Oracle® Fusion Cloud EPM

Administering and Working with Enterprise Profitability and Cost Management

F44806-53

Oracle Fusion Cloud EPM Administering and Working with Enterprise Profitability and Cost Management,

F44806-53

Copyright © 2022, 2026, Oracle and/or its affiliates.

Primary Author: EPM Information Development Team

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Documentation Accessibility

Documentation Feedback

1 Creating and Running an EPM Center of Excellence

Part I Getting Started with Enterprise Profitability and Cost Management

Part II Creating and Managing Applications

2 Creating an Enterprise Profitability and Cost Management Application

Application Design Best Practices 1
About Creating an Application 1
Configuring Your Environment 2
Selecting What Type of Application to Create 3
Creating the Sample Application 3
Creating a New Application 4
- Entering a Name and a Description 5
- Setting Up the Calendar 5
- Setting Up Currencies 8
- Reviewing Application Information 9

3 Managing Applications

Application Overview 1
Managing Cubes 2
- About Cubes in Enterprise Profitability and Cost Management 2
- Creating Cubes 3
- Clearing Cubes 3
  - About Clearing Cubes 4

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating Clear Cube Jobs 4
Submitting a Clear Cube Job 5
Deleting a Clear Cube Job 5
Scheduling Clear Cube Jobs 5
Improving Cube Performance 7
Compacting the Outline 7
Merging Data Slices 8
Optimizing Aggregation for the PCM_CLC Calculation Cube 8
Optimizing Aggregation for the PCM_REP Reporting Cube 9
Managing Dimensions 10
Dimension Overview 10
About Dimensions and Members in Enterprise Profitability and Cost Management 11
About Dimension Hierarchies 11
Hierarchy Types 12
Dimension Top Levels 13
Best Practices When Designing Dimensions 13
Creating a Dimension 13
Accessing the Dimension Editor 14
Reviewing Dimensions 15
Editing Dimension Properties 17
Working with Members 18
Adding Members to a Dimension 18
Adding "No<dimname>" Members 19
Editing Member Properties 19
Deleting Members 20
Adding Shared Members 20
Assigning Access to Dimension Members 21
Working in the Edit Member Properties Grid 23
Working with Attributes 29
About Attributes 29
Understanding Attribute Data Types 30
Creating an Attribute Dimension 30
Adding or Editing Attribute Dimension Members 31
Working with User-Defined Attributes (UDAs) 32
Importing and Exporting Dimension Metadata 33
Importing Metadata 33
Exporting Metadata 38
Viewing Activity Reports 39
Importing and Exporting Data 40
Importing Data 40
Driver Member Casting Errors 43
Exporting Data 43

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Data Import and Export Status 45
Importing Exchange Rates for a Multicurrency Application 46
Uploading and Downloading Files Using the Inbox/Outbox Explorer 46
Refreshing the Application Database 47
Validating Metadata 48
Removing an Application 49

4 Managing Application and System Settings

About Managing Application and System Settings 1
Application Settings 1
System Settings 6
Calculation Options Settings 9
Defining Logical Clear Versus Physical Clear 9
Enabling Allocation Rule Non Empty Tuple 9

5 Defining Valid Intersections

Understanding Valid Intersections 1
Valid Intersection Groups 1
Valid Intersection Rules 1
Anchor and Nonanchor Dimensions 2
Valid Intersection Examples 2
Redundancy or Overlap in Valid Intersection Rules 5
Shared Members and Valid Intersection Rules 5
Substitution Variables and Valid Intersection Rules 6
Evaluation Order 6
Creating Valid Intersections 6
Managing Valid Intersections 7
Viewing Valid Intersections 7
Filtering Valid Intersections 8
Importing and Exporting Intersections 9
Changing the Valid Intersection Group Evaluation Order 11
Disabling and Enabling Valid Intersection Groups 12
Editing Details for a Valid Intersection Group 12
Duplicating Valid Intersection Groups 13
Deleting a Valid Intersection Group 14
Suppressing Invalid Data in Forms 14
Clearing Invalid Data 14
About Invalid Data 15
Working With Invalid Intersection Reports 15
Clearing Data at Invalid Intersections 16

Copyright © 2022, 2026, Oracle and/or its affiliates.

Working with Valid Intersections 16
Working with Valid Intersections in Application Forms 16
Working with Valid Intersections in Calculation Manager Rule Runtime Prompts 17

6 Administering Data Integration

Creating File-Based Integrations 1
Defining Data Maps 1

7 Managing Jobs

About Jobs 1
Job Types 1
Accessing the Jobs Console 7
Scheduling Jobs 8
Scheduling Jobs to Run Now 8
Scheduling Jobs to Run Later 8
Scheduling Hourly Jobs 10
Viewing Pending Jobs and Recent Activity 13
Viewing Task Manager Jobs 14
Editing and Deleting Jobs 16
Exporting Job Console Files 17
Exporting Supplemental Diagnostics 18

Part III Building and Calculating Models

8 Creating and Managing Models

About Models 1
Creating and Managing Models 1.0 2
Creating a Model 2
Managing Models 2
Generating a Model Documentation Report 4
Generating a Model Comparison Report 6
Creating and Managing Models 2.0 7
About Models 2.0 7
Creating a Model 8
Defining a Model Context 9
Managing Models 12
Defining the Columns that Display on the Models Page 16
Generating a Model Documentation Report 17

Copyright © 2022, 2026, Oracle and/or its affiliates.

Generating a Model Comparison Report 19

9 Creating and Managing Rules

About Rules 1
Types of Rules 2
Rule and Rule Member Considerations 3
Dimension and Member Requirements When Creating Rules 3
Understanding Model and Rule Set Context 4
Understanding How System Dimensions Are Used in Rules 10
Overview of the PCM_Rule and PCM_Balance System Dimensions 10
PCM_Rule Dimension 10
PCM_Balance Dimension 11
Understanding PCM_Balance Dimension Members 12
PCM_NetBalance 12
PCM_Remainder 12
PCM_System 13
PCM_Balance Example 13
Working in Rule Designer 1.0 16
About Rule Designer 1.0 16
Creating Allocation Rules 17
About Creating Allocation Rules 17
Creating an Allocation Rule Definition 19
Defining an Allocation Rule Source and Destination 21
Defining an Allocation Rule Driver 33
Defining an Allocation Rule Offset 38
Validating Allocation Rules 39
Running a Rule Data Validation Report for Allocation Rules 40
Using Ad Hoc to Analyze Allocation Rule Data 42
Creating Custom Rules 43
About Creating Custom Rules 43
Creating a Custom Rule Definition 44
Defining a Custom Rule Target 45
Validating Custom Rules 51
Using Ad Hoc to Analyze Custom Rule Data 51
Creating Rule Sets 52
About Rule Sets 52
Rule Set Design Best Practices 53
Creating a Rule Set 53
Creating Multiple Rules 54
Creating Multiple Rule Sets 55
Viewing Rule Definitions 56

Copyright © 2022, 2026, Oracle and/or its affiliates.

Renaming Rules 57
Using the Designer 1.0 Waterfall Setup Tab 58
Editing a Rule or Rule Set 59
Copying a Rule or Rule Set 59
Deleting a Rule or Rule Set 60
Using the Designer 1.0 Mass Edit Tab 60
Filtering Which Rules Are Displayed 61
Adding Members to Rules 63
Replacing Members in Rules 63
Copying Rules to a Rule Set 65
Copying Rules to a Model 66
Enabling and Disabling Rules 67
Viewing Rules Jobs 67
Working in Rule Designer 2.0 69
About Rule Designer 2.0 69
Creating Allocation Rules 70
About Creating Allocation Rules 70
Creating an Allocation Rule Definition 72
Defining an Allocation Rule Source and Destination 74
Defining an Allocation Rule Driver 88
Defining an Allocation Rule Offset 93
Validating Allocation Rules 95
Running a Rule Data Validation Report for Allocation Rules 96
Using Ad Hoc to Analyze Allocation Rule Data 98
Creating Custom Rules 99
About Creating Custom Rules 99
Creating a Custom Rule Definition 100
Defining a Custom Rule Target 102
Validating Custom Rules 110
Using Ad Hoc to Analyze Custom Rule Data 111
Creating Rule Sets 112
About Rule Sets 112
Rule Set Design Best Practices 112
Creating a Rule Set 113
Creating a Rule Set Context 115
Duplicating a Rule Set 117
Renaming Rules 117
Using the Designer 2.0 Waterfall Setup Tab 118
Using the Designer 2.0 Mass Edit Tab 119
About the Designer 2.0 Mass Edit Tab 119
Working in the Designer 2.0 Mass Edit Tab 120
Defining the Columns that Display on the Mass Edit Tab 121

Copyright © 2022, 2026, Oracle and/or its affiliates.

Filtering Which Rules Are Displayed 122
Inpecting Rule Details 124
Editing Multiple Rules from the Mass Edit Tab 125
Editing a Single Rule from the Mass Edit Tab 126
Copying Rules to a Rule Set 127
Coying Rules to a Model 128
Enabling and Disabling Rules 128

10 Running Model Validation

About Model Validation 1
Validating Models 1.0 1
Validating Models 2.0 2
Validation Errors and Warnings 3

11 Calculating Models

About Calculating Models 1
Understanding Points of View 2
Calculating Models 1.0 2
Using the Calculation Control Page 1.0 2
Filtering Which Points of View Are Displayed 3
Creating a Point of View 6
Editing a Point of View 8
Deleting a Point of View 8
Clearing a Point of View 9
Copying a Point of View 10
Viewing Point of View Jobs 12
Calculating a Model 1.0 13
Calculating Models 2.0 15
About Calculating Models 2.0 15
Using the Calculation Control Page 2.0 16
Defining the Columns that Display on the Calculation Control Page 17
Working with Points of View on the Calculation Control Page 18
Creating a Point of View 18
Filtering Which Points of View Are Displayed 20
Viewing Point of View Properties 22
Copying a Point of View 22
Clearing a Point of View 27
Changing a Point of View Status 28
Deleting a Point of View 28
Calculating a Model 2.0 29

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Run Calculation Jobs 31
Cancelling a Calculation Job 32
Preferences Related to Calculation Performance 33

12 Analyzing Calculations

Analyzing Calculations 1.0 1
About Calculation Analysis 1
Filtering Which Calculation Records Are Displayed 3
Editing Comments 5
Re-Running Calculations 6
Providing Feedback 7
Analyzing Calculations 2.0 7
About Analyzing Calculations 2.0 8
Using the Calculation Analysis Page 2.0 8
Defining the Columns that Display on the Calculation Analysis Page 9
Filtering Which Calculation Records are Displayed 10
Inspecting Calculation Record Job Details and Parameters 12
Editing Comments 12
Rerunning Calculations 13
Providing Feedback 15
Analyzing Calculation Performance 16
Analyzing Data for a Single Calculation Record 16
Analyzing Data for Multiple Calculation Records 18
Using the PCM Agent Performance Assistant to Help Idendity and Resolve Calculation Performane Issues 21
Generating Calculation Analysis Reports 25
Generating a Calculation Statistics Summary Report 25
Generating a Calculation Statistics Diagnostics Report 27
Generating a Model Snapshot Documentation Report 32
Generating a Compare Snapshot with Current Model Report 34
Generating a Compare Model Snapshots Report 35
Creating a Model from a Snapshot 36

13 Viewing Rule Balancing Reports

About Rule Balancing 1
Generating a Rule Balancing Report 1
Using Data Forms with Rule Balancing 3
Designing Data Forms for Rule Balancing 3
Best Practices for Designing Rule Balancing Data Forms 5
Selecting a Data Form 8

Copyright © 2022, 2026, Oracle and/or its affiliates.

Analyzing or Editing a Data Form 9

14 Using Profitability and Cost Management (PCM) Agent

About Profitability and Cost Management (PCM) Agent 1
Enabling Profitability and Cost Management (PCM) Agent 2
Accessing Profitability and Cost Management (PCM) Agent 3
Creating, Confirming, and Running Modeling and Analysis Commands 4
User Request Best Practices 8
Using Smart Lookup When Creating a User Request 9
Filtering Rules When Creating a User Request 12
Using Substitution Variables in User Requests 13
Saving User Requests As a Job 14
User Request Examples 14
User Request to Create Rule Sets 15
User Request to Create Rules 16
User Request to Calculate a Model 17
User Request to a Add Member 19
User Request to List Rules 20
User Request to Create a Job 21
User Request to Copy a POV 21
User Request to Clear a POV 21
User Request to Delete a POV 22
Configuring PCM Agent for Specific Tasks 22

Part IV Analyzing Data

15 Working with Data in Forms

You Enter Data in Forms 1
About Forms Versions 2
Viewing Forms 3
Exporting Data to Microsoft Excel 6
Working in Forms 1.0 6
Selecting Different Data to Work With 7
Understanding Form Colors 7
Viewing Server Status on Forms 8
Navigating Quickly in a Form 8
Basics of Working With Data 9
About Entering Data 10
Dynamically Setting User Variables 12
Using Data with Forms 12

Copyright © 2022, 2026, Oracle and/or its affiliates.

More Ways to Manipulate Values 15
Entering Data for Suppressed or Excluded Members 15
Getting the Latest Data 18
About Calculating Data 18
How Totals are Calculated 18
Reviewing Data 18
Personalizing How Data Displays 19
Printing Data 20
More About Working With Data 20
Viewing Member Formulas 21
Working with Business Process Data in Excel 21
Drilling Through to Source Data 23
Cell Icons 23
Resolving Data Validation Errors 24
Pushing Data for Reporting 24
About Cell Comments 25
Working with Attachments 25
Searching for Forms, Dashboards, and Infolets 26
Why Cells May Be Read-Only 27
Seeing What's Changed 28
Working in Forms 2.0 28
Working with the Global Toolbar in Forms 2.0 29
Working with the Quick Toolbar in Forms 2.0 30
Working with POVs in Forms 2.0 32
Opening the Member Selector in Forms 2.0 34
Performing Calculations Without Having to Submit Your Changes (Calc on the Fly) 36
Printing Data in Forms 2.0 38
Managing Data Validation and Format Rules in Forms 38
About Data Validation Rules 39
Creating and Updating Data Validation Rules in Forms 39
Formatting Cells 42
Viewing Data Validation Rules 43
Order of Evaluation and Execution for Data Validation Rules 43
Conditions Supported by the Rule Builder 44
Data Validation Conditional Operators 53
Data Validation Rule Scenarios 54
About Format Rules in Forms 60
Creating and Updating Format Rules in Forms 62
Cell Formatting Options in Forms 64
Viewing Format Rules 65
Order of Precedence for Format Rules 66
Applying Format Rules to Forms at Runtime 67

Copyright © 2022, 2026, Oracle and/or its affiliates.

Format Rule Scenarios 68

16 Working with Reports

About Reports 1
Accessing Reports and Viewing the Reports Repository 1
Managing Folders and Reports 2
Reports Books and Bursting 3
Managing Fonts 3

17 Designing and Working with Dashboards

Designing Dashboards 1
The Power of Dashboards 1
Creating and Managing Dashboards 3
About Dashboard Versions 4
Viewing Dashboards - Standardized Interface 6
Viewing Dashboards - Legacy Interface 9
Converting Dashboard 1.0 Dashboards to 2.0 12
Creating and Managing Dashboards 1.0 13
Concepts in Designing 1.0 Dashboards 13
Creating Dashboard 1.0 Dashboards 15
Creating Dashboards Containing Master Forms and Details 17
About Your Dashboard's Layout - Version 1.0 18
About the Gauge Chart Type 18
About the Tile Chart Type 20
Customizing Dashboard Colors 22
About Global and Local POVs in 1.0 Dashboards 23
Dashboard POVs and Valid Intersections 24
Creating and Managing Dashboards 2.0 25
Concepts in Designing Dashboard 2.0 Dashboards 25
Considerations for Dashboard 2.0 35
Creating Dashboard 2.0 Dashboards 37
Working with the Member Selector When Designing Dashboards 2.0 38
About Forms 2.0 Grids in Dashboard 2.0 39
Using Tables in Dashboards 40
About Global and Local POVs in Dashboard 2.0 41
About Quick Analysis 45
About Dashboard Charts 46
Dashboard Design Guidelines 60
Using Dashboards to Work with Data 74
Understanding Dashboards 74

Copyright © 2022, 2026, Oracle and/or its affiliates.

About Dashboard Versions 75
Viewing Dashboards 77
Working with Dashboard 1.0 Dashboards 80
Working with Dashboard 2.0 Dashboards 81
Working with the Dashboard 2.0 Global Toolbar 82
Working with Dashboard 2.0 Components 83
Working with Forms 2.0 Grids in Dashboard 2.0 86
Drilling Through on Charts and Legends 87
Working with POVs in Dashboard 2.0 88
Opening the Member Selector in Dashboards 2.0 90
Working with Dashboard 2.0 Dashboards in Navigation Flows 91
Working with Master Forms and Details in Dashboard 2.0 Components 91
Support for Valid Intersections in Dashboard 2.0 Dashboards 92
About Quick Analysis 92
Drilling into Ad Hoc from a Dashboard 2.0 Chart 94

18 Viewing Key Information with Infolets

About Infolets 1
Anatomy of an Infolet 3
About Infolet Views 6
About the Infolet Dots 7
Determining Infolet Content 7
Designing Forms for Infolets 8
Designing Charts for Infolets 8
Using the Infolets Designer 9
Creating Infolets 12
Working with Infolets - Standardized Interface 12
Customizing the Interface to Access Infolets 15
Setting Your Default Infolet 16

19 Configuring and Working with IPM

Configuring IPM Insights 1
About IPM 2
Enabling AI for Insights in Enterprise Profitability and Cost Management 2
About IPM Insights 2
Considerations for IPM Insights 4
About Using Calendars and Events in IPM Insights 6
Configuring Calendars and Events 7
Configuring IPM Insights 10
Using Dynamic Calc Members in Insights 12

Copyright © 2022, 2026, Oracle and/or its affiliates.

Configuring Additional Insight Settings 13
Running and Scheduling Insights 14
Managing Insight Definitions and Generated Insights 14
Managing Tags 15
Using IPM Insights to Inform Your Decision-Making 15
Analyzing Insights 15
Summarizing Insights with Generative AI 18
Searching and Filtering the Insights Dashboard Display 20
Collaborating with Insights Using Tags 21
IPM Insights Metrics 23
IQR (Interquartile Range) 23
MAD (Mean Absolute Deviation) 24
MAPE (Mean Absolute Percentage Error) 25
ME (Mean Error) 25
Modified Z-Score 26
MPE (Mean Percentage Error) 26
RMSE (Root Mean Squared Error) 27
RPD (Relative Percentage Difference) 28
Standard Variance 29
TOTD (Total Deviation) 30
TOTPD (Total Percentage Difference) 30
Z-Score 31
Impact Magnitude Thresholds 31

20 Using Ad Hoc for Data Entry and Analysis

Get Started Performing Ad Hoc 1
Creating an Ad Hoc Grid 2
Submitting Ad Hoc Data and Saving the Grid Definition 3
Performing Calculations Without Having to Submit Your Changes (Calc on the Fly) 4
Accessing an Ad Hoc Grid 7
Designing Ad Hoc Grids 7
Opening the Member Selector in Ad Hoc Grids 8
Selecting Period-to-Date Members 9
Filtering Column Members 11
Pivoting Dimensions 12
About Shared Members 13
Zooming in on Shared Members 13
Setting Properties for Ad Hoc Grids 15
Ad Hoc Grid Keyboard Shortcuts and Quick Data Entry Commands 18
Applying Rules to Ad Hoc Grids 19
Adding Comments and Attachments 19

Copyright © 2022, 2026, Oracle and/or its affiliates.

Adjusting Values 20
Using Ad Hoc Action Menus 20
About Using Line Item Details 20
Adding Line Item Details 22
Working with the Structure of Line Item Details 22
Order of Line Item Details 23
Incorrectly Entering Line Item Details 23
Correctly Entering Line Item Details 24
Totaling When Line Item Details Cells are Blank 24
Printing Ad Hoc Grids 25
Using Free-Form Ad Hoc 25

21 Working with Profit Curves

About Profit Curves 1
Designing Data Forms for Profit Curves 2
Creating a Profit Curve 4
Managing Profit Curves 5
Generating Profit Curves 6

22 Tracing Allocations

About Trace 1
Designing Data Forms for Trace 1
Viewing Allocation Trace Results 4
Filtering Trace Data by Focusing on Specific Nodes 5
Viewing Trace Data 6
Editing a Trace Data Form and Analyzing the Resulting Trace Data 8

23 Using Smart View to Import and Edit Application Metadata

About Using Smart View to Work with Application Metadata 1
Using Smart View Grids to Import and Edit Application Metadata 1
About the Smart View Grid 2
The Smart View Grid and Ribbon Display 2
Guidelines for Using the Smart View Grid 4
Default Metadata Dimension Member Properties 5
Importing Dimensions in Smart View 7
Importing Dimensions in Smart View for Office 7
Importing Dimensions in Smart View (Mac and Browser) 8
Editing Members in Smart View 10
Adding Application Members in Smart View 10

Copyright © 2022, 2026, Oracle and/or its affiliates.

Adding Members in Smart View 11
Guidelines for Adding Members in Smart View 12
Moving Members in Smart View 12
Guidelines for Moving Members in Smart View 13
Working with Attribute Dimensions 13
Adding Attribute Dimension Members in Smart View 13
Adding Attribute Dimension Members in Smart View for Office 13
Adding Attribute Dimension Members in Smart View (Mac and Browser) 15
Designating Shared Members in Smart View 17
Refreshing Databases 17
Refreshing Databases in Smart View for Office 18
Refreshing Databases in Smart View (Mac and Browser) 18
Planning Admin Extension and Office AutoCorrect 20

Part V Using Tools

Part VI Creating and Managing Business Rules

24 Using Business Rules

Creating, Validating, and Deploying Business Rules 1
Managing Business Rule Security 2
Assigning Access to Individual Business Rules 2
Assigning Access to Folders Containing Several Business Rules 3
Enabling Business Rules Notifcation 4
Launching Business Rules 4
Launching Business Rules From the Business Rules Page 4
Launching Business Rules From a Form 5
Adding and Removing Rules in Forms 5
Setting Business Rule Properties 6
Launching Business Rules From the Job Scheduler 7
Launching Business Rules from Dashboards 1.0 8
Viewing Rules Usage 8

25 Resources for Designing Groovy Business Rules

About Groovy Business Rules 1
Java API Reference for Groovy Rules 3
Validating Groovy Scripts 3
Groovy Business Rule Examples 4
Groovy Business Rule Tutorial Videos 4

Copyright © 2022, 2026, Oracle and/or its affiliates.

Groovy Business Rule Tutorials 5
Groovy Rule Business Scenarios 7
Moving Modified Data Using Groovy Rules and Smart Push 7
Calculating Modified Data Using Groovy Rules 13

Part VII Administrative Tasks Accessed from the Navigator

Part VIII Setting Up Access Permissions and Data Security

26 About Managing Access and Data Security

About Predefined Roles 2
About Granular Roles 3
Managing Application Ownership 4

27 Working with Access Permissions

Types of Access Permissions 1
About Assigning Access Permissions 3
Application Artifacts That Can Be Assigned Permissions 3
Adding, Changing, and Removing Permissions to Artifacts and Folders 4
Enabling or Disabling Security for Dimensions 5
Assigning Security to Dimension Members 5
About Effective Access Permissions to Shared Members 7
Defining Cell-Level Security 8
Understanding Cell-Level Security 8
Creating Cell-Level Security Definitions 9
Viewing Cell-Level Security Definitions 10
Filtering Cell-Level Security Definitions 11
Importing and Exporting Cell-Level Security Definitions 11
Testing Cell-Level Security 13
Reordering the Cell-Level Security Definitions List 14
Reporting on Access Permissions 14

Part IX Administering and Working with Task Manager

28 Administering Tasks with Task Manager

Setting Up Task Manager 1
Task Manager Terms 2

Copyright © 2022, 2026, Oracle and/or its affiliates.

Task Manager Overview 4
Sample Task Flows 7
Managing Task Manager Views, Lists, and Filters 8
Viewing Task Manager Lists 8
Column Definitions for Task Manager 9
Managing Task Manager System Settings 17
Managing Global Integration Tokens 17
Managing Task Manager Organizational Units 19
Managing Holiday Rules for Tasks 21
Changing Configuration Settings 24
Using Oracle Cloud Object Storage to Store Attachments 39
Managing Task Manager Attributes 45
Defining Task Manager Attributes 46
Defining Calculation Attributes 47
Importing List Attributes 50
Editing Attributes 51
Duplicating Attributes 51
Deleting Attributes 52
Viewing Attributes 52
Searching for Attributes 52
Managing Artifact Labels in Task Manager 53
Managing Task Types 55
Task Types 55
Creating Task Types 56
Setting Task Type Properties 56
Setting Task Type Parameters 57
Specifying Task Type Instructions 58
Specifying Task Type Questions 59
Assigning Task Type Attributes 60
Working With Task Type Rules 61
Viewing Task Type History 63
Editing Task Types 64
Viewing Task Types 64
Searching for Task Types 65
Importing Task Types 65
Exporting Task Types 66
Deleting Task Types 67
Managing Task Templates 67
Creating Task Templates 67
Setting Template Properties 68
Specifying Template Instructions 69
Assigning Viewers to Templates 70

Copyright © 2022, 2026, Oracle and/or its affiliates.

Applying Template Attributes 71
Specifying Day Labels 71
Embedding Templates 72
Working With Template Rules 74
Viewing Template History 77
Opening Templates 77
Adding Tasks to Templates 77
Editing Templates 78
Importing Tasks into Templates 78
Task Import File Format 80
Exporting Tasks to Microsoft Excel 82
Reassigning Users in Templates 83
Creating Schedules from Templates 84
Using the Override Parameter Option When Creating Schedules from Templates 86
Manually Validating Templates 86
Viewing Task Manager Templates 87
Searching for Templates 88
Deleting Templates 88
Managing Tasks 89
Creating Tasks 89
Setting Task Properties 89
Setting Task Parameters 91
Specifying Task Instructions 92
Selecting the Workflow 93
Adding Task Questions 95
Setting Task Viewers 97
Setting Task Predecessors 97
Applying Task Attributes 98
Working With Task Rules 99
Viewing Task History 102
Working with the Task Dialog Box 102
Importing and Exporting Tasks 103
Editing Tasks 104
Adding Attachments 105
Sorting Tasks 105
Searching for Tasks 105
Moving Tasks 106
Cutting, Copying, and Pasting Tasks 106
Reopening Manual and Automated Tasks 107
Submitting Tasks 109
Approving or Rejecting Tasks 110
Claiming or Releasing Tasks 110

Copyright © 2022, 2026, Oracle and/or its affiliates.

Managing Task Reassignments 111
Automated Task Execution 112
Canceling Tasks 112
Deleting Tasks 113
Managing Services 113
Managing Schedules 114
Manually Creating Schedules 114
Setting Schedule Properties 115
Adding Instructions to Schedules 115
Assigning Schedule Viewers 116
Applying Schedule Attributes 117
Adding Day Labels 117
Working With Schedule Rules 118
Setting Required Task Parameters 120
Opening Schedules 120
Editing Schedules 120
Adding Tasks to Schedules 121
Importing Tasks into Schedules 121
Updating Tasks in Schedules 123
Reassigning Users in Schedules 124
Authorizing Process-Automated Tasks 124
Setting Schedule Status 126
Viewing Schedule History 127
Validating Schedules 127
Locking Schedules 128
Viewing Schedules 128
Searching for Schedules 128
Deleting Schedules 129
Managing Task Manager Integrations 129
Managing Integrations with Cloud EPM Services 130
Adding Pre-built Integrations in Cloud EPM 131
End User Integrations for Cloud EPM 132
Automation Integrations for Cloud EPM 135
Copy and Delete Integration Files 165
Managing Integrations with Cloud Applications 167
End User Integrations for Oracle Cloud ERP 167
Event Monitoring Integrations for Oracle Cloud ERP 172
Creating Custom Integrations 180
Creating End User Integration 180
Creating Custom Process Automation Integrations 181
Creating Custom Event Monitoring Integrations 184
Working with Integrations 189

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating Integrations 189
Viewing Integrations 191
Editing Integrations 191
Searching for Integrations 192
Validating Integrations 192
Deleting Integrations 192
Managing Connections 193
Adding Connections 193
Editing Connections 193
Deleting Connections 194
Managing Alert Types for Task Manager 194
Creating Alert Types 195
Setting Alert Type Properties 196
Specifying Alert Type Instructions 198
Selecting the Alert Type Workflow 198
Assigning Alert Type Viewers 199
Adding Questions for Alert Types 200
Applying Alert Type Attributes 201
Viewing Alert Type History 202
Viewing Alert Types 202
Column Definitions for Alerts 203
Editing Alert Types 204
Searching for Alert Types 204
Deleting Alert Types 205
Managing Views in Task Manager 205
Viewing Currencies in Task Manager 205
Using Reports 206
Generating Custom Reports for Task Manager 206
Creating a Task Manager Query 207
Creating a Template 211
Setting Up a Report Group 211
Creating a Report 212
Searching and Filtering Queries, Report Groups, or Reports 213
Generating the Report 214
Understanding Reports Security 215
Using Task Manager Report Binders 216
Generating Cloud EPM System Reports for Task Manager 218
Working with Views and Filters 218
Working with Filters 218
About Filters 218
Viewing the Existing Saved Filters 219
Creating a New Filter 219

Copyright © 2022, 2026, Oracle and/or its affiliates.

Using the Filter Bar to Adjust Your View 220
Clearing Filter Conditions 221
Removing a Filter 221
Editing a Filter 221
Duplicating a Filter 222
Saving a Filter 222
Applying a Saved Filter 222
Publishing a Filter 222
Deleting a Filter 223
Displaying Columns for Filters 223
Reordering Columns for Filters 223
Working with Views 224
About Views 224
Working With List Views 225
Working with Pivot Views 226
Working with Chart Views 230
Working With Gantt Chart Views 240
Working With Calendar Views 241
Saving Views 241
Editing Saved Views 242
Deleting Views 242
Publishing Views 242
Setting a Default View 242
Exporting List Views and Pivot Views 243
Managing Dashboards 243
Overview of Operational Dashboards 244
Viewing and Opening Operational Dashboards 244
Operational Dashboards: Design Mode 245
Creating Operational Dashboards 246
Defining Operational Dashboard Properties 247
Defining Access to Operational Dashboards 248
Setting the Object Type Within Operational Dashboards 249
Specifying View Options for Operational Dashboards 249
Editing Operational Dashboards 250
Duplicating Operational Dashboards 250
Deleting Operational Dashboards 250
Exporting Operational Dashboards 251
Importing Operational Dashboards 251
Running Operational Dashboards 252
Displaying Columns for Viewing Operational Dashboards 252
Reordering Columns for Viewing Operational Dashboards 252
Copying a URL for Operational Dashboards 253

Copyright © 2022, 2026, Oracle and/or its affiliates.

Applying Filters to Data Displayed Within Operational Dashboards 253
Example: Task Manager Operational Dashboard 253
Chart View: Task Completion - Plan vs Actual 254
Chart View: Tasks Completed Late 256
Chart View: Status by Workday 257
Chart View: Completion by Region 258

29 Using Task Manager

Working with Task Manager 1
Task Manager Overview 1
Working with Tasks 1
Accessing Tasks 2
Updating Task Information 5
Managing Tasks 13
Working with Tasks in Smart View 18
Working with Alerts 20
Creating Alerts 20
Updating Alerts 22
Creating an Alert on a Schedule 24
Alert Actions 24
Viewing Alerts from Alert List 26
Deleting Alerts 27
Working with Views and Filters 27
Working with Filters 27
About Filters 28
Viewing the Existing Saved Filters 29
Creating a New Filter 29
Using the Filter Bar to Adjust Your View 29
Clearing Filter Conditions 30
Removing a Filter 31
Editing a Filter 31
Duplicating a Filter 31
Saving a Filter 31
Applying a Saved Filter 32
Deleting a Filter 32
Displaying Columns for Filters 32
Reordering Columns for Filters 32
Working with Views 33
About Views 33
Working With List Views 34
Working with Pivot Views 35

Copyright © 2022, 2026, Oracle and/or its affiliates.

Working with Chart Views 39
Working With Gantt Chart Views 49
Working With Calendar Views 50
Saving Views 50
Editing Saved Views 51
Setting a Default View 51
Working with Dashboards 51
Dashboard Overview 52
Task Overview Dashboard 52
Compliance Dashboards 53
Working With Operational Dashboards 53
Overview of Operational Dashboards 54
Viewing and Opening Dashboards 54

Part X Appendices

30 Best Practices

31 Frequently Asked Questions (FAQ) about Enterprise Profitability and Cost Management

32 Using the Member Selector

About Selecting Members 1
Selecting a Dimension 1
Defining Member Display Options 2
Searching for Members 5
Filtering Which Members Are Displayed 7
Filtering by Attributes 8
Filtering by Level 9
Filtering by Generation 10
Filtering by Member Relationship 11
Member Relationships 13
Making Member Selections 14
Selecting Members 18
About Selecting Members for Forms 1.0 and Dashboards 1.0 19
Member Relationships 19
Selecting Members 21
Considerations When Selecting Members 22

Copyright © 2022, 2026, Oracle and/or its affiliates.

Selecting Attribute Values as Members 23
Selecting Substitution Variables as Members 25
Selecting User Variables as Members 26

33 Naming and Character Restrictions

Naming Restrictions for Applications and Databases 1
Naming Restrictions for Dimensions, Members, and Aliases 2
Dimension and Member Names in Calculation Scripts, Report Scripts, Formulas, Filters, and Substitution Variables 6
Restrictions for User and Group Names 6

34 Integrating Cloud EPM and Cloud EDM with Oracle Guided Learning

Enabling Context-Based Activation of OGL Guides in Cloud EPM 3

35 Migrating from Profitability and Cost Management to Enterprise Profitability and Cost Management

Copyright © 2022, 2026, Oracle and/or its affiliates.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Documentation Feedback

To provide feedback on this documentation, click the feedback button at the bottom of the page in any Oracle Help Center topic. You can also send email to epmdoc_ww@oracle.com.

Copyright © 2022, 2026, Oracle and/or its affiliates.

1

Creating and Running an EPM Center of Excellence

A best practice for EPM is to create a CoE (Center of Excellence).

An **EPM CoE** is a unified effort to ensure adoption and best practices. It drives transformation in business processes related to performance management and the use of technology-enabled solutions.

Cloud adoption can empower your organization to improve business agility and promote innovative solutions. An EPM CoE oversees your cloud initiative, and it can help protect and maintain your investment and promote effective use.

The EPM CoE team:

- Ensures cloud adoption, helping your organization get the most out of your Oracle Fusion Cloud EPM investment
- Serves as a steering committee for best practices
- Leads EPM-related change management initiatives and drives transformation

All customers can benefit from an EPM CoE, including customers who have already implemented EPM.

How Do I Get Started?

Click to get best practices, guidance, and strategies for your own EPM CoE: Introduction to EPM Center of Excellence.

Learn More

- Watch the Cloud Customer Connect webinar: Creating and Running a Center of Excellence (CoE) for Cloud EPM
- Watch the videos: Overview: EPM Center of Excellence and Creating a Center of Excellence.
- See the business benefits and value proposition of an EPM CoE in *Creating and Running an EPM Center of Excellence*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part I

Getting Started with Enterprise Profitability and Cost Management

Related Topics

- About Enterprise Profitability and Cost Management
- About Enterprise Profitability and Cost Management Applications
- Launching the Application
- About the Home Page
- Using Dynamic Tabs
- Considerations When Using the Application Interface
- Downloading and Installing Smart View

Video

Your Goal	Watch This Video
Get an introdution to the key features in Enterprise Profitability and Cost Management.	Getting Started with Enterprise Profitability and Cost Management

About Enterprise Profitability and Cost Management

To maximize profitability, a business must be able to accurately measure, allocate, and manage costs and revenue.

Enterprise Profitability and Cost Management is an analytic software tool that manages the cost and revenue allocations that are necessary to compute profitability for a business segment, such as a product, customer, region, or branch. Enterprise Profitability and Cost Management enables you to use cost decomposition, consumption-based costing and scenario-playing to measure profitability for effective planning and decision support.

Enterprise Profitability and Cost Management uses an Oracle Essbase cube to store and calculate data. The application data and calculated results can be output in the following EPM analytic tools:

- Dashboards
- Infolets
- Forms
- Profit Curves
- Allocation Trace
- Oracle Smart View for Office

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Reports

Video

Your Goal	Watch This Video
Learn how Enterprise Profitability and Cost Management can help unburden your general ledger and speed up your financial close, while providing transparency and traceability to your operational and management reporting.	Overview of Enterprise Profitability and Cost Management

About Enterprise Profitability and Cost Management Applications

Enterprise Profitability and Cost Management applications are designed for use by analysts who have deep domain experience in the computation and reporting methods of management reporting, but who may not have much experience with Oracle Essbase and scripting syntax or programming languages.

To model cost and revenue flows with Enterprise Profitability and Cost Management, you must understand the following essential concepts:

- **Dimensions**: Data categories in an underlying database used to organize data for retrieval and preservation of values. Dimensions usually contain hierarchies of related members grouped within them. For example, a Period dimension often includes members for each time period, such as Quarter or Month.
- **Application**: A related set of dimensions, dimension members, and modeling elements that are used to meet a specific set of analytical or reporting requirements.
- **Modeling elements**: Application parts used in an Enterprise Profitability and Cost Management application that apply allocation logic to data that is identified by dimensions and members. Modeling elements include cost allocation rules and analysis definitions that reflect existing or proposed business cases.

  Together these elements organize the allocation points in the application into a logical flow. Careful modeling can capture the actual processes and activities, enabling you to realistically allocate costs and revenues.

An Enterprise Profitability and Cost Management application is a representation of part or all of an organization, and contains costs and revenue categories that are similar to the organization's chart of accounts and general ledger. Enterprise Profitability and Cost Management applications enable you to accurately trace the processes and activities that contribute to costs and revenue within the organization.

> **Note**
>
> Enterprise Profitability and Cost Management applications are separate and independent from Profitability and Cost Management applications. There is no impact to Profitability and Cost Management applications or environments.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Launching the Application

A Service Administrator is responsible for providing the unique URLs to users.

Customers provisioned to EPM Enterprise Cloud Service instances will use URLs similar to the following to access their environments:

- **Production environment URL:** `https://epm-idDomain.epm.dataCenter.oraclecloud.com/epmcloud`
- **Test environment URL:** `https://epm-test-idDomain.epm.dataCenter.oraclecloud.com/epmcloud`

For example, for Oracle Fusion Cloud Enterprise Performance Management environments provisioned with identity domain `exampleDoM` in `exampleDC` data center, the URLs may be as follows:

- **Production environment:** `https://epm-exampleDoM.epm.exampleDC.oraclecloud.com/epmcloud`
- **Test environment:** `https://epm-test-exampleDoM.epm.exampleDC.oraclecloud.com/epmcloud`

This is a change from previous versions of Cloud EPM where each application used a separate context to access environments. See Sample EPM Cloud URLs in *Getting Started Guide for Administrators*.

About the Home Page

The Home page is the launch point for accessing your business process tasks.

The Home page displays your most common tasks and tools represented as home page cards or in clusters that group related cards together. When you open a page, related cards are displayed along the top so you can easily get to them without returning to the Home page.

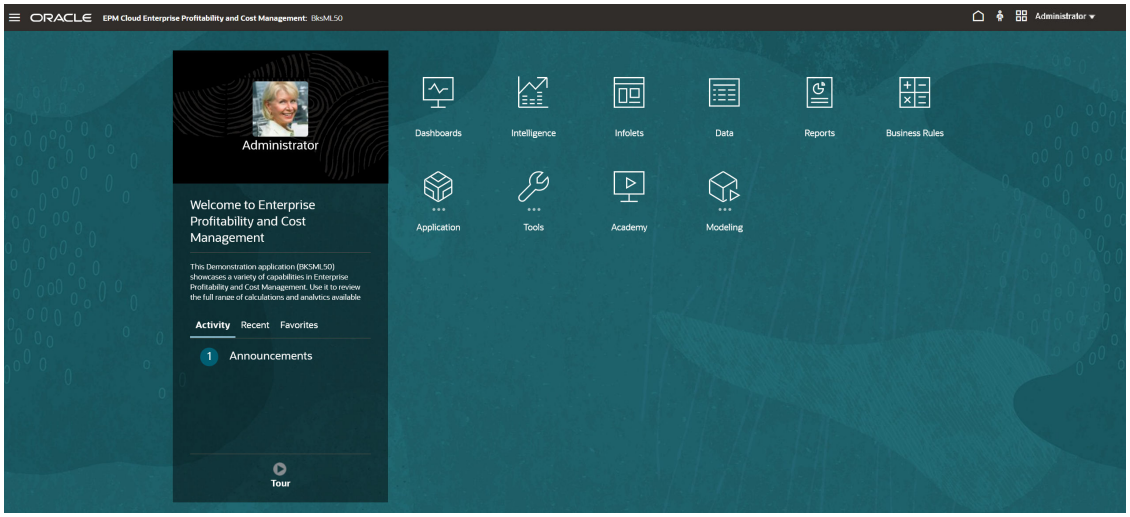
From the Home page:

- *Service Administrators* can create applications, create dimensions, load dimensions into the application, enable localization and accessibility, install and configure clients, and set up user access.
- *Power Users* can create POVs, load data, create rules, validate models, run calculations, and validate results.
- *Users* can create reports, dashboards, analytics, and model views; trace allocations; and create profit curves.
- *Viewers* can view reports, dashboards, analytics, and model; trace allocations, and view profit curves.

All newly created or re-created Oracle Enterprise Performance Management Cloud services, business processes, and applications use the Redwood Experience as the default theme. To add a branding logo or a custom background image to the Home page, select **Tools**, and then **Appearance**. You can also select whether to display the name of your business process.

Example of the Home Page

Copyright © 2022, 2026, Oracle and/or its affiliates.



Global Header

The global header is the area that stretches across the top of the user interface. It contains navigation icons as well as access to accessibility settings and the **Settings and Actions** menu. You can also switch between navigation flows from the global header.

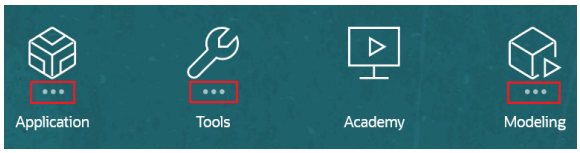
Global Header Part	Description
	The Navigator icon opens the **Navigator** menu, which serves as a sitemap of the business process and displays links to all of the business process pages to which you have access.
ORACLE	Click the Oracle logo to return to the Home page while working elsewhere in the business process. You can display a custom logo instead of the Oracle logo by selecting a **Logo Image** on the **Appearance** page.
EPM Cloud Enterprise Profitability and Cost Management: BksML50	The name of the current business process. You can hide the business process name by selecting **No** for the **Display Business Process Name** option on the **Appearance** page.
	The Home icon refreshes the Home page or returns you to the Home page while working elsewhere in the business process.
	Click the Accessibility Settings icon to enable accessibility features.
	If you belong to multiple groups or if a navigation flow is assigned to a role, click the navigation flow icon to switch navigation flows at runtime.
Administrator	Click your user name to access the **Settings and Actions** menu.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Work Area

The work area on the Home page displays either the default Redwood background image or a custom background image. The cards that display in the work area link you to each functional area of the business process to which you have access; for example, **Dashboards**, **Intelligence**, **Infolets**, **Data**, **Reports**, **Business Rules**, **Application**, **Tools**, **Academy**, and **Modeling**.

The three dots above a card label denotes that the card opens a grouping of sub-cards, called a cluster. In Enterprise Profitability and Cost Management, the **Application**, **Tools**, and **Modeling** cards have associated sub-cards.

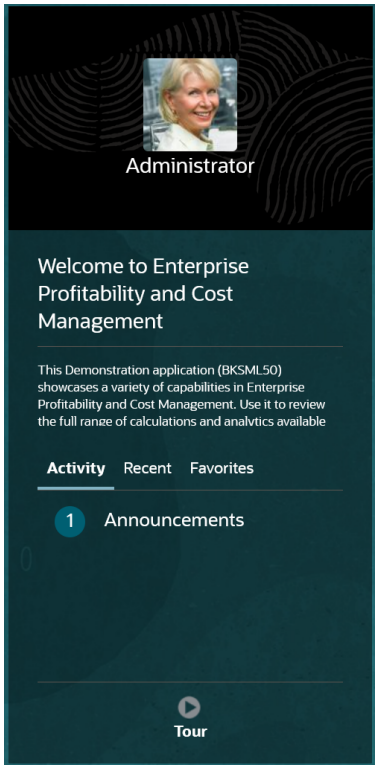


> **Note**
>
> - The **Academy** card links you to a variety of resources about using the business process.
> - To replace the Redwood background image in the work area with a custom background image, select **Tools**, and then **Apperance**, and then select a **Background Image** on the **Appearance** page.

Announcements Panel

The Announcements Panel displays your user name and profile picture (if set) and any system announcements entered by the Service Administrator. Information displayed on the panel can help you track your activity.

Copyright © 2022, 2026, Oracle and/or its affiliates.



- You can set your profile picture to display at the top of the Announcements panel of the Home page. To set your profile picture, click **Tools**, and then **User Preferences**.
- **Activity**: Summarizes system announcements (the most recent announcement, sorted by effective date, appears at the top) and lists your open tasks. Click **Announcements** to flip the panel and view announcements. Click **Tasks Due Today** to flip the panel and view your tasks.
- **Recent**: Displays a list of links to recently visited forms and dashboards (up to 15 items). Clicking a link will launch the item in a secondary window. Clicking the star next to a link will tag it as a favorite.
- **Favorites**: Displays a list of links to forms or dashboards that were tagged as favorites, and prevents them from being overwritten. Click a link in **Favorites** to launch the item in a secondary window. To add items to **Favorites**, click **Recent** to view your recent user activity, and then click the star to the right of the item.
- : Click the **Tour** icon to launch a video about key features in the business process.

Videos

Your Goal	Watch This Video
Explore the default Redwood theme.	 Overview: Announcing EPM Cloud's new Redwood Theme

Copyright © 2022, 2026, Oracle and/or its affiliates.

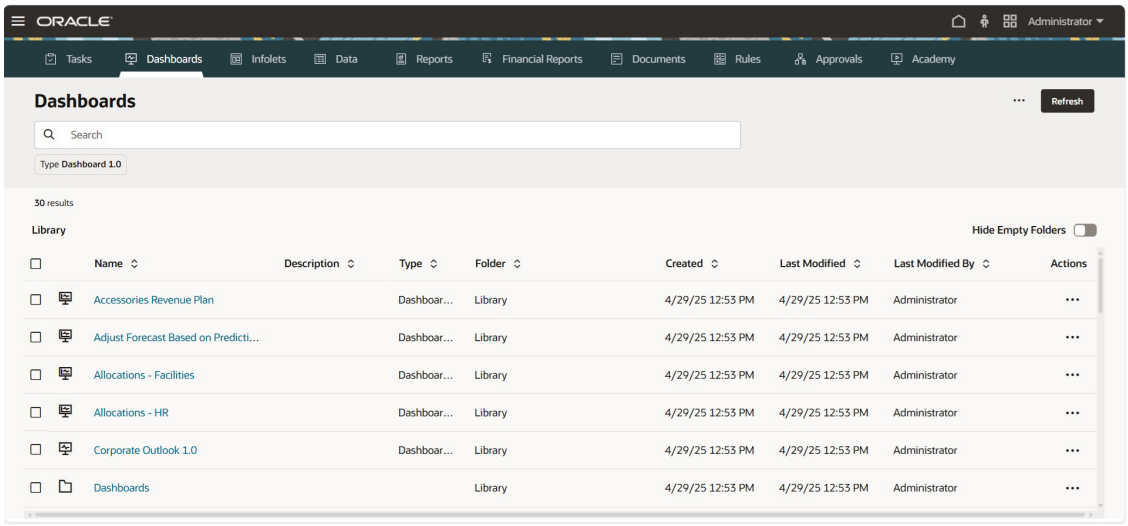
Your Goal	Watch This Video
Learn how to customize the interface to streamline workflow.	Overview: Customizing Workflow in Enterprise Performance Management Cloud

About the Standardized Cloud EPM Platform Artifact Pages

The following artifact pages (also known as list or listing pages) are standardized to provide a common user experience across Cloud EPM Platform business processes:

- **Dashboards**
- **Infolets**
- **Data**
- **Rules**
- **Documents**

The following image shows the standardized **Dashboards** page.



Viewing Artifact Pages

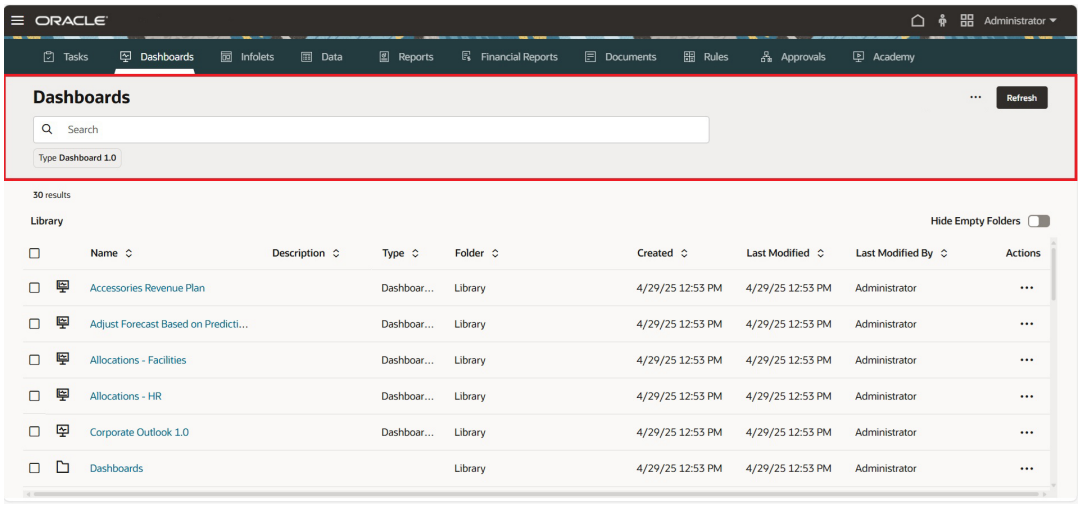
To view the artifact pages, from the Home page, click the icon for **Rules**, **Dashboards**, **Data**, **Infolets**, or **Documents**.

Features of the Standardized Artifact Pages

Standardized artifact pages consist of a header region and a list region.

- Header region features:

Copyright © 2022, 2026, Oracle and/or its affiliates.



– Global Actions ••• : Actions might include creating an artifact, creating a folder, uploading a file, and converting an artifact, whatever actions are applicable for each artifact. You can also select multiple artifacts in the list region to perform global actions such as **Assign Permission** and **Move to**.

> **Note**
>
> To assign permissions to the Library folder on an artifact page, click ••• (More Actions) without selecting an artifact in the list region, and then select **Assign Permission**.

– **Refresh**: Updates the artifact list

– **Search**: Enter search criteria and the search results will display in a drop-down under the **Search** box. Click **Enter** to view the search results in the list region. Search results list all instances of artifacts that include the search criteria (including folder names). Each search result displays the complete folder path. Searching inside a folder narrows the search to that folder and its subfolders.

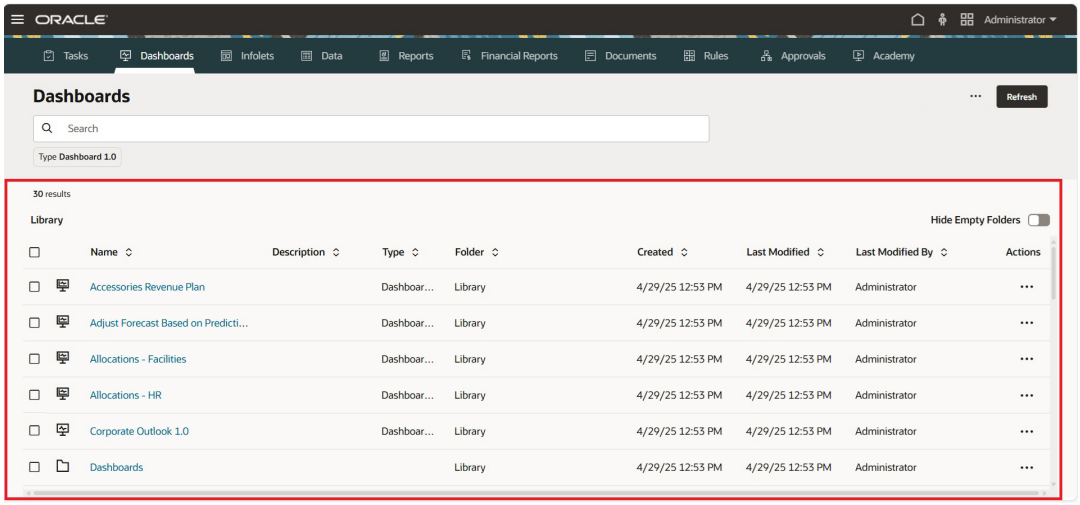
> **Note**
>
> * The search considers the **Name**, **Description**, and **Folder** columns, wherever applicable, in the search.
> * If you perform a **Search** and the **Hide Empty Folders** toggle is off, all matching folders and artifacts are displayed. If the toggle is on, only folders containing matching artifacts are displayed. Empty folders are hidden.

– Filter chips: Filter chips display the search criteria that is entered in the **Search** box. Filter chips can be selected or removed to quickly filter information without changing the current view. We've provided some out-of-the-box filter chips that are combined with a menu so they open a list of selectable options; for example, the **Type** filter chip

Copyright © 2022, 2026, Oracle and/or its affiliates.

for Dashboards filters dashboards by type. Click the **Type** filter chip and select **Dashboard 1.0**, **Dashboard 2.0**, or select both.

- List region features:



  - **Hide Empty Folders** (available only for **Dashboards**, **Documents**, **Infolets**, and **Data** artifact pages): Hides folders that don't contain relevant artifacts for the current context. When the toggle is off, all folders are visible in the list region, including empty ones. When the toggle is on, only folders containing relevant artifacts for the specific artifact page (for example, **Data**, **Dashboards**, and so on) are displayed.

    By default this option is off, and will reset to off each time you start a new session. The state of the toggle is retained by the page during the session and is page-specific. Navigating away from the page and returning preserves the toggle state until the tab is closed or the user logs out.

    > **Note**
    >
    > If you create a folder, keep in mind that newly created folders are empty and therefore will not display if the **Hide Empty Folders** toggle is on. New folders become visible after content is added to them, or if the toggle is switched off.

  - Check boxes enable multi-selection to carry out global actions for the selected artifacts.
  - There are new columns for **Type** and **Folder**.
  - Sort items in ascending or descending order using the arrows next to each column heading.
  - Quickly return to root and parent folders by clicking hyperlinks within the **Folder** column or within the breadcrumbs displayed above the artifact list.
  - Each artifact line item has an item-specific **Actions** menu.
  - Assign permissions using the **Assign Permission** option in either the global Actions ••• menu or in the line item-specific **Actions** menu.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The **Assign Permission** option on the global Actions ••• menu supports assigning permissions to multiple artifacts or folders, or if no artifacts or folders are selected, it assigns permissions to the Library folder.

- Move artifacts using the **Move to** option in either the global Actions ••• menu or in the line item-specific **Actions** menu. The **Move to** option on the global actions menu supports transferring multiple artifacts to a destination folder. While viewing the **Move** interface, you can scroll to find a destination folder or quickly find a destination folder using **Search**.

  > **Note**
  >
  > All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

- For **Dashboards** artifacts, there are new icons to help you differentiate between dashboard versions:
  - : Dashboard 1.0
  - : Dashboard 2.0
- For **Rules** artifacts, the line item-specific **Actions** menus include options to **Edit**, **Launch**, and **Assign Permission**. **Edit** is only available for Service Administrators, and it opens the rule in Calculation Manager within a new dynamic tab.

Reverting to Legacy Artifact Pages

Before standardization, the artifact page options would vary depending on the business process used and the artifacts viewed. By default, all applications now use the standardized artifact pages for **Dashboards**, **Infolets**, **Data**, **Rules**, and **Documents**. However, there are cases when you might prefer to view the legacy artifact pages; for example, if your application uses composite forms and you need to view composite forms on the **Data** page. Use the **Legacy List Pages** application setting to revert the standardized artifact pages to legacy pages.

To revert your application to use legacy artifact pages:

1. From the Home page, click **Application**, and then click **Settings**.
2. Under **Other Options**, find the **Legacy List Pages** setting, and then select **Yes** to revert to legacy artifact pages.
3. Click **Save**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support the **Legacy List Pages** application setting. For all new and existing environments, the **Legacy List Pages** option will be removed and the following artifact pages will be rendered as standardized:
>
> - **Data**
> - **Dashboards**
> - **Infolets**
> - **Documents**
> - **Rules**

Standardized Artifact Page Considerations

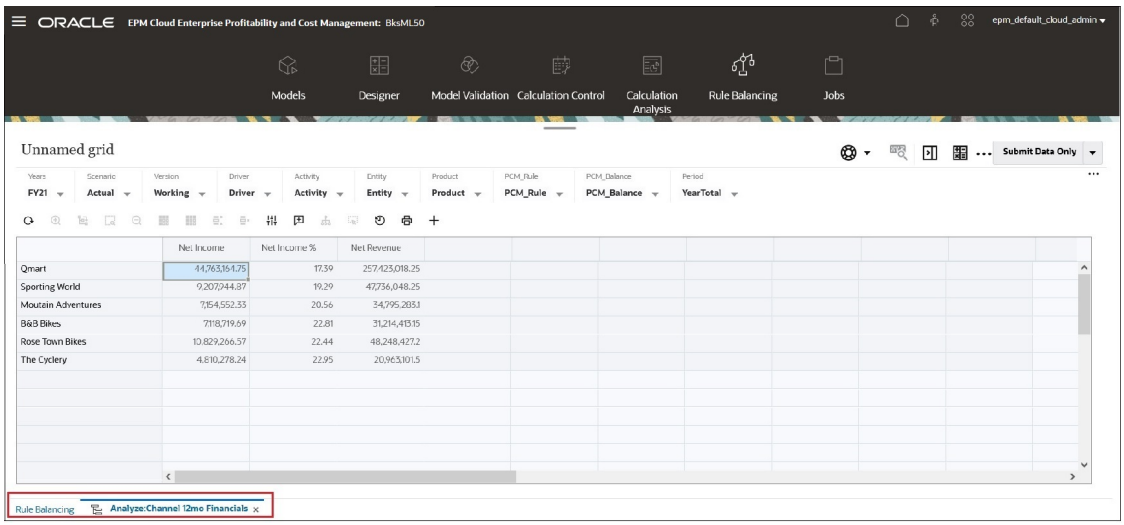
The standardized **Data** page does not support listing composite forms. To view composite forms on the **Data** page, you must revert to the legacy pages using the **Legacy List Pages** application setting. To revert your application to use legacy artifact pages, see Reverting to Legacy Artifact Pages.

Using Dynamic Tabs

Work on related artifacts within tabs without having to navigate away from a parent artifact.

About Dynamic Tabs

Dynamic tabs enable you to view multiple artifacts on a single page. For example, if you have a form open, you can open other related forms, and you can also open dashboards. These additional artifacts are denoted by horizontal tabs at the bottom of the page. This feature is for users who do want to view multiple artifacts simultaneously, but don't want to have multiple browser windows open.



Dynamic tabs terminology:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Dynamic Tab**—A tab that is added at the bottom of the page to the right of the source tab when a related artifact is launched. Only dynamic tabs will display a close icon.
- **Source Tab**—The page from where the dynamic tab was launched.

If your Oracle Fusion Cloud Enterprise Performance Management environment includes tabs from another Cloud EPM environment, dynamic tabs are supported for those cross-environment tabs.

Considerations When Using Dynamic Tabs

- You can open up to 30 tabs on a page. If you attempt to open more than 30 tabs, you will see a message prompting you to close a few tabs before opening new ones.
- Long artifact names will appear truncated on tabs.

Working with Dynamic Tabs

Source and dynamic tabs display at the bottom of the page on which you're working.

When you launch a new dynamic tab from an existing tab or listing page, the new tab is added to the right of the existing tab and the focus will move to the newly launched tab.

Dynamic tabs are preserved for the current session only. The last tab displayed is retained the next time you access the page within the same session. If you log out and then log back in, if you reload a navigation flow, or if you switch to another navigation flow, dynamic tabs will not be retained. If there is any unsaved data, you will be prompted to save it before you're able to proceed.

Each new action you perform opens a new dynamic tab. Say, for example, you perform a drill through on Form1 and then perform a drill through on Form2, this will open two dynamic tabs. If you perform another drill through on Form1, the action will relaunch the previously opened tab.

Artifacts that were launched in dynamic tabs will also be listed in your recent history on the Announcements Panel. Dynamic tabs can also be added to **Favorites** in the Announcements Panel.

Dynamic tabs display a close icon. If there is any unsaved data on a tab, you will be prompted to save it before closing the tab. After a tab is closed the focus will move to the tab that is to the left of the closed tab. If you are closing a tab that is not in focus, the focus remains on the tab that is currently in view. To close all dynamic tabs, right-click any horizontal tab displayed at the bottom of the page and click **Close All Tabs**.

Videos

Your Goal	Watch This Video
Learn how to navigate with dynamic tabs to multi-task with different artifacts. With dynamic tabs, you can open related artifacts while keeping the original artifacts open.	Navigating with Dynamic Tabs

Copyright © 2022, 2026, Oracle and/or its affiliates.

Considerations When Using the Application Interface

Note the following considerations when using the application interface:

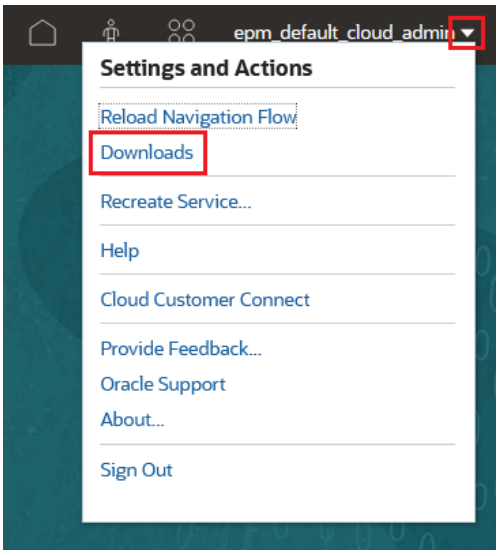
- The interface supports only Landscape mode for iPad and Android tablets.
- The user experience on tablets is better on iPad than on Android devices.
- Oracle recommends using the Safari web browser with iPads and Google Chrome with Android devices.
- If you use Windows 10, the interface might appear in a magnified (or zoomed in) state if your scaling isn't set to 100%. Windows 10, by default, might have 125% or 150% scaling.
- A PDF viewer is required to view reports on the tablet. Oracle recommends the Adobe PDF viewer, but it can be opened in Kindle or Polaris Office on Android devices or a similar application on the iPad.

Downloading and Installing Smart View

Service Administratrors can use Oracle Smart View for Office to import and edit dimension and member metadata. (See Using Smart View to Import and Edit Application Metadata). In addition, as you are working with your data on the Rule Balncing page in Enterprise Profitability and Cost Management, you can click linked data points that open a context-sensitive, ad-hoc report in Smart View, where you can add more context to your results, drill down for more detail, and pivot the data. (See Viewing Rule Balancing Reports.

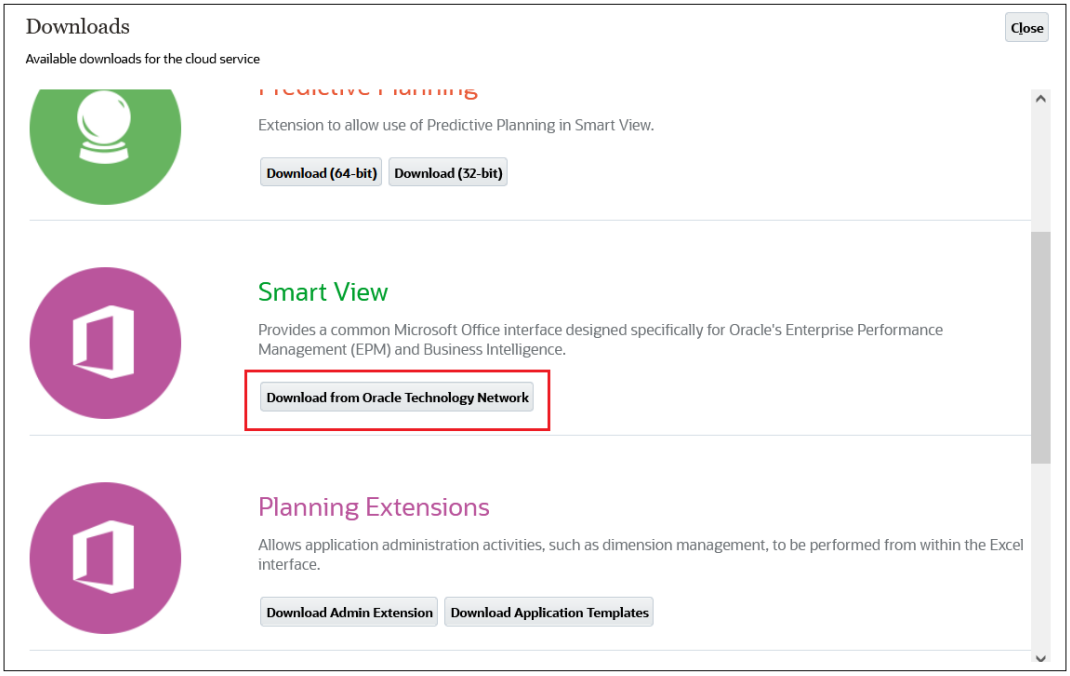
To download and install Smart View:

1. From the Home page, click the drop-down next to your user name at the top right of the page, and select **Downloads**.

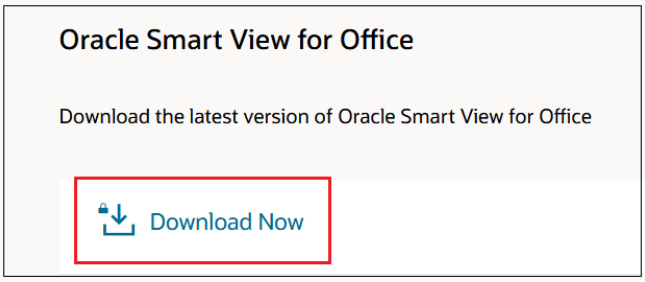


2. On the **Downloads** page, under **Smart View**, click **Download from Oracle Technology Network**.

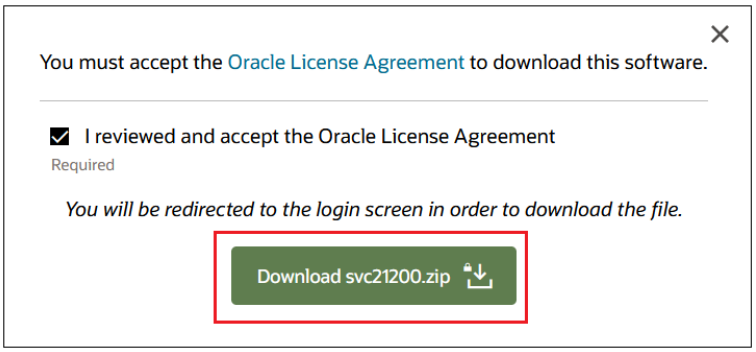
Copyright © 2022, 2026, Oracle and/or its affiliates.



3. On the **Oracle Smart View for Office** page, click **Download Now**.



4. Accept the license agreement, and download the zip file.



5. Go to your downloads and extract **SmartView.exe**.
6. Double-click **SmartView.exe** and follow the installation prompts.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Managing Your Enterprise Profitability and Cost Management Implementation

Though the order of steps may vary based on how you manage your implementation, a typical implementation process for a new Enterprise Profitability and Cost Management application includes these steps:

1. **Create an application based on design requirements:** Start by designing the structure of the business process. This includes planning which custom dimensions and attribute dimensions you will need for the default and custom cubes in your application. You also make decisions on items such as naming conventions, the calendar structure, and currency specifications. See Creating an Enterprise Profitability and Cost Management Application.
2. **Manage dimensions and cubes:** After the business process is created, you set up any custom dimensions and attribute dimensions, and then load metadata to build out all your dimensions. You can also add member formulas, attributes, user-defined attributes and smart lists to your dimension members. After creating your dimensions you can optionally add any custom cubes you require. See Managing Dimensions and Managing Cubes.
3. **Set up security:** Set up role-based, metadata, data, and artifact security. See Setting Up Access Permissions and Data Security.
4. **Create application forms:** Create forms needed for data entry, data validation, and Rule Balancing. See Administering Forms and Designing Data Forms for Rule Balancing.
5. **Load or enter input data, driver data, and exchange rates:** Enter data in forms and load data using native import or data integrations. See About Entering Data, Importing Data, and Creating File-Based Integrations.
6. **Create model POVs:** Create and manage model POVs for running model calculations. See Understanding Points of View, Creating a Point of View, and Using the Calculation Control Page 1.0.

Copyright © 2022, 2026, Oracle and/or its affiliates.

7. **Create models, rule sets, and rules:** Create models, rule sets, and rules based on your business requirements. See Creating and Managing Models and Creating and Managing Rules.
8. **Calculate, validate, and troubleshoot models:** After loading data and creating models, you validate your rules, calculate models, and manage calculations. See Running Model Validation, Calculating Models, Analyzing Calculations, and Viewing Rule Balancing Reports.
9. **Integrate data with downstream systems:** After finalizing your calculated data, you can export it to a file, or to external systems such as Oracle Financials Cloud, Oracle General Ledger, and Planning. You can also export data from your calculation cube to your reporting cube. See Administering Data Integration.
10. **Create and view dashboards, infolets, reports, and intelligence:** Use dashboards, infolets, reports, and intelligence to analyze and report on your data. See Designing and Working with Dashboards, Viewing Key Information with Infolets, and Working with Reports for information on how to interact with existing dashboards, infolets, and reports. See Designing Data Forms for Profit Curves and Designing Data Forms for Trace to learn how to design forms for and build Profit Curves and Allocation Traces, which are unique toEnterprise Profitability and Cost Management.
11. **Customize the business process:** You customize your business process by designing custom navigation flows to customize the look and feel of the user interface for specific roles or groups, definng valid intersections, and creating custom action menus for forms. See Designing Custom Naviation Flows and Defining Valid Intersections.
12. **Maintain the business process:** You maintain your business process by scheduling backups, analyzing system diagnostics, and cloning environments.

De-Support of Legacy Features

Starting with the October 2025 (25.10) update, Oracle is de-supporting the following legacy features:

- Forms 1.0
- Dashboard 1.0
- **Legacy List Pages** application setting
- Infolets

Copyright © 2022, 2026, Oracle and/or its affiliates.

Legacy Feature	For New Environments (Created on or after October 3, 2025)	For Existing Environments (Created before October 3, 2025)	Details
Forms 1.0	Internally defaulted to Forms 2.0 – No Application Setting option to render Forms in Forms 1.0	Application Setting for **Forms Version** reset to Forms 2.0 – Users can still change it back	New environment users will see all their forms rendered exclusively in Forms 2.0, with no option in Application Settings to switch to Forms 1.0. Existing environment users will also see their Forms rendered in Forms 2.0 by default. However, they will have the option to switch back to Forms 1.0 using Application Settings if needed. See Plan to Discontinue Support for Forms 1.0 and Dashboard 1.0.
Dashboard 1.0	Users will not be able to create Dashboard 1.0 artifacts.	Users will be able to create or modify Dashboard 1.0 artifacts as before.	New environment users will be able to create and modify dashboards using the Dashboard 2.0 framework only. Existing environment users will have the flexibility to create and modify dashboards using either the Dashboard 1.0 or Dashboard 2.0 frameworks. See Plan to Discontinue Support for Forms 1.0 and Dashboard 1.0.
Legacy List Pages application setting	The option to show or hide **Legacy List Pages** in Application Settings is removed. Users will see only Standardized artifact pages (also known as List or Listing Pages)	The option to show or hide **Legacy List Pages** in Application Settings is removed. Users will see only Standardized artifact pages (also known as List or Listing Pages)	Users for all environments will see the following artifact pages rendered as Standardized only: • **Forms** • **Dashboards** • **Infolets** • **Documents** • **Rules** See About the Standardized Cloud EPM Platform Artifact Pages.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Legacy Feature	For New Environments (Created on or after October 3, 2025)	For Existing Environments (Created before October 3, 2025)	Details
Infolets	Users cannot: • Create new infolets • Include infolets in navigation flows	Users cannot: • Create new infolets • Include infolets in navigation flows There is no impact for existing infolet dots on the Home page.	All environment users are restricted from creating infolets or adding them to navigation flows. See Plan to Discontinue Support for New Infolets and Other Infolet Actions.

Plan to Discontinue Support for Forms 1.0 and Dashboard 1.0

Effective October 2025, all environments will default to the 2.0 setting for Forms and Dashboards with existing environments having the option to switch back to 1.0 with no support for 1.0. All new environments deployed effective October (25.10) will be deployed with Forms 2.0 and Dashboard 2.0 only; the option to switch to Forms 1.0 will no longer be available.

Customers are advised to change application settings from 1.0 to 2.0 and convert their dashboards from 1.0 to 2.0 as soon as possible. Gaps found in 2.0 should be reported using the Service Request process so that Oracle Support can evaluate if the request is justified and, if so, resolve them. Any issues found in 1.0 for either Forms or Dashboards will be resolved in 2.0 if it can be reproduced in 2.0. There will be no bug fixes or enhancements to Forms 1.0 or Dashboard 1.0.

The Task Manager interface will continue to display standalone forms using Forms 1.0 even if the **Forms Version** application setting is set to 2.0.

Plan to Discontinue Support for New Infolets and Other Infolet Actions

Effective October 2025, Oracle will no longer support the following infolet actions:

- Creation of new infolets
- **Copy As**, which duplicates an existing infolet
- Designating an infolet as **Default** and defining infolet dots on the Home page

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part II
Creating and Managing Applications

Related Topics

- Creating an Enterprise Profitability and Cost Management Application
- Managing Applications
- Managing Application and System Settings
- Defining Valid Intersections
- Administering Data Integration
- Managing Jobs

Copyright © 2022, 2026, Oracle and/or its affiliates.

2

Creating an Enterprise Profitability and Cost Management Application

Related Topics

- Application Design Best Practices
- About Creating an Application
- Configuring Your Environment
- Selecting What Type of Application to Create
- Creating the Sample Application
- Creating a New Application

Video

Your Goal	Watch This Video
Learn how to create applications in Enterprise Profitability and Cost Management.	Creating Applications in Enterprise Profitability and Cost Management

Application Design Best Practices

Before you create your Enterprise Profitability and Cost Management application, review the Enterprise Profitability and Cost Management Application Design Best Practices in the *Operations Guide* to help you determine your requirements and design your application so that it meets your business needs. Design best practices are available in the following areas:

- Managing Application Scalability
- Managing Dimension Design
- Managing Application Logic Design
- Maintaining an Optimized Calculation System

About Creating an Application

The landing page is your starting point for creating an Enterprise Profitability and Cost Management application and for viewing an overview video to help you get started. Each subscription to the EPM Enterprise Cloud Service allows you to create one application.

You begin by pre-configuring your environment for Enterprise Profitability and Cost Management. After the pre-configuration is complete, you select what type of application to create, and then you create the application.

- Configuring Your Environment
- Selecting What Type of Application to Create
- Creating the Sample Application

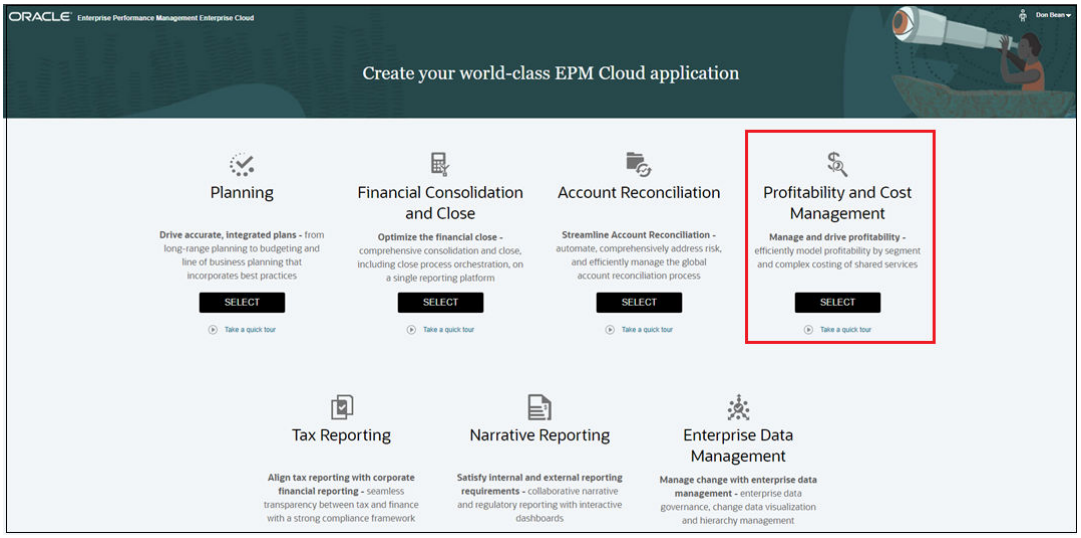
Copyright © 2022, 2026, Oracle and/or its affiliates.

- Creating a New Application

Configuring Your Environment

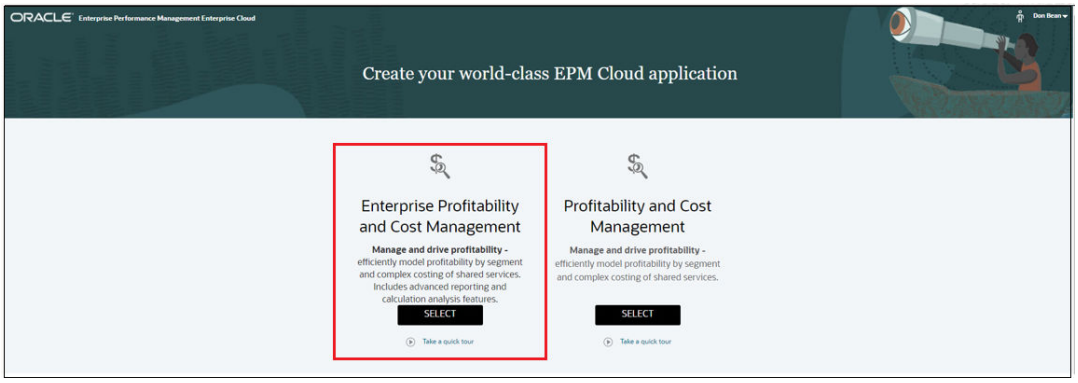
To configure your environment for Enterprise Profitability and Cost Management:

1. From the landing page, click **SELECT** under **Profitability and Cost Management**.



Click **OK** to initiate the configuration process.

2. Click **SELECT** under **Enterprise Profitability and Cost Management**.



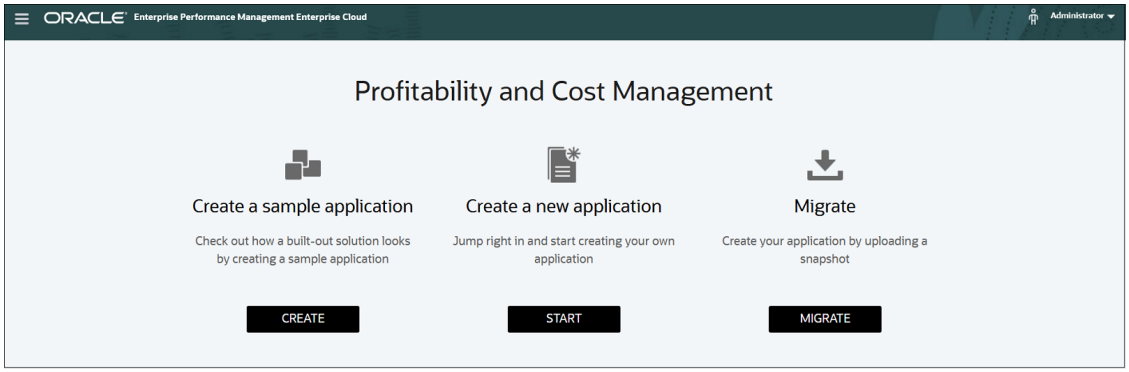
> **Note**
>
> After you initiate the creation of an application, you cannot return to the landing page. If wish to return to the landing page to create a different application, you must first reset your environment to its original state. See Switching to a Different Business Process in *Getting Started Guide for Administrators*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If you want to create a legacy Profitability and Cost Management application, then select **Profitability and Cost Management**. For documentation on legacy Profitability and Cost Management, go to Oracle Profitability and Cost Management on the Help Center.

Selecting What Type of Application to Create

After the pre-configuration is complete, you have three options to create an Enterprise Profitability and Cost Management application:



- **Create a sample application:** Click **CREATE** to create a sample business process with data and artifacts. You can use this ready-to-use business process for testing and exploration of functional areas. You can also use it as a template to model your own business process. Creating a sample application is a good way to learn about Profitability and Cost Management using a simple prebuilt example that has a full set of dimensions, rules, dashboards, and reports.
- **Create a new application:** Click **START** to create a container business process.
- **Migrate:** Click **MIGRATE** to import a business process from a snapshot that you previously uploaded to the environment. See What Applications Can I Migrate to EPM Standard Cloud Service and EPM Enterprise Cloud Service for prerequisites and snapshot compatibility. You can also migrate from a legacy Profitability and Cost Management application.

Creating the Sample Application

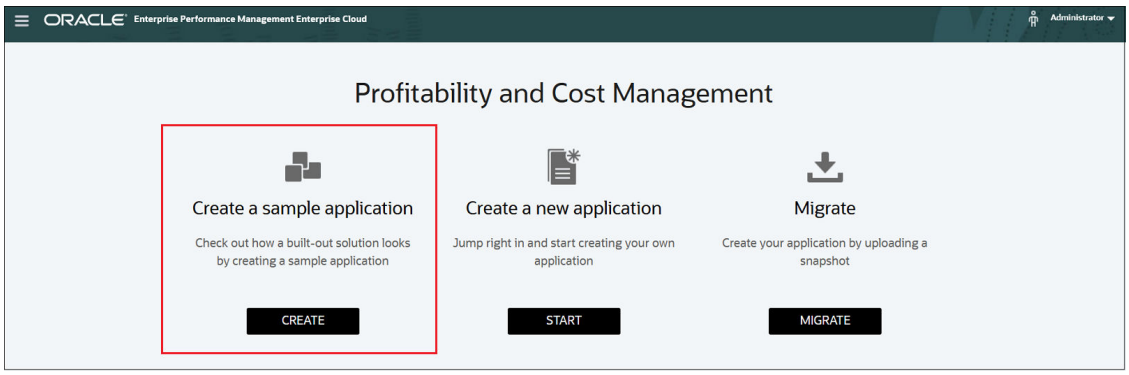
Enterprise Profitability and Cost Management provides a sample application, called BksML50, that lets you quickly create an application with artifacts and data. The sample application showcases a variety of capabilities in Enterprise Profitability and Cost Management. The calculations and analytics in the sample application can serve as examples of analysis options for your own model design. You can use this application for testing and exploration of functional areas. You can also use it as a template to model your own application.

In the sample application, "Bikes" is a fictional manufacturer and distributor of bicycles and accessories to a group of retail chains with a total of 1,600 store locations. The rules are in eight rule sets with a total of 26 rules created in a waterfall of currency conversions followed by

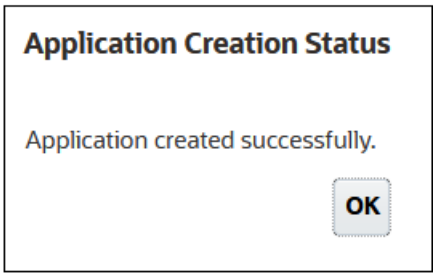
Copyright © 2022, 2026, Oracle and/or its affiliates.

allocations. The resulting data set has both revenue and expenses fully dimensionalized across Entity, Account, Activity, Product and Customer with time series analysis views.

To create the sample application, click **CREATE** under **Create a sample application**.



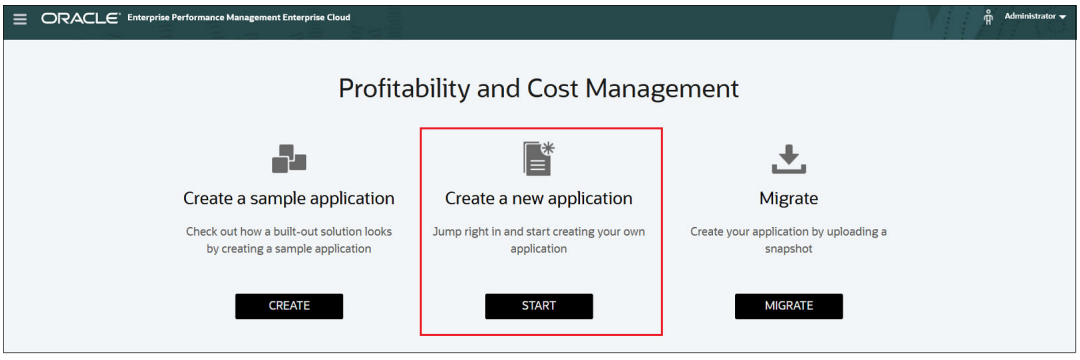
When the application creation is complete, you will see an **Application created successfully** message. Click **OK** to display the sample application in Enterprise Profitability and Cost Management.



Creating a New Application

To create a new application:

1. Click **Start** under **Create a new application**.



2. In the **Create Application** wizard, set up the following information about the application:
   - Entering a Name and a Description

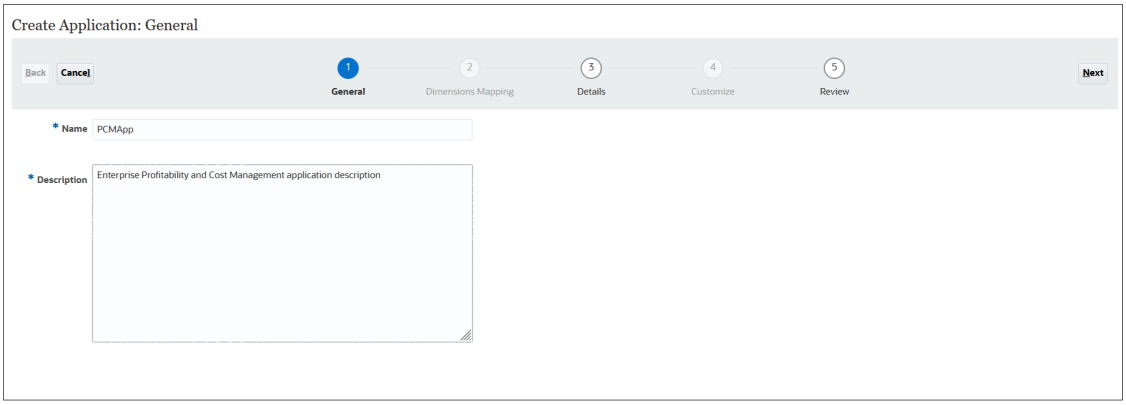
Copyright © 2022, 2026, Oracle and/or its affiliates.

- Setting Up the Calendar
- Setting Up Currencies
- Reviewing Application Information

> **Note**
>
> The **Dimension Mapping** and **Customize** options in the **Create Application** wizard are disabled and not applicable for Enterprise Profitability and Cost Management.

Entering a Name and a Description

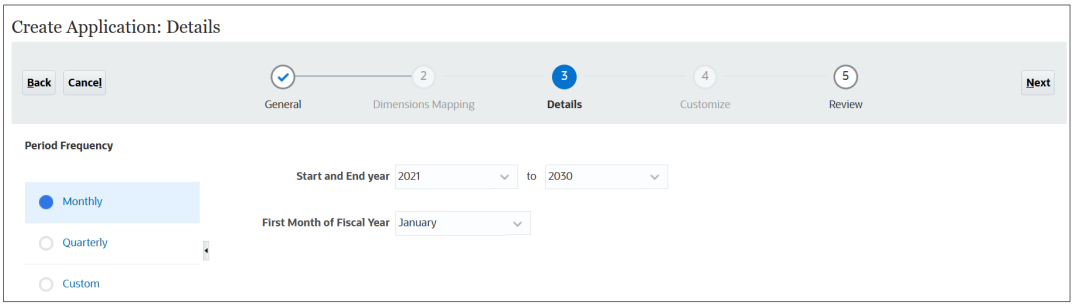
On the **Create Application: General** page, enter a name and a description for the application.



Setting Up the Calendar

Set up the calendar for the application in the **Period Frequency** section of the **Create Application: Details** page. You can set the period frequency to **Monthy**, **Quarterly**, or **Custom**.

- **Monthly**—If you select **Monthly**, enter the **Start and End Year** and the **First Month of Fiscal Year**.



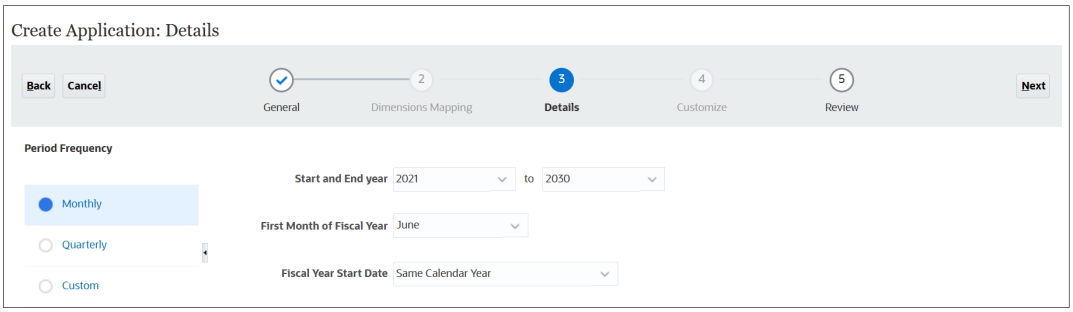
The years you enter for **Start and End Years** determine how many years are created in the **Years** dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example, if the **Start Year** is **2021** and the **End Year** is **2030,** then the **Years** dimension is constructed as follows:

Member Name	Parent Member	Default Data Storage	Data Type	Default Alias Table
Years		Never Share	Unspecified	
All Years	Years	Dynamic Calc	Unspecified	
FY21	All Years	Store	Unspecified	
FY22	All Years	Store	Unspecified	
FY23	All Years	Store	Unspecified	
FY24	All Years	Store	Unspecified	
FY25	All Years	Store	Unspecified	
FY26	All Years	Store	Unspecified	
FY27	All Years	Store	Unspecified	
FY28	All Years	Store	Unspecified	
FY29	All Years	Store	Unspecified	
FY30	All Years	Store	Unspecified	

The month you enter for the **First Month of Fiscal Year** determines how the **Period** dimension is constructed. If you set the **First Month of Fiscal Year** to anything other than **January**, specify whether the fiscal year starts in the **Same Calendar Year** or in the **Previous Calendar Year**.



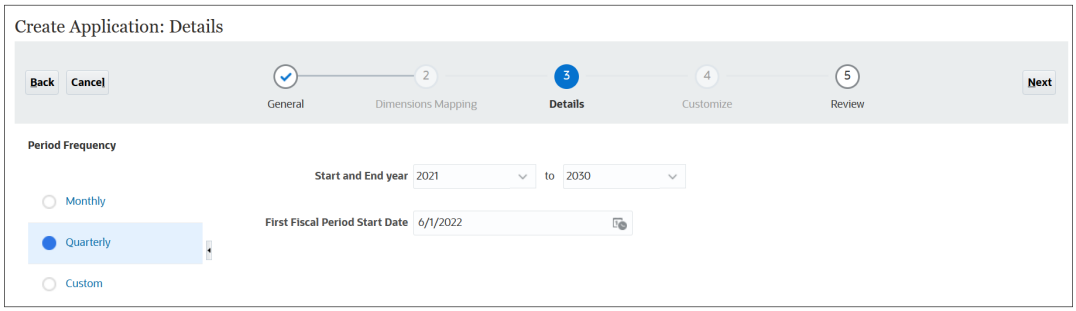
You can later set up calculations based on the calendar year, for example, using formula expressions. When setting up formulas for an application, consider that formula expressions such as [TPDate] and [FirstDate] produce different results if the application starts in the same calendar year or previous calendar year.

For example, if the **First Month of Fiscal Year** is **June**, and **Fiscal Year Start Date** is in the **Same Calendar Year**, then the **Period** dimension is constructed as follows:

Member Name	Parent Member	Default Data Storage	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
Period		Never Share	Unspecified	Ignore	Ignore	
BegBalance	Period	Store	Unspecified	Ignore	Ignore	
YearTotal	Period	Dynamic Calc	Unspecified	Addition	Addition	
Q1	YearTotal	Dynamic Calc	Unspecified	Addition	Addition	
Jun	Q1	Store	Unspecified	Addition	Addition	
Jul	Q1	Store	Unspecified	Addition	Addition	
Aug	Q1	Store	Unspecified	Addition	Addition	
Q2	YearTotal	Dynamic Calc	Unspecified	Addition	Addition	
Sep	Q2	Store	Unspecified	Addition	Addition	
Oct	Q2	Store	Unspecified	Addition	Addition	
Nov	Q2	Store	Unspecified	Addition	Addition	
Q3	YearTotal	Dynamic Calc	Unspecified	Addition	Addition	
Dec	Q3	Store	Unspecified	Addition	Addition	
Jan	Q3	Store	Unspecified	Addition	Addition	
Feb	Q3	Store	Unspecified	Addition	Addition	
Q4	YearTotal	Dynamic Calc	Unspecified	Addition	Addition	
Mar	Q4	Store	Unspecified	Addition	Addition	
Apr	Q4	Store	Unspecified	Addition	Addition	
May	Q4	Store	Unspecified	Addition	Addition	

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Quarterly**—If you select **Quarterly**, enter the **Start and End Year** and the **First Fiscal Period Start Date**.

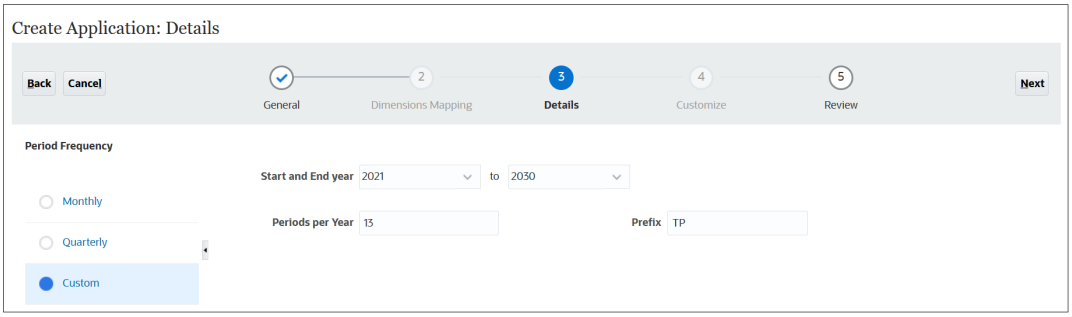


For example, if you select **Quarterly**, and set the **Start Year** to **2021** and the **End Year** to **2030**, then the **Period** and **Years** dimensions are constructed as follows:

Member Name	Parent Member	Default Data Storage	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
Period		Never Share	Unspecified	Ignore	Ignore	
BegBalance	Period	Store	Unspecified	Ignore	Ignore	
YearTotal	Period	Dynamic Calc	Unspecified	Addition	Addition	
Q1	YearTotal	Store	Unspecified	Addition	Addition	
Q2	YearTotal	Store	Unspecified	Addition	Addition	
Q3	YearTotal	Store	Unspecified	Addition	Addition	
Q4	YearTotal	Store	Unspecified	Addition	Addition	

Member Name	Parent Member	Default Data Storage	Data Type	Default Alias Table
Years		Never Share	Unspecified	
All Years	Years	Dynamic Calc	Unspecified	
FY21	All Years	Store	Unspecified	
FY22	All Years	Store	Unspecified	
FY23	All Years	Store	Unspecified	
FY24	All Years	Store	Unspecified	
FY25	All Years	Store	Unspecified	
FY26	All Years	Store	Unspecified	
FY27	All Years	Store	Unspecified	
FY28	All Years	Store	Unspecified	
FY29	All Years	Store	Unspecified	
FY30	All Years	Store	Unspecified	

- **Custom**—If you select **Custom**, enter the **Start and End Year**, **Periods Per Year**, and a **Prefix**.



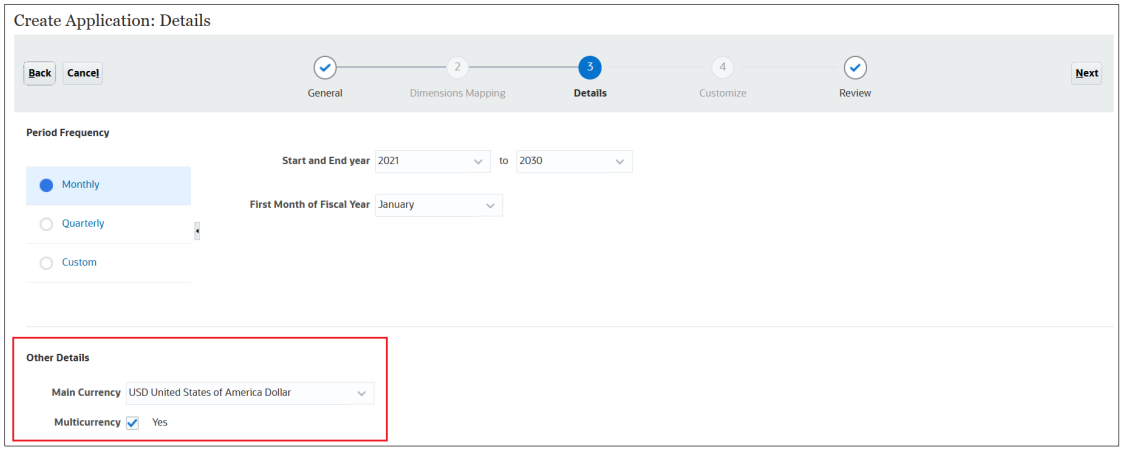
For example, if the **Periods Per Year** is **13**, and the **Prefix** is **TP**, then the **Period** dimension is constructed as follows:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Member Name	Parent Member	Default Data Storage	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
Period		Never Share	Unspecified	Ignore	Ignore	
BegBalance	Period	Store	Unspecified	Ignore	Ignore	
YearTotal	Period	Dynamic Calc	Unspecified	Addition	Addition	
TP1	YearTotal	Store	Unspecified	Addition	Addition	
TP2	YearTotal	Store	Unspecified	Addition	Addition	
TP3	YearTotal	Store	Unspecified	Addition	Addition	
TP4	YearTotal	Store	Unspecified	Addition	Addition	
TP5	YearTotal	Store	Unspecified	Addition	Addition	
TP6	YearTotal	Store	Unspecified	Addition	Addition	
TP7	YearTotal	Store	Unspecified	Addition	Addition	
TP8	YearTotal	Store	Unspecified	Addition	Addition	
TP9	YearTotal	Store	Unspecified	Addition	Addition	
TP10	YearTotal	Store	Unspecified	Addition	Addition	
TP11	YearTotal	Store	Unspecified	Addition	Addition	
TP12	YearTotal	Store	Unspecified	Addition	Addition	
TP13	YearTotal	Store	Unspecified	Addition	Addition	

Setting Up Currencies

Specify the main currency for the application, and establish whether the application supports multiple currencies in the **Other Details** section of the **Create Application: Details** screen. If you select **Yes** for **Multicurrency** then a **Currency** dimension is created.



The currency that you select for the main currency is the first member of the **Currency** dimension. For example, if you select **USD United States American Dollar** as the **Main Currency**, it is displayed in the **Currency** dimension as follows:

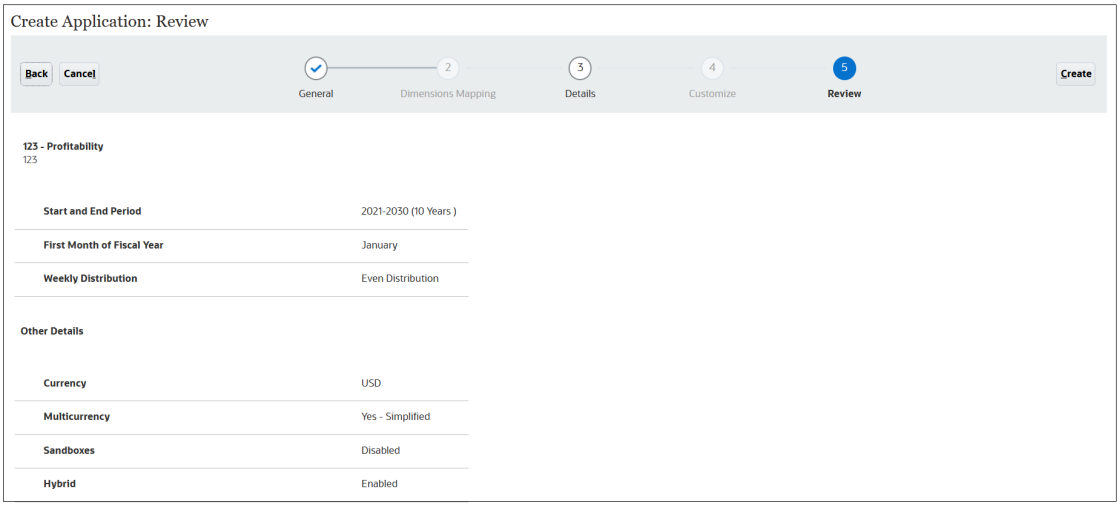
Member Name	Parent Member	Default Data Storage	Data Type	Symbol	Predefined Symbol	Scale
Currency		Never Share	Unspecified			
Input Currencies	Currency	Label only	Unspecified		<None>	1
USD	Input Currencies	Store	Unspecified		$	1
Reporting Currencies	Currency	Label only	Unspecified		<None>	1
USD_Reporting	Reporting Currencies	Store	Unspecified		$	1
No Currency	Currency	Never Share	Unspecified		<None>	1

> **Note**
>
> After the application is created, you can't change this option. Multiple currency support is available for level 0 members, regardless of base currency. The same currencies and exchange rates are used across cubes.

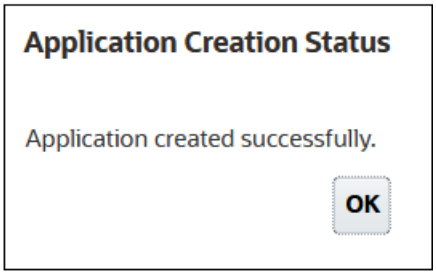
Copyright © 2022, 2026, Oracle and/or its affiliates.

Reviewing Application Information

On the **Create Application: Review** page, review the application information that you have defined, and then click **Create** to create the application.



When the application creation is completed, you will see an **Application created successfully** message. Click **OK** to display the application in Enterprise Profitability and Cost Management.



Copyright © 2022, 2026, Oracle and/or its affiliates.

3

Managing Applications

Related Topics

- Application Overview
- Managing Cubes
- Managing Dimensions
- Viewing Activity Reports
- Importing and Exporting Data
- Importing Exchange Rates for a Multicurrency Application
- Uploading and Downloading Files Using the Inbox/Outbox Explorer
- Refreshing the Application Database
- Validating Metadata
- Removing an Application

Application Overview

An application is a related set of dimensions and dimension members used to meet a set of business process needs. Each application has its own cubes, dimensions, accounts, entities, scenarios, and other data elements.

An application is based on a set of related dimensions and dimension members used to meet a set of business process needs. Each application has its own cubes, dimensions, data, models, calculation rules, and analytic artifacts.

You can have a single Enterprise Profitability and Cost Management application for each environment. An application consists of a single ASO calculation cube and a single ASO reporting cube. Up to three additional cubes are allowed.

To create an application, see Creating an Enterprise Profitability and Cost Management Application.

After an application is created, you can view and manage it using the **Application** console. To view the **Application** console, select **Application**, and then **Overview**.

The **Application** console consists of these tabs:

- **Overview**: Application name, description, and type; the number of data definitions (dashboards, forms, and reports) in the application; the number of rules in the application; and the cubes used by the application.
- **Cubes**: See Managing Cubes.
- **Dimensions**: See Managing Dimensions.
- **Activity Reports**: See Viewing Activity Reports.

From any of the tabs on the **Application** console, you can click these buttons:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Refresh Refreshes the **Application** console to ensure it is displaying the latest information.
- Actions Click the drop-down to perform the following tasks:
  - Importing and Exporting Data
  - Importing Exchange Rates for a Multicurrency Application (Available only if you created a Currency dimension when you created your application. See Setting Up Currencies.)
  - Refreshing the Application Database
  - Creating Clear Cube Jobs
  - Removing an Application
  - Uploading and Downloading Files Using the Inbox/Outbox Explorer

Managing Cubes

Related Topics

- About Cubes in Enterprise Profitability and Cost Management
- Creating Cubes
- Clearing Cubes
- Improving Cube Performance

About Cubes in Enterprise Profitability and Cost Management

Enterprise Profitability and Cost Management applications contain cubes that store data and metadata. As you manage dimensions, members, and data in your application, you associate them with cubes. The association ensures that the cube contains only relevant application dimensions, members, and data values, and that application design, size, and performance are optimized.

Enterprise Profitability and Cost Management comes pre-loaded with the following cubes:

- **PCM_CLC**: Use this cube to run calculations.
- **PCM_REP**: Use this cube to view data and run reports.

For performance reasons, it is best to keep the amount of data in the **PCM_CLC** cube small. To do this, move calculation results for completed time periods from the **PCM_CLC** cube to the **PCM_REP** cube, where you can then view data and reports.

For example, instead of calculating data for January and leaving it in the **PCM_CLC** cube, and then calculating data for February and leaving it in the **PCM_CLC** cube, and so on for months or even years, it is better to periodically move the data from the **PCM_CLC** cube to the **PCM_REP** cube and keep only the actively-calculated data in the **PCM_CLC** cube.

To view and manage cubes:

1. From the Enterprise Profitability and Cost Management Home page, select **Application**, and then select **Overview**.
2. Select the **Cubes** tab, and perform a task:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Click the name of the cube to view cube details.
- Create a new cube (see Creating Cubes).
- Clear a cube (see Clearing Cubes).

> **Note**
>
> You can add only Aggregate Storage (ASO) cubes in Enterprise Profitability and Cost Management.

Creating Cubes

In addition to the pre-loaded PCM_CLC calculation cube and the PCM_REP reporting cube, you may want to create additional cubes to use in your organization. For example, you could create a custom cube to collect driver data or to stage and validate input data before loading the data into the calculation cube. The number of cubes you create depends on the needs of your organization. You can create up to three custom cubes.

To create a new cube:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Cubes** tab.
3. On the **Cubes** tab, click **Create**.
4. On the **Create Cube** page, enter a **Name**, **Type**, and **Description** for the cube.

   Since you can add only Aggregate Storage cubes in Enterprise Profitability and Cost Management, select **Aggregate Storage Option** for the **Type**. When creating a new cube, aggregate storage limits apply.
5. Click **Done**.

   The new cube is displayed along with the **PCM_CLC** and **PCM_REP** cubes on the **Cubes** tab.

After you create a cube, you add dimensions to the cube (see Managing Dimensions) and then refresh the database to commit the changes to the application (see Refreshing the Application Database.

> **Note**
>
> After a cube is created, you cannot rename or delete it.

Clearing Cubes

Related Topics

- About Clearing Cubes
- Creating Clear Cube Jobs
- Submitting a Clear Cube Job
- Deleting a Clear Cube Job

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Scheduling Clear Cube Jobs

About Clearing Cubes

You can clear specific input and calculaton data within cubes. When you clear a cube, you can reload or correct the data in the cube. For example, you might have loaded data into into the wrong intersection, or you may simply need to prepare the cube for the next cycle.

You create Clear Cube jobs to clear the data in a cube. You can start a Clear Cube job right away, or you can schedule it to run later.

> **Note**
>
> A Clear Cube job clears the data that you specify in a cube, but it does not delete the cube definition in the application's relational tables.

Creating Clear Cube Jobs

To create a Clear Cube job:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select **Actions**, and then **Clear Cube**.
3. On the **Clear Cube** page, click **Create**.
4. Enter the job name and select the cube to clear.
5. Select what you would like to clear:
   - **Clear All**: Clears all data in a cube that is associated with the selected **Clear Options**. You can select to clear:
     - **Supporting Details**
     - **Comments**
     - **Attachments**
     - **Essbase Data**
   - **All Aggregations**: Clears all aggregate views. For more information on aggregation, see Aggregating an Aggregate Storage Database in the *Essbase Database Administrator's Guide*.
   - **Partial Data (Basic Mode)**: Clears the data that is associated with the selected **Clear Options**. Use the member selector to select the point of view. You can select to clear:
     - **Supporting Details**
     - **Comments**
     - **Attachments**
     - **Essbase Data**
       * **Logical**: Input cells in the specified region are written to a new data slice with negative, compensating values that result in a value of zero for the cells you want to clear. The process for logically clearing data completes in a length of

Copyright © 2022, 2026, Oracle and/or its affiliates.

time that is proportional to the size of the data being cleared. Because compensating cells are created, this option increases the size of the database.

* **Physical**: Input cells in the specified region are physically removed from the aggregate storage database. The process for physically clearing data completes in a length of time that is proportional to the size of the input data, not the size of the data being cleared. Therefore, you might typically use this method only when you need to remove large slices of data. This option decreases the size of the database.

- **Partial Data (Advanced Mode)**: Clears Oracle Essbase data only by using an MDX expression in the text box provided. Select **Logical** or **Physical** (see the descriptions above) to specify how to clear the data.

6. Click **Save and Close**.
7. Click **Refresh** to view the Clear Cube job.
8. Select whether to run the Clear Cube job now or at a later time.

   - To run the job right away, click next to the job, and then select **Submit**. If the job submitted successfully, click **OK**, and then click **Close** to return to the **Application** screen.
   - To run the job at a later time, or at intervals, click **Close** to return to the **Application** page, and then schedule the job in the **Jobs** console. See Scheduling Clear Cube Jobs for information on how to do this.

Submitting a Clear Cube Job

If you did not submit a Clear Cube job when you created it, you can always submit it later.

To submit a Clear Cube job:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select **Actions**, and then **Clear Cube**.
3. On the **Clear Cube** listing page, click next to a Clear Cube job, and then select **Submit**.

Deleting a Clear Cube Job

To delete a Clear Cube job:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select **Actions**, and then **Clear Cube**.
3. On the **Clear Cube** listing page, click next to a Clear Cube job, and then select **Delete**.

Scheduling Clear Cube Jobs

You can schedule when to run Clear Cube jobs and how often you want the jobs to run.

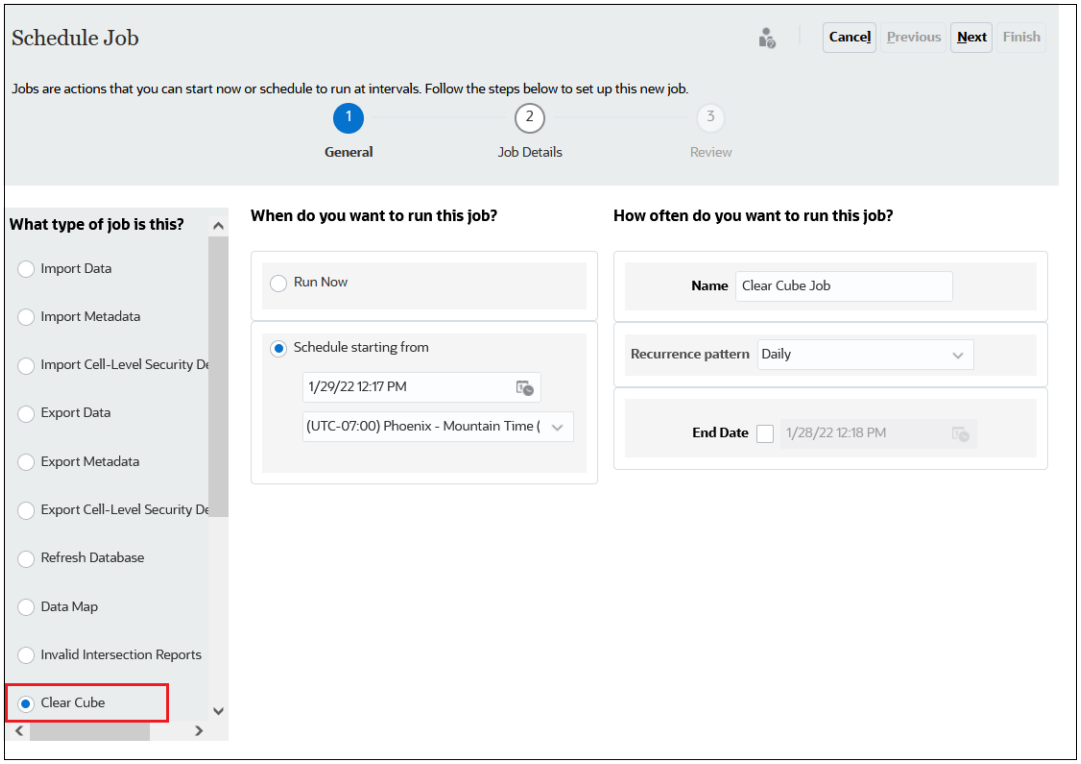
To schedule a Clear Cube job:

1. Go to the **Jobs** console.

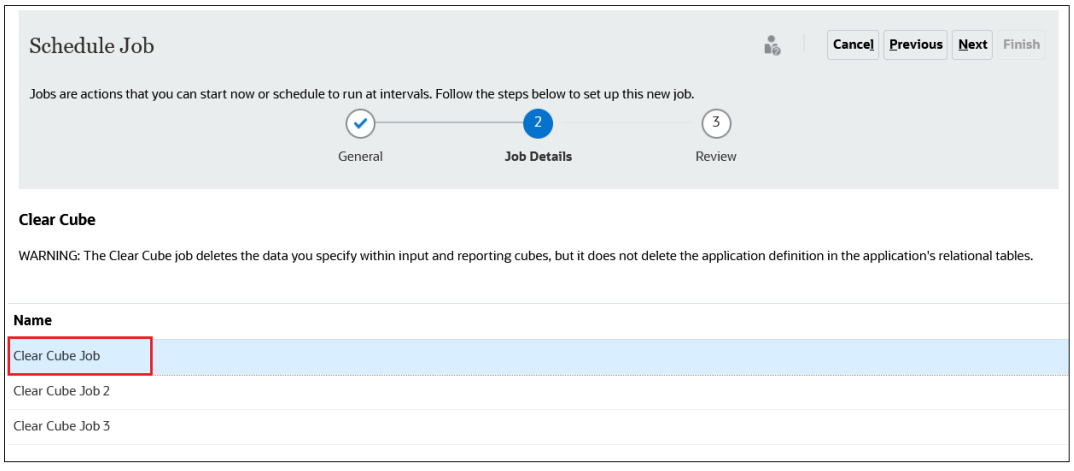
Copyright © 2022, 2026, Oracle and/or its affiliates.

If you just created a Clear Cube job and are in the **Application** console, select the **Jobs** icon at the top of the screen. If you are on the Home page, select **Application**, and then **Jobs**.

2. Select **Actions**, and then **Schedule**.
3. In the **General** step of the **Schedule Job** page, select **Clear Cube**, enter a name for the job, enter information about when and how often you want to run the job, and then click **Next**.

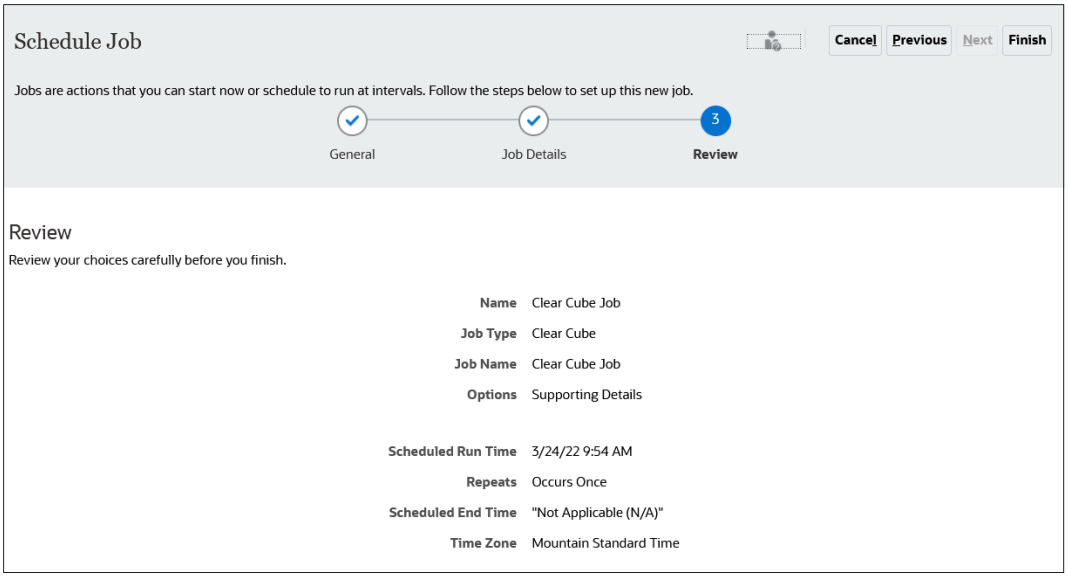


4. **Job Details** lists all of the Clear Cube jobs that have been created. Select the Clear Cube job that you want to schedule, and then click **Next**.



5. Review the details for the job, and then click **Finish** to run the Clear Cube job.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Improving Cube Performance

In addition to moving calculations for given time periods from the **PCM_CLC** calculation cube to the **PCM_REP** reporting cube in order keep the amount of data in the **PCM_CLC** calculation cube small, there are several actions you can take to improve cube performance. These optimization actions include:

- Compacting the Outline
- Merging Data Slices
- Optimizing Aggregation for the PCM_CLC Calculation Cube
- Optimizing Aggregation for the PCM_REP Reporting Cube

> **Note**
>
> For additional optimization information, see Optimizing Aggregate Storage Option Cubes in *Oracle Enterprise Performance Management Cloud Operations Guide*

Compacting the Outline

The **Compact Outline** job compacts the outline file of a cube. Compaction helps keep the outline file at an optimal size. Compacting the outline does not clear the data.

To schedule a job to compact the outline file of a cube:

1. From the Home page, select **Application**, and then **Jobs**.
2. On the **Jobs** page, select **Actions**, and then **Schedule**.
3. In the **General** step of the **Schedule Job** page, select **Compact Outline**, enter a name for the job, enter information about when and how often you want to run the job, and then click **Next**.
4. In **Job Details**, select a cube, and then click **Next**.
5. Review the details for the job, and then click **Finish** to run the **Compact Outline** job.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> See Scheduling Jobs for complete information on scheduling jobs.

Merging Data Slices

The **Merge Data Slices** job merges incremental data slices of a cube. Fewer slices improve a cube's performance. You can merge all incremental data slices into the main cube slice or merge all incremental data slices into a single data slice without changing the main cube slice. You can optionally remove cells that have a value of zero.

To schedule a job to merge incremental data slices in a cube:

1. From the Home page, select **Application**, and then **Jobs**.
2. On the **Jobs** page, select **Actions**, and then **Schedule**.
3. In the **General** step of the **Schedule Job** page, select **Merge Data Slices**, enter a name for the job, enter information about when and how often you want to run the job, and then click **Next**.
4. In **Job Details**, select a cube, select whether to merge all incremental slices into the main slice or into a single incremental slice, and select whether to keep or remove cells with a zero value.
5. Review the details for the job, and then click **Finish** to run the **Merge Data Slices** job.

> **Note**
>
> When you merge incremental data slices, you cannot undo this action.

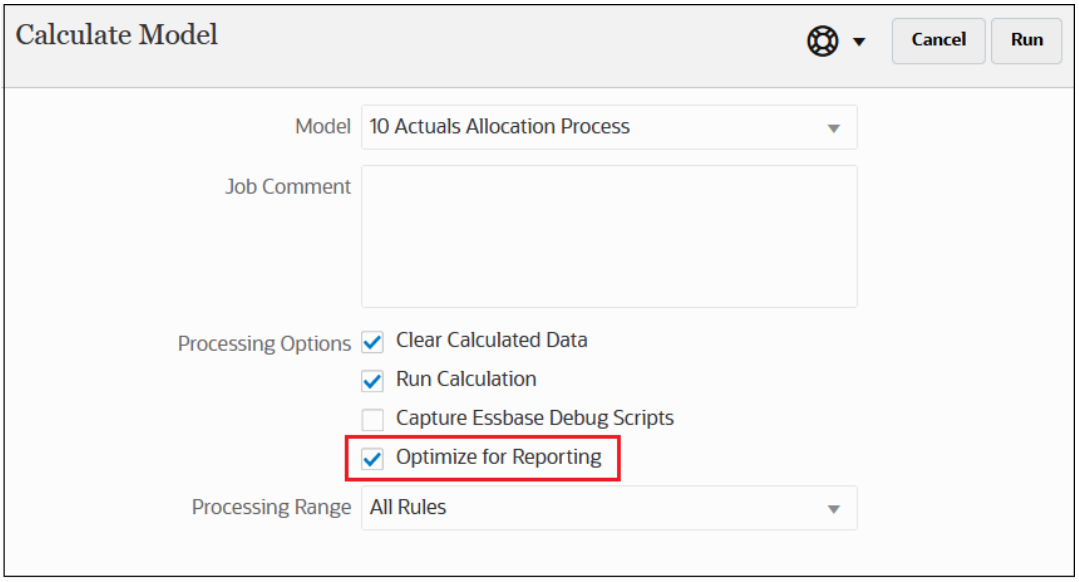
> **Note**
>
> See Scheduling Jobs for complete information on scheduling jobs.

Optimizing Aggregation for the PCM_CLC Calculation Cube

To optimize aggregation for the Enterprise Profitability and Cost Management calculation cube (PCM_CLC):

1. From the Home page, select **Modeling**, and then **Calculation Control**.
2. Select a Point of View, and then click **Calculate Model**.
3. In the **Calculate Model** dialog box, select **Optimize for Reporting**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



In most cases, the **Optimize for Reporting** option is sufficient for your aggregation needs.

Optimizing Aggregation for the PCM_REP Reporting Cube

The **Optimize Aggregation** job is useful for optimizing aggregation in the Enterprise Profitability and Cost Management reporting cube (PCM_REP). The job generates optimized views based on collected query tracking information in a cube. This job has two actions:

To optimize aggregation for the Enterprise Profitability and Cost Management reporting cube (PCM_REP):

1. From the Home page, select **Application**, and then **Jobs**.
2. On the **Jobs** page, select **Actions**, and then **Schedule**.
3. In the **General** step of the **Schedule Job** page, select **Optimize Aggregation**, enter a name for the job, enter information about when and how often you want to run the job, and then click **Next**.
4. In **Job Details**, select a cube, and select whether to enable query tracking or execute the aggregation process.
    - **Enable Query Tracking**: Records a meaningful set of queries, and then uses the recorded query data to select the most appropriate set of aggregate views to materialize for the cube. You must enable query tracking and allow it sufficient time to collect data before executing the aggregation process based on query data.

      Once enabled, query tracking continues until query tracking is disabled, the cube is reloaded or refreshed, the outline is compacted, the application is shut down, or additional aggregate views are materialized for the cube. Query tracking does not resume automatically after these actions occur.

      The following actions clear the stored query tracking information from the aggregate storage cube, but they do not disable query tracking:

      – Merging incremental data slices
      – Clearing data
      – Clearing existing aggregations
      – Clearing partial data

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - Loading data into the aggregate storage cube
- **Execute Aggregation Process**: Calculates aggregations for aggregate storage cubes that contain data and to which you are granted Calculation permission.

  To perform an aggregation, you use system recommended views. The selection of views and aggregation processes are combined into one, non-configurable operation performed by the server. You can optionally specify the maximum disk space for the resulting files, base the view selection on user querying patterns, and include rollup hierarchies in the view selection.

  Select one or more of the following options:

  - **Based on query data?** Aggregate the views the server selects, based on collected user querying patterns. This option is only available if query tracking is turned on.
  - **Include rollup option?** Include secondary hierarchies (with default level usage) in the view selection process.
  - **Include growth size option?** Aggregate the views the server selects, until the maximum growth of the aggregated cube exceeds limits you specify. Enter the size (in ratio) beyond which the server should stop the aggregation.

5. Review the details for the job, and then click **Finish** to run the **Optimize Agregation** job.

> **Note**
>
> See Scheduling Jobs for complete information on scheduling jobs.

Managing Dimensions

Related Topics

- Dimension Overview
- Best Practices When Designing Dimensions
- Creating a Dimension
- Accessing the Dimension Editor
- Reviewing Dimensions
- Editing Dimension Properties
- Working with Members
- Working with Attributes
- Importing and Exporting Dimension Metadata

Dimension Overview

Related Topics

- About Dimensions and Members in Enterprise Profitability and Cost Management
- About Dimension Hierarchies
- Hierarchy Types
- Dimension Top Levels

Copyright © 2022, 2026, Oracle and/or its affiliates.

About Dimensions and Members in Enterprise Profitability and Cost Management

Enterprise Profitability and Cost Management applications contain dimensions that represent the categories of data in your organization. For example, you identify time periods, such as YearTotal, Q1, or Jan, in the Period dimension. You identify budgeted items, such as SG&A for expenses, in the Account dimension, and you identify departments for your organization in the Entity dimension.

Members are components of dimensions. You add dimensions and members based on your organizational requirements.

Enterprise Profitability and Cost Management consists of the following dimensions:

- Years, Period, Scenario, and Version POV dimensions (required)
- Entity and Account dimensions (required)
- Balance and Rule system dimensions (required)
- Up to 11 custom dimensions
- Up to 40 attribute dimensions

> **Note**
>
> If you selected the **Multicurrency** option when you created your application, a Currency dimension is created. See Setting Up Currencies.

> **Note**
>
> The Entity and Account dimensions, along with any custom dimensions are referred to as *Business Dimensions*.

About Dimension Hierarchies

Dimension hierarchies define relationships and consolidations between members. Relationships are represented in a graphical hierarchy diagram.

In an Enterprise Profitability and Cost Management hierarchy, the dimension is at the top of the hierarchy, and the levels below it are members of the dimension. Members with levels under them are called parents. Members of the same level under a given parent are called children in relation to the parent, and siblings in relation to each other. Members at any level under a parent are called descendants.

In the following example, the Period dimension has a YearTotal child member. The YearTotal member has Q1, Q2, Q3, and Q4 child members, which represent quarters. The quarters have child members for the corresponding months. Monthly data values roll up to the quarters, and quarterly data values roll up to the year total.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Member Name	Parent Member
Period	
BegBalance	Period
YearTotal	Period
Q1	YearTotal
Jan	Q1
Feb	Q1
Mar	Q1
Q2	YearTotal
Apr	Q2
May	Q2
Jun	Q2
Q3	YearTotal
Jul	Q3
Aug	Q3
Sep	Q3
Q4	YearTotal
Oct	Q4
Nov	Q4
Dec	Q4

Hierarchy Types

In Enterprise Profitability and Cost Management, you can create two types of dimensions hierarchies:

- **Stored Hierarchy**
  - Members are aggregated according to the outline structure.
  - Because aggregate storage databases are optimized for aggregation, the aggregation of data values for stored hierarchies is very fast.
  - Stored hierarchies cannot have formulas.
  - All members in a stored hierarchy must use "+" or "~" consolidation.
  - Shared members are supported in the second hierarchy or later.
- **Dynamic Hierarchy**
  - Members and formulas are calculated, rather than aggregated.
  - Because dynamic hierarchies are calculated, the data retrieval time may be longer than for data retrieved from stored hierarchies.
  - Dynamic hierarchy can have formulas.
  - Dynamic hierarchies can contain any consolidation operator.

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - Use dynamic hierarchies sparingly. They are mainly used to isolate members requiring formula or "-" consolidation.

A dimension can contain both types of hierarchies. To use multiple hierarchies in a dimension (even if they are all stored hierarchies), you must enable multiple hierarchies for that dimension. When using multiple hierarchies, the first hierarchy must be *stored*.

You set the hierarchy type on the **Edit Dimension Properties** tab. See Editing Dimension Properties for information.

Dimension Top Levels

The top levels of dimensions impact usability:

- Design for all data in first hierarchy to roll up to top of dimension
- Use "Total", "All", and "No" members in the primary hierarchy
  - The "Total" member houses all data whether or not a ‘real’ member is associated
  - The "All" member houses the primary hierarchy
  - The "No" member is used for data that has not yet, or will not, be assigned to a member of the dimension
- Alternate hierarchies should not roll up to top

These choices make it easier to:

- Define rules
- Use built in reports (Stage Balancing, Trace, Prof Curves)
- Use Smart View and other reporting tools

Best Practices When Designing Dimensions

- Use dynamic dimensions sparingly. They are slow to aggregate, which impacts both reporting and calculation speed. Stored dimensions are the best choice. See Hierarchy Types.
- When creating a stored dimension, keep in mind that *shared* members are only allowed in the second hierarchy or later.
- Understand how the top levels of dimensions impact usability. See Dimension Top Levels.
- Allow for future dimension growth.
- Do not overlook the need for intermediate step dimensions or data categorization dimensions.

Creating a Dimension

To create a dimension:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Click the drop-down next to **Cube**, and select the cube to which you want to add the dimension.
4. Click **Create**.
5. On the **Create Dimension** page, enter the following information:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Dimension**: Enter a name that is unique across all dimensions. See Naming Restrictions for Dimensions, Members, and Aliases.
- **Description**: **Optional:** Enter a description.
- **Alias Table**: Select an alias table.
- **Alias**: **Optional:** Enter an alternate name for the dimension.
- **Two Pass Calculation**: Not applicable in Enterprise Profitability and Cost Management.
- **Apply Security**: Allow security to be set on the dimension members; must be selected before assigning access rights to dimension members. Otherwise, dimensions have no security and users can access members without restriction.
- **Data Storage**: Select a data storage option.

  Note: The Data Storage setting applies only to the dimension itself, not to all members in the dimension.

  - **Store**: Stores data values of members.
  - **Dynamic Calc and Store**: Not applicable in Enterprise Profitability and Cost Management.
  - **Dynamic Calc**: Calculates data values of members. The Dynamic Calc option only applies to attribute members.
  - **Never Share**: Prohibits implied sharing between parent and child members when only one child aggregates to the parent.
  - **Label Only**: Has no data associated with the member.
- **Display Option**: Set the application default display option for the **Member Selection** dialog box. See Using the Member Selector.
- **Hierarchy Type**: The Hierarchy Type cannot be set when you initially create a dimension. You can set it later after the dimension is created. See Editing Dimension Properties.

6. Select which cubes will use the dimension by selected **Enabled** next to the desired cube.
7. Click **Done**.

Accessing the Dimension Editor

Use the Dimension Editor to edit the properties of dimensions and members.

To access the Dimension Editor:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of a dimension.

   The Dimension Editor is opened with the **Edit Member Properties** page displayed.
4. Navigate between the following tabs:

   Edit Member Properties, where you can view and edit dimension members. See Editing Member Properties.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Edit Dimension Properties, where you can view and edit dimension details. See Editing Dimension Properties.

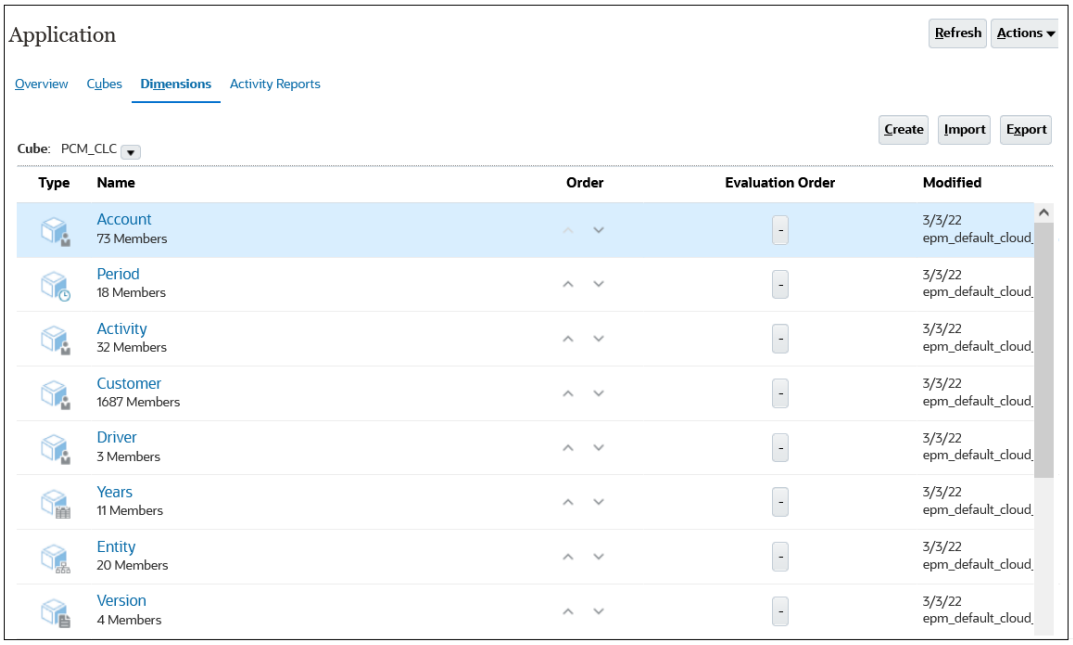
> **Note**
>
> In addition to managing dimensions in the Dimension Editor discussed here, you can also use the Classic Dimension Editor, which is accessed by using the **Dimensions** link in the Navigator menu. See Administrative Tasks Accessed from the Navigator.

Reviewing Dimensions

To review the dimensions in your application:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.

   The dimensions and the number of members asigned to each dimension are displayed for each cube.

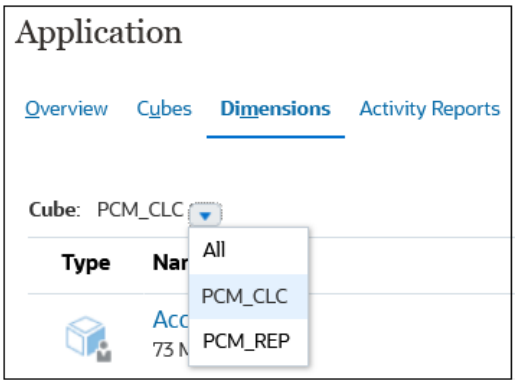


Filtering Dimensions by Cube

You can filter the dimension view by cube. When you select a cube, only the dimensions used in that cube are displayed.

To filter the dimension view by cube, select which dimensions to display by selecting **All** or a cube name from the **Cube** drop-down list.

Copyright © 2022, 2026, Oracle and/or its affiliates.



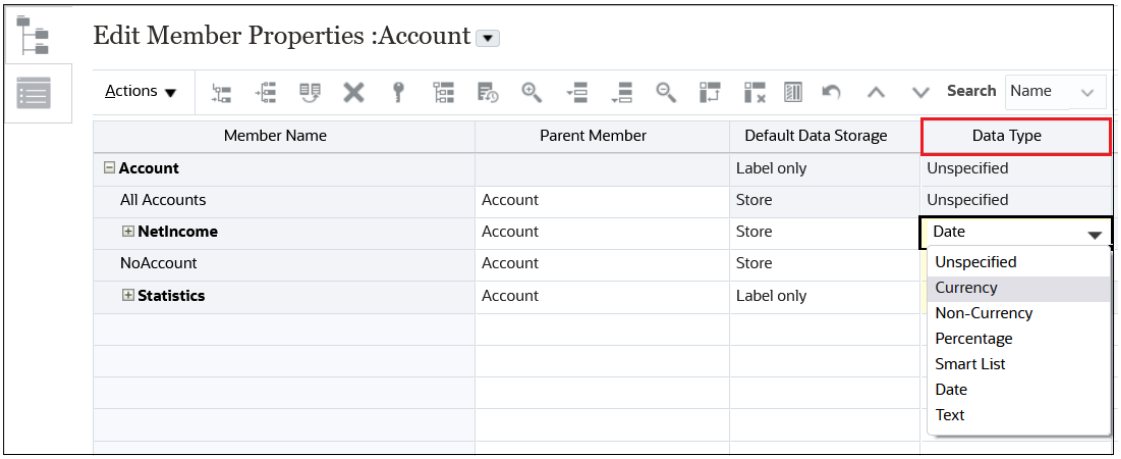
When you filter by cube, you can specify the order of precedence and the evaulation order for the dimensions.

Setting the Order of Precendence and the Data Evaluation Order

Dimensions are listed in order of precedence. The order of dimensions is critical for the structure and performance of a business process. The order of your dimensions determines how your data calculations perform. You can strategically classify and order dimensions to improve performance.

Evaluation Order allows you to specify which data type prevails when a data intersection has conflicting data types. For example, if Account members are set to the Currency data type, and Product members are set to the Smart List data type, you can set whether the Currency or Smart List data type prevails at an intersection.

Data types are specified on the **Edit Member Properties** page. Click the down arrow in a cell in the **Data Type** column to select a data type. See Editing Member Properties.

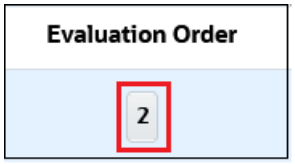


Order of precendence and data evaulation order is set per cube. You must select a cube to display the **Order** and **Evaulation Order** columns on the **Dimensions** tab.

To set the order of precendence, use the up and down arrows next to a dimension in the **Order** column to move the dimension up or down.

To set an evaluation order for a dimnesion, click the square next to the dimension in the **Evaluation Order** column.

Copyright © 2022, 2026, Oracle and/or its affiliates.



The square is updated with the dimension's position in the evaluation order.

If you want to exclude a selected dimension, click the square again to return it to its original state.

> **Note**
>
> Account members that require Text, Date, or Smart List data types require the Account dimension to have an Evaluation Order set for the cube or cubes in question.

Editing Dimension Properties

> **Note**
>
> Dimension properties must conform to guidelines listed in Naming Restrictions for Dimensions, Members, and Aliases.

To edit dimension properties:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of the dimension you want to edit.
4. Click (**Edit Dimension Properties** tab).
5. On the property page for the dimension you selected, view or modify the following properties:
   - **Dimension**: This field displays the name of the dimension. You cannot change the dimension name for the Account, Scenario, Version, Entity, or the Balance and Rule system dimensions. It is also not recommended to change the dimension name for the Years and Period dimensions.
   - **Description**: (Optional) Description of the dimension.
   - **Alias Table and Alias**: (Optional) Select an alias table. Enter an alternate name for the dimension.
   - **Two Pass Calculation**: Not applicable in Enterprise Profitability and Cost Management.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Apply Security**: Allow security to be set on the dimension members; must be selected before assigning access rights to dimension members. Otherwise, dimensions have no security and users can access members without restriction.
- **Data Storage**: Displays the data storage option selected when the dimension was created. You cannot change the data storage option once it has been set.
- **Display Option**: Set application default display options for the **Member Selection** dialog box. See Using the Member Selector.
- **Hierarchy Type**: Select a hierarchy type. Valid options are:
  - **Not Set**—The hierarchy type is not set.
  - **Stored**—Stores data values of members. Members of stored hierarchies are aggregated according to the outline structure. Because aggregate storage databases are optimized for aggregation, the aggregation of data values for stored hierarchies is very fast. Stored hierarchies cannot have formulas.
  - **Dynamic**—Calculates data values of members. Because dynamic hierarchies are calculated, the data retrieval time may be longer than for data retrieved from stored hierarchies; however, dynamic hierarchies can contain any consolidation operator, and they can have formulas.
  - **Multiple**—The dimension contains more than one hierarchy. Dimensions can contain both Stored and Dynamic hierarchies.

6. In the **Cube** section, select the cubes for which the dimension is enabled. Clearing this option disables all members of the dimension for the deselected cube.
7. **Optional:** For **Custom Attributes**, click to **Create** to create a custom attribute for a dimension. In the **Create Attribute** dialog box, enter the attribute name and select a data type. See Working with Attributes.
8. When you are finished editing dimension properties, click **Done**.

Working with Members

Related Topics

- Adding Members to a Dimension
- Adding "No<dimname>" Members
- Editing Member Properties
- Deleting Members
- Adding Shared Members
- Assigning Access to Dimension Members
- Working in the Edit Member Properties Grid

Adding Members to a Dimension

To add a member to a dimension:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of the dimension for which you want to add a member.
4. On the **Edit Member Properties** page, perform one of the following tasks:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- To add a child member, select the parent level member, select the **Actions** drop-down, and then select **Add Child**.
- To add a sibling member, select a member, select the **Actions** drop-down, and then select **Add Sibling**.

See Naming Restrictions for Dimensions, Members, and Aliases.

5. To set or change member properties, click a cell in the **Edit Member Properties** grid and make updates.
6. **Optional:** To add members to a different dimension, click the arrow next to the dimension name at the top of the **Edit Member Properties** page, and select another dimension.
7. Click **Save**.

Adding "No<*dimname*>" Members

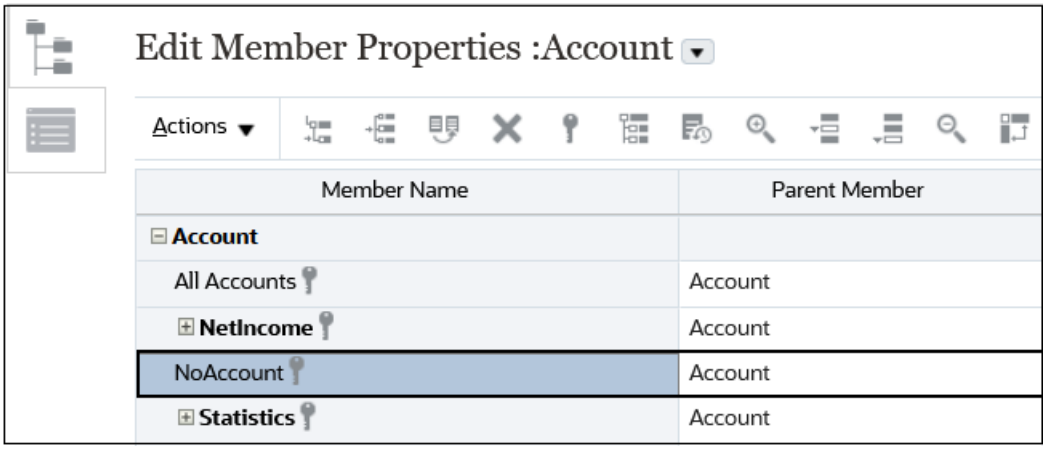
When you create rules in Enterprise Profitability and Cost Management, you must assign members to every dimension in the rule. See Dimension and Member Requirements When Creating Rules.

For dimensions that are not relevant in a rule, you still must assign a member. In this case, you assign a "No<*dimname*> " member, where <*dimname*> is the name of the dimension to which you are adding the member.

As a best practice, you should set up a "No<*dimname*>" member for the following dimensions before you start creating rules so that the member will be available during rule creation:

- Entity
- Account
- Currency (if you have a multi-currency application)
- Any custom dimensions that you have created

In the example below, a **NoAccount** member is assigned to the Account dimension.



Editing Member Properties

The **Edit Member Properties** page displays dimensions and members in a grid format. With the grid format, dimensions and members are editable on a single page. You can edit member properties directly on the grid and you can perform ad hoc operations such as zooming in, zooming out, keep selected, remove selected, and freeze.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To edit member properties:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of the dimension for which you want to edit member properties.
4. On the **Edit Member Properties** page, click within a grid cell to edit text or to view a drop-down menu from which you can choose member properties.

Each column in the grid represents a member property. The columns that initially display can be different based on which dimension you are editing. You can customize the layout of the columns by hiding, unhiding, or resizing columns. See Customizing the Column Layout.

Deleting Members

Each data value is identified by a set of dimension member values and a cube. Deleting dimension members or deselecting cubes in a member's properties results in data loss when refreshing an application.

Before deleting members, it is important to understand where in the application they are used (in which forms, approval units, exchange rates, and so on). To do this, select the member in the **Edit Member Properties** grid, click **Actions**, and select **Show Usage**.

You must delete the entity member throughout the application before deleting it from dimension. For example, if the entity member is used in a form, you must delete it from the form before deleting it from dimensions.

If you delete members from dimensions that are referenced in existing rules, the rules can't run.

To delete members:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of the dimension that contains the member you want to delete.
4. On the **Edit Member Properties** page, select the member to delete, and click (**Delete Member** icon).

> **Note**
>
> Deleting a base member also deletes its descendants and associated shared members.

5. Click **OK** in the **Delete Member** confirmation window.

Adding Shared Members

Sharing members allows alternate rollup structures within an application. When added shared members, keep in mind the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- A base member must exist before you can create a shared member. You can create multiple shared members for the base member. A base member must display before its shared members in position from top to bottom.
- Shared members are available for Entity, Account, and user-defined custom dimensions. Shared member values can be ignored to avoid double-counting values when you roll up the outline.
- Shared members share some property definitions with base members, such as member name, alias name, base currency, and cubes for which members are valid. Shared members must have unique parent members and different rollup aggregation settings. Custom attributes, custom attribute values, and member formulas are not allowed for shared members. Renaming base members renames all shared members.
- Shared members must have the same names as their base member. Also, base and shared member names are case-sensitive.
- Shared members can't be moved to another parent member. You must delete shared members and recreate them under different parent members. The base member need not be level zero. You can enter data in shared members, and values are stored with base members.

To add shared members:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of the dimension for which you want to add a member.
4. In **Edit Member Properties**, add the shared members:
   - Add a child member with the same name as the base member.
   - For **Parent Name** of the new member, type a new parent name.
   - For **Default Data Storage** of the new member, select **Shared**.
5. Click **Save**.

Data storage properties for all other cubes will automatically be set to **Shared**.

> **Note**
>
> See About Effective Access Permissions for Shared Members for information on access permissions for shared members.

Assigning Access to Dimension Members

Related Topics

- Adding, Editing, and Removing Access to Members
- About Effective Access Permissions for Shared Members

Adding, Editing, and Removing Access to Members

You can specify which users and groups can access the selected member.

To assign, edit, and remove member access permissions:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of the dimension for which you want to edit member properties.
4. On the the **Edit Member Properties** page, select a member, and then click (Assign Permission icon).
5. In the **Assign Permissions** dialog box, select the **Permissions** tab.
6. Click **Add User/Group**, and select the users or groups for which you would like to add permissions.

   Click **Users** to display all user names; click **Groups** to display all groups; or click to search to search for a particular user or group.

   When you select a user or group, click **OK** to add the user or group to the **Permissions** tab.

   After you have selected all the users and groups for which you want to add permissions, click **Close**.
7. On the **Permissions** tab, assign permissions to the users and groups you just selected.
   - **Permission**: Select **Read**, **Write**, or **None**
   - **Relation**: Select a relationship. For example, select **Children** to assign access to the children of the selected member.
8. Click **Save** and then **OK** to save the permissions.
9. Click **Cancel** to close the **Assign Permission** dialog box.

About Effective Access Permissions for Shared Members

You can't assign access directly to a shared member. A shared member inherits access permissions from its base member, parent, or ancestor.

The application checks access permissions at each level, first by user, then by group, based on the member's access permissions inheritance relationship. If multiple access permissions exist, the least restrictive access permission is applied (for example, Write access takes precedence over Read access).

Sample Parent and Child Entity Members

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 3-1 Example of Inherited Access to Shared Members

Case	Access Permission	Effective Access for Base and Shared Member CA	Explanation
Case 1	CA (base) = None iDescendants (West) = Read	Read	CA inherits Read access from its West parent because Read is less restrictive than None.
Case 2	iDescendants (United States) = None iDescendants (West) = Read iDescendants (Sales Region 1) = Write	Write	CA inherits Write access from its Sales Region 1 parent because Write is less restrictive than Read or None.
Case 3	iDescendants (United States) = Write iDescendants (West) = None iDescendants (Sales Region 1) = Read	Write	CA inherits Write access from its United States parent because Write is less restrictive than Read or None.

Working in the Edit Member Properties Grid

Related Topics

- Switching to Another Dimension
- Customizing the Column Layout
- Context Menu Options
- Viewing Ancestors
- Showing Member Usage in an Application
- Focusing Your Editing
- Finding Members
- Moving Members
- Sorting Members
- Moving Members to Another Hierarchy
- Working with Member Formulas
- Copying Member Names from Microsoft Excel

Switching to Another Dimension

To switch to another dimension while working with members in the grid, click the down arrow next to the dimension name at the top of the page and select a dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The dimension drop-down displays all of the dimensions, regardless of the cube you are currently viewing.

Customizing the Column Layout

Each column in the grid represents a member property. The columns that initially display may differ based on which dimension you are editing. You can customize the layout of columns in the grid by hiding, unhiding, moving, or resizing columns.

You can customize the layout of columns in the **Edit Member Properties** grid by hiding, unhiding, resizing, or reordering columns. You can also display the complete set of properties (all columns) by selecting **Select All** in the **Select Columns** dialog box.

The properties listed in the column selector are not a flat list of properties. Instead, properties are grouped in the column selector according to their functionality. For example, Account-specific properties such as **Account Type**, **Variance Reporting**, and **Time Balance**, are grouped under **Account** in the column selector. When you select **Account** in the column selector, all properties in the group are selected for inclusion in the grid. Then you can clear the checkboxes for any properties that you don't want added to the grid.

To customize the column layout in the **Edit Member Properties** grid:

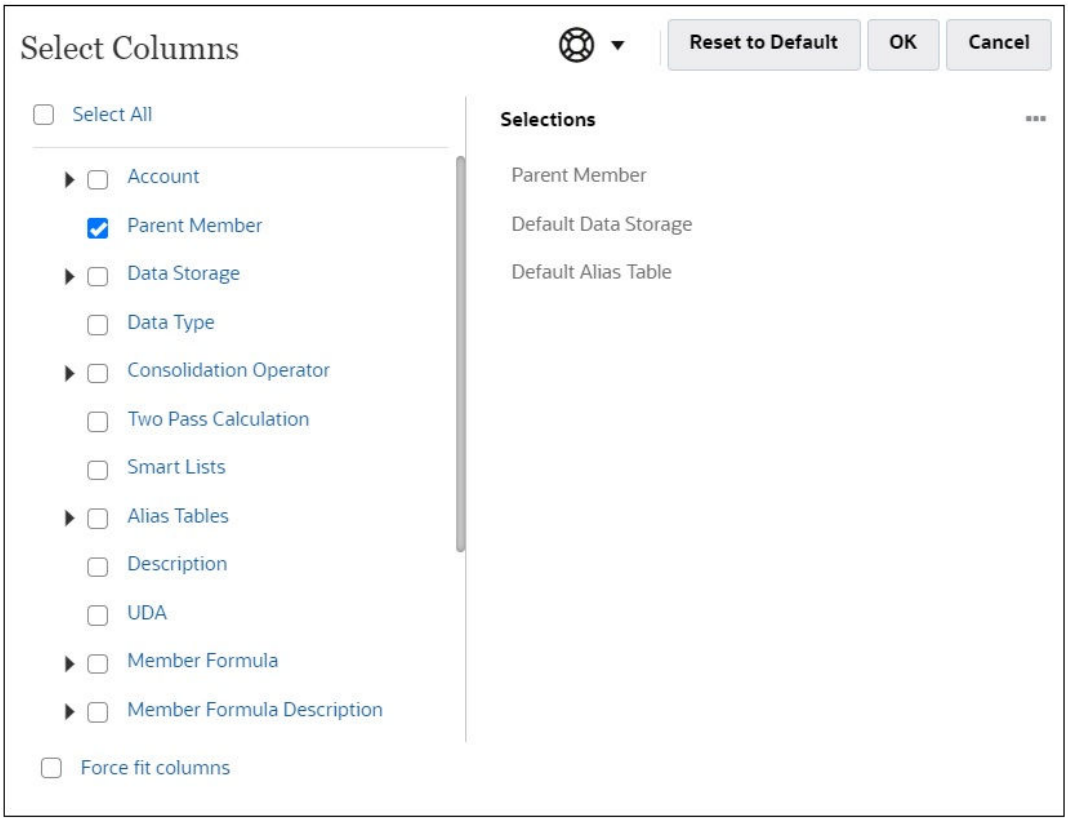
1. Right-click any column heading.

   Alternatively, you can display this dialog box by clicking or by clicking **Actions**, and then **Select Columns**.

2. The **Select Columns** dialog box displays.

   The Select Columns dialog box dialog box displays:

Copyright © 2022, 2026, Oracle and/or its affiliates.



3. Select or clear the check boxes for the columns (properties) you want to add to or remove from the grid. Select a top-level group such as **Account** or **Data Storage** to select all of the properties grouped under those categories.
   - To display all property columns on the grid, click **Select All**.
   - In the **Selections** pane of the **Select Columns** dialog box, columns appear in the order they are selected, and this is the order in which they will be displayed on the grid. To reorder the columns on the grid, hover over a column in the **Selections** pane, then select the up or down arrows to move the column up or down in the order.

     You can also reorder columns by dragging and dropping them directly on the grid.
   - To remove a column from the **Selections** pane, hover over a column and click .
   - To remove all columns from the **Selections** pane, click , and then select **Remove All**.
   - To view the columns that initially displayed on the grid, click **Reset to Default**.

   After making your selections, the columns you select will be saved for the next session.
4. To change the size of the grid or the columns that are displayed on the grid, select or clear the **Force fit columns** option. Selecting the **Force fit columns** option resizes the columns so that all columns are visible on the grid without scrolling.

Context Menu Options

In the **Edit Member Properties** grid, right-click on a cell in the grid to view the following context menu options:

- **Move** options:

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - **Move Up**: Moves the member up one position
  - **Move Down**: Moves the member down one position
- **Zoom In** options:
  - **Zoom in Next Level**: Displays all members one level below the selected member
  - **Zoom in All Levels**: Displays all descendant members below the selected member
  - **Zoom in Bottom Level**: Displays all descendant members of the selected member that have no children
- **Zoom Out**: Displays the member one level above the selected member
- **Keep Selected**: Displays only the selected row or column on the grid
- **Remove Selected**: Removes the selected row or column from the grid
- **Delete**: Deletes the selected member, its descendants, and associated shared members

> **Note**
>
> The context menus might differ depending on the dimension you are viewing. For some members, certain commands like **Move** or **Delete** are disabled.

Viewing Ancestors

Ancestors are all the members above the selected member in the dimension hierarchy.

To view the ancestors for a member:

1. Select a member in the grid.
2. Click **Actions**, and select **Show Ancestors**.

Showing Member Usage in an Application

Before performing operations such as deleting members, it is important to understand where in the application the members are used.

To view where members are used in an application:

1. Select a member in the grid.
2. Click **Actions**, and select **Show Usage**.

   Alternatively, you can click to view where a member is used in the application.

Focusing Your Editing

To focus your editing on specific members in the grid, select a member, click **Actions**, and select one of the following zoom operations:

- **Zoom In Next Level**: Displays all members one level below the selected member
- **Zoom In All Levels**: Displays all descendant members below the selected member
- **Zoom In Bottom Level**: Displays all descendant members of the selected member that have no children
- **Zoom Out**: Displays the member one level above the selected member

Copyright © 2022, 2026, Oracle and/or its affiliates.

To focus your editing on specific rows or columns in the grid, select a row or column, and select an operation:

- **Keep Selected**: Displays only the selected row or column on the grid
- **Remove Selected**: Removes the selected row or column from the grid
- **Freeze** (Columns only): Keeps the selected column and all columns to the left of the selected column stationary so the column or columns can't be scrolled. Only columns to the right of the frozen column can be scrolled. For example, you can freeze the first column that includes the member name so that you can scroll and edit that member's properties and still see the member name. To unfreeze columns, click Freeze once again.

Finding Members

To find members in the grid:

1. Click the drop-down next to Search at the top of the grid, and select **Name, Alias**, or **Both.**
2. Enter the search text (member name, alias, or partial string) for which to search.
3. Select one of the following search options:
   - **Search Up**
   - **Search Down**
   - : **Filtered Search** searches for all members that match the search term and returns a list of members. Click **Clear Filter** to display the unfiltered grid again.

Moving Members

To move a member in the grid, select the member and click to move the member up one postion,and click to move the member down one position. Moving members affects the outline.

Alternatively, you can click **Actions**, then select **Move Up** or **Move Down** to move a member up or down one position in the hierarchy. You can also right-click on a cell in the grid to view the **Move** options.

Sorting Members

You can sort members in ascending or descending order, by children or descendants. Sorting members affects the outline. For example, you can alphabetize a list of child members by sorting in descending order to help users quickly locate members in hierarchies in the Simplified dimension editor.

To sort members in the grid:

1. Select the members whose children or descendants you want to sort.
2. In the **Sort** drop-down, select **Children** or **Descendants.**
3. Click to sort in ascending order, or click to sort in descending order.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - If you do not see the Sort options at the top of the page, click
> - Sorting by children affects only members in the level immediately below the selected member. Sorting by descendants affects all descendants of the selected member.

Moving Members to Another Hierarchy

To move members to another hierarchy in the grid:

1. In the **Parent Member** column of the grid, type a new parent name for the member you want to move.
2. Click **Save**.

Working with Member Formulas

You can define or edit member formulas directly in the grid, in the formula bar, or in the **Member Formula** dialog box, where you can validate member formulas.

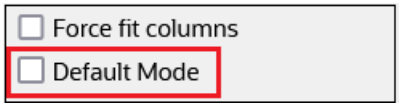
You can define member formulas that combine operators, calculation functions, dimension and member names, and numeric constants to perform calculations on members.

Member formulas can also include:

- Operator types, functions, values, member names, and UDAs
- Predefined formula expressions, including Smart List values, that expand into a formula or value upon database refresh

To define or edit member formulas:

1. Right-click a column heading and clear the **Default Mode** option on the drop-down menu.

   For more information on the Default Mode setting, see Customizing the Column Layout.
2. In the grid, select the member for which you want to add a formula.
3. With the member selected, scroll to the right in the grid until you see the **Default Formula** column.
4. In the **Default Formula** column, perform one of the following tasks;
   - Double-click a cell in the grid, and then enter or edit a formula in the dialog box that appears.
   - Click within the formula bar above the dimension editor grid, and enter or edit a formula.
   - Click next to the formula bar, and then enter or edit a formula in the **Member Formula** dialog box. When you enter a formula in the Member Formula dialog box,

Copyright © 2022, 2026, Oracle and/or its affiliates.

you can take advantage of the editing icons at the top of the dialog box, and you can validate the formula.

Tip

- If you don't see the **Default Formula** column, you'll need to add it to the grid.

  Click to open the **Select Columns** dialog, expand **Member Formula**, select **Default Formula**, and then click **OK**. After selecting it, the **Default Formula** column will be included in the grid for all subsequent sessions.
- To include member names in formulas, keep the focus on the formula cell in the grid. Press Ctrl while clicking the member name you want to include in the formula. The member name will display in the formula bar.

5. **Optional**: To check the validity of a member formula, click next to the formula bar, and then click **Validate**.
6. Click **Save**.

Copying Member Names from Microsoft Excel

To copy and paste member names from Microsoft Excel:

1. In Excel, highlight the member names in one cell or in a range of cells, and press **Ctrl+C** to copy the data onto the clipboard.
2. Highlight and select the target cell or cells in the Simplified dimension editor, and then press **Ctrl+V**.
3. When the Clipboard helper is displayed, press **Ctrl+V** again. The data is pasted to the Clipboard helper.
4. Click **Paste** to paste the data into the grid.

Working with Attributes

Related Topics

- About Attributes
- Understanding Attribute Data Types
- Creating an Attribute Dimension
- Adding or Editing Attribute Dimension Members
- Working with User-Defined Attributes (UDAs)

About Attributes

Attributes describe characteristics of data, such as the size and color of products. You can use attributes to group and analyze members of dimensions based on their characteristics. For example, you can analyze product profitability based on size or packaging, and you can make more effective conclusions by incorporating market attributes, such as the population size of each market region, into your analysis.

When working with attributes, note the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Attribute names must conform to guidelines listed in Naming and Character Restrictions.
- Attributes dimensions are associated with base dimensions.
- Attribute dimensions don't have aggregation properties because parents are dynamically calculated.
- You can't assign attributes to label-only members.

Understanding Attribute Data Types

Attribute dimensions can have a data type of text, numeric, Boolean, or date that enables different functions for grouping, selecting, or calculating data. The attribute type applies only to level 0 members of the attribute dimension.

- **Text** attributes enable basic attribute member selection and attribute comparisons in calculations. When you perform such comparisons, characters are compared. For example, a package type Bottle is less than a package type Can because B precedes C in the alphabet.
- **Numeric** attribute dimensions use numeric values for the names of level 0 members. You can include the names (values) of numeric attribute dimension members in calculations. For example, you can use the number of ounces specified in an Ounces attribute to calculate profit per ounce for each product. You can also associate numeric attributes with ranges of base dimension values, for example, to analyze product sales by market population groupings.
- **Boolean** attribute dimensions in a database contain only two members. When a Boolean attribute dimension is added in the business process, two attribute values, True and False, are created for this attribute dimension by default. A base dimension, such as Account or Entity, can be associated with only one attribute dimension that has the Boolean data type.
- **Date** attributes can specify the date format as month-day-year or day-month-year, and sequence information accordingly. You can use date attributes in calculations, for example, comparing dates in a calculation that selects product sales since 12-22-1998.

> **Note**
>
> Before you can work with date attributes, you must set the **Attribute Dimension Date Format** setting on the **Application Settings** page and save it. From the Home page, select **Application**, and then **Settings**. In **Attribute Dimension Date Format**, select a date format (MM-dd-yyyy or dd-MM-yyyy), and then click **Save.** After you select and save the date format, you must manually change any existing attribute date values to the supported format. If any date attributes in your application use an unsupported format, the system provide you with a list of dimension attribute values that you need to fix.
>
> If the **Attribute Dimension Date Format** setting is changed in the Application Settings, you must change any date attributes in the original format to the new format before you can add or save a new attribute.

Creating an Attribute Dimension

To create an attribute dimension:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Select a cube, and then click the name of the dimension for which you want to assign an attribute.
4. Click (**Edit Dimension Properties** tab).
5. On the property page for the dimension, in the **Custom Attributes** section, click **Create**.
6. In the **Create Attribute** dialog box, enter the the following information:
   - **Name**: See Naming Restrictions for Dimensions, Members, and Aliases.
   - **Data Type**: See Understanding Attribute Data Types.

   Note: The **Is Indexed Attribute?** option is not applicable to Enterprise Profitability and Cost Management.
7. Click **Save**.

> **Note**
>
> To edit or delete an attribute dimension, click (**Actions** icon) next to the attribute, and select **Edit** or **Delete**.

Adding or Editing Attribute Dimension Members

When an attribute dimension is associated with a base dimension, it displays on the **Dimensions** page in the same way as the base dimension. To view attribute dimensions in the listing, select **All** in the **Cube** drop-down list on the main **Dimensions** page. You can then select the attribute dimension to add or edit attribute dimension members. Review the detailed steps below.

To add or edit attribute dimension members:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. For **Cube**, select **All**.
4. Select an attribute dimension.
5. In **Edit Member Properties**, perform one of the following tasks:
   - To add a child member, select the parent level member, select the **Actions** drop-down, and then select **Add Child**.
   - To add a sibling member, select a member, select the **Actions** drop-down, and then select **Add Sibling**.
6. To set or change member properties, click a cell in the **Edit Member Properties** grid and make updates.
7. **Optional:** To assign members to a different attribute dimension, click the arrow next to the dimension name at the top of the **Edit Member Properties** page, and select another attribute dimension.
8. Click **Save**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Alternatively, you can select the base dimension on the **Dimensions** tab, and then select the attribute dimension from the from the drop-down next to the base dimension on the **Edit Member Properties** page.

Working with User-Defined Attributes (UDAs)

You can use user-defined attributes (UDAs), descriptive words or phrases, within calc scripts, member formulas, reports, and forms. UDAs return lists of members associated with the UDA.

For example:

- For a Product dimension with several product members, you can create a UDA called New Products and assign this UDA to the new products in the Product dimension hierarchy. Then you can base certain calculations on the designation New Products.
- When designing forms, you can use a UDA to select members for forms based on a common attribute. When you create forms with UDAs, any members that are assigned to the UDA are dynamically added to the form. For example, if you create a UDA called New Products and assign this UDA to the new products in the Product dimension hierarchy, the form will automatically display the new products at runtime. When selected in the form designer, a UDA is preceded by`UDA`; for example, `UDA(New Products)`.

UDAs are specific to dimensions. For example, creating a UDA for an Account member makes it available for non-shared Account members. Deleting it removes it for all Account members. To make UDAs available for multiple dimensions, create the same UDA for multiple dimensions. For example, create a UDA named New for Account and Entity dimensions to make the UDA named New available for Account and Entity members.

To create or edit UDAs:

1. From the Home page, select **Application**, and then **Overview**.
2. On the **Application** page, select the **Dimensions** tab.
3. Select a cube, and then click the name of the dimension for whose members you want to associate the UDA.
4. On the dimension grid, right-click any column heading, and then clear the **Default Mode** option to make the **UDA** column visible.
5. In the grid, select the member to associate with the UDA, and then scroll to the right until you see the **UDA** column.
6. Click in cell in the **UDA** column to display the **UDA** dialog box.
7. Select a task:
   - To create a UDA, click , enter a name, and then click **Save**.
   - To modify a UDA, select the UDA, click , change the name, and then click **Save**.
   - To delete a UDA, select the UDA, click , and then confirm deletion.

     Note: Deleting a UDA removes it for the whole dimension. If you delete UDAs, you must update all member formulas, calc scripts, and reports that reference them.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- To clear UDA selections, click .

8. To add or remove UDAs for the member, use the arrows to move UDAs to and from the **Selected UDA** panel.
9. Click **OK**.

Importing and Exporting Dimension Metadata

Related Topics

- Importing Metadata
- Exporting Metadata

Importing Metadata

You can import metadata from a flat file in a comma-delimited, tab-delimited, or other format.

These artifacts are supported in the imports:

- Dimensions
- Smart Lists
- Exchange rate tables (See Importing Exchange Rates for a Multicurrency Application.)

To import metadata:

1. Create an import file for each artifact that you want to import.

   See About the Metadata Import File.
2. Load the import file or files.

   You can import multiple dimension files at the same time. See Loading the Metadata Import File.

When importing metadata, keep in mind the following points:

- You cannot rename members of attribute dimensions during a metadata import. Renaming of members will be ignored.
- You cannot delete attribute dimensions while importing metadata.

About the Metadata Import File

Before you begin loading metadata, you must create an import file for each artifact that you want to import (dimensions, smart lists, and exchange rate tables).

The import file must contain a header record. The header record:

- Is the first line in the file
- Lists the dimension and any member properties used by subsequent metadata records. The header record and subsequent records do not need to include all properties. Properties that are not included are inherited from the corresponding parent's default property value. If the header record does not contain a property column like Data Storage, the data storage for a member will be inherited from that member’s parent member.
- Is case sensitive
- Can list properties in any order, as long as the subsequent metadata records are in the same order

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Can use comma or tab delimiters. Other delimiter characters can be used if they are supported and the same delimiter character is used throughout the file. For a list of supported delimiter characters and exceptions, see Other Supported Delimiter Characters.

The header record should be followed by a list of metadata records to import or update.

- Each metadata record must contain a delimited list (comma, tab, or other) of property values that matches the order designated in the header record.
- A metadata record can skip a property that is specified in the header record; in this case, the default property is assumed.
- The file format can be .csv (comma-delimited) or .txt (tab-delimited or other delimiter characters).

For an example import file, see Example Entity Dimension Import File.

> **Note**
>
> Only characters that are included in the UTF-8 character set are supported in import or export files. Characters that aren't included in the UTF-8 character set are considered invalid. For dimension name restrictions, see Naming and Character Restrictions.

Example Entity Dimension Import File

```
Entity,Parent,Data Storage,Plan Type (Plan1),Plan Type (Plan2),Plan Type (Plan3),Data Type,Base Currency,
Alias: Default NoEntity,,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Unspecified Entity
AllEntities,,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Total Entity
1000,AllEntities,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Agencies
1001,1000,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Administration and Finance
1011,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Office of the Secretary of Administration and Finance
1012,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Bureau of State Office Buildings
1101,1012,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Finance and Administration
1102,1012,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,State Office Buildings
1103,1012,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Safety and Security
1104,1012,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,State House ADA/Communications Access
1105,1012,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,State House Events
1013,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Civil Service Commission
1014,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Department of Revenue
1106,1014,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Child Support Enforcement
1107,1014,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Division of Local Services
1108,1014,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Appellate Tax Board
1015,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Developmental Disabilities Council
1016,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Division of Administrative Law Appeals
1017,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Dept. of Revenue
1018,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Executive Office for Administration and Finance
1019,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,George Fingold Library
1020,1001,Never Share,TRUE,TRUE,TRUE,Unspecified,USD,Group Insurance Commission
```

In this example, the import file loads an Entity dimension with the required header record and three data records. This example is comma-delimited. The header record specifies the member to be imported (Entity), the parent member (Parent) into which to import the member, and the Data Storage property to assign to the member.

```
Entity, Parent, Data Storage
e1, Entity,
e2, ,
e1, e2, Shared
```

Using this import file would result in this outline, assuming that no other members exist:

```
Entity
e1
```


Copyright © 2022, 2026, Oracle and/or its affiliates.

```
e2
    e1(Shared)
```

The first data record (`e1, Entity`) imports Entity member e1 as a child under the root member Entity. Unspecified values assume the default. For example, if data storage isn't specified, it assumes the default value, Never Share. The next data record (`e2, ,`) imports Entity member e2 under the dimension root member because no parent is specified, and sets data storage to Never Share. The last data record (`e1, e2, Shared`) imports a shared member of e1 under member e2, and sets data storage to Shared.

Other Supported Delimiter Characters

In addition to commas and tabs, Enterprise Profitability and Cost Management supports these delimiter characters in import and export files:

- tilde (~)
- grave accent (`)
- exclamation point (!)
- number sign (#)
- question mark (?)
- dollar sign ($)
- percent sign (%)
- caret (^)
- ampersand (&)
- asterisk (*)
- parentheses ( )
- hyphen-minus (-)
- plus (+)
- colon (:)
- semicolon (;)
- angle brackets (< >)
- backslash (\)
- forward slash (/)
- vertical bar (|)
- apostrophe (')
- braces ({ })
- underscore (_)
- brackets ([ ])
- at sign (@)
- period (.)

Only one character is supported for use as a delimiter. For example, one vertical bar (|) is supported, but two vertical bars (| |) are not supported.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Caution**
>
> Not all of the characters listed can be used for all import and export scenarios. Note the following exceptions.

Import and Export Metadata Delimiter Exceptions

Do not use these delimiter characters in metadata import and export files.

Table 3-2 Import and Export Metadata Delimiter Exceptions

Delimiter Character	Reason for Exception
double quotation mark ("")	Creates an empty file
plus (+) minus (-) forward slash (/) percent sign (%)	Causes an error if the metadata import file contains consolidation properties that use these characters
angle brackets (< >)	Causes an error if a property uses the value <none>

> **Note**
>
> Any character that conflicts with a character in a member name will cause an error.

Import and Export Data Delimiter Exceptions

Table 3-3 Import and Export Data Delimiter Exceptions

Delimiter Character	Reason for Exception
apostrophe (')	Causes an error if used in a cube name
parentheses ( )	Causes an error if used in a data import file
double quotation mark ("")	Creates an empty file
hyphen-minus (-)	Causes an error if used in a data import file

Loading the Metadata Import File

> **Note**
>
> When performing metadata loads as a part of cloning environments or importing snapshots using Migration or EPM Automate, Oracle Fusion Cloud Enterprise Performance Management uses the multi-pass solution. This solution automatically initiates another load of the same metadata input file if the previous metadata load resulted in rejected records. For Financial Consolidation and Close, multi-pass also resolves issues with forward referencing of plug accounts.

To load the metadata import file:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Create a metadata import file for each artifact (dimensions, smart lists, and exchange rate tables) that you want to import.

   See About the Metadata Import File.

2. From the Home page, select **Application**, and then select **Overview**.
3. On the **Application** page, select the **Dimensions** tab, and then click **Import**.
4. On the **Import Metadata** page, click **Create**.
5. Select the location of the metadata import file or files:
   - **Local**: Loads the import file or files from a location on your computer. For **Import File**, click **Browse** to select the import file on your computer for the artifact you are importing.
   - **Inbox**: Loads the import file or files from the server. Enter the name of the file in **Import File**. See Uploading and Downloading Files Using the Inbox/Outbox Explorer.
6. For **File Type**, select **Comma delimited**, **Tab delimited**, or **Other.**

   If **Other** is selected, enter the delimiter character that is used in the import file. For a list of supported delimiter characters and exceptions, see Other Supported Delimiter Characters.
7. **Optional:** Select **Clear Members** to delete members not explicitly specified in the load file before performing the import.
   - Any member not specified is deleted from the application outline after importing the dimension unless it's an ancestor of a member that was specified, or it's a base member of a shared member that was specified.
   - If **Clear Members** isn't selected, the import will only add new members or update existing members. Oracle recommends loading the metadata file without selecting **Clear Members** to make sure the file loads successfully; then, select **Clear Members** and execute the import again
   - **Clear Members** is unavailable in certain dimensions where members must exist and are critical to the application. You cannot clear members in the Years, Period, and Currency dimensions; the Balance system dimension; and the PCM_Calculation Rules and PCM_No Rule hierarchies in the Rule system dimension. In addition, you cannot clear any member used in a POV group.
   - Members that can't be deleted in the dimension editor for any reason (for example, because they're used in a form or in a validation rule) won't be deleted.
8. **Optional:** If the location selected is **Inbox**, you can click **Save as Job** to save the import operation as a job, which you can schedule to run right away or at a later time. See Managing Jobs.
   - Saving an import operation as a job is useful to batch a load sequence; for example, import metadata, then import data, then run models when the data load is complete.
   - You can run up to five import jobs at one time.
   - If you want to review the data that was rejected during the metadata import job, you can specify an **Error File** in the **Save as Job** dialog box. This file will provide information about the metadata records that were not imported for each dimension. If an error zip file is specified, a separate error file is created for each dimension, then the error files are zipped together, and the zip file is stored in the Outbox where you can download the file using Inbox/Outbox Explorer. See Uploading and Downloading Files Using the Inbox/Outbox Explorer.
9. **Optional:** If the location selected is **Local**, click **Validate** to test whether the import file format is correct.

Copyright © 2022, 2026, Oracle and/or its affiliates.

10. Click **Import** to run the import operation.

    If the import fails, a **Failed** status will display in the **Last Validate/Import** column. Click **Failed** to view the detailed status. If the import is successful, a **Completed** status will display in the **Last Validate/Import** column. To view details about the successful import, click **Completed**, and then in the **Show** drop-down, select **All**.

> **Note**
>
> A failed dimension load to Oracle Essbase generates an error file, which is written to the system inbox.

> **Note**
>
> If the cubes listed in the import file don't match the cube names in the application, the application will ignore unrecognized cube columns.

Exporting Metadata

You can export metadata to a flat file in a .csv (comma-delimited) or .txt (tab-delimited or other delimiter character) format.

These artifacts are supported in an export:

- Dimensions
- Smart Lists
- Exchange rates (See Importing Exchange Rates for a Multicurrency Application.)

Enterprise Profitability and Cost Management creates an export file for each artifact (.txt or .csv, depending on the file type), and all export files are consolidated into one zip file. You must extract the .csv or .txt files from the zip file if you want to use the files as import files (for example, when importing into another application).

> **Note**
>
> Only characters that are included in the UTF-8 character set are supported in export or import files. Characters that aren't included in the UTF-8 character set are considered invalid. For dimension name restrictions, see Naming Restrictions for Dimensions, Members, and Aliases.

To export metadata to a flat file:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select the **Dimensions** tab, and then click **Export**.
3. On the **Export Metadata** page, click **Create**.
4. Select the target environment of the export file:
   - **Local**: Saves the export file to a location on your local computer.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Outbox**: Saves the export file to the server where you can use it to schedule the export job. See Uploading and Downloading Files Using the Inbox/Outbox Explorer.

> **Note**
>
> - You can run up to five export jobs at one time.
> - When scheduling export jobs, you can specify a unique output file name for each job.
> - For more information about scheduling jobs, see Managing Jobs.

5. Select the artifact or artifacts to export.
6. For **File Type**, select an option.
   - **Comma delimited**: Creates a comma-delimited .csv file for each artifact.
   - **Tab delimited**: Creates a tab-delimited .txt file for each artifact.
   - **Other**: Creates a .txt file for each artifact. Enter the delimiter character that you want to use in the export file. For a list of supported delimiter characters and exceptions, see Other Supported Delimiter Characters .
7. **Optional:** If the location selected is **Outbox**, click **Save as Job** to save the export operation as a job, which you can schedule to run right away or at a later time. See Managing Jobs.
8. Click **Export**, and then specify where to save the export file.

Viewing Activity Reports

Activity reports are automatically generated every day and enable Service Administrators to understand application usage over a period of five, ten, thirty, or sixty days. The reports help streamline application design by identifying calculation scripts and user requests that impact application performance. Information provided in these reports includes:

- User information such as number of users who signed into the application each day, each hour, last seven days, and last 30 days
- Percentage of requests that took more than 10 seconds to complete
- Ranking of requests by duration
- Ranking the performance of requests that took more than 10 seconds to complete
- Number of application design changes that occurred over the reporting period
- Number and duration of user interface requests per hour
- CPU and memory usage by hour

To view activity reports:

1. From the Home page, select **Application**, and then **Overview**.
2. Select the **Activity Reports** tab.
3. To view report details, click **View** next to the name of the report that you want to view.
4. **Optional:** To save a report to another location, right-click the report while viewing it, and then select **Save Page As**. To download the access logs for a report, click **Download** next to the desired report.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> For more information on Activity Reports, see Monitoring EPM Cloud in *Getting Started Guide for Administrators*.

Importing and Exporting Data

Related Topics

- Importing Data
- Driver Member Casting Errors
- Exporting Data
- Viewing Data Import and Export Status

Importing Data

After you import dimensions, you can populate the application with data from a data import file.

Before importing data, you must:

- Define or load metadata and refresh the database. See Importing Metadata,
- Prepare the data load file. Source data must be in a business process-specific data file format or in an Oracle Essbase data file format.
- Ensure the data load files do not contain any thousands separators, quotes, and so on, around data values. Up to one single . (decimal point) character is supported.
- Ensure the data import file type is .csv, .txt, or .zip.

You can create a data import file based on a template, or you can generate one based on the source system. To use a template, run the export data process in your business process and use the exported file as a template. See .Exporting Data

> **Note**
>
> When importing data, no validation is performed on intersections to determine which are valid, and data is loaded into all intersections. To review data that has been loaded into invalid intersections, run the Invalid Intersection report before importing data to see and clear invalid intersections. See Working With Invalid Intersection Reports.

To import data:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select **Actions**, and then **Import Data**.
3. On the **Import Data** page, click **Create**.
4. Select the **Location** of the data import file:
   - **Local**: Imports the data import file from a location on your computer.
   - **Inbox**: Imports the data import file from the server. See Uploading and Downloading Files Using the Inbox/Outbox Explorer.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Note: Valid data import file types are .csv, .txt, or .zip.

5. Select the **Source Type** of the data import file:

   - Select **Default** to load data in a business process-specific data file format.

     If you select **Default**, enter the following data import options:

Table 3-4 Default Data Import Options

Data Import Option	Description
File Type	Choose a file type: – **Comma delimited** – **Tab delimited** – **Other** Note the following: – If an import error occurs during a business process-specific data load, the import will continue to load valid data (partial load). Any errors are noted in the import and export status. See Viewing Data Import and Export Status. – For a list of supported delimiter characters and exceptions, see Other Supported Delimiter Characters. – If data is exported to a file in a business process-specific format, you can use Notepad to change the cube name in the file; for example, PCM_REP, and then import the data file into the aggregate storage outline (provided all dimensions exist in the aggregate storage outline).
Source File	Enter or select the source file: – If you selected **Local** for the location, click **Browse** to navigate to the source file. – If you selected **Inbox** for the location, enter the name of the file in **Source File**.
Include Metadata	Select whether or not to include metadata in your data inport. Note that clearing the **Include Metadata** option improves data import performance and prevents members from changing position in the outline during data import. Regardless of this option setting, the required metadata must already exist in the business process and in the Oracle Essbase outline before you can load the application data.
Date Format	Select a date format from the drop-down list.
Missing Data Label	Specify how to display missing values in forms. Enter an alphabetic value that does not exceed 16 characters. You can begin the value with a # (number sign). If no value is entered, the system defaults to #MISSING. **Note:** If you are using a data import file that's based on a template (in other words, you ran the export data process in your business process and you're using the exported file as a template), this label must match the Missing Data Label that was defined during data export. See Exporting Data.
Last Validate/Import	This field displays the date of the last validation or import, if any.

   - Select **Essbase** to load data in an Essbase data file format.

     If you select **Essbase** as the source type, enter the following data import options:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 3-5 Essbase Data Import Options

Data Import Option	Description
Cube	Select a cube from the drop-down list.
Source File	Enter or select the source file: – If you selected **Local** for the location, click **Browse** to navigate to the source file. – If you selected **Inbox** for the location, enter the name of the file in **Source File**.
Delimeter	Specify the **Delimiter** for the Essbase data; options are **Space** or **Tab**.
Stop in Case of Error	**Stop In Case of Error** is selected by default. If this option is selected and any import errors occur during an Essbase data load, the import stops and no data is loaded. If this option is cleared, data continues to load even if there are errors.
Last Validate/Import	This field displays the date of the last validation or import, if any.

6. **Optional:** If you selected **Inbox** for the import data file location, click **Save as Job** to save the import operation as a job, which you can schedule to run later.
   - Saving an import operation as a job is useful to batch a load sequence; for example, import metadata, then import data, then run rules when the data load is complete. See Managing Jobs.
   - You can run up to five import jobs at one time.
   - To review the data that was rejected during the data import job, specify an **Error File** in the **Save as Job** dialog box. This file will provide information about the data records that were not imported. If an error zip file is specified, the zip file is stored in the Outbox where you can download the file using Inbox/Outbox Explorer. See Uploading and Downloading Files Using the Inbox/Outbox Explorer.
7. **Optional:** If you selected **Local** for the import data file location, click **Validate** to test whether the import file format is correct.
8. Click **Import** to run the import operation.

Considerations When Importing Data

- Since there is no option to clear data before import, the import will not overwrite existing data values with #MISSING values. Instead, complete one of the following tasks:
  - Run a Clear Cube job to clear specific business process data within input and reporting cubes. See Clearing Cubes.
  - Write a business rule that uses the CLEARDATA Essbase command to clear specific data values. See CLEARDATA in *Technical Reference for Oracle Analytics Cloud - Essbase*.
  - Use the Clear Data Slices REST API to clear business process and Essbase data for a specified region. See Clear Data Slices in *REST APIs for Oracle Fusion Cloud EPM*.
- If the evaluation order in the application is changed after exporting data, the import may have unexpected results.
- If a value in a data load input file doesn't match the evaluated driver member type; for example, if the evaluated type of a driver member is "date" and its corresponding input value isn't a valid date format, a driver member casting error occurs. See Driver Member Casting Errors.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Driver Member Casting Errors

A driver member casting error occurs when a value in a data load input file doesn't match the evaluated driver member type. A driver member casting error occurs in any application where an invalid data file is loaded. The "driver member" refers to the members in a column in the data file. Here are some examples of driver member casting errors:

- If a driver member is of type "Date" and it's corresponding input value isn't a valid date format
- If a nonexistent Smart List value is specified for a driver member of type "Smart List"
- If a nonnumeric value is supplied for a member of type "Currency," "Data," or "Percent."

A casting error can occur for each driver member specified in the input file and for every occurrence in a data record, so the number of casting errors for a given input record ranges from 0 to the number of drivers. Because successful driver member bindings can occur along with driver member binding errors, the application will not reject the entire input record, but the error will be noted in the import and export status. See Viewing Data Import and Export Status.

Consider the following data record input file where a bad date value is specified:

```
Entity, aDate, aSl, aText, aCurr, aPercent, Point-of-View,Data Load Cube Name
e1, exampleBadDateValue, sl1, text11, 888, 0.99,
"FY15,Current,""BUVersion_1"",Local,u1,Jan",Plan1
```

Error messages displayed:

- After loading the data, the status window will read:

  ```
  Outline data store load process finished (Invalid data values were not
  loaded). 7 data records were read, 7 data records were processed, 7 were
  accepted for loading (verify actual load with Essbase log files), 0 were
  rejected.
  ```

- The error is noted as an error in the import and export status with the following entry details:

  ```
  Category: Data record

  Record Index: 2

  Message: Unable to load specified data value in Record 2: (aDate:
  exampleBadDateValue)
  ```

- If multiple casting errors occur, each error is recorded in the same error message:

  ```
  Unable to load specified data values in Record 2: (aSl: aaaaaaasl1),
  (aPercent: cc), (aDate: exampleBadDateValue), (aCurr: bb)
  ```

- If the error message count exceeds the maximum limit, it will issue the following message:

  ```
  The warning [Unable to load specified data values] message count limit (100)
  exceeded: no more warnings of this type will be issued.
  ```

Exporting Data

To export data to a file:

1. From the Home page, select **Application**, and then select **Overview**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. On the **Application page**, select **Actions**, and then **Export Data**.
3. On the **Export Data** page, click **Create**, and make your export data selections:

Table 3-6 Data Export Options

Data Export Option	Description
Location	Select the target environment of the data export file: • **Local**: Saves the data export file to a location on your local computer. • **Outbox**: Saves the data export file to the server. See Uploading and Downloading Files Using the Inbox/Outbox Explorer.
Cube	Select a cube from the drop-down list. **Note:** The driver/column dimension in the Export Data job definition needs to be dense.
File Type	Select from the following options: • **Comma delimited**: Creates a comma-delimited .csv file for each artifact. • **Tab delimited**: Creates a tab-delimited .txt file for each artifact. • **Other**: Creates a .txt file for each artifact. Enter the delimiter character that you want to use in the export file. For a list of supported delimiter characters and exceptions, see Other Supported Delimiter Characters .
Smart Lists	Specify **Export Labels** or **Export Names**.
Dynamic Members	Select whether to **Include** or **Exclude** dynamic calculation members during export. **Note:** Excluding dynamic members from exported data improves performance during data exports.
Decimals	Specify the number of decimal positions (0-16) to format the data after export, or select **None** to use the default precision formatting. For example, specifying a decimal value of **3** in the **Decimals** field results in the exported data displaying three digits to the right of the decimal point, wherever applicable. Selecting **None** formats the decimal number as specified in the default precision settings, whereas selecting **0** formats the data to display a whole number. For example, if the data value you are exporting is `123.45678`, selecting 0 exports the data as 123, and selecting **None** exports the data as `123.45678`.
Missing Data Label	Specify how to display missing values in forms. Enter an alphabetic value that does not exceed 16 characters. You may begin the value with a # (number sign). If no value is entered, the system defaults to #MISSING. **Note:** If you are running the export data process to create a template file for a data import and you define a custom missing data label during data export, the Missing Data Label defined during the import data process must match the label defined here.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 3-6 (Cont.) Data Export Options

Data Export Option	Description
Slice Definition	Select the slice of data to export. If you are exporting data for multiple members simultaneously, make sure that at least one of the members you select is a non-shared member. You can export shared members individually because it's equivalent to selecting a base member. However, selecting level 0 descendants of a parent member whose descendants are all shared members is equivalent to not selecting any members from a dimension and the export will not run. Therefore, you must ensure that one of the members selected is a non-shared member.

4. **Optional**: If you selected **Outbox** as the location of the export data file, click **Save as Job** to save the export operation as a job, which you can run immediately or schedule to run at a later time.
   - You can run up to five export jobs at one time.
   - When scheduling export jobs, you can specify a unique output file name for each job.
   - For more information about scheduling jobs, see Managing Jobs.
5. Click **Export**, and then specify where to save the data export file.

> **Note**
>
> To reduce the size of data export files, if a slice has an entire row of #MISSING values, the row will be omitted from the data export file.

Troubleshooting

For help with troubleshooting issues if you get an Oracle Essbase query limit error when exporting a large number of data cells from ASO cubes, see Handling Issues Related to Large Data Export from ASO Cubes in *Operations Guide*.

Viewing Data Import and Export Status

You can view the status of a data import or export on the **Jobs** console.

1. Go to the **Jobs** console.

   If you just created an import or export job and are on the **Application** page, select the **Jobs** icon at the top of the screen. If you are on the Home page, select **Application**, and then **Jobs**.
2. From the **Jobs** console, select the import or export job you want to view.

   The status page displays messages for **Errors**, **Warnings**, **Info**, and **All**. If there are errors and you specified an error file name while defining the job, you can download the generated error file using the **Error File** link.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Importing Exchange Rates for a Multicurrency Application

> **Note**
>
> To view the exchange rates options, the application must have been created with the **Multicurrency** option enabled. When you select the **Multicurrency** option during application creation, a Currency dimension is then created. By default, the multicurrency type is *simplified*. If you do not have a Currency dimension in your application, the **Import Exchange Rates** and **Export Exchange Rate Template** options will not be displayed on the **Actions** menu. See Setting Up Currencies.

To simplify managing exchange rates for a multiple currency application, you can export the provided `ExchangeRateTemplate.csv` template, enter your exchange rates in a spreadsheet, and then import the rates into your application. You can import exchange rates right away or schedule an **Import Exchange Rates** job to run later.

To import exchange rates using a template:

1. From the Home page, select **Application**, and then select **Overview.**
2. From the **Actions** menu, select **Export Exchange Rate Template**, and then open `ExchangeRateTemplate.csv` or save it locally.
3. In the `ExchangeRateTemplate.csv` template file, enter average and ending currency exchange rates for each period and each currency, specify members for the POV, and then save the file.

   > **Note**
   >
   > The number 1 represents the exchange rate for the default currency in the application. Enter rates relative to the default currency.

4. From the **Actions** menu, select **Import Exchange Rates,** click **Create**, browse for the file, and then click **Import.**

   > **Note**
   >
   > You can schedule the import to run as a job that runs right away or at a later time. To schedule an **Import Exchange Rates** job, select the **Inbox** option, point to an import file that is located in the Inbox, and then click **Save as Job**. See Scheduling Jobs.

Uploading and Downloading Files Using the Inbox/Outbox Explorer

Use the Inbox/Outbox Explorer to upload files to the server or download them to your computer.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To upload or download files:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select **Actions**, and then **Inbox/Outbox Explorer**.
3. **Optional:** Sort or filter the files displayed in the **Inbox/Outbox Explorer**.
   - To sort the files, click a heading. You can sort the files by **Name**, **Last Modified**, or **Size.**
   - To filter the files displayed, click (Filter icon), enter a name in the **Filter** dialog box, and click **Apply**.
4. To upload a file from the server, click **Upload**. In the **Upload File** dialog box, click **Browse**, select the file to upload, and then click **Upload File**.
5. To download a file from the server, select the desired file, then click (Actions icon), and then click **Download File**.
6. Click **Close** to close the **Inbox/Outbox Explorer** and return to the **Application** page.

> **Note**
>
> There is an upload file size limit of 2GB. If your upload file exceeds the size limit, either select a smaller file or use EPM Automate to upload the larger file. For information about EPM Automate, see *Working with EPM Automate*.

Refreshing the Application Database

The application database, which stores data for each cube in the application, is created when the application is created. You must refresh the database after changing the application structure and modifying artifacts such as dimensions and members.

Changes made to the application are not reflected to users performing data entry and approvals tasks until the application is refreshed. For example, when you modify properties of a dimension member, add a member, or change access permissions, these changes are reflected to users after you refresh the application. Oracle recommends that you notify all users, asking them to save their work and close the application, before you refresh the database.

Before refreshing the database:

- Back up your application and export data from all databases
- Decide if you want to enable all users or just the current Service Administrator to use the application in administration mode during the refresh
- Decide if you want to log off all users
- Terminate any active application requests

To refresh the database:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select **Actions**, and then **Refresh Database**.
3. On the **Refresh Database** page, click **Create**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. For **Before Refresh Database**, select from these options:
   - **Enable use of the application for**: Lets **All users** or **Administrators** (or the current logged in Service Administrator) access the application in administration mode during the refresh
   - **Log off all users**: Logs off all application users before starting the refresh
   - **Stop all active requests**: Terminates any active requests in the application before starting the refresh
5. For **After Refresh Database**, select from these options:
   - **Enable use of the application for**: Lets **All users** or **Administrators** use the application after the refresh.
   - **Validate Metadata:** When this option is selected, the system scans for member identity (ID) mismatches between the business process and Oracle Essbase and then automatically resolves them after the refresh process. Selecting Validate Metadata might add additional time to the refresh process. For more information, see Validating Metadata.

     Note: The Validate Metadata option is not available for cubes running on the legacy version of Essbase.
6. Click **Refresh Database** to refresh the database now, or click **Save as Job** to run the refresh later as a job. See Managing Jobs.

> **Note**
>
> When you refresh the application database, all the cubes in the database are refreshed.

Validating Metadata

About Validate Metadata

Use the **Validate Metadata** setting (formerly called **Autocorrect Errors**) as part of the database refresh process to scan for and automatically resolve member identity (ID) mismatches between the business process and Oracle Essbase.

> **Caution**
>
> Selecting **Validate Metadata** might add additional time to the refresh process.

In certain cases, the identity of a member changes in a way that causes it to be not fully recognized in the multi-dimensional database used by the application. When a member's identity is not fully correctly established within all parts of the system, it could sometimes cause hierarchy issues like incorrect member ordering, or it could miss children underneath that member, or miss some siblings, or miss certain properties, and so on. Selecting **Validate Metadata** detects such members and automatically resolves their identity, allowing these members as well as their hierarchies along with properties and siblings, to be fully and correctly recognizable and usable within all the parts of the system.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing the Report Detailing Member Movement and Deletion

After making member ID corrections, members might be deleted or moved. A report file detailing any member movement (to a different parent) or deletion is generated and placed in the Outbox in a csv (comma-delimited) file format. Review the report to reaggregate some of the stored parent members where the child hierarchy may have changed.

For example:

Action	Member	Parent	Dimension	Cube	New Parent
Delete	Member1	Parent1	Scenario	Plan1	
Move	Member2	Parent2	Account	Plan2	Parent3

If a correction is made, the system generates a CSV file to the Outbox folder, and the filename is automatically generated with the application name followed by `_autocorrect.csv`; for example, `vision_autocorrect.csv`. No file is created if no issue was addressed. If a previous `*_autocorrect.csv` file exists and a correction is made during a subsequent run, this file is overwritten.

After running the **Refresh Database** job with the **Validate Metadata** setting, you can download the export file from the Outbox.

To download files:

1. Click **Application**, and then click **Jobs**.
2. Under **Recent Activity**, click the job.
3. At the top of **Job Details**, click the export file option to select a download location.

Removing an Application

Proceed with caution when removing an application. Because removing an application will delete all of its contents and any scheduled jobs, make a backup of your application.

To remove an application:

1. From the Home page, select **Application**, and then select **Overview**.
2. On the **Application** page, select **Actions**, and then **Remove Application**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4

Managing Application and System Settings

Related Topics

- About Managing Application and System Settings
- Application Settings
- System Settings
- Calculation Options Settings

About Managing Application and System Settings

Service Administrators can specify defaults for the current application.

To view and manage application and system settings:

1. From the Home page, select **Application**, and then **Settings**.
2. On the **Application Settings** page, define the desired application settings.

The following two settings are specific to Enterprise Profitability and Cost Management:

- **Calculation Threads**: The number of rules that can be executed in parallel if a rule set is enabled for parallel calculation. See **Parallel Calculation** in the **Rule Set Calculation** options in Creating a Rule Set.
- **Allocation Precision**: The decimal precision for calculated allocation results. Precision is calculated by rounding, not truncation. The default is 2 decimal places. Values can range from 7 to -6.

In addition to the Enterprise Profitability and Cost Management-specific settings, you can define settings in the following areas:

- Application Settings
- System Settings

Application Settings

You can define application settings in the following areas:

- Alias Settings
- Number Formatting
- Notifications
- Digital Assistance Settings
- Smart View Add-on
- Oracle Guided Learning Settings
- Page Settings
- Other Options

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Profitability and Cost Management

Alias Settings

Table 4-1 Alias Settings

Setting	Description
Alias Table	Default alias table for the application
Display Member Label As	Default display options for the Member Selection dialog box. See Using the Member Selector.

Number Formatting

Table 4-2 Number Formatting Settings

Setting	Description
Thousands Separator	• **None**: 1000 • **Comma**: 1,000 • **Dot**: 1.000 • **Space**: 1 000 • **Underscore**: 1_000
Decimal Separator	• **Dot**: 1000.00 • **Space**: 1000 00 • **Underscore**: 1000_00
Negative Sign	• **Prefixed minus**: -1000 • **Suffixed minus**: 1000- • **Parentheses**: (1000)
Negative Color	• **Red** • **Black**

Notifications

Table 4-3 Notification Settings

Setting	Description
Task Lists	Not applicable for Enterprise Profitability and Cost Management
Approvals	Not applicable for Enterprise Profitability and Cost Management
Job Console	Select to enable notifications for jobs on the **Jobs** console. See Managing Jobs .

Digital Assistance Settings

If you have implemented the EPM Digital Assistant, specify configuration settings for the assistant.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> These settings are part of a larger configuration process to enable you to work with the Digital Assistant. You must complete the configuration steps before using the Digital Assistant. See Configuring Applications in *Getting Started with the Digital Assistant*.

Table 4-4 Digital Assistance Settings

Setting	Description
Channel ID	Enter the channel ID generated when you created the Oracle Web channel for the Digital Assistant.
Service Name	Enter the Digital Assistant URL, which is the Oracle Digital Assistant Service URL that you see when you log on to the service. Enter the URL without either http:// or https:// preceding it.

Smart View Add-on

Table 4-5 Smart View Add-on

Setting	Description
Google Sheets	Select the **Google Sheets** check box to enable support for Oracle Smart View for Office in Google Sheets. When selected, you can connect to your application from Google Sheets and use Smart View features to view and analyze data in Google Sheets.
Keep Invalid Members/ Comments	Select to allow users to retain invalid members and comments on ad hoc grids in Smart View after a refresh. For example, users may enter member names incorrectly in ad hoc grids or add comments within or outside the grid. Selecting this option for the application allows users to refresh the grid and retain the invalid members and the comments, along with any data they may have already entered. Smart View users can set a cell style for comments, which will call out the invalid members and comments. When this option is not selected, then the invalid member reverts to the closest previous member in the grid, with the exception of the first row or first column in the grid, which is retained as a comment. Blank rows or columns inserted into the grid remain blank.

Oracle Guided Learning Settings

If you have implemented Oracle Guided Learning, specify configuration settings.

> **Note**
>
> These settings are part of a larger configuration process to enable you to work with Oracle Guided Learning. You must complete the configuration steps before using Oracle Guided Learning. See Integrating Cloud EPM and Cloud EDM with Oracle Guided Learning for more information.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 4-6 Oracle Guided Learning Settings

Setting	Description
Application ID	Enter the Application ID.
Server URL	Depending on the location of your environment, enter the URL: • NA: `https://guidedlearning.oracle.com` • EMEA: `https://guidedlearning-emea.oracle.com` • APAC: `https://guidedlearning-apac.oracle.com`

Page Settings

Table 4-7 Page Settings

Setting	Description
Indentation of Members	Set the default for indenting members on a page.
Number of Items on the Page Drop-down	Set the default for the number of items on the Page drop-down. If you shorten the number of items in the member list, the Search box can be more easily seen. If the list is shortened to 10 members, for example, then you won't need to scroll to see the Search box.

Other Options

Table 4-8 Other Options

Setting	Description
Date Format	Not applicable for Enterprise Profitability and Cost Management.
Attribute Dimension Date Format	Select a date format for attribute dimensions in your application.
Partial Grid Fetch Size (Rows,Columns)	Enter the number of rows and columns in the format `nn,nn`
Suppress Application Management Options in Smart View	Select whether to suppress application management options in Smart View.
Enable Data Load for Adhoc Read Only Role	Default is **No**. Select **Yes** to enable data load for users with the Adhoc read-only role.
Enable Currency Calculation Based on Scenario Time Period	If the system cannot identify the input as a valid member name or alias, the input will be displayed as a comment. Choose whether to enable currency calculations in forms and batch currency rules based on the scenario time period. Selecting **Yes** restricts currency calculations to the range defined for the scenario time period. Selecting **No** calculates everything based on exchange rates and reporting currency and is not restricted based on the scenario time period range. Note that the behavior of the currency conversion script is dependent on this application setting at the time the rule is executed.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 4-8 (Cont.) Other Options

Setting	Description
Set Number of Seconds Before Rules Run in Background	Enter a value between 0 and 600 seconds (10 minutes). **Note** Rules that are set to automatically run when a form is loaded or saved never run in the background. **Note** The value entered here applies to business rules created in Calculation Manager. See Creating and Managing Business Rules.
Client Log Level	Select None, Information, Warning, Error, or General
Web Ad Hoc Grid	Select whether to suppress missing values only or whether to suppress missing and zero values in Web Ad Hoc grids.
Enable User Formulas in Ad Hoc	If you select **Yes**, in an ad hoc grid, when you hover over a cell with a member formula attached, you see the member formula associated with the cell and you can perform the calculation on the fly.
Filter Out Excluded Members in Segment Dropdown	Default is **Yes**. Choose **No** to display the excluded members in the row drop-down POV in forms.
Forms Version	Specify a forms version. For existing applications, the default is **Forms 1.0**. Newly created applications will default to **Forms 2.0**. This setting is application-specific and can vary across applications.
Render Grid for Invalid Intersection	Select **Yes** or **No** to specify whether or not to render the grid for an invalid combination on the POV/page.
Legacy List Pages	Reverts the standardized artifact pages (also known as list or listing pages) to legacy artifact pages. The default is **No**, which displays the standardized artifact pages. Choose **Yes** to revert to the legacy artifact pages. See About the Standardized Cloud EPM Platform Artifact Pages.

Profitability and Cost Management

Table 4-9 Profitability and Cost Management Settings

Setting	Description
Calculation Threads	The number of rules that can be executed in parallel if a rule set is enabled for parallel calculation. See **Parallel Calculation** in the **Rule Set Calculation** options in Creating a Rule Set.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 4-9 (Cont.) Profitability and Cost Management Settings

Setting	Description
Allocation Precision	The decimal precision for calculated allocation results. Precision is calculated by rounding, not truncation. The default is 2 decimal places. Values can range from 7 to -6.
Allocation Rules Use Non Empty Tuple	Indicates whether Non Empty Tuple (NET) optimization is enabled. Allocation rules on sparse cubes may perform better by setting this preference to **Yes**. Not all Enterprise Profitability and Cost Management applications will see a performance benefit from enabling this preference. **Note:** This setting affects Allocation rules only, Custom rules are not impacted by this setting.
Skip Scripts When Data Missing	Indicates whether Skip Scripts optimization is enabled. Select **Yes** to allow allocation rules to skip processing steps when data conditions make them unnecessary, thus improving performance.
Skip Scratch Cell Generation	Indicates whether scratch cell optimization is enabled. Select **Yes** to skip unnecessary rule execution steps and improve allocation rule performance. **Note:** In rare cases, allocation rules can be out of balance if you skip scratch cell generation. If you detect out-of-balance rules, select **No**, and report the issue to Oracle Support.
Scenario Upper Level Start / End Years Replaced with Level Zero	Resolves parent Year members in Scenario dimensions, which are used to determine whether the data for those scenarios can be edited. • If **Yes**, and All Years is selected in the Scenario dimension Start Year or End Year, then the Years dimension automatically resolves to all years configured and allows you to edit the cell level data for the given scenario. • If **No**, you cannot edit cell level data when All Years is used. The default value is **Yes**. Selecting Yes guarantees that when the Start Year and End Year is set to All Years, any future years are automatically resolved to the correct year; otherwise, you would need to keep changing the End Year when new years are introduced.
Designer Version	Which version of the Rule Designer to open. **Designer 1.0** opens the older version of the Rules Designer. **Designer 2.0** opens the new Rule Designer UI with enhanced features.

System Settings

Table 4-10 System Settings

System Setting	Description
Display Users' Full Names	When selected, the system displays the user's full name (for example, Max Hennings). When cleared, the system displays the user's ID (for example, VHennings).
Include Shared Members in Cube Refresh	When selected, shared members will inherit the security access assigned to the base member. When cleared, shared members will inherit the highest security access based on a combination of the access assigned to the base member and parent of shared member.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 4-10 (Cont.) System Settings

System Setting	Description
Default Ancestor Access	Select an option to specify the default user access to ancestor members in ad hoc grids and the Member Selector: • **None**: By default, users are not able to see the ancestor members of members that they have access to unless they are explicitly granted access to them. • **Read**: By default, users are granted Read Only access to the ancestor members of members that they have access to unless they are explicitly granted **Write** or **Display** access, which would override this default. • **Write**: By default, users are granted Write access to the ancestor members of members that they have access to unless they are explicitly granted **Read** or **Display** access, which would override this default. • **Display**: By default, users are granted Display Only access to the ancestor members of members that they have access to unless they are explicitly granted **Read** or **Write** access, which would override this default. **Note:** Members with Display Only access are displayed, but instead of data values in the cells associated with those members, users will see #NoAccess.
Email Character Set	Select **UTF-8** or **Regional Setting**.
Business Rules Notification	If set to **Yes,** sends an emailed notification to a user or group when business rules created and enabled for notification in Calculation Manager are completed or encounter errors. In **Notify These Users**, select the user or group to notify. **Note:** You specify whether to enable a business rule for notifcation when you create the rule in Calculation Manager using the **Enable Notifcations** option in the rule's properties. See Creating a Business Rule in *Designing with Calculation Manager*. **Note:** See Creating and Managing Business Rules for more information on business rules.
Notify These Users	If the **Business Rules Notification** setting is set to **Yes**, select the user or group to notify when business rules are complete or encounter errors. **Note:** You can select only one user or group to notify.
Allow Drill Down on Shared Members in Ad Hoc	• **Yes** enables drilling on shared members in an ad hoc grid. When set to **Yes,** the **Drill to All Levels in Base** check box is displayed. • **No** disables drilling on shared members in an ad hoc grid.
Enable Use of the Application for	Determines whether users can access the application in administration mode, such as during backups. • **Administrators**: When you select Administrators, if any non-administrative users are logged on to the application, they are forced off the system and will not be able to log on. • **All Users**: To restore access to an application for all users, select All users.
Assign Application Owner	Assigns ownership of the application to another Service Administrator.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 4-10 (Cont.) System Settings

System Setting	Description
Enable the Display of Substitution Variables	Set how substitution variables display in the Member Selection dialog box when users respond to runtime prompts in business rules. • **Display All**: Displays all substitution variables. • **Display None**: Displays no substitution variables. • **Enable Filtering**: Displays only substitution variables that are valid for the runtime prompt.
Suppression Mode	Choose a suppression behavior for ad hoc grids in the web and in Smart View for cases where rows and columns contain missing data or zeroes. • **Suppress Missing values only** (default): Suppresses rows, or columns, or both that contain No Data/Missing. • **Suppress Missing also Suppresses Zeros**: Suppresses rows, or columns, or both that contain both No Data/Missing and Zero.
Smart View Ad Hoc Behavior	All new and recreated applications in Enterprise Profitability and Cost Management are automatically set to Standard. You cannot change this setting. For a complete description of the ad hoc features available in Standard mode, see Smart View Behavior Options in EPM Cloud in *Working with Oracle Smart View for Office (Mac and Browser)*.
Use All Alias Tables on Refresh	If set to **Yes**, the system evaluates the alias name against all alias tables. If set to **No** (default setting), the system evaluates the alias name against the currently selected alias table. In either case, if the system cannot identify the input as a valid member name or alias, the input is displayed as a comment.
Link Accounts by Default	Not applicable in Enterprise Profitability and Cost Management.
Attribute Dimension Re-order Threshold	Enter a threshold value between 0 and 500 (500 is the default value). For attribute dimensions, when the number of members under a given parent exceeds the specified threshold value, then the members will be reordered at the end of a metadata load instead of during the load. Depending on the specific shape of the attribute dimension, adjusting this number can sometimes have an impact on performance. In general, this setting can be ignored unless attribute dimension load times degrade beyond acceptable levels.
Set Reporting Options	If you're using the next-generation Reports reporting solution, Oracle recommends you use this setting to upload any TrueType fonts that your company uses to produce reports. See Managing Fonts. To upload TrueType fonts, click **Report Settings**, click **Manage Fonts**, click , and then select the font files to upload.
Enable AI	Select **Generative AI** to enable the ability to automatically generate narrative summaries for a single insight or group of insights. (See Configuring and Working with IPM for information on IPM Insights.)

Copyright © 2022, 2026, Oracle and/or its affiliates.

Calculation Options Settings

Enterprise Profitability and Cost Management calculation processes are designed to yield consistent and reliable calculation results. Enterprise Profitability and Cost Management offers Logical Clear and Allocation Rule Non Tuple calculation settings that may help enhance performance in some cases.

Related Links

Defining Logical Clear Versus Physical Clear

Enabling Allocation Rule Non Empty Tuple

Defining Logical Clear Versus Physical Clear

Enterprise Profitability and Cost Management calculation processes by default use the Logical clear calculation setting to calculate results. Logical clear can improve overall calculation times when the data growth in the database impacts database clear processes and may help enhance performance. In some cases, if you notice any calculation issue while using Logical clear, you may wish to change the calculation setting to Physical clear.

Use the `EPCM_CALC_CLEAR_TYPE` substitution variable to specify whether to use Logical or Physical clear. Since Logical clear is the default, if you want to use Logical clear, you do not need to enable the `EPCM_CALC_CLEAR_TYPE` substitution variable.

If you want to switch to Physical clear, follow these steps:

1. From the Home page, select **Tools**, and then **Variables**.
2. On the **Variables** page, select **Substitution Variables**.
3. Click +.

   A new variable is added to the bottom of the list.
4. Scroll to the bottom of the list, and select the cube where you want to add the variable.
5. For **Name**, enter `EPCM_CALC_CLEAR_TYPE`.
6. For **Value**, enter "Physical".
7. Click **Save**.

Enabling Allocation Rule Non Empty Tuple

The Allocation Rule Non Empty Tuple (NET) setting can improve the calculation times for Simple Reclassification (SR) rules. This setting may be the solution if you experience long run times for SR rules with very large and very sparse source or destination ranges. In some cases the allocation logic of the affected rules is conducive to improvements while in others it is not. Regression testing is critical before promoting this calculation enhancement to a production environment.

Use the `EPCM_CALC_NET_ENABLE` substitution variable to enable Allocation Rule Non Empty Tuple (NET). The valid values for this substitution variable are Yes or No. When this variable is not present, the default is No.

To enable Allocation Rule Non Empty Tuple (NET):

1. From the Home page, select **Tools**, and then **Variables**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. On the **Variables** page, select **Substitution Variables**.
3. Click +.

   A new variable is added to the bottom of the list.
4. Scroll to the bottom of the list, and select the cube where you want to add the variable.
5. For **Name**, enter `EPCM_CALC_NET_ENABLE`.
6. For **Value**, enter "Yes".
7. Click **Save**.

> **Note**
>
> For information on skipping empty tuples in custom rules, see Skipping Empty Tuples to Optimize Calculations.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5

Defining Valid Intersections

Related Topics

- Understanding Valid Intersections
- Creating Valid Intersections
- Managing Valid Intersections
- Suppressing Invalid Data in Forms
- Clearing Invalid Data
- Working with Valid Intersections

Understanding Valid Intersections

Valid intersections are cell interactions that are filtered based on rules you define, called valid intersection rules, which filter certain cell intersections to users when they enter data or select runtime prompts. For example, you can specify that certain programs are valid only for some periods or departments. After valid intersections are defined, cells containing invalid data are read-only. This restriction speeds the planning process and optimizes the information available to users.

Conversely, you might have a use case where data entry is allowed in most cell combinations and you only need to prevent data entry to a select few cell combinations. In this case, you can ease the definition process by defining invalid intersections. You define invalid intersections in the same way that you define valid intersections except you can specify the invalid intersection definition type while creating the intersection group.

To better understand how valid intersections affect behavior in forms and in runtime prompts, see Working with Valid Intersections.

Valid Intersection Groups

Valid intersection groups define:

- Dimensions to be included
- One of those dimensions as the anchor dimension
- Whether nonanchor dimensions are required or not
- Whether the anchor dimension members not specified or referenced will be valid or invalid

Valid Intersection Rules

Valid intersection rules:

- Must use the same dimensions that were defined within their valid intersection group
- Valid intersection rules within the same valid intersection group that produce an apparent conflict or overlap, are marked valid if either valid intersection rule condition is met

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Valid intersection rules in different valid intersection groups that produce an apparent redundancy or overlap, are marked valid if they satisfy the requirements of all valid intersection groups

  Thus, if any valid intersection group marks an intersection invalid, regardless of other valid intersection groups making it valid, the system will mark the intersection invalid. Invalid groups override valid group results.

> **Note**
>
> If you want to remove valid intersections regardless of what other valid intersection groups allow, then this rule must be in a different valid intersection group.

See Valid Intersection Examples.

Anchor and Nonanchor Dimensions

Anchor and nonanchor dimensions:

- Anchor dimensions are always required dimensions in the cube that is used in the valid intersection evaluation.
- Nonanchor dimensions are either required or not:
  - If a nonanchor dimension is required, any cube that doesn't use that dimension will ignore any valid intersection group where that dimension is tagged as required as it evaluates the valid intersections.
  - If a nonanchor dimension isn't required, any cube that doesn't use that dimension will still evaluate any valid intersection group that includes that dimension as not required and evaluate the intersections of any other dimensions in the valid intersection group in use in the cube.
- Unselected anchor dimension members are valid by default, but you can mark them invalid by clearing the **Unselected Members are Valid** option. This option marks all intersections with anchor dimension members not selected in this rule as invalid.

See Valid Intersection Examples.

Valid Intersection Examples

This section provides valid intersection group and valid intersection rule examples to illustrate a few simple, complex, and edge-case scenarios.

Example: Anchor and Nonanchor Dimensions

The choice of the anchor dimension is critical. Consider the following example, which produces a different result based on the anchor dimension definition:

- Valid intersection group 1 defines Entity as the anchor dimension and Product as a nonanchor dimension.
- Valid intersection group 2 reverses this definition with Product as the anchor dimension and Entity as the nonanchor dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 5-1 Example - Anchor Dimension is Entity

Valid Intersection Group	Anchor Dimension - Entity	Nonanchor Dimension - Product
1	DESC(500 - Manufacturing) - Unselected members are valid	DESC(P_TP1 - Computer Equipment)

Group 1 means entities that are descendants of Manufacturing are valid only with descendant products of Computer Equipment. No other products are valid with descendants of Manufacturing. All other entities besides descendants of Manufacturing are valid with all products, including descendants of Computer Equipment.

Table 5-2 Example - Anchor Dimension is Product

Valid Intersection Group	Anchor Dimension - Product	Nonanchor Dimension - Entity
2	DESC(P_TP1 - Computer Equipment) - Unselected members are valid	DESC(500 - Manufacturing)

Group 2 means products that are descendants of Computer Equipment are only valid with descendant entities of Manufacturing. No other entities are valid with descendants of Computer Equipment. All other products besides descendants of Computer Equipment are valid with all entities, including descendants of Manufacturing.

> ⚠ **Caution**
>
> The choice of anchor dimension is significant. You'll get dramatically different results if you choose the wrong anchor dimension.

Example: Required Dimension

In the following example, if a nonanchor dimension isn't required, then the application evaluates all remaining dimension intersections in the valid intersection group for a cube that doesn't contain the nonrequired dimension. This behavior could result in the evaluation of a valid intersection group with only one effective dimension.

Table 5-3 Example - Required vs. Non-Required Nonanchor Dimensions

Valid Intersection Group	Anchor Dimension - Entity	Nonanchor Dimension - Product
1	DESC(500 - Manufacturing) - Unselected members are valid	DESC(P_TP1 - Computer Equipment) - Not required

In Group 1, the product dimension isn't required, and unselected entities are valid. Therefore, if the cube of the form or business rule, at runtime, doesn't include the product dimension, the application evaluates the entity dimension selections to mark all entities as valid for a cube that doesn't contain the product dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 5-4 Example - Required vs. Non-Required Nonanchor Dimensions

Valid Intersection Group	Anchor Dimension - Entity	Nonanchor Dimension - Product
2	DESC(500 - Manufacturing) - Unselected members are invalid	DESC(P_TP1 - Computer Equipment) - Not required

In Group 2, the product dimension isn't required, and unselected entities are invalid. Therefore, if a cube doesn't include the product dimension, then the application evaluates the entity dimension selections to mark all entities except descendants of Manufacturing as invalid. Thereafter, any cube that doesn't use the product dimension will only allow data entry in the descendants of Manufacturing entities.

> ⚠ **Caution**
>
> Carefully consider whether a nonanchor dimension is required or not, especially if the result leaves a valid intersection group with only one effective dimension. Additionally, selecting the **Unselected Members are Valid** option for anchor dimension members also plays a significant role in the system behavior for valid intersections. See Valid Intersection Examples.

Example: Unselected Members are Valid

In the following example, two intersection groups are valid. In one group, the anchor dimension unselected members are invalid (this option is cleared). In the other group, the anchor dimension unselected members are valid (this option is selected).

Table 5-5 Example - Unselected Members are Valid

Valid Intersection Group	Anchor Dimension - Account	Nonanchor Dimension - Entity
1	IDESC(BS - Balance Sheet) - Unselected members are invalid	000 - No Department
2	IDESC(GP - Gross Profit) - Unselected members are valid	IDESC(403 - Sales)

Because Group 1 defines all unselected members as invalid, the application marks noninclusive descendants of Balance Sheet invalid. Gross Profit isn't an inclusive descendant of Balance Sheet. So even though Group 2 explicitly states inclusive descendants of Gross Profit are valid with inclusive descendants Sales entities, the invalid definition from Group 1 overrides any further valid intersections of the same anchor dimension member set.

Example: Redundant or Overlapping Valid Intersection Rules Within the Same Valid Intersection Group

When valid intersection rules are within the same valid intersection group and produce any redundancy or overlap, the system marks an intersection valid if either of the valid intersection rule conditions are met.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 5-6 Example - Redundant or Overlapping Valid Intersection Rules Within the Same Valid Intersection Group

Valid Intersection Rule	Anchor Dimension - Account	Nonanchor Dimension - Entity
1	IDESC(GP - Gross Profit) - Unselected members are valid	IDESC(403 - Sales)
2	IDESC(NI - Net Income) - Unselected members are valid	IDESC(TD - Total Department)

Because Gross Profit is a descendant of Net Income and Sales is a descendant of Total Department, inclusive descendants of Gross Profit are valid with any inclusive Descendant of Total Department. Rule 1 is a subset of Rule 2, so Rule 1 is effectively a "No operation" rule and is unnecessary. There is no restriction on inclusive descendants of Gross Profit accounts only being valid for inclusive descendants of Sales Entities.

Example: Redundant or Overlapping Valid Intersection Rules in Different Valid Intersection Groups

When valid intersection rules are in different valid intersection groups and produce any redundancy or overlap, the system marks an intersection valid only if it satisfies the requirements of all valid intersection groups.

In the following example, there are redundant or overlapping rules in different groups:

Table 5-7 Example - Redundant or Overlapping Valid Intersection Rules in Different Valid Intersection Groups

Valid Intersection Group	Anchor Dimension - Account	Nonanchor Dimension - Entity
1	IDESC(GP - Gross Profit) - Unselected members are valid	IDESC(403 - Sales) - Required
2	IDESC(NI - Net Income) - Unselected members are valid	IDESC(TD - Total Department) - Not required

Because Group 1 is further restrictive for inclusive descendants of Gross Profit accounts being valid with inclusive descendants of Sales entities, the application enforces this group for these intersections. Other, non-Gross Profit accounts can still use all inclusive descendants of Total Department entities, but inclusive descendants of Gross Profit accounts must use inclusive descendants of Sales entities.

Redundancy or Overlap in Valid Intersection Rules

Valid intersection rules within the same valid intersection group, which produce any apparent conflict or overlap, are marked valid if either valid intersection rule condition is met.

If different valid intersection groups share the same attributes, including the anchor dimension, required and not required nonanchor dimensions, and **Unselected Members are Valid** attribute, they will be treated as rules of the same valid intersection group.

Shared Members and Valid Intersection Rules

Shared members are supported in valid intersection rules. If a base member is selected for a valid intersection rule, any shared members are also included in the rule. Conversely, if a

Copyright © 2022, 2026, Oracle and/or its affiliates.

shared member is selected for a valid intersection rule, the base member is also included in the rule.

Substitution Variables and Valid Intersection Rules

You can use substitution variables in valid intersection rules. User variables are not supported. Substitution variables can be set on the Essbase server, application, or database level. The same substitution variable can exist on multiple levels; the application uses the first one it finds as it searches in this order:

1. Database (cube)
2. Application
3. Server

Evaluation Order

Evaluation order for valid intersection groups orders invalid results sets as quickly as possible, increasing the speed and efficiency of the overall valid intersection evaluation.

For example, the application evaluates the first valid intersection group in the list, then the second group, and so on. If the application finds an invalid intersection in the second group in the list, it will stop evaluating the rest of the list because, once an intersection is defined as invalid, it will override other valid intersection rule results.

To change the order in which the groups are evaluated, see Changing the Valid Intersection Group Evaluation Order.

Creating Valid Intersections

You can define rules to filter certain cell intersections to users when they enter data, select members, or select runtime prompts.

To create a valid intersection:

1. Click **Application**, and then click **Valid Intersections**.
2. If it isn't already selected, click the **Setup** tab.
3. Create the valid intersection group:
   a. Click **Create**.
   b. Enter a name and description for the new intersection.
   c. The **Enabled** checkbox is selected by default. To disable the valid intersection group, clear the **Enabled** checkbox. You can also enable or disable a valid intersection group directly on the **Valid Intersections** page. See Disabling and Enabling Valid Intersection Groups.
   d. For **Definition Type**, select one of the following:
      - **Valid Intersection**
      - **Valid Intersection**
   e. To select the anchor dimension for the intersection group, click next to **Select Anchor Dimension**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

f. **Optional:** By default, the anchor dimension members that are not specified in the valid intersection rule are marked valid. To clear this option, click next to the anchor dimension, and then click **Unselected members are valid**.
For an explanation of this option and for an example of how it's used, see Anchor and Nonanchor Dimensions.

g. To select additional dimensions (called nonanchor dimensions), click **Add Dimension**.

h. **Optional:** By default, nonanchor dimensions are not required. To make a nonanchor dimension required, click next to the nonanchor dimension, and click **Required**.

4. Define the valid intersection rule:

   a. Click **Add Rule**.

   b. To select the range of members to include, exclude, or remove in the valid intersection, click the drop-down icon next to the dimensions in the new rule:

      - Click **Edit** to open the **Select Members** page and select the members, substitution variables, and attributes to include in the valid intersection rule. See Using the Member Selector
      - Click **Add Exclusion** to define an exclusion in the rule. You can exclude a subset of what is included for that dimension.
      - Click **Clear** to clear the selection.

        To delete a rule, click the **Delete** icon.

5. Click **Save and Close**.

6. The new valid intersection group is added to the end of the valid intersections list. To reorder the rules in the list, see Changing the Valid Intersection Group Evaluation Order.

Managing Valid Intersections

Related Topics

- Viewing Valid Intersections
- Filtering Valid Intersections
- Importing and Exporting Intersections
- Changing the Valid Intersection Group Evaluation Order
- Disabling and Enabling Valid Intersection Groups
- Editing Details for a Valid Intersection Group
- Duplicating Valid Intersection Groups
- Deleting a Valid Intersection Group

Viewing Valid Intersections

To view valid intersections:

1. Click **Application**, and then click **Valid Intersections**.
2. If it isn't already selected, click the **Setup** tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The **Setup** tab is at the bottom of the page.

3. To search the entire listing for certain intersections, enter search criteria in the **Search** box and then click to display only the intersections that meet the search criteria.
4. To filter the listing so it displays only the intersections that meet the filter criteria, specify the following filter options:
   - **Filter** : Click to display the **Filter** page where you can select from a robust list of filter options. For a complete list of filter options and their descriptions, see Filtering Valid Intersections.
   - **Clear All** : Click to clear all filters.
   - **Enabled**: Filters the list so you view only the intersections that are enabled (**Yes**), not enabled (**No**), or select **All**.
   - **Definition Type**: Filters the list so you view only the intersections that are the **Valid Intersection** or **Invalid Intersection** types, or select **All**.
5. You can also perform these tasks on the **Valid Intersections** page:
   - **Actions** menu: To import and export valid intersections, see Importing and Exporting Intersections .
   - **Create**: See Creating Valid Intersections.
   - **Refresh**: Click to refresh the intersections listing.
6. For each listing on the intersections page you can perform the following tasks:
   - **Enabled** column: Indicates whether an intersection is enabled. Click the check mark next to the intersection to disable or enable it. A green check mark indicates that the definition is enabled. See Disabling and Enabling Valid Intersection Groups.
   - **Action** column: Click ••• (Action) to edit, duplicate, or delete an intersection, or to move it up or down in the listing order. See the following topics:
     - Changing the Valid Intersection Group Evaluation Order
     - Editing Details for a Valid Intersection Group
     - Duplicating Valid Intersection Groups
     - Deleting a Valid Intersection Group

Filtering Valid Intersections

You can filter the list of intersections by certain criteria such as whether the intersection is enabled or not, whether the definition is valid or invalid, when it was modified, and by whom. When you filter, only the intersections that meet the filter criteria are displayed on the **Valid Intersections** page.

To filter intersections:

1. Click **Application**, and then click **Valid Intersections**.
2. Click (Filter) to specify filter criteria:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Enabled**: View only the intersections that are enabled (**Yes**), not enabled (**No**), or select **All**.
- **Definition Type**: View only the intersections that are the **Valid Intersection** or **Invalid Intersection** types, or select **All**.
- **Modified**: View only the intersections that were modified before or after a certain date and time, or the intersections modified within a range of dates or times. Select **After**, **Before**, or **Between** and then click (Select Date and Time) to specify the date and time criteria.
- **Modified By**: View only the intersections modified by selected users.

3. Click **More** to further refine the filter criteria:
   - **Dimensions**
   - **Anchor Dimensions**
   - **Unselected members are valid**: Choose **Yes**, **No**, or **All**.
   - **Additional Dimensions Required**: Choose **Yes**, **No**, or **All**.
4. Click **Apply**.

Importing and Exporting Intersections

About Importing and Exporting Valid Intersections

You can export the filtered list of valid intersections from the listing page to a location on your local computer, or you can export them to the server. If no filter is defined on the listing page, then all intersections are exported.

Use the Import action to import intersections into the application from a location on your local computer or import them from the server. When you perform an import, the system tests the import file for anything that might break a definition; for example, if a cube is missing, or if an anchor dimension doesn't exist, or if a subrule is not found, errors are logged in the error file. Import jobs will only complete successfully if the import file has no errors.

> **Note**
>
> Subrules provide information about the content of the rules such as the member selection or exclusion for anchor and non anchor dimensions, and the restriction type applied for each subrule.

Depending on the export or import location you choose, the intersections are exported or imported in either an Excel file format (XLSX) or a zip file format.

> **Note**
>
> Locked valid intersection rules are not exported when you export valid intersections. Locked valid intersection rules (and rules that start with restricted prefixes such as FCCS_, OCX_, OEP_, OFS_, OPF_, OWP_, TRCS_) are not imported when you import valid intersections.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Valid Intersections Import File

The Excel import file must have two sheets with the following names for the first and second sheets:

1. `Rules`
2. `Sub Rules`

The `Rules` sheet has the following column headings:

- **Name**
- **Position**
- **Description**
- **Enabled**
- **Definition Type**
- **Anchor Dim Name**
- **Anchor Dimension Apply to Selected Members**
- **Dim1**
- **Dim1 Required**
- **Dim2**
- **Dim2 Required**
- **Dim***X*
- **Dim***X* **Required**

The `Sub Rules` sheet has the following column headings:

- **Name** - This column must contain the name of the Rule from the first sheet
- **Anchor Members**
- **Anchor Exclusion**
- **Anchor Exclusion All**
- **Dim1 Members**
- **Dim1 Exclusion**
- **Dim1 Exclusion All**
- **Dim2 Members**
- **Dim2 Exclusion**
- **Dim2 Exclusion All**
- **Dim***X* **Members**
- **Dim***X* **Exclusion**
- **Dim***X* **Exclusion All**

Exporting and Importing Valid Intersections

To export and import intersections:

1. Click **Application**, and then click **Valid Intersections**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Apply filters to the listing, as needed. See Filtering Valid Intersections.
3. To export, click **Actions**, then **Export**, and then select the target location for the export file:
   - **Local**: Saves the export file to a location on your local computer. If you choose this option, click **Export**, and then specify where to save the export file.
   - **Outbox**: Runs a job that saves the export file in a zip format to the server which you can download now or use to schedule an export job later. If you choose this option, click **Save and Run Job**.

     To download the export file from the Outbox:

     a. Click **Application**, and then click **Jobs**.

     b. Under **Recent Activity** click the export job.

     c. On the **Job Details** page, click (Download) to select a download location for the export file. You can also download the export file from the Inbox/Outbox Explorer for your business process.
4. If editing the export file in Excel, note that the Excel file has two sheets: `Rules` and `Sub Rules`.
5. To import, click **Actions**, then **Import**, and then select the location of the import source file:
   - **Local**: Loads the import file from a location on your computer. For **Source File**, click **Browse** to select the import file on your computer, and then click **Import**.
   - **Inbox**: Runs a job that loads the import file from the server. The import file must be in a zip file format. Enter the name of the file in **Source File**, click **Save and Run Job**, and then specify the **Name** and **Error File** on the **Save as Job** dialog. The error file provides information about the intersections that were not imported. You can download the error file from the Inbox/Outbox Explorer for your business process.

Changing the Valid Intersection Group Evaluation Order

Evaluation order for intersection groups orders invalid results sets as quickly as possible, increasing the speed and efficiency of the overall intersection evaluation.

To learn more about evaluation order, see Evaluation Order.

To change the position of a valid intersection group in a list:

1. Click **Application**, and then click **Valid Intersections**.
2. If it isn't already selected, click the **Setup** tab.

> **Note**
>
> The **Setup** tab is at the bottom of the page.

3. To the right of the intersection group in the listing, click ••• (Actions).
4. Select **Move Up** or **Move Down**.

> **Tip**
>
> You can also drag intersection groups to move them up and down in the list.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Disabling and Enabling Valid Intersection Groups

Intersection groups, by default, are enabled at the time of creation. If you don't want an intersection group to be evaluated or used, you can disable it on the **Valid Intersections** page. When an intersection group is disabled, the intersection rule for that group no longer applies when viewing application forms, business rules, or runtime prompts. You can also reenable a disabled intersection group.

To disable and enable an intersection group:

1. Click **Application**, and then click **Valid Intersections**.
2. If it isn't already selected, click the **Setup** tab.

> **Note**
>
> The **Setup** tab is at the bottom of the page.

3. In the Enabled column of the intersection list, click the check mark next to the intersection group that you're disabling or enabling.

> **Note**
>
> The check mark is green if the group is enabled.

4. Ensure that any remaining groups that are enabled are still listed in the correct evaluation order in the intersections list. If they are not, then move them up or down in the order.

   See Changing the Valid Intersection Group Evaluation Order.

Editing Details for a Valid Intersection Group

To edit intersection group details, you work with dimension members in the member selector. You can also define exclusions in intersection rules.

To edit intersection group details:

1. Click **Application**, and then click **Valid Intersections**.
2. If it isn't already selected, click the **Setup** tab.

> **Note**
>
> The **Setup** tab is at the bottom of the page.

3. Click the name of the intersection group you want to edit.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> A pagination bar displays at the bottom of the rules page. If you have a large number of rules, you can use the pagination bar to easily navigate between the rules pages and to jump to a specific page. The page size options (number of rules per page), which you can select on the pagination bar, are **25**, **50**, **100**, and **All**. (Note that the **All** option isn't available if you have more than 300 rules.)

- To edit dimension details, next to the dimension, click (Edit) to select the members to include, exclude, or remove in the intersection rule:
  - Click **Edit** to open the **Select Members** page and select members, substitution variables, and attributes to include in the intersection rule. You can also type in the members or functions.

    See Using the Member Selector.
  - Click **Exclude** or **Exclude All** to define the dimension members you want to exclude from the rule:
    - **Exclude**: Selecting this option excludes members by ID. Only the specified members (base or shared) will be excluded.
    - **Exclude All**: Selecting this option excludes members by name. If a base member is specified, then the base and all of its shared members will be excluded. If a shared member is specified, then this member, its base member, and all other shared members of this member will be excluded.
  - Click **Clear** to clear the selection.
- To delete a dimension from an intersection group, next to the dimension, click (Edit), and then click (Remove).
- To remove a rule from an intersection group, click (Remove).
- To add a dimension or a rule to an intersection group, click **Add Rule** or **Add Dimension**.

4. Click **Save and Close**.

Duplicating Valid Intersection Groups

To speed intersection group creation, you can duplicate an existing intersection group and then edit it.

To duplicate an intersection group:

1. Click **Application**, and then click **Valid Intersections**.
2. If it isn't already selected, click the **Setup** tab.
3. Click (Actions) to the right of the intersection group you want to duplicate, and then select **Duplicate**.

   The duplicate group is added to the end of the intersections list with the word "Copy" appended to the name.
4. Open the intersection group and edit it.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. Reorder the intersection groups, if needed. See Changing the Valid Intersection Group Evaluation Order.

Deleting a Valid Intersection Group

After a group is deleted, the intersection groups are reordered. If there are three intersection groups, and the second one in the order is deleted, the third intersection group becomes number two.

To delete an intersection group:

1. Click **Application**, and then click **Valid Intersections**.
2. If it isn't already selected, click the **Setup** tab.

> **Note**
>
> The **Setup** tab is at the bottom of the page.

3. Click ••• (Actions) to the right of the intersection group that you want to remove, and then select **Delete**.
4. Reorder the remaining intersections, if needed. See Changing the Valid Intersection Group Evaluation Order.

To delete an intersection rule from an intersection group, see Editing Details for a Valid Intersection Group.

Suppressing Invalid Data in Forms

Suppressing invalid data hides rows or columns in application forms that contain invalid data. If this option isn't selected, then the application displays rows or columns that contain cells with data that are invalid. Cells with invalid data are read-only.

To suppress invalid data in forms:

1. From the Home page, click **Navigator**, and then under **Create and Manage**, click **Forms**.
2. Select the form, click (Edit), and then click **Layout**.
3. Under **Grid Properties**, select **Suppress invalid data - Rows** and/or **Suppress invalid data - Columns**.
4. Click **Save**.

Clearing Invalid Data

Related Topics

- About Invalid Data
- Working With Invalid Intersection Reports
- Clearing Data at Invalid Intersections

Copyright © 2022, 2026, Oracle and/or its affiliates.

About Invalid Data

If data already exists at intersections, then adding or modifying valid intersections invalidates the existing data. Creating a valid intersection rule or modifying an existing valid intersection rule doesn't clear data in the invalid intersections. You must generate a valid intersection rule report, which will show where data exists at invalid intersections, and then determine whether to clear the data.

> **Note**
>
> Data may remain at an invalid intersection for historical purposes or for use in forward looking scenarios. Therefore, it's not a requirement to clear data at invalid intersections.

Working With Invalid Intersection Reports

You can view reports that show data at invalid intersections on the **Reports** tab of the **Valid Intersections** page. **Invalid Intersection Reports** lists existing reports, their status, and the last time they were run.

To work with invalid intersection reports:

1. Click **Application**, then **Valid Intersections**, and then click the **Reports** tab.

   > **Note**
   >
   > The **Reports** tab is at the bottom of the page.

2. Perform a task:
   - To refresh the listing, click **Refresh**.
   - To create a report, click **Create**, name the report, select the cube, choose the scope of the report, and then select when to run the report. You can run the report now or run the report later by saving it as a job. To save a report without running it, click **Save and Close**. To remove a report after it's run, click **Remove Reports**.

     > **Note**
     >
     > Invalid intersection reports are not supported for aggregate storage cubes. Aggregate storage cubes are not listed in the **Cube** drop-down list.

   - To edit a report, click (Actions), and then **Edit**.
   - To copy a report, click (Actions), and then **Duplicate**.
   - To run a report, click (Actions), and then **Run**.
   - To delete a report, click (Actions), and then **Delete**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Clearing Data at Invalid Intersections

Users with appropriate permissions can clear the invalid data if the data isn't needed. To clear invalid data, run the report, and then click **Clear Invalid Intersections**.

Working with Valid Intersections

Related Topics

- Working with Valid Intersections in Application Forms
- Working with Valid Intersections in Calculation Manager Rule Runtime Prompts

Working with Valid Intersections in Application Forms

Using valid intersections prevents data entry for invalid intersections as defined in the applicable valid intersection group. The affected cells in the form display as read-only following standard, read-only color coding. If you hover the cursor over an invalid intersection, a tool tip displays indicating the cell is read-only because it's defined as an invalid intersection.

The valid intersection group applies first to the form point of view and page axis. If the point of view intersections are all invalid, then a warning message is displayed, and the form doesn't render a data grid until a valid intersection is selected.

If the point of view has valid intersections, then the rows and columns are filtered to restrict data entry at invalid intersections. If the **Suppress Invalid Data** option for the form is enabled, then the form suppresses invalid rows, columns, or both, as appropriate.

Any rows or columns, which consist of a mix of valid and invalid intersections, display those intersections as valid or invalid, as appropriate. Invalid intersections are displayed with standard, read-only shading and preclude data entry.

Application users can reset the point of view to the default, unfiltered list without closing and reopening the form by clearing the selections. Application users can also clear a selection, thus opening up more selections for other dimensions. They will not be able to render a form with a dimension cleared, because valid members must be selected for each dimension.

In the member selector, invalid members are suppressed due to valid intersection rules. Application users can display invalid members in the member selector using the **Show Invalid Members** option. Invalid members are displayed but are unavailable for selection.

> **Note**
>
> Valid intersection groups don't grant access to dimension members. Valid intersection groups further restrict the valid intersections of dimension members already granted to an application user.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 5-8 Form Behavior if Valid Intersections are Applied

Action	Behavior
Open a form	The form renders with member selections as defined in the form definition, adhering to the user's access rights for dimensions, and applies valid intersection groups with the most recently used as current selections.
Select members from a point of view dimension	The application: • Enables users to select a member on the point of view • In the member selector for a point of view dimension, enables users to select from a filtered list of remaining valid intersections, which is based on the members that were selected for the other point of view dimensions • Ignores the order in which point of view dimension members are selected because selecting a member from any dimension included in a valid intersection group dynamically filters the remaining dimension members lists for those dimensions included in the valid intersection group, as appropriate, when that dimension is selected • Provides the option to hide invalid members from dimension lists or display them as unselectable in the point of view • Provides the ability to reset the point of view to the fully unfiltered list without closing and reopening the form by clearing the selections Note that ad hoc forms, both in Web and Oracle Smart View for Office, will not filter page or point of view members according to valid intersection groups.
Select **Go** to render a form based on point of view selections. You can also click the right arrow in the form point of view.	The form renders as defined based on the valid point of view intersections.
Enter and save data	The form data is entered and saved.

Working with Valid Intersections in Calculation Manager Rule Runtime Prompts

Valid intersection groups apply to runtime prompts when launched from within the context of the application. Runtime prompts will prevent users from selecting invalid intersections as defined in the valid intersection groups.

Filtering according to valid intersection groups isn't supported in Oracle Smart View for Office forms. The rule, however, will not launch if you choose an invalid intersection in the runtime prompts both in the Web and in Smart View.

Table 5-9 Runtime Prompt Behavior if Valid Intersections are Applied

Action	Behavior
Launch a Calculation Manager rule runtime prompt	The application: • Prevents the user from selecting invalid intersections within the runtime prompt based on the valid intersection group • Prevents the Calculation Manager rule from executing if there are invalid intersections in the runtime prompts
Enter valid intersections	The valid intersection is allowed to be entered.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Copyright © 2022, 2026, Oracle and/or its affiliates.

6

Administering Data Integration

Related Topics

- Creating File-Based Integrations
- Defining Data Maps

Creating File-Based Integrations

Data Integration is the mechanism by which integration processes are performed in Oracle Enterprise Performance Management Cloud. You can define file-based and direct integration sources, create mapping rules to translate source data into the required target format, and execute and manage the periodic data loading process.

To create a file-based integration:

1. From the Home page, select **Application**, and then **Data Exchange**.
2. Click the **Data Integration** tab at the bottom of the page.
3. Review Creating File-Based Integrations in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

Defining Data Maps

Define data maps to move data, comments, attachments, and supporting detail from source cubes and Smart Lists to target reporting cubes to consolidate data.

To create a data map:

1. From the Home page, select **Application**, and then **Data Exchange**.
2. Click the **Data Maps** tab at the bottom of the page.
3. Review Defining Data Maps in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.

> **Note**
>
> Cross pod data maps using Enterprise Profitability and Cost Management as a source are only supported if the target system is an Enterprise Profitability and Cost Management system.

Copyright © 2022, 2026, Oracle and/or its affiliates.

7

Managing Jobs

Related Topics

- About Jobs
- Job Types
- Accessing the Jobs Console
- Scheduling Jobs
  Schedule jobs to perform common administrative tasks and lighten your workload. You can run jobs right away or schedule jobs to run later at intervals.
- Viewing Pending Jobs and Recent Activity
- Viewing Task Manager Jobs
- Editing and Deleting Jobs
- Exporting Job Console Files
- Exporting Supplemental Diagnostics

About Jobs

Jobs are actions such as:

- Importing and exporting metadata and data
- Refreshing the database
- Clearing cubes

The Jobs console enables you to see a record of both submitted and pending jobs. You can also use the Jobs console to run certain types of jobs, or to schedule them to run at intervals.

Job Types

Table 7-1 Job Types

Job Type	Description
Administration Mode	Changes the login level for a business process. If you select **Administrators**, all non-administrative users will be logged off from the application after job execution. To restore access to an application for all users, select **All users**. See the **Enable Use of the Application for** setting in System Settings.
Auto Predict	Not applicable to Enterprise Profitability and Cost Management

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-1 (Cont.) Job Types

Job Type	Description
Batch Calculation	Job that is created as a result of running a calculation on the Calculation Control page. If you selected more than one POV to calculate, the Batch Calculation job summarizes information about all the POVs selected to calculate. Separate calculation jobs are also created for each individual POV. See Calculating Models.
Change Hybrid Configuration	Not applicable to Enterprise Profitability and Cost Management
Clear Cell Details	Not applicable to Enterprise Profitability and Cost Management
Clear Cube	Performs a cube clearing operation. See Clearing Cubes for information about clearning cubes and creating Clear Cube jobs. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Clear Point of View	Job that is created as a result of clearing a point of view either through the Enterprise Profitability and Cost Management application or with the "Clear Data by Point of View" REST API. See Clearing a Point of View in this guide and Clear Data by Point of View in *REST APIs for Oracle Fusion Cloud EPM*.
Compact Outline	Compacts the outline file of a cube. Compaction helps keep the outline file at an optimal size. Compacting the outline doesn't clear the data. Running this job won't push any changes from the business process to Oracle Essbase. See Compacting the Outline. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Content Update	The application is automatically refreshed during an application update. Information about the refresh is captured in the Content Update job, which propagates the changes introduced during the daily maintenance of the environment. See Setting Content Update Start Time.
Convert 1.0 Dashboards to 2.0	Converts Dashboard 1.0 to Dashboard 2.0. See Creating and Managing Dashboards 1.0 and Creating and Managing Dashboards 2.0.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-1 (Cont.) Job Types

Job Type	Description
Copy Data	Copies datafrom one dimensional intersection to another, including relational data and supporting detail. See Copying Data.
Copy Point of View	Job that is created as a result of copying a point of view either through the Enterprise Profitability and Cost Management application or with the "Copy Data by Point of View" REST API. See Copying a Point of View in this guide and Copy Data by Point of View in *REST APIs for Oracle Fusion Cloud EPM*.
Data Map	Job that is created as a result of creating data mappings between a source application and a target reporting application. See Defining Data Maps in *Administering Data Integration for Oracle Enterprise Performance Management Cloud*.
Delete Point of View	Job that is created as a result of deleting a point of view either through the Enterprise Profitability and Cost Management application or with the "Delete Point of View" REST API. See Deleting a Point of View in this guide and Delete Point of View in *REST APIs for Oracle Fusion Cloud EPM*.
Execute Bursting Definition	Runs a report bursting job. If you're using the next-generation Reports reporting solution, the bursting feature enables you to run a single report or book for more than one member of a single dimension for one data source, and publish a PDF output for each member. See Working with Bursting in *Designing with Reports for Oracle Enterprise Performance Management Cloud*.
Export Audit	Exports audit records to a Comma Separated Values (CSV) file. See Export Audit.
Export Cell-Level Security Definitions	Exports a cell-level security definition that was saved as a job. See Importing and Exporting Cell-Level Security Definitions.
Export Data	Performs a data export that was saved as a job. See Exporting Data **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Export Diagnostics	Exports supplemental diagnostic information to a zip file titled `Pcm_Supplemental_Diagnostics.zip`. See Exporting Supplemental Diagnostics.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-1 (Cont.) Job Types

Job Type	Description
Export Job Console	Exports records about the jobs in the Jobs console to a zip file titled `allJobDetails<date>`.zip. See Exporting Job Console Files.
Export Metadata	Exports metadata into a file using the settings specified in an `export metadata` job. See Exporting Metadata. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Export POV Data	Not applicable to Enterprise Profitability and Cost Management
Export Security	Exports the security records or access control list (ACL) records for specified users or groups to a Comma Separated Values (CSV) file. See Export Security.
Export Valid Intersections	Exports valid intersections that were save as a job. See Importing and Exporting Intersections,
Generate EPCM Report	Generates a Model Documentation report. See Generating a Model Documentation Report.
Import Audit	An EPM Automate command that imports data audit records from a ZIP file that you created by exporting audit data from an environment. See importAppAudit.
Import Cell-Level Security Definitions	Imports a cell-level security definition that was saved as a job. See Importing and Exporting Cell-Level Security Definitions.
Import Data	Imports data from a file in the repository into the application using the import data settings specified in the `Import Data` job type. See Import Data. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Import Document to Library	Not applicable to Enterprise Profitability and Cost Management
Import Job Console	An EPM Automate command that clones job console records using a ZIP file containing job console records exported from an environment. See importJobConsole.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-1 (Cont.) Job Types

Job Type	Description
Import Metadata	Imports metadata from a file in the repository into the application using the import metadata settings specified in an `import metadata` job. See Importing Metadata. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Import Security	Imports the security records or access control list (ACL) records from a Comma Separated Values (CSV) file. See Import Security.
Insights	Runs an IPM Insights insight definition. See Configuring IPM Insights.
Integration	Runs a data rule in Data Management or integration in Data Integration based on the parameters defined in the data rule or integration definition. See Scheduling a Data Rule, Integration, or Batch Definition to Run in the Job Scheduler
Integration Batch	Runs a batch definition based on parameters defined in Data Management. See Scheduling a Data Rule, Integration, or Batch Definition to Run in the Job Scheduler
Integration Maintenance Script	Runs a Maintenance Script based on parameters and variables in Data Management. See Scheduling Maintenance Scripts in the Job Scheduler.
Integration Pipeline	Runs a Pipeline definition. This job supports running a Pipeline based on the parameters and variables that were defined for the Pipeline in the Data Integration user interface; for example, **Start Period** and **Import Mode**. For descriptions of the job parameters and variables, see the following topics: • Using an Integration Job Type in *Administering Data Integration* • Running a Pipeline in *REST APIs for Oracle Fusion Cloud EPM* For information about creating a Pipeline definition, see Using the Pipeline in *Administering Data Integration*. **Note:** This job is prevented from starting during daily maintenance, whether it's a scheduled job or a job that is started on an ad hoc (unscheduled) basis. Oracle recommends that you start this job outside of the daily maintenance window. See Setting the Daily Maintenance Process Time.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-1 (Cont.) Job Types

Job Type	Description
Invalid Intersection Reports	Runs a report that shows where data exists at invalid intersections. See Working With Invalid Intersection Reports.
Merge Data Slices	Merges incremental data slices of an aggregate storage cube. Fewer slices improve a cube's performance. You can merge all incremental data slices into the main database slice or merge all incremental data slices into a single data slice without changing the main database slice. You can optionally remove cells that have a value of zero. See Merging Data Slices. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Optimize Aggregation	Generates optimized views based on collected query tracking information in an Enterprise Profitability and Cost Management reporting cube (PCM_REP). See Optimizing Aggregation for the PCM_REP Reporting Cube. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Refresh Database	Refreshes the application database. See Refreshing the Application Database. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
Restructure Cube	Performs a full restructure of a block storage cube to eliminate or reduce fragmentation. This will also remove empty blocks. Running this job won't push any changes from the business process to Essbase. See Improving Cube Performance. **Note:** The system prevents this job from starting if it's scheduled to start while the daily maintenance process is running. Oracle recommends that you reschedule this job to start outside of the daily maintenance window. See Managing Daily Maintenance in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-1 (Cont.) Job Types

Job Type	Description
Rules	Runs business rules created in Calculation Manager. See Creating and Managing Business Rules.
Rules Add Member	Adds a member to one or more rules. See Adding Members to Rules.
Rules Copy to Model	Copies one or more rules to a model. See Copying Rules to a Model.
Rules Copy to RuleSet	Copies one or more rules to a rule set. See Copying Rules to a Rule Set.
Rules Disable	Disables a rule or rules. Enabling and Disabling Rules.
Rules Enable	Enables a rule or rules. See Enabling and Disabling Rules.
Rules Replace Member	Finds a member in a rule and replaces it with another member. See Replacing Members in Rules.
Run Calculation	Job that is created as a result of running a calculation for a POV on the Calculation Control page. See Calculating Models.
Smart Push	Uses Smart Push to move data from one cube to another. See Moving Data from One Cube to Another Using Smart Push
Validate Model	Validates models to make sure there are no potential calculation failures. The Validate Model job is created when you use the Validate Model EPM Automate command or the Validate Model Rest API. If you run Model Validation from the Enterprise Profitability and Cost Management user interface, a job is not created. See Validate Model in *REST APIs for Oracle Fusion Cloud EPM*.

Accessing the Jobs Console

You can access the **Jobs** console from these places in Enterprise Profitability and Cost Management:

- From the Home page, select **Application**, and then **Jobs**.
- From the Home page, select **Modeling**, and then **Jobs**.
- From any of the pages in the **Application** or **Modeling** cluster, select the **Jobs** card above the page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Scheduling Jobs

Schedule jobs to perform common administrative tasks and lighten your workload. You can run jobs right away or schedule jobs to run later at intervals.

Related Topics

- Scheduling Jobs to Run Now
- Scheduling Jobs to Run Later
- Scheduling Hourly Jobs

Scheduling Jobs to Run Now

To schedule jobs to run now:

1. From the **Jobs** console, click the **Actions** drop-down, and select **Schedule**.
2. On the **General** tab of the **Schedule Job** page, specify the following, and then click **Next**.
   - **What type of job is this?**: Select one of the job types listed. For more information on job types, see Job Types.
   - **When do you want to run this job?**: Select **Run Now**.
3. On the **Job Details** tab, select a job from the job list, and then click **Next**.

> **Note**
>
> - If you're running import or export jobs, you can run up to five jobs at one time.
> - For export jobs, you can specify a unique output file name for each job. From the jobs list, click **Edit** next to the selected job and specify the output file name with a zip extension. The unique file name you specify will override the default export file name when the job runs.
> - To prevent automatic backup from failing due to certain jobs running during daily maintenance, Oracle Fusion Cloud Enterprise Performance Management disallows certain jobs from starting while the daily maintenance process is running. If the system prevents a job from starting, the reason will be stated in the Job Details. If you've enabled email notifications for the Job Console, you'll receive an email notification when a job does not start. If you have a job that is scheduled to start during the daily maintenance process, it is recommended that you reschedule your job to start outside of the daily maintenance window.

4. Review your choices. If satisfactory, click **Finish**.

Scheduling Jobs to Run Later

To schedule jobs to run later:

1. From the **Jobs** console, click the **Actions** drop-down, and select **Schedule**.
2. On the **General** tab of the **Schedule Job** page, specify the following:
   - **What type of job is this?**: Select one of the job types listed. For more information on job types, see Job Types.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **When do you want to run this job?**: Select the date and time when you want the job to run.

  Schedule starting from: Select the starting date and time, including the time zone.

- **How often do you want to run this job?**: Specify the following, and then click **Next**.

Option	Description
Name	Enter a name for this instance of the scheduled job. This doesn't have to be the job name that was originally assigned when the job was created. For example, you can enter a name that reflects your scheduling requirement. Suppose you are scheduling an instance of a job that was originally named **Refresh Database** when it was created. You can name this instance of the scheduled job **MyWeeklyCubeRefresh**. After you schedule this job, the name you specify is listed in the Jobs console with a system-generated name; such as **MyWeeklyCubeRefresh : Refresh Database**, where **MyWeeklyCubeRefresh** is the name that you entered for the scheduled job and **Refresh Database** is the name that you originally defined during the job creation.
Recurrence Pattern	Specify the frequency with which to run the job: – **Hourly**: See Scheduling Hourly Jobs. – **By Minute**: Set the **Frequency** for 15 or 30 minutes. The job will start running in 15 or 30 minutes and continue to run at the selected frequency until the ending date and time; for example, if you set the job to run every 15 minutes and the starting time is 3:15, the job will start to run at 3:30, then 3:45, and so on. Jobs cannot be scheduled to run in increments smaller than 15 minutes. – **Run Once**: The job will run once at the starting date and time. – **Daily**: The job will run at the starting date and time and continue to run each day until the end date. – **Weekly**: The job will run at the starting date and time and continue to run each week until the end date. – **Monthly**: The job will run at the starting date and time and continue to run each month thereafter until the end date. – **Yearly**: The job will run at the starting date and time and continue to run each year thereafter until the end date.
End Date	If the job is recurring, select an ending date and time.

3. On the **Job Details** tab, select a job from the job list, and then click **Next**.

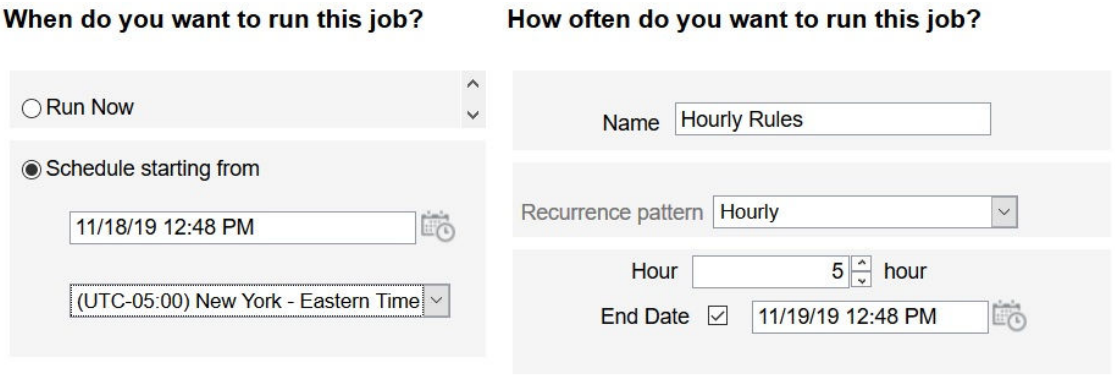
> **Note**
>
> - If you're running import or export jobs, you can run up to five jobs at one time.
> - For export jobs, you can specify a unique output file name for each job. From the jobs list, click **Edit** next to the selected job and specify the output file name with a zip extension. The unique file name you specify will override the default export file name when the job runs.

4. Review your choices. If satisfactory, click **Finish**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Scheduling Hourly Jobs

Hourly jobs run according to a timetable which is based on the values you set in the **Schedule starting from** and **Hour** fields. The schedule for **Hourly** jobs restarts each day during the midnight hour and the recurring job starts at the first hour, second hour, third hour (and so on up to 12 hours) after the midnight hour, depending on the value you select in the **Hour** field.



For example, if you specify a value of **5** in the **Hour** field, the hours during which the job will run each day are 12 AM, 5 AM, 10 AM, 3 PM, and 8 PM. The start time indicates the hour and minute when the system should start honoring the schedule, and the end time indicates when the system should stop. So if the start time is 12:48 PM on 11/18, then that means 12:48 AM, 5:48 AM, and 10:48 AM have already occurred on the current day (11/18) and the next available timeslot is 3:48 PM, which is when the scheduled job will run for the first time. After that it will run at 8:48 PM on 11/18. However on 11/19 it starts over again and will run at 12:48 AM, 5:48 AM, 10:48 AM, and so on until the system reaches the specified end time (in this case, 12:48 PM on 11/19).

> **Note**
>
> When a job spans two days, the job runs during the midnight hour the next day and resets the recurrence pattern.

Table 7-2 Timetable for Hourly Jobs

Hourly Recurrence	Timetable
1 (default)	AM: 12:00, 1:00, 2:00, 3:00, 4:00, 5:00, 6:00, 7:00, 8:00, 9:00, 10:00, 11:00 PM: 12:00, 1:00, 2:00, 3:00, 4:00, 5:00, 6:00, 7:00, 8:00, 9:00, 10:00, 11:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 1 hour, the job will run for the first time at 12:48 PM, and then again at 1:48 PM, 2:48 PM, 3:48 PM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 1 hour, the job will run for the first time at 7:48 AM, and then again at 8:48 AM, 9:48 AM, 10:48 AM, and so on.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-2 (Cont.) Timetable for Hourly Jobs

Hourly Recurrence	Timetable
2	AM: 12:00, 2:00, 4:00, 6:00, 8:00, 10:00 PM: 12:00, 2:00, 4:00, 6:00, 8:00, 10:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 2 hours, the job will run for the first time at 12:48 PM, and then again at 2:48 PM, 4:48 PM, 6:48 PM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 2 hours, the job will run for the first time at 8:48 AM, and then again at 10:48 AM, 12:48 PM, 2:48 PM, and so on.
3	AM: 12:00, 3:00, 6:00, 9:00 PM: 12:00, 3:00, 6:00, 9:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 3 hours, the job will run for the first time at 12:48 PM, and then again at 3:48 PM, 6:48 PM, 9:48 PM, 12:48 AM, 3:48 AM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 3 hours, the job will run for the first time at 9:48 AM, and then again at 12:48 PM, 3:48 PM, 6:48 PM, 9:48 PM, 12:48 AM, 3:48 AM, and so on.
4	AM: 12:00, 4:00, 8:00 PM: 12:00, 4:00, 8:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 4 hours, the job will run for the first time at 12:48 PM, and then again at 4:48 PM, 8:48 PM, 12:48 AM, 4:48 AM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 4 hours, the job will run for the first time at 8:48 AM, and then again at 12:48 PM, 4:48 PM, 8:48 PM, 12:48 AM, and so on.
5	AM: 12:00, 5:00, 10:00 PM: 3:00, 8:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 5 hours, the job will run for the first time at 3:48 PM, and then again at 8:48 PM, 12:48 AM, 5:48 AM, 10:48 AM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 5 hours, the job will run for the first time at 10:48 AM, and then again at 3:48 PM, 8:48 PM, 12:48 AM, 5:48 AM, and so on.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-2 (Cont.) Timetable for Hourly Jobs

Hourly Recurrence	Timetable
6	AM: 12:00, 6:00 PM: 12:00, 6:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 6 hours, the job will run for the first time at 12:48 PM, and then again at 6:48 PM, 12:48 AM, 6:48 AM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 6 hours, the job will run for the first time at 12:48 PM, and then again at 6:48 PM, 12:48 AM, 6:48 AM, and so on.
7	AM: 12:00, 7:00 PM: 2:00, 9:00 If the scheduled start time is 12:48 PM and you set the hourly recurrence for 7 hours, the job will run for the first time at 2:48 PM, and then again at 9:48 PM, 12:48 AM, 7:48 AM, and so on. If the scheduled start time is 8:48 AM and you set the hourly recurrence for 7 hours, the job will run for the first time at 2:48 PM, and then again at 9:48 PM, 12:48 AM, 7:48 AM, and so on.
8	AM: 12:00, 8:00 PM: 4:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 8 hours, the job will run for the first time at 4:48 PM, and then again at 12:48 AM, 8:48 AM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 8 hours, the job will run for the first time at 8:48 AM, and then again at 4:48 PM, 12:48 AM, and so on.
9	AM: 12:00, 9:00 PM: 6:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 9 hours, the job will run for the first time at 6:48 PM, and then again at 12:48 AM, 9:48 AM, 6:48 PM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 9 hours, the job will run for the first time at 9:48 AM, and then again at 6:48 PM, 12:48 AM, and so on.
10	AM: 12:00, 10:00 PM: 8:00 **Examples:** For example, if the scheduled start time is 12:48 PM and you set the hourly recurrence for 10 hours, the job will run for the first time at 8:48 PM, and then again at 12:48 AM, 10:48 AM, 8:48 PM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 10 hours, the job will run for the first time at 10:48 AM, and then again at 8:48 PM, 12:48 AM, and so on.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 7-2 (Cont.) Timetable for Hourly Jobs

Hourly Recurrence	Timetable
11	AM: 12:00, 11:00 PM: 10:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 11 hours, the job will run for the first time at 10:48 PM, and then again at 12:48 AM, 11:48 AM, 10:48 PM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 11 hours, the job will run for the first time at 11:48 AM, and then again at 10:48 PM, 12:48 AM, and so on.
12	AM: 12:00 PM: 12:00 **Examples:** If the scheduled start time is 12:48 PM and you set the hourly recurrence for 12 hours, the job will run for the first time at 12:48 PM, and then again at 12:48 AM, and so on. If the scheduled start time is 7:48 AM and you set the hourly recurrence for 12 hours, the job will run for the first time at 12:48 PM, and then again at 12:48 AM, and so on.

Viewing Pending Jobs and Recent Activity

By default, when you first access the **Jobs** console, the **Recent** jobs list displays the last three days' jobs. You can expand this by adding a date filter.

- To switch the view from **Recent** to **Pending**, click the drop-down arrow next to **Recent**, and select **Pending**.
- To search or filter the job list, perform an action:
  - To search for job by name, enter text in the **Search** field, and then press **Enter** or click **Search** ( ).
  - To filter jobs, click a tab under the **Search** field to add that filter to the Search. Then, click the filter in the **Search** field to select the parameters for the filter. You can add more than one filter to the **Search** field. To remove a filter from the **Search** field, click **X** on the filter tab.

> **Note**
>
> The default parameter is automatically selected. De-select that parameter to filter by a different parameter value.

The following filters are available:

* **Job Type**: Type of job that was run (for example, Clear Cubes). For more information, see Job Types. By default, **Import Security** is displayed.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> You can select multiple job types. The number of selections appears in the **Search** field. For example, if you select two job types, it will show as Job Type (2) in the **Search** field.

* **Status**: Status of the job (for example, Pending). By default, **Completed** is displayed.
* **Start Time**: Date and time range that a job was started. Click **Calendar** ( ) to edit the date and time range.
* **End Time**: Date and time range that a job was completed. Click **Calendar** ( ) to edit the date and time range.

> **Note**
>
> After selecting one or more of the above filter criteria, you can also enter a search text or wildcard character in the **Search** field and press **Enter**.

The search results are listed in the **Jobs** console.

- To sort data in each column in ascending or descending order, click **Sort** ( ) in the column header.
- To view a job's details, click **Actions** ( ), and then select **Details**.

> **Note**
>
> - The application is automatically refreshed during an application upgrade. Any errors that occur during the upgrade are captured in the **Content Update** job.
> - If a scheduled job execution is terminated because of automated daily maintenance, an EPM Automate resetService command, or due to an unforeseen outage, the job will be restarted when the environment comes back online.
> - Jobs older than 90 days are purged.

Viewing Task Manager Jobs

The Task Manager Jobs page lists Task Manager jobs and lets you filter and view job details. For Task Manager jobs, you can:

- View job details such as parameters, properties, and results.
- View job summary statistics on the side panel.
- Cancel pending jobs

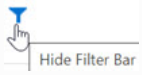
Task Manager jobs include additional execution sequencing routines to prevent conflicting batch jobs from running at the same time, ensuring application integrity. While the run time of individual jobs isn't affected, their start times may be delayed due to the optimization sequencing.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To view the Jobs:

1. On the Home page, click **Tasks**, and then click the **Jobs** tab in the left navigation.
2. **Optional:** To search for a job, enter search criteria in the **Search** text box.
3. **Optional:** In the Filter bar, select filter criteria:
   - **Job ID**
   - **Name**
   - **Type**
   - **Source**
   - **Status**: Pending, Running, Complete, and Error
   - **Start Date**
   - **End Date**
4. Click

   to select additional filter criteria.

   > **Note**
   >
   > To hide the filter bar, click
   > 
   >
   > . To clear all filters, click to the right of the filter bar.

5. Click

   icon next to a job to view the **Job Details** such as **Parameters**, **Properties**, and **Results**.
   - Not all sections will be available for all jobs.
   - If the job is pending because it is waiting for other job(s) to complete, these will be listed under **Properties**. The start time of the currently running job is in parenthesis.
   - If the batch job was started manually (example, running a report), **Scheduled Start Date** shows the user initiated time. If it is a scheduled job (example, system maintenance), **Scheduled Start Date** shows the time it's schedule to run.
6. A new panel on the right-side contains the summary information for jobs. At the top of the summary panel, you can select the range of the tasks to be included in the summary:
   - Last 24 hours
   - Last 7 days
   - Last 30 days
   - Last 60 days (maximum time job information is stored before it's purged)

   The following information is displayed in the side panel for each **Job Name** for the specified **Time Range**:
   - **Total Time**: Total time of all executions of the job
   - **Average Time**: Average time across all job runs
   - **Execution**: Total number of executions

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If a job is highlighted in the main list, the job's name will be highlighted automatically in the Summary panel.

Cancel Pending Jobs

You can cancel jobs that are pending to run before they execute. This will allow you to prevent jobs that may have been accidentally added to the queue. For example, manually starting multiple data loads when only one is necessary. However, you can't delete system-scheduled jobs that are awaiting a specific time.

To cancel any user-created pending jobs, on the Task Manager Jobs page, select the job that you want to cancel and click the **Cancel** icon. You can also cancel a pending job using the **Actions** menu.

Task Manager Jobs

Job Name	Description	Execution
Email Notifications	Generate email notifications for upcoming user actions.	Scheduled
Generate Reports	Generate report output from report definitions.	On Demand
Import Reports	Import custom report definitions.	On Demand
LCM Export	Export object definitions and data.	Scheduled On Demand
LCM Import	Import object definitions and data.	On Demand
Schedule Monitor	Set pending tasks to open when their start time is reached.	Scheduled
System Maintenance	Daily cleanup and optimization. This job contains operations that prevent other system activities from running simultaneously. While the maintenance operations are in progress, other operational functions are temporarily paused to prevent conflicts and ensure a seamless process.	Scheduled
System Maintenance (Non-Blocking)	Daily cleanup and optimization. This job doesn't prevent other system activities from running. It allows maintenance operations to run concurrently with ongoing operations.	Scheduled
Task Status Update	Update event monitoring tasks.	Scheduled
Delete Schedule	Delete the specified schedule including all the tasks and their related information such as attachments.	On Demand
Deploy Schedule	Deploy tasks from one or more templates to a specified schedule.	On Demand
Import Integrations	Import external integration types and related data.	On Demand
Import Tasks	Import tasks and related data into specified template or schedule.	On Demand

Editing and Deleting Jobs

You can edit the schedule for pending jobs, and delete pending and complete jobs. You can't modify or delete jobs that are processing.

To edit a job:

1. From the **Jobs** console, select the job you want to edit.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click the drop-down arrow next to **Recent**, and select **Pending**.
3. Click **Actions** (•••), and then select **Edit**.
4. In **Edit a Scheduled Job** screen, modify the schedule, and then click **Next**.

> **Note**
>
> When changing the frequency of a job, the job will not run at the new frequency until the next time it runs at the previous frequency; for example, if the job is set up to recur daily and you change the frequency to hourly, the job won't start running at the new hourly frequency until after the scheduled daily job runs the next day. If you want the job to begin running at the new frequency sooner, Oracle recommends that you delete the scheduled job and create a new one.

5. Review your choices. If satisfactory, click **Finish**.

To delete a job:

1. From the **Jobs** console, select the job you want to delete.
2. Click the drop-down arrow next to **Recent**, and select **Pending**.
3. Click **Actions** (•••), and then select **Delete**.

> **Note**
>
> To delete multiple jobs, select the jobs, click the **Actions** drop down, and then select **Delete**.

4. Review your choices. If satisfactory, click **Finish**.

Exporting Job Console Files

You can export information about the jobs in the **Jobs** console to a CSV file, and then download the CSV file to your local machine.

To export and download an Export Job Console file:

1. From the **Jobs** console, click the **Actions** drop-down, and select **Export**.

   An **Export Job Console** job is created.
2. When the job status says "Complete", click the hyperlink for the **Export Job Console** job, or click •••, and select **Details**.
3. On the **Job Details** page, click next to **Export Job Console**.

   The export file is downloaded to your local machine in a file called `allJobDetails<date>.csv`.
4. Click the `allJobDetails<date>.csv` file to open it in Excel.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> You can also download the `allJobDetails<date>.csv` from the **Inbox/Outbox Explorer**. See Uploading and Downloading Files Using the Inbox/Outbox Explorer.

Exporting Supplemental Diagnostics

You can export supplemental diagnostic information in the form of CSV files, text files, and reports and zip them into a single file, which you can then download to your local machine.

The general types of information collected are metadata, aggregate data, and statistical data related to the structure of the application and its execution characteristics. Information is collected for diagnosis and support. No sensitive information or actual data is collected. When working with Oracle Support to diagnose a problem, you may be requested to provide this file.

To run an Export Diagnostics job:

1. From the **Jobs** console, click the **Actions** drop-down, and select **Schedule**.
2. On the **General** tab of the **Schedule Job** page, specify the following information:
   - **What type of job is this?**: Select **Export Diagnostics**.
   - **When do you want to run this job?**: Select **Run Now**.

     If you want to schedule the job to run later, see Scheduling Jobs to Run Later.
3. **Export Diagnostic Job** is displayed on the **Job Details** tab. Click **Next**.
4. On the **Review** tab, click **Finish**.

   An **Export Diagnostics** job is created and displayed in the **Jobs** console with an initial status of **Processing**. After the status changes to **Completed**, you can download the file.

To download the Export Diagnostics file:

1. Click the **Overview** card above the **Jobs** console.
2. From the **Overview** tab on the **Application** page, click the **Actions** drop-down, and select **Inbox/Outbox Explorer**.
3. In the **Inbox/Outbox Explorer**, select `Pcm_Supplemental_Diagnostics.zip`, then click •••, and the select **Download File**.
4. In your downloads, click `Pcm_Supplemental_Diagnostics.zip`.
5. In Explorer, a PCM_Supplemental_Diagnostics folder is created. Expand this folder, and then click the `Model_Statisics.csv` file to open it in Excel.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part III
Building and Calculating Models

Related Topics

- Creating and Managing Models
- Creating and Managing Rules
- Running Model Validation
- Calculating Models
- Analyzing Calculations
- Viewing Rule Balancing Reports

Videos

Your Goal	Watch This Video
Understand the key concepts of modeling in Enterprise Profitability and Cost Management.	Models and Modeling in Enterprise Profitability and Cost Management
Learn how to create models, and how to add rule sets, allocation rules, and custom rules to models.	Creating Models and Rules in Enterprise Profitability and Cost Management
Learn how validate rules, calculate models by running all rules or selected rules only, and clear calculated data.	Validating and Calculating Models in Enterprise Profitability and Cost Management
Learn how to run reports to troubleshoot model calculations in the Calculation Analysis screen, and how to use the Rule Balancing screen to analyze model calculations.	Analyzing and Troubleshooting Model Calculations in Enterprise Profitability and Cost Management

Copyright © 2022, 2026, Oracle and/or its affiliates.

8

Creating and Managing Models

Related Topics

- About Models
- Creating and Managing Models 1.0
- Creating and Managing Models 2.0

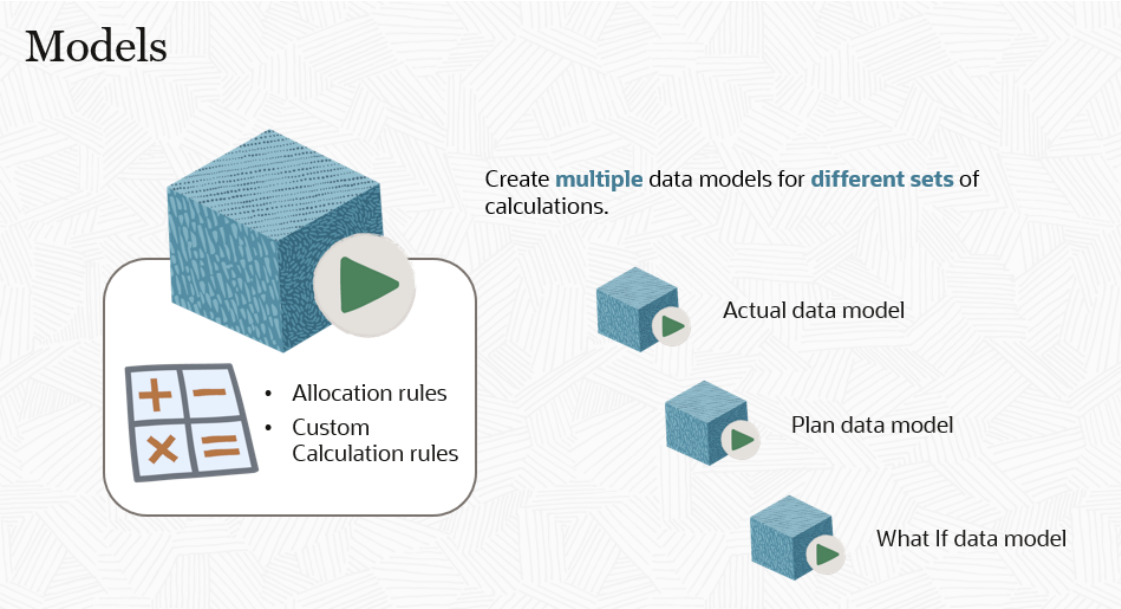
Videos

Your Goal	Watch This Video
Understand the key concepts of modeling in Enterprise Profitability and Cost Management.	Models and Modeling in Enterprise Profitability and Cost Management
Learn how to create models, and how to add rule sets, allocation rules, and custom rules to models.	Creating Models and Rules in Enterprise Profitability and Cost Management

About Models

You start the modeling process in Enterprise Profitability and Cost Management by creating models. Models are containers for allocation and custom rules. If you have different sets of rules that you want to apply to your data, you can create multiple models.

For example, you can create one model for calculating actual data, a second model for calculating plan data, and a third model for calculating What If scenarios. You can run different models against the same base financial data to analyze how different drivers or allocation scenarios affect your end results.



Copyright © 2022, 2026, Oracle and/or its affiliates.

Once a model is created, you can run it against one or more data POVs.

For example, you could run a Forecasting model agains 12 periods of data. When you run a model against a data POV, the system layers the results on top of the source data without changing it. This makes it easy to undo or redo a single rule, a rule set, or all of your rules at once. See Calculating Models.

Creating and Managing Models 1.0

Related Topics

- Creating a Model
- Managing Models
- Generating a Model Documentation Report
- Generating a Model Comparison Report

Creating a Model

To create a model:

1. From the Enterprise Profitability and Cost Management Home page, select **Modeling**, and then **Models**.
2. On the **Models** page, click + (Create Model icon).
3. In the **Create Model** dialog box, enter a **Name** and **Description** for your model.

   The name cannot contain any special characters.
4. **Optional:** You can define default member selections for dimensions that will use the same member for all the rules in the model. Defining default member selections saves you from having to select the members for a dimension each time the dimension is used in a rule.

   To define default member selections:

   a. In the **Model Context** section, click the **Add Dimensions** drop-down and select a dimension.

   b. Click **Select Member**, and then click (Invoke Member Selector icon).

   c. In the **Select Members** dialog box, select the member that you want to assign to the dimension, and then click **OK**.

      When making default member selections, you can select only level 0 members. See Using the Member Selector for more information about using the **Select Members** dialog box.

   See Understanding Model and Rule Set Context.
5. Click **Save and Close** to return to the **Models** page.

Managing Models

From the Models page, you can edit, delete, copy, inspect, and refresh models.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Editing a Model

You can edit the description of an existing model or modify the members selected for the model context by removing the existing dimensions and member selection, or by adding new dimensions and members.

To edit a model:

1. In the **Models** screen, select a model, and then click (Edit Model).
2. In the **Edit Model** dialog box, make any desired changes, and then click **Save and Close**.

Deleting a Model

If you no longer need the models you created, you can delete the models one by one. When you delete a model, the rules in the model are also deleted.

To delete a model:

1. In the **Models** screen, select the model you want to delete.

   You can select only one model at a time.

2. Click (Delete Model).
3. Click **OK** to confirm the deletion.

Copying a Model

You can create a copy of a model that preserves the existing rules, and then revise the copied model with new rules. For example, you can preserve the rules of a particular year's model in the copied model, but revise it with new rules for another year.

To copy a model:

1. In the **Models** screen, select a model, and then click (Copy Model).
2. In the **Copy Model** dialog box, enter a name for the copied model, and then click **OK**.

   The copied model is now displayed in the models list.

> **Note**
>
> When you copy a model, all the rules in the model are also copied.

Inspecting a Model

You can inspect the properties of a model.

To inspect a model:

1. In the **Models** screen, select the model you want to inspect.
2. Click (Inspect Model icon).

   The properties of the selected model appear in the right pane.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Refreshing the Models List

You can refresh the models listed in the Models screen by clicking (Refresh). The refresh action fetches an updated list of models.

Generating a Model Documentation Report

The Model Documentation report provides an overview of all the details relevant to a model. It shows the source of allocated values and the logic used to allocate them.

The report shows the name and sequence of the rules used in the model and gives an explanation of the purpose of each rule. If you click a hyperlink for a rule, it will show you details about the rule and the actual rule definition. The hyperlinks enable you to easily navigate through the different areas in the report. For example, you can navigate from the overview of a rule and the sequence in which it occures to the actual rule definition.

You can save the report locally and distribute it to others, or attach it to other reports to help explain the allocation process to internal or external reviewers and auditors.

The Model Documentation can be generated from the Models page or from the Rule Designer.

To generate a Model Documentation report from the Models page:

1. From the Home page, select **Modeling**, and then **Models**.
2. From the **Models** page, select a model.
3. Click the **Actions** drop-down, and select **Model Documentation Report**.
4. Select any of these formats:
   - PDF
   - EXCEL
   - WORD
   - XML
   - HTML

To generate a Model Documentation report from the Rule Designer:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Click the **Actions** drop-down, and select **Model Documentation Report**.
3. Select any of these formats:
   - PDF
   - EXCEL
   - WORD
   - XML
   - HTML

Sample Model Documentation Report

Copyright © 2022, 2026, Oracle and/or its affiliates.

Model Documentation Report

ORACLE

Application : BksML50
Model name : 10 Actuals Allocation Process
Description : Allocation program for Actuals allocations approved for FY24.
Created By : epm_default_cloud_admin
Creation Date : 07/16/2025 08:42:36 PM
Modified By : epm_default_cloud_admin
Modified Date : 07/16/2025 08:42:36 PM
Model Context : Driver.NoDriver
Future1.NoFuture1
Future2.NoFuture2
View.Periodic

Rules by Waterfall Order

Rule Set Name	Rule Name	Rule Type	Sequence	Enabled	Use Context	Modified By Modified Date	Description
Preprocessing Currency Translation			1	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated REV Translation to USD_Reporting	Custom	1	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated COGS Translation to USD_Reporting	Custom	2	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated OPEX Translation to USD_Reporting	Custom	3	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated COGS Drivers Copy to USD_Reporting	Custom	4	Y	N	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated STATS Copy to USD_Reporting	Custom	5	Y	N	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Occupancy Expense Allocations			10	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	Occupancy expenses are reassigned from cost centers where the expenses are paid to

8/26/2025 22:37 **1** of **45**

Detailed Information about the "Utilities Expense Adjustment" Custom Rule in the Model

Model Documentation Report

ORACLE

Rule Set Name : Occupancy Expense Allocations
Rule Name : Utilities Expense Adjustment
Use Rule Set Context : Y
Rule Set Context :
Activity.No Activity
Customer.No Customer
Product.No Product
Currency.USD_Reporting

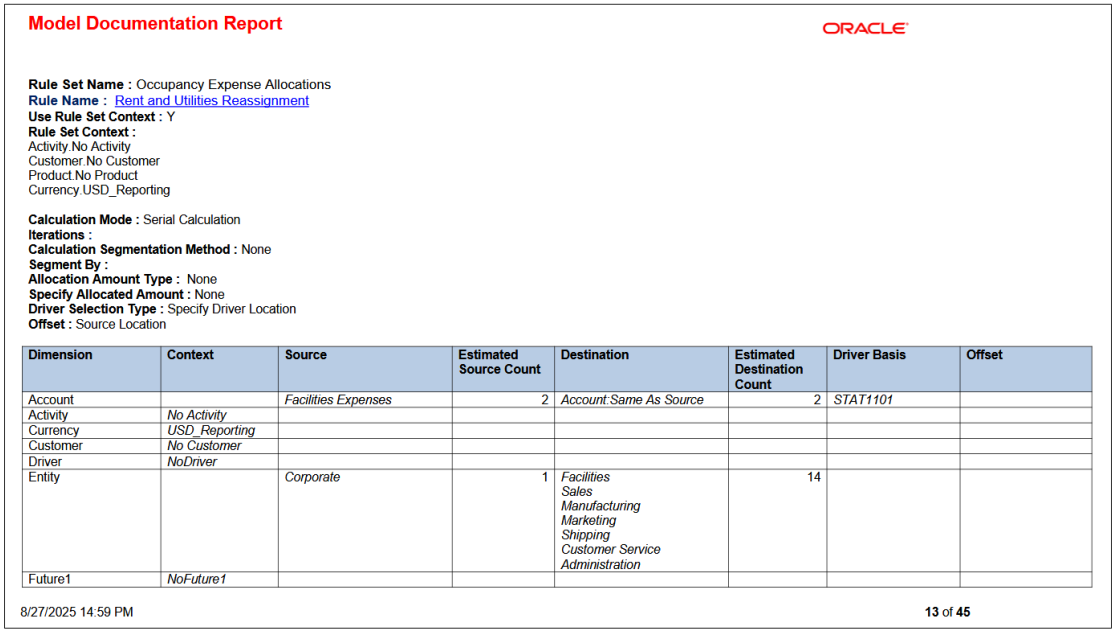
Calculation Mode : Serial Calculation
Iterations :
Calculation Segmentation Method : None
Segment By :

Dimension	Context	Target (Level-0 Count)	Result Dimension	Formula Members (Hierarchy Type, Level-0 Count)
Account		*Utilities (0)*		
Activity	*No Activity*			
Currency	*USD_Reporting*			
Customer	*No Customer*			
Driver	*NoDriver*			
Entity		*Corporate (0)*		
Future1	*NoFuture1*			
Future2	*NoFuture2*			
PCM_Balance			Yes	PCM_Adjustment In (Not Set, 0) PCM_Input (Not Set, 0)
Product	*No Product*			
View	*Periodic*			
Formula	[PCM_Adjustment In]:= ([PCM_Input],[PCM_Rule]) * .10;			

8/27/2025 14:59 PM **12** of **45**

Detailed Information about the "Rent and Utilities Reassignment" Allocation Rule in the Model

Copyright © 2022, 2026, Oracle and/or its affiliates.



Model Documentation Report

Rule Set Name : Occupancy Expense Allocations
Rule Name : Rent and Utilities Reassignment
Use Rule Set Context : Y
Rule Set Context :
Activity.No Activity
Customer.No Customer
Product.No Product
Currency.USD_Reporting

Calculation Mode : Serial Calculation
Iterations :
Calculation Segmentation Method : None
Segment By :
Allocation Amount Type : None
Specify Allocated Amount : None
Driver Selection Type : Specify Driver Location
Offset : Source Location

Dimension	Context	Source	Estimated Source Count	Destination	Estimated Destination Count	Driver Basis	Offset
Account		*Facilities Expenses*	2	*Account:Same As Source*	2	*STAT1101*	
Activity	*No Activity*						
Currency	*USD_Reporting*						
Customer	*No Customer*						
Driver	*NoDriver*						
Entity		*Corporate*	1	*Facilities* *Sales* *Manufacturing* *Marketing* *Shipping* *Customer Service* *Administration*	14		
Future1	*NoFuture1*						

8/27/2025 14:59 PM **13** of **45**

Tip

If you are generating a Model Documentation Report for a large model, it may be more efficient to use the Generate Model Documentation Report REST API.

Generating a Model Comparison Report

The Model Comparison report enables you to see the differences between two models. You can use the report to:

- Compare the differences in logic between two different models.

  For example, if you have two different business units using slightly different logic, you can use the report to see what the differences in logic are.

- Compare the differences in logic between an older version of a model and a new version of that same model.

  For example, assume you have a process to allocate your actuals throughout fiscal 2021, and in fiscal 2022 you decide to make some changes to the allocation process. In this example, you could copy the rules in the original Fiscal 2021 Actuals Allocation Process model into a new model called Fiscal 2022 Actuals Allocation Process. After you made changes to the rules in the new model in 2022, you could then run the Model Comparison report to see the differences in the allocation process you were using in 2021 versus 2022.

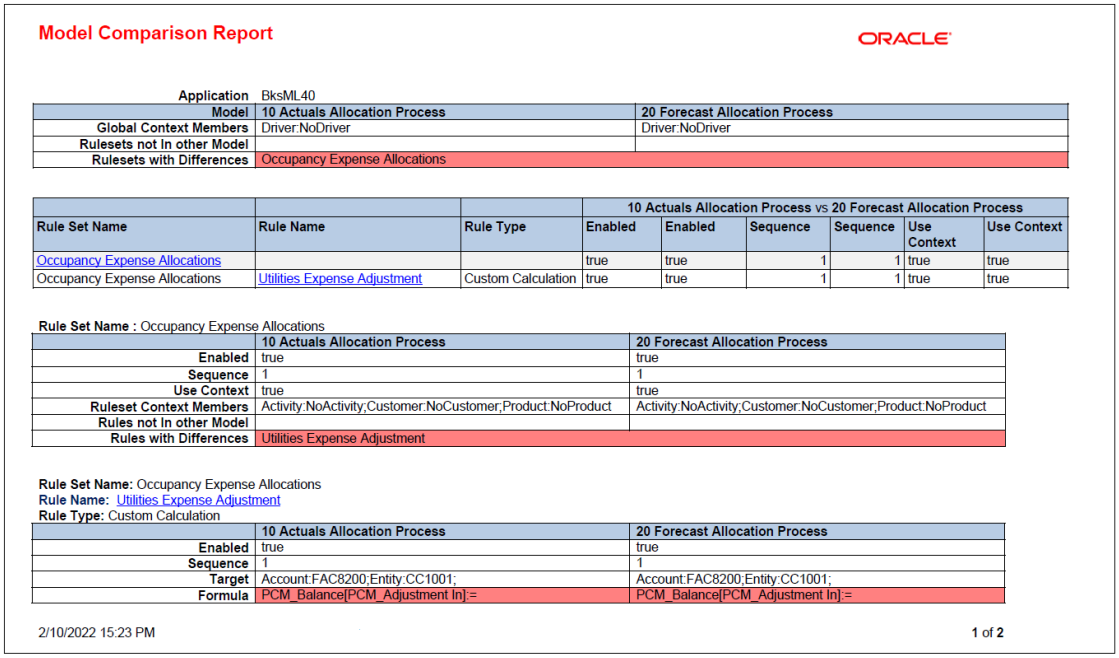
To generate a Model Comparison report:

1. From the Home page, select **Modeling**, and then **Models**.
2. From the **Models** page, select the two models that you want to compare.
3. Click the **Actions** drop-down, and select **Model Comparison Report**.
4. Select any of these formats:
   - PDF
   - EXCEL

Copyright © 2022, 2026, Oracle and/or its affiliates.

- WORD
- XML
- HTML

Sample Model Comparison Report



Model Comparison Report

ORACLE

Application	BksML40

Model	10 Actuals Allocation Process	20 Forecast Allocation Process
Global Context Members	Driver:NoDriver	Driver:NoDriver
Rulesets not In other Model		
Rulesets with Differences	Occupancy Expense Allocations	

			10 Actuals Allocation Process vs 20 Forecast Allocation Process					
Rule Set Name	Rule Name	Rule Type	Enabled	Enabled	Sequence	Sequence	Use Context	Use Context
Occupancy Expense Allocations			true	true	1	1	true	true
Occupancy Expense Allocations	Utilities Expense Adjustment	Custom Calculation	true	true	1	1	true	true

Rule Set Name : Occupancy Expense Allocations

	10 Actuals Allocation Process	20 Forecast Allocation Process
Enabled	true	true
Sequence	1	1
Use Context	true	true
Ruleset Context Members	Activity:NoActivity;Customer:NoCustomer;Product:NoProduct	Activity:NoActivity;Customer:NoCustomer;Product:NoProduct
Rules not In other Model		
Rules with Differences	Utilities Expense Adjustment	

Rule Set Name: Occupancy Expense Allocations
Rule Name: Utilities Expense Adjustment
Rule Type: Custom Calculation

	10 Actuals Allocation Process	20 Forecast Allocation Process
Enabled	true	true
Sequence	1	1
Target	Account:FAC8200;Entity:CC1001;	Account:FAC8200;Entity:CC1001;
Formula	PCM_Balance[PCM_Adjustment In]:=	PCM_Balance[PCM_Adjustment In]:=

2/10/2022 15:23 PM 1 of 2

Creating and Managing Models 2.0

Related Topics

- About Models 2.0
- Creating a Model
- Defining a Model Context
- Managing Models
- Defining the Columns that Display on the Models Page
- Generating a Model Documentation Report
- Generating a Model Comparison Report

About Models 2.0

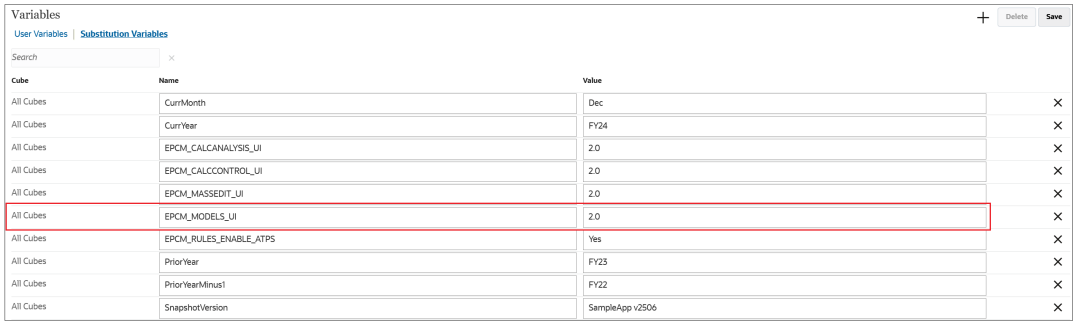
Models 2.0 has the same functionality as Models 1.0, but it provides a more modern and updated user interface with more streamlined actions.

In the April 2026 release (26.04), Models 1.0 is the default. You can preview and start using the new Models 2.0 screens by entering an EPCM_MODELS_UI substitution variable to specify 2.0.

1. From the Home page, select **Tools**, and then **Variables**.
2. On the **Variables** tab, click **Substitution Variables**, and then click the plus sign to define a new variable.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Leave the **Cube** field set to **All Cubes**, and enter the EPCM_MODELS_UI substitution variable for the Models 2.0 screens as follows:



Timeline going forward:

Starting in in the May 2026 release (26.05), Models 2.0 will be the default when you open your application. If desired, you can temporarily revert to the original Models 1.0 screens by setting the substitution variable value to 1.0.

Starting in release 26.07, the original Models 1.0 screens will no longer be available.

Creating a Model

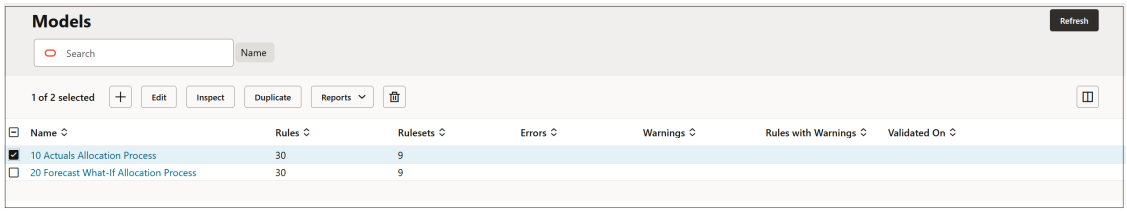
To create a model:

1. From the Home page, select **Modeling**, and then **Models**.
2. On the **Models** page, click (Add Model).
3. In the **Create Model** dialog box, enter a **Name** and **Description** for your model.

   The name cannot contain any special characters.
4. Click **Save,** and then select either **Save and Close** to return to the **Models** page, or **Save and Next** to create another model.
5. **Optional:** Click the hyperlink for a model on the **Models** page to define a model context. See Defining a Model Context.

Following are the models in the BksML50 sample application provided with Enterprise Profitability and Cost Management. (See Creating the Sample Application for information on how to access the sample application.)

Figure 8-1 Models in the BksML50 Sample Application



Copyright © 2022, 2026, Oracle and/or its affiliates.

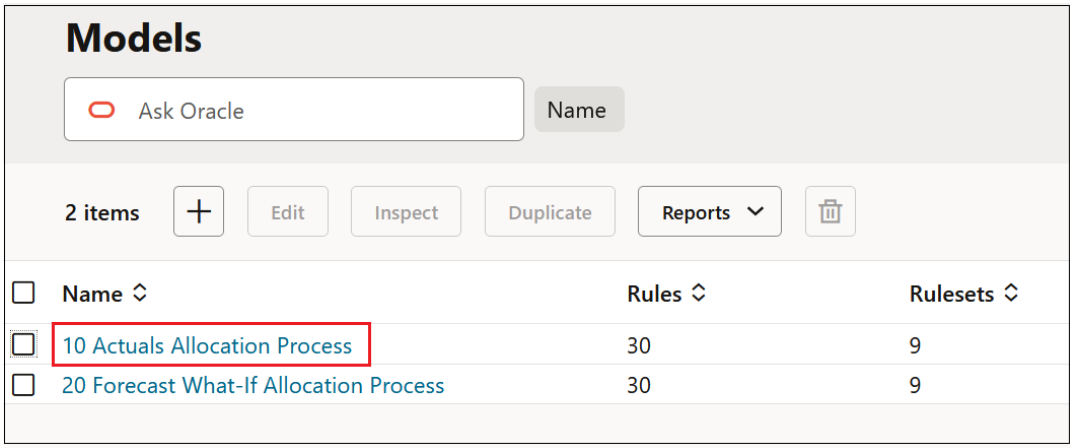
Defining a Model Context

You can define default member selections for dimensions that will use the same member for all the rules in the model. Defining default member selections saves you from having to select the members for a dimension each time the dimension is used in a rule.

To define default members for the model context:

1. On the **Models** page, click the hyperlink for a model.

   For example, in the BksML50 sample application, you could click the link for the 10 Actuals Allocation Process model.

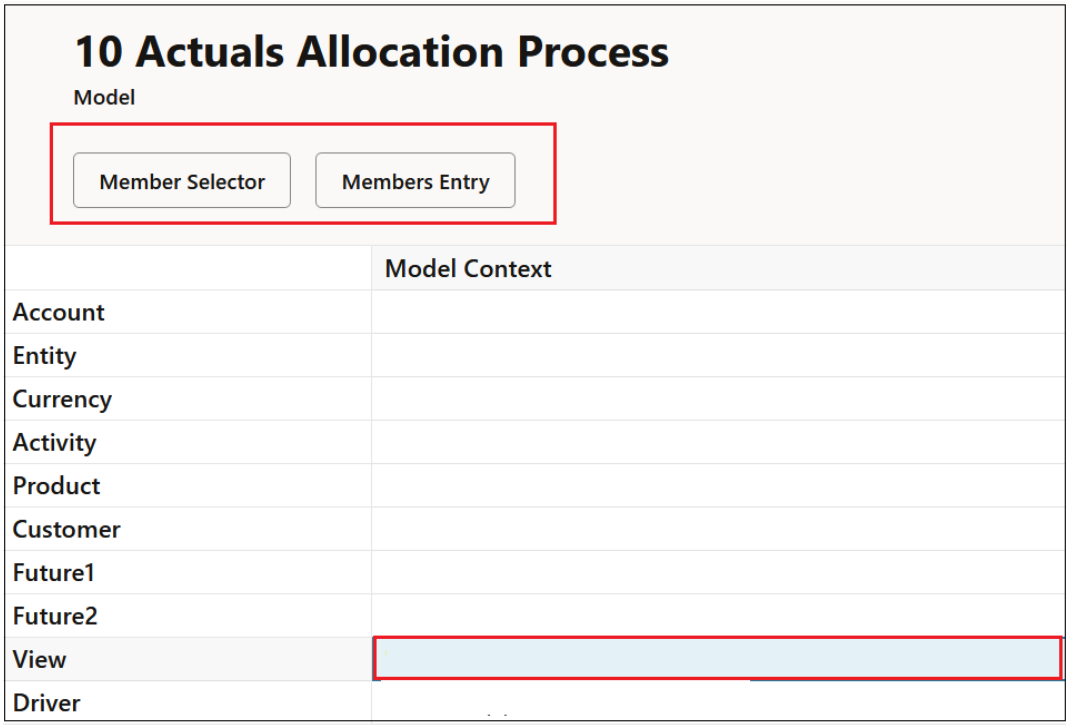


2. Define the members to be used in the model context.

   To define default member selections for a dimension, click in a row next to the dimension in the **Model Context** column, and then click either **Member Selector** or **Members Entry**.

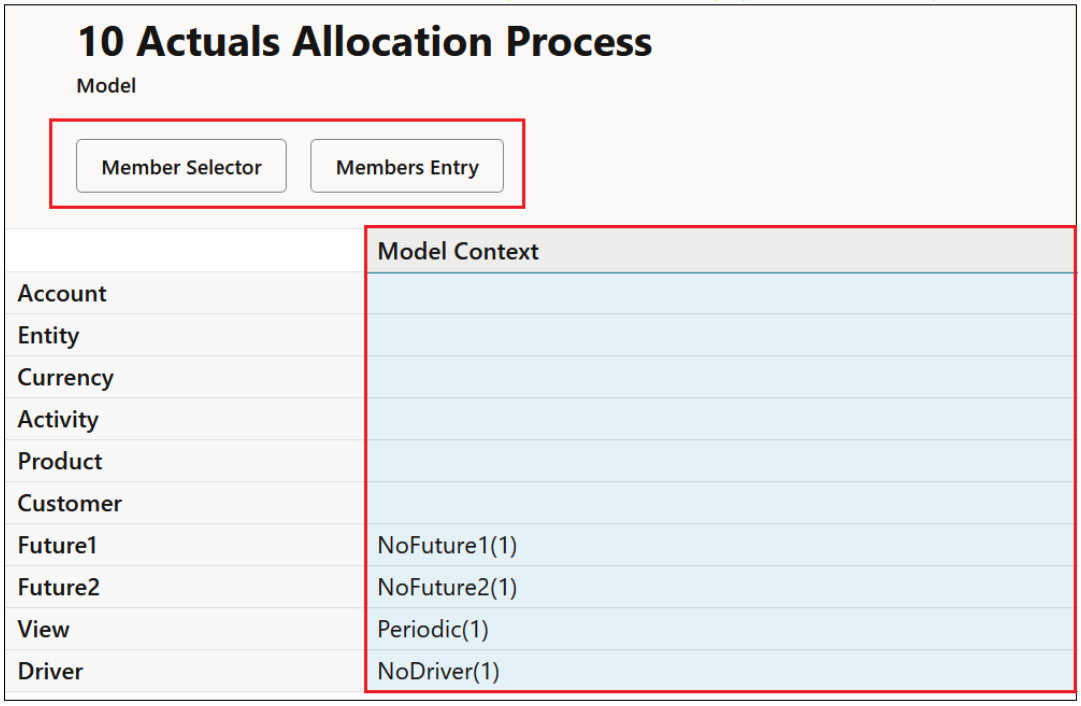
   For example, to define member selections for the View dimension, click in the **Model Context** column next to View.

Copyright © 2022, 2026, Oracle and/or its affiliates.



You can also define members selections for several dimensions by clicking the rows next to the desired dimensions in the **Model Context** column, and then clicking either **Member Selector** or **Members Entry**.

To defne default member selection for all the dimensions in the model, click **Model Context** to select all the rows.

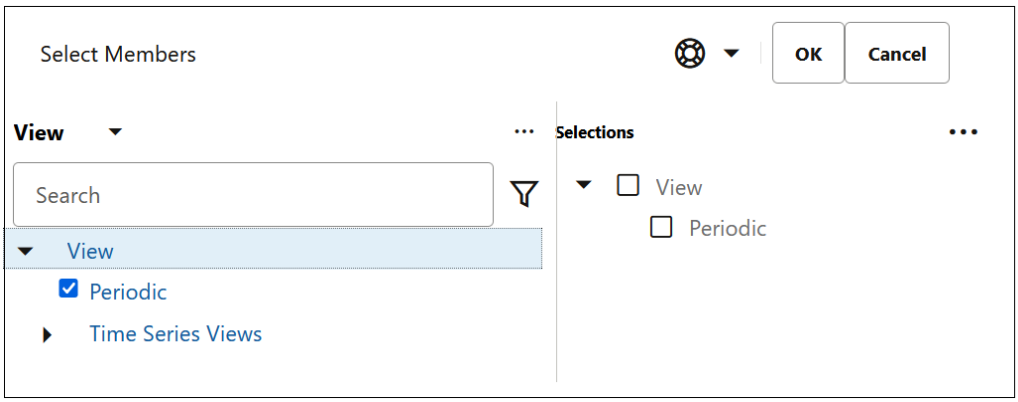


- **Member Selector**

  Click **Member Selector** to open the **Select Members** dialog box, where you can select the members to add to the dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

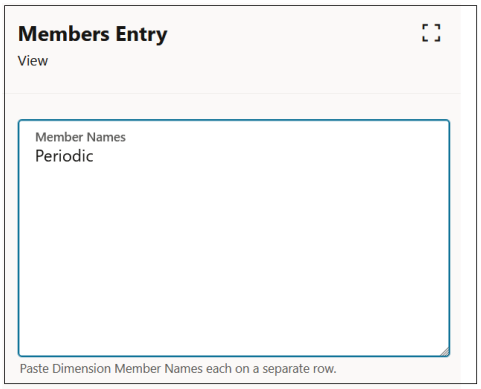
In this example, the Periodic member has been added to the View dimension.



> **Note**
>
> When making default member selections, you can select only level 0 members. See Using the Member Selector.

- **Members Entry**

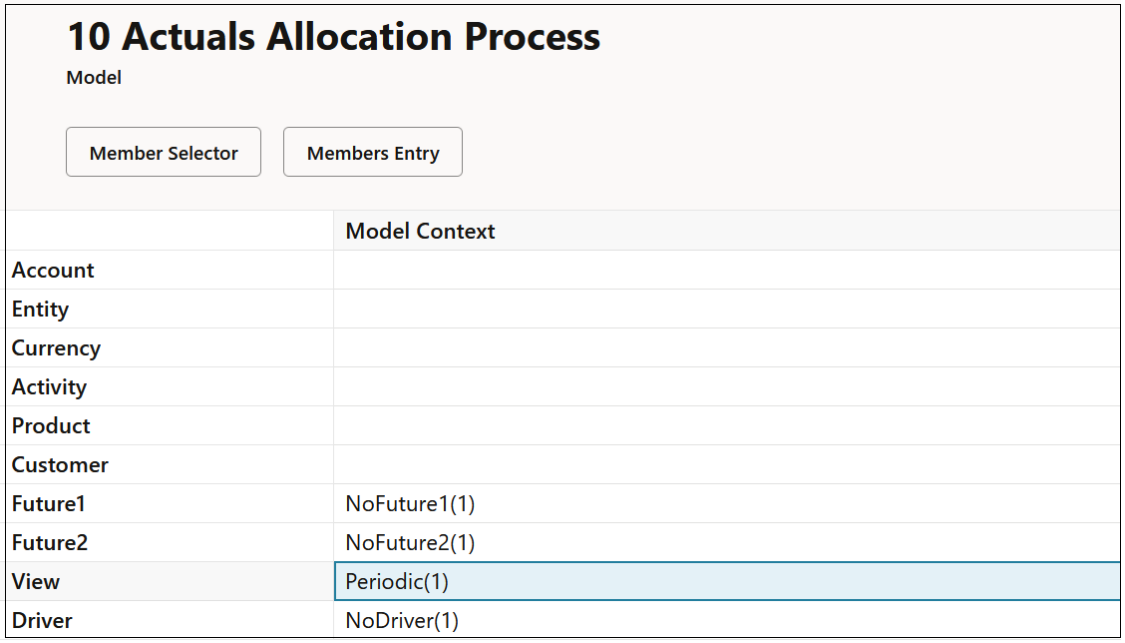
  If you know the member names that you want to add to a dimension, click **Members Entry** and manually enter the names. This can be a good way to add members if you have several members to add. For example, if you have a list of members in an Excel spreadsheet, you can copy these members from Excel, and then paste them into the **Members Entry** dialog box.



In the BksML50 sample application provided with Enterprise Profitability and Cost Management, a model context has been defined for the 10 Actuals Allocation Process model as follows:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 8-2 Sample Model Context for the 10 Actuals Allocation Model



Tip

See Understanding Model and Rule Set Context for a detailed example of defining a model context.

Managing Models

As you manage your models, you can complete these tasks:

- Searching for a Model
- Editing a Model
- Inspecting a Model
- Duplicating a Model
- Deleting a Model
- Refreshing the Models List
- Running Reports

Searching for a Model

If you have several models, you can search for a model by name.

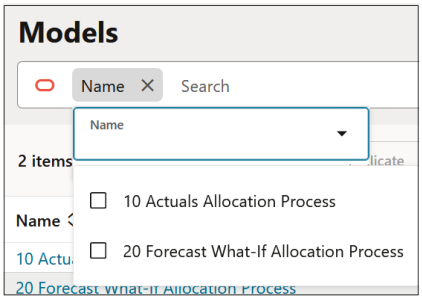
To search for a model:

1. Click the **Name** tile or drag it into **Search**.

   The drop-down displays a list of existing models. You can either select a model from the drop-down, or type the model name.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Select or enter the desired model, and then click back on the main **Models** page to display the selected model.



The **Models** page displays only the selected model.

> **Tip**
>
> Click the **X** to remove the model from **Search** and once again display all the models on the page.

Editing a Model

You can edit the name and description of an existing model and modify the members selected for the model context by removing the existing dimensions and member selection, or by adding new dimensions and members.

To edit a model:

1. On the **Models** page, select a model, and then click **Edit.**
2. With the model information displayed, edit the dimensions and members defined for the model context, or click (Open Configuration) to view or edit the model name and description.
3. Click **Save and Close** to return to the **Models** page.

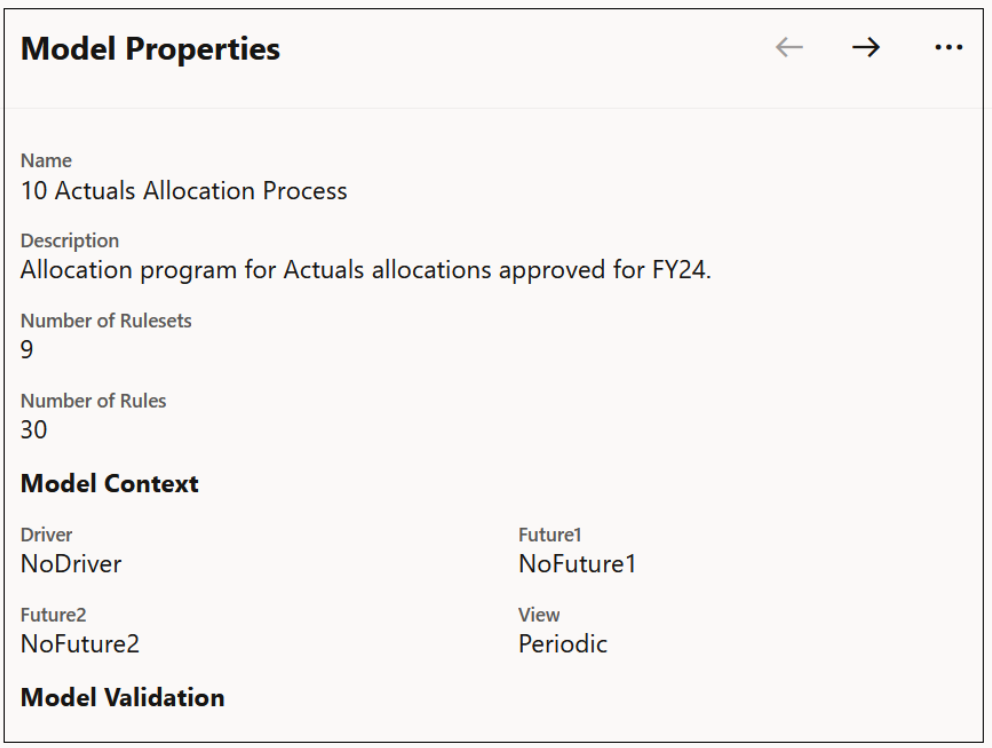
Inspecting a Model

Inspecting a model lets you view all the information associated with the model.

To inspect a model:

1. On the **Models** page, select a model, and then click **Inspect**.
2. In **Model Properties**, review the information for the model.

Copyright © 2022, 2026, Oracle and/or its affiliates.



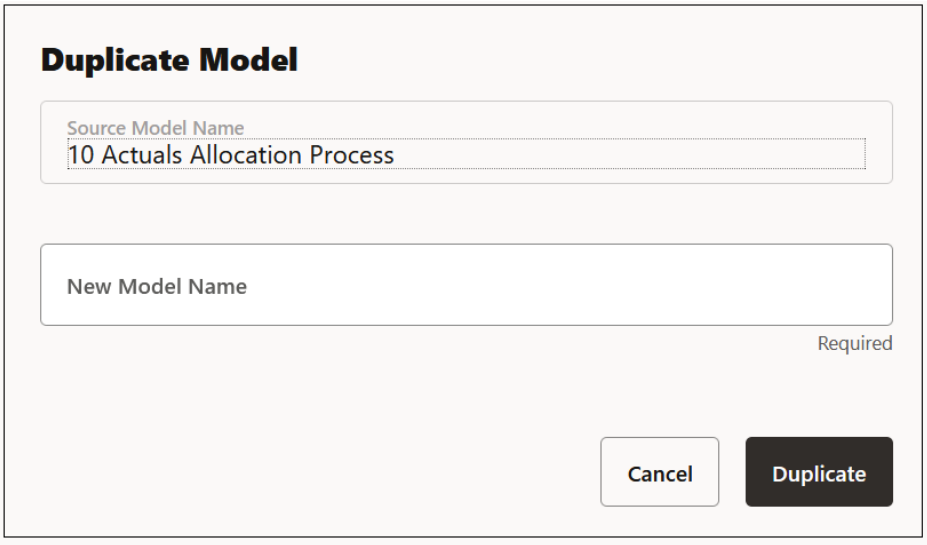
3. Click → (Next) to view information about subsequent models, or click ... (More Actions), and then select **Close** to return to the **Models** page.

Duplicating a Model

You can create a duplicate of a model that preserves the existing rules, and then revise the duplicated model with new rules. For example, you can preserve the rules of a particular year's model in the duplicated model, but revise it with new rules for another year.

To duplicate a model:

1. On the **Models** page, select a model, and then click **Duplicate**.
2. In the **Duplicate Model** dialog box, enter a name for the duplicated model, and then click **Duplicate**.



Copyright © 2022, 2026, Oracle and/or its affiliates.

The duplicated model is now displayed in the models list.

> **Note**
>
> When you duplicate a model, all the rules in the model are also duplicated.

Deleting a Model

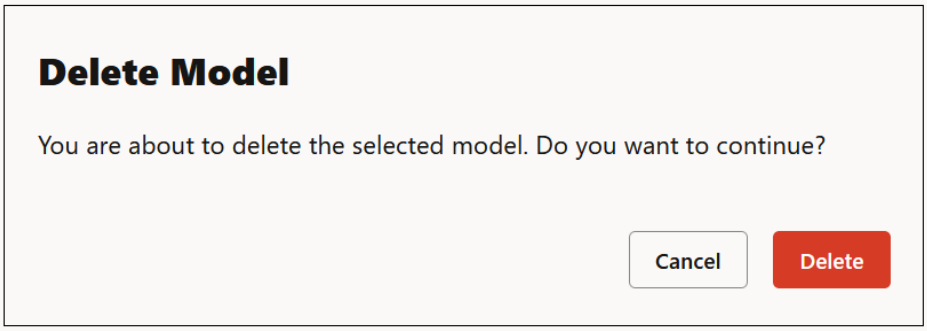
If you no longer need the models you created, you can delete the models one by one.

To delete a model:

1. On the **Models** page, select the model you want to delete.

   You can select only one model at a time.

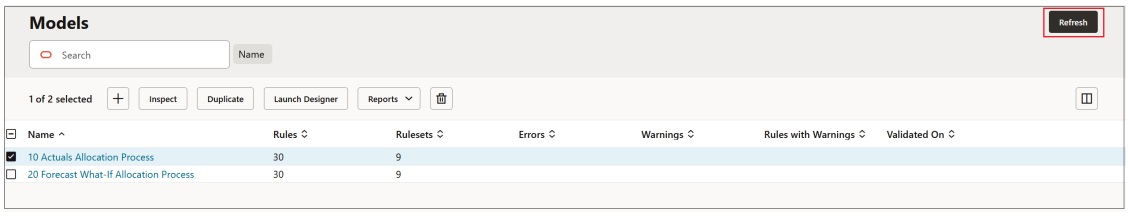
2. Click (Delete).
3. Click **Delete** to confirm the deletion.



> **Note**
>
> When you delete a model, the rules in the model are also deleted.

Refreshing the Models List

You can refresh the models listed on the Models page by clicking the **Refresh** button on the top right of the page. The refresh action fetches an updated list of models.



Running Reports

To run a report for a model:

1. On the **Models** page, select a model or models.

   To select all the models that you have defined, click the checkbox next to **Name.**

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click the **Reports** drop-down and select a report.

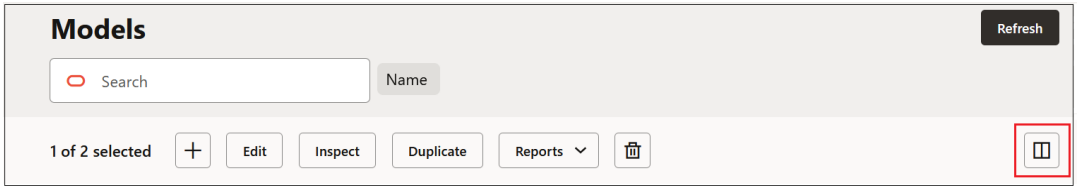
   See Generating a Model Documentation Report and Generating a Model Comparison Report.

Defining the Columns that Display on the Models Page

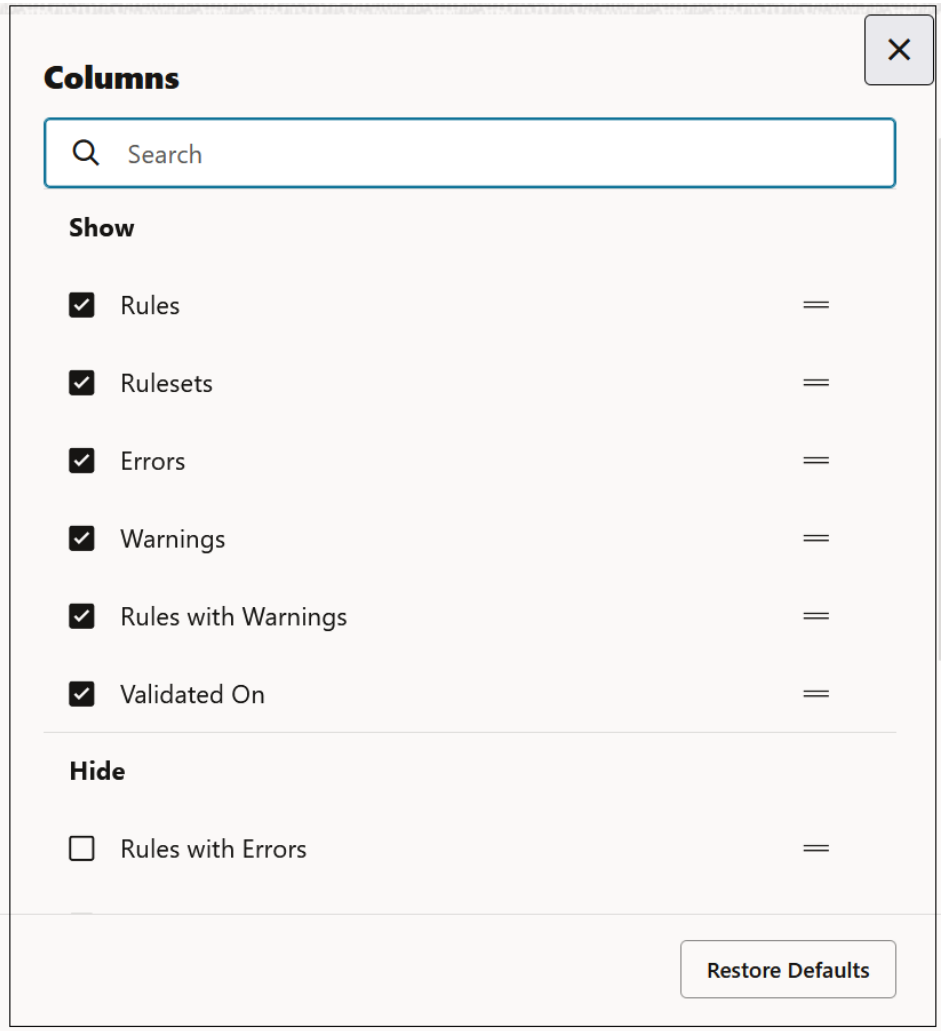
In addition to the default columns of Rule Sets and Rules, you can select additional columns to display on the **Models** page, and you can define the order in which the columns display.

To define the column display:

1. From the **Models** page, click the (Columns button).



2. Select or de-select the desired columns to show or hide the columns.



Copyright © 2022, 2026, Oracle and/or its affiliates.

3. To change the order in which the columns will display, click and drag to the right of a column to move the column up or down. To restore the columns to their default values, click **Restore Defaults**.
4. When you have finished defining the columns that will display and the order in which they will display, click (Close) to close the **Columns** dialog box.

Generating a Model Documentation Report

The Model Documentation report provides an overview of all the details relevant to a model. It shows the source of allocated values and the logic used to allocate them.

The report shows the name and sequence of the rules used in the model and gives an explanation of the purpose of each rule. If you click a hyperlink for a rule, it will show you details about the rule and the actual rule definition. The hyperlinks enable you to easily navigate through the different areas in the report. For example, you can navigate from the overview of a rule and the sequence in which it occures to the actual rule definition.

You can save the report locally and distribute it to others, or attach it to other reports to help explain the allocation process to internal or external reviewers and auditors.

The Model Documentation can be generated from the Models page or from the Rule Designer.

To generate a Model Documentation report from the Models page:

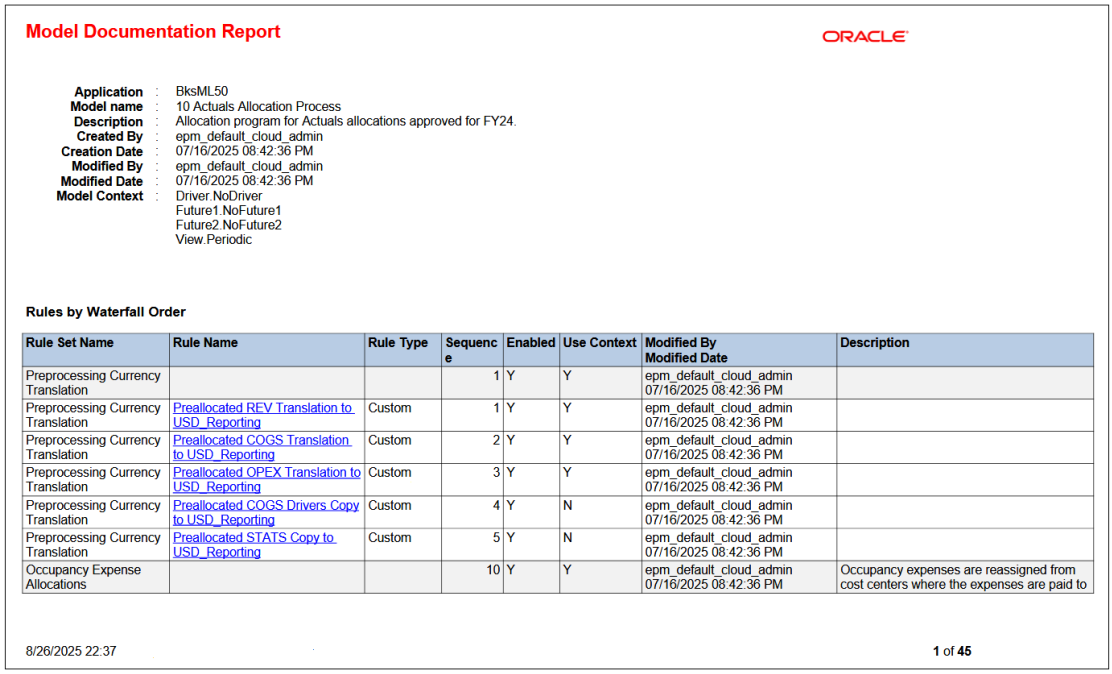
1. From the Home page, select **Modeling**, and then **Models**.
2. From the **Models** page, select a model.
3. Click the **Reports** drop-down, and select **Model Documentation Report**.
4. Select any of these formats, and then click **Run**:
   - PDF
   - EXCEL
   - WORD
   - XML
   - HTML

To generate a Model Documentation report from the Rule Designer:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Click the **Reports** drop-down, and select **Model Documentation Report**.
3. Select any of these formats:, and then click **Run**.
   - PDF
   - EXCEL
   - WORD
   - XML
   - HTML

Sample Model Documentation Report

Copyright © 2022, 2026, Oracle and/or its affiliates.



Model Documentation Report

ORACLE

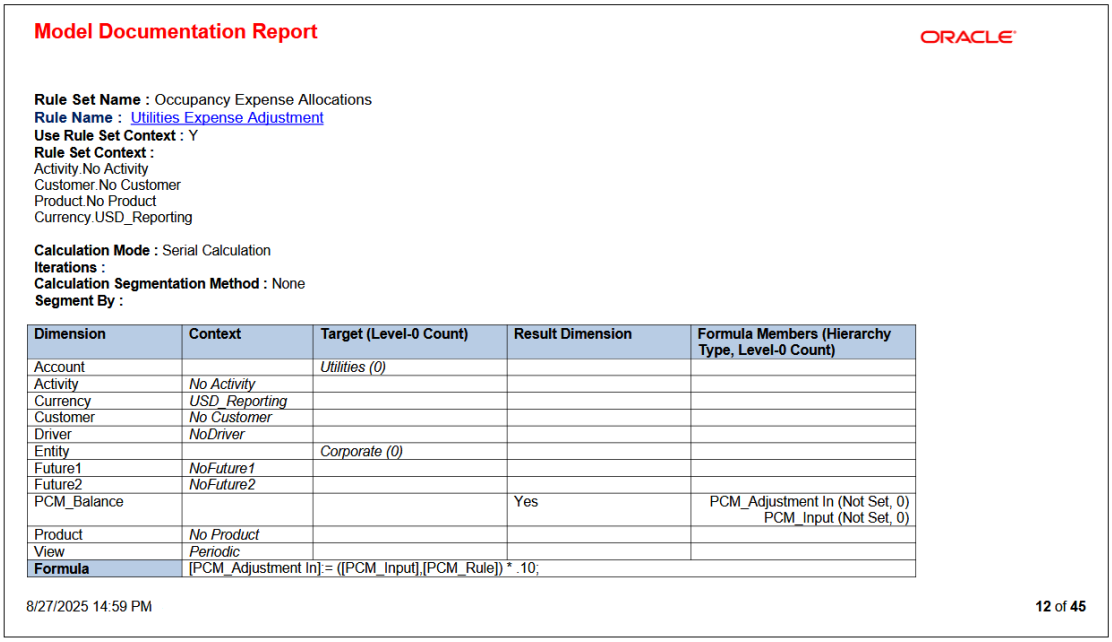
Application : BksML50
Model name : 10 Actuals Allocation Process
Description : Allocation program for Actuals allocations approved for FY24.
Created By : epm_default_cloud_admin
Creation Date : 07/16/2025 08:42:36 PM
Modified By : epm_default_cloud_admin
Modified Date : 07/16/2025 08:42:36 PM
Model Context : Driver.NoDriver
Future1.NoFuture1
Future2.NoFuture2
View.Periodic

Rules by Waterfall Order

Rule Set Name	Rule Name	Rule Type	Sequence	Enabled	Use Context	Modified By Modified Date	Description
Preprocessing Currency Translation			1	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated REV Translation to USD_Reporting	Custom	1	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated COGS Translation to USD_Reporting	Custom	2	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated OPEX Translation to USD_Reporting	Custom	3	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated COGS Drivers Copy to USD_Reporting	Custom	4	Y	N	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated STATS Copy to USD_Reporting	Custom	5	Y	N	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Occupancy Expense Allocations			10	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	Occupancy expenses are reassigned from cost centers where the expenses are paid to

8/26/2025 22:37 **1** of **45**

Detailed Information about the "Utilities Expense Adjustment" Custom Rule in the Model



Model Documentation Report

ORACLE

Rule Set Name : Occupancy Expense Allocations
Rule Name : Utilities Expense Adjustment
Use Rule Set Context : Y
Rule Set Context :
Activity.No Activity
Customer.No Customer
Product.No Product
Currency.USD_Reporting

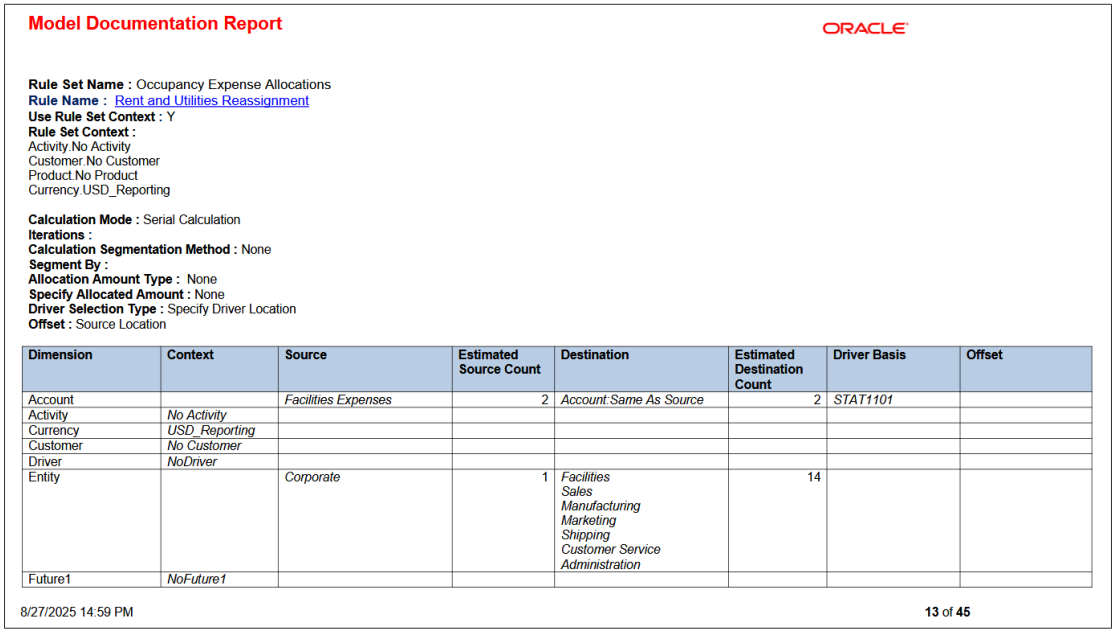
Calculation Mode : Serial Calculation
Iterations :
Calculation Segmentation Method : None
Segment By :

Dimension	Context	Target (Level-0 Count)	Result Dimension	Formula Members (Hierarchy Type, Level-0 Count)
Account		*Utilities (0)*		
Activity	*No Activity*			
Currency	*USD_Reporting*			
Customer	*No Customer*			
Driver	*NoDriver*			
Entity		*Corporate (0)*		
Future1	*NoFuture1*			
Future2	*NoFuture2*			
PCM_Balance			Yes	PCM_Adjustment In (Not Set, 0) PCM_Input (Not Set, 0)
Product	*No Product*			
View	*Periodic*			
Formula	[PCM_Adjustment In]:= ([PCM_Input],[PCM_Rule]) * .10;			

8/27/2025 14:59 PM **12** of **45**

Detailed Information about the "Rent and Utilities Reassignment" Allocation Rule in the Model

Copyright © 2022, 2026, Oracle and/or its affiliates.



Model Documentation Report

Rule Set Name : Occupancy Expense Allocations
Rule Name : Rent and Utilities Reassignment
Use Rule Set Context : Y
Rule Set Context :
Activity.No Activity
Customer.No Customer
Product.No Product
Currency.USD_Reporting

Calculation Mode : Serial Calculation
Iterations :
Calculation Segmentation Method : None
Segment By :
Allocation Amount Type : None
Specify Allocated Amount : None
Driver Selection Type : Specify Driver Location
Offset : Source Location

Dimension	Context	Source	Estimated Source Count	Destination	Estimated Destination Count	Driver Basis	Offset
Account		*Facilities Expenses*	2	*Account:Same As Source*	2	*STAT1101*	
Activity	*No Activity*						
Currency	*USD_Reporting*						
Customer	*No Customer*						
Driver	*NoDriver*						
Entity		*Corporate*	1	*Facilities* *Sales* *Manufacturing* *Marketing* *Shipping* *Customer Service* *Administration*	14		
Future1	*NoFuture1*						

8/27/2025 14:59 PM **13** of **45**

Tip

If you are generating a Model Documentation Report for a large model, it may be more efficient to use the Generate Model Documentation Report REST API.

Generating a Model Comparison Report

The Model Comparison report enables you to see the differences between two models. You can use the report to:

- Compare the differences in logic between two different models.

  For example, if you have two different business units using slightly different logic, you can use the report to see what the differences in logic are.

- Compare the differences in logic between an older version of a model and a new version of that same model.

  For example, assume you have a process to allocate your actuals throughout fiscal 2021, and in fiscal 2022 you decide to make some changes to the allocation process. In this example, you could copy the rules in the original Fiscal 2021 Actuals Allocation Process model into a new model called Fiscal 2022 Actuals Allocation Process. After you made changes to the rules in the new model in 2022, you could then run the Model Comparison report to see the differences in the allocation process you were using in 2021 versus 2022.

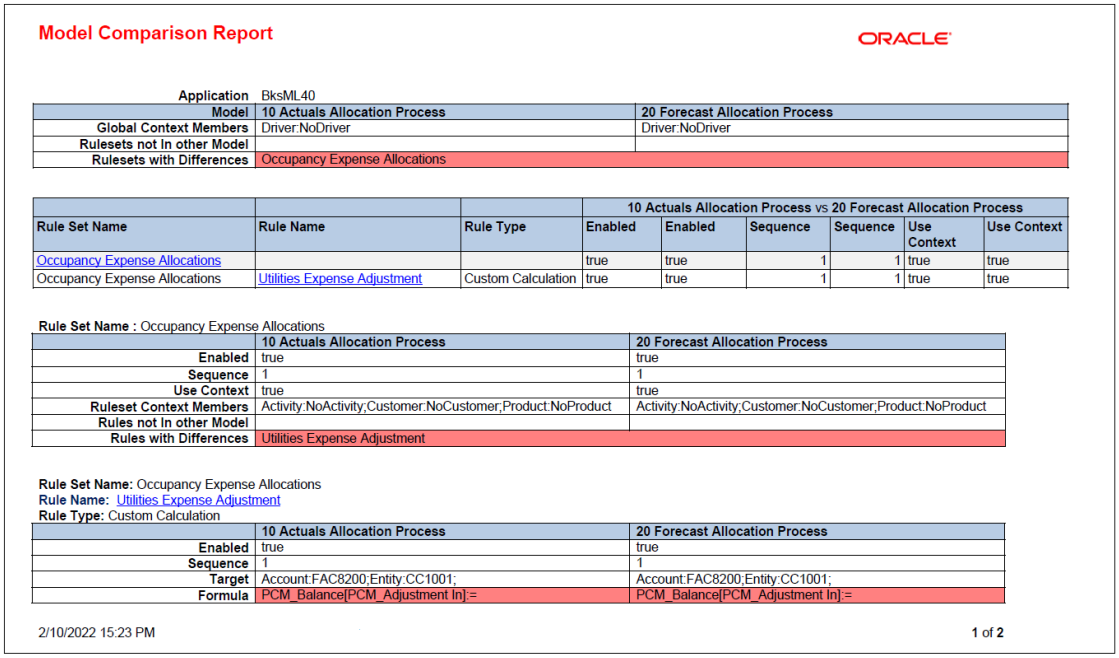
To generate a Model Comparison report:

1. From the Home page, select **Modeling**, and then **Models**.
2. From the **Models** page, select the two models that you want to compare.
3. Click the **Reports** drop-down, and select **Model Comparison Report**.
4. Select any of these formats, and then click **Run**:
   - PDF
   - EXCEL

Copyright © 2022, 2026, Oracle and/or its affiliates.

- WORD
- XML
- HTML

Sample Model Comparison Report



Model Comparison Report

ORACLE

Application	BksML40

Model	**10 Actuals Allocation Process**	**20 Forecast Allocation Process**
Global Context Members	Driver:NoDriver	Driver:NoDriver
Rulesets not In other Model		
Rulesets with Differences	Occupancy Expense Allocations	

			10 Actuals Allocation Process vs 20 Forecast Allocation Process					
Rule Set Name	**Rule Name**	**Rule Type**	**Enabled**	**Enabled**	**Sequence**	**Sequence**	**Use Context**	**Use Context**
Occupancy Expense Allocations			true	true	1	1	true	true
Occupancy Expense Allocations	Utilities Expense Adjustment	Custom Calculation	true	true	1	1	true	true

Rule Set Name : Occupancy Expense Allocations

	10 Actuals Allocation Process	**20 Forecast Allocation Process**
Enabled	true	true
Sequence	1	1
Use Context	true	true
Ruleset Context Members	Activity:NoActivity;Customer:NoCustomer;Product:NoProduct	Activity:NoActivity;Customer:NoCustomer;Product:NoProduct
Rules not In other Model		
Rules with Differences	Utilities Expense Adjustment	

Rule Set Name: Occupancy Expense Allocations
Rule Name: Utilities Expense Adjustment
Rule Type: Custom Calculation

	10 Actuals Allocation Process	**20 Forecast Allocation Process**
Enabled	true	true
Sequence	1	1
Target	Account:FAC8200;Entity:CC1001;	Account:FAC8200;Entity:CC1001;
Formula	PCM_Balance[PCM_Adjustment In]:=	PCM_Balance[PCM_Adjustment In]:=

2/10/2022 15:23 PM **1** of **2**

Copyright © 2022, 2026, Oracle and/or its affiliates.

9

Creating and Managing Rules

Related Topics

- About Rules
- Types of Rules
- Rule and Rule Member Considerations
- Dimension and Member Requirements When Creating Rules
- Understanding Model and Rule Set Context
- Understanding How System Dimensions Are Used in Rules
- Working in Rule Designer 1.0
- Working in Rule Designer 2.0
- Using the Designer 1.0 Mass Edit Tab

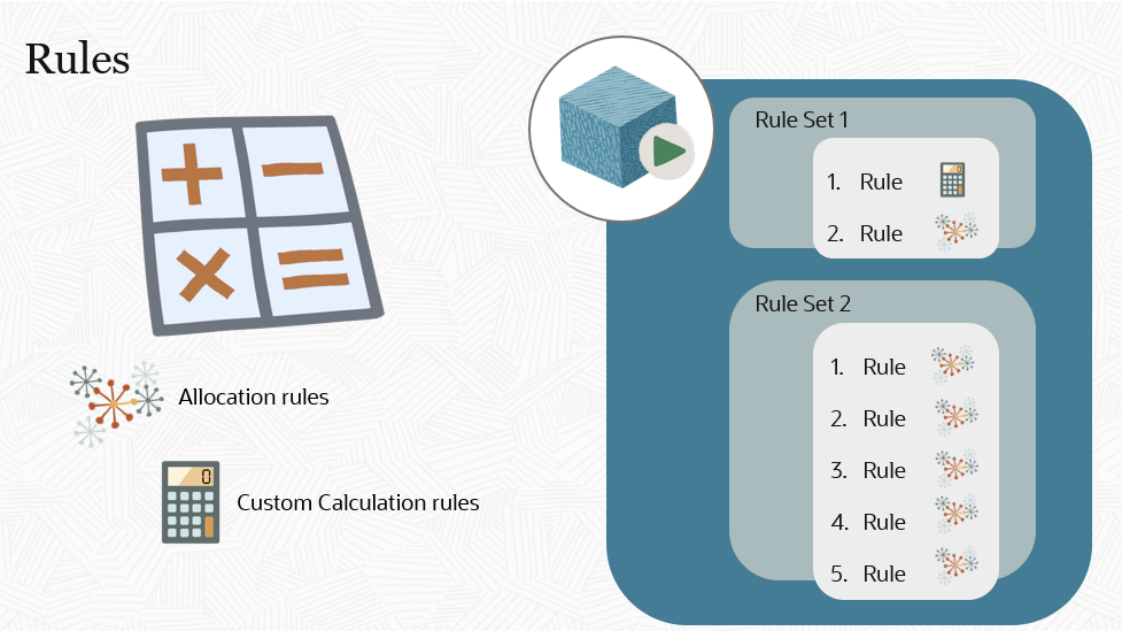
Video

Your Goal	Watch This Video
Learn how to create models, and how to add rule sets, allocation rules, and custom rules to models.	Creating Models and Rules in Enterprise Profitability and Cost Management

About Rules

After you create a model, the next step in the modeling process is to add rules to the model. The rules in a model tell Enterprise Profitability and Cost Management how to execute allocations and calculations. You can sequence rules and group them into sets, giving you a granular level of control over the order of your calculation logic.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Types of Rules

In an Enterprise Profitability and Cost Management application, there are two types of rules:

- **Allocation Rules**, which define the source and destination of allocated data, which drivers are used to allocate the data, and where offsets are placed to balance accounts.

  Examples of allocation rules include:

  - Rent and Utilities Reassignment, where rent and utility expenses are reassigned from the Corporate cost center to the business function cost centers. A driver based on the square feet of each building used by each cost center is used to apportion the expenses.
  - Product Material Allocation, where the cost of materials is allocated to products in the Bike family. A driver member "BOMRate" that reflects the unique rate of consumption of materials by each product is used in the driver basis.
  - Activity Costing Assignments, where operating expenses for each functional cost center are assigned to Business Sustaining, Customer Sustaining, or Product Sustaining activities based on the activity time split statistic collected at each cost center.

- **Custom Rules**, which contain formulas in an Oracle Essbase MDX format and are primarily used for adjusting data or creating driver values used in subsequent allocation rules.

  An example of a custom rule is a Utilities Expense Adjustment that increases utility expenses at Corporate Headquarters by 10 percent.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The allocation and custom rule examples above are some of the rules used in the BksML50 sample application that is provided with Enterprise Profitability and Cost Management. You can refer to the examples in the sample application to get ideas of the different types of rules; however, keep in mind that these examples may not necessarily relate to your application.

Rule and Rule Member Considerations

As you work with rules and rule members in Enterprise Profitability and Cost Management, keep in mind the following considerations:

- For each unique rule in Enterprise Profitability and Cost Management, there will be a corresponding rule member in Oracle Essbase that matches the rule name. The rule member is created in Essbase during the first calculation run after the rule is created in the Enterprise Profitability and Cost Management Rule Designer. It is advisable to refresh the cube after creating new rules. (See Working in Rule Designer 1.0, Working in Rule Designer 2.0, and Calculating a Model 1.0).
- All rule names must be unique within a model.
- A rule can exist in multiple models.

  This is because each model has its own definition of the rule, so the definition of the rule can vary from one model to another. In that sense, they are different rules. But since they both share the same rule name, they both share the same rule member in Essbase; so in that sense, they are the same rule.
- Deleting a rule in the Rule Designer does *not* delete the rule *members* associated with that rule. This is important to understand because deleting a rule member also deletes the data associated with the rule member. (See Deleting a Rule or Rule Set.)
- The only way to delete a rule member is from the Edit Member Properties page accessed from the Application, Dimensions tab. (See Deleting Members,)
- Rule members can have attributes and UDAs.

  Attributes and UDAs make it possible to categorize rules. (See Working with Attributes.)
- If a rule that has been calculated is renamed, then a new member with the new rule name is added to the cube. The old member name still persists, and any data associated with that member name remains in the cube.

Dimension and Member Requirements When Creating Rules

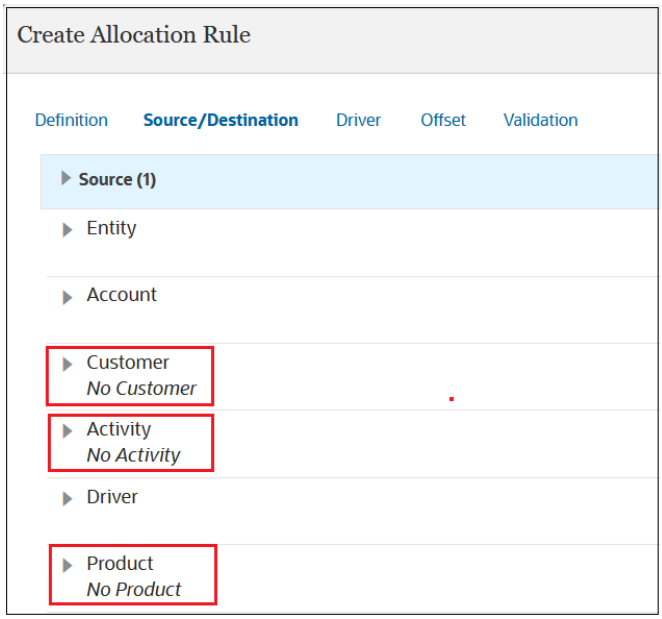
For each rule that you create in Enterprise Profitability and Cost Management, you must provide full dimensional context for source and destination intersections or for target intersections, depending on the rule type.

In Enterprise Profitability and Cost Management, the following dimensions are required: Years, Period, Scenario, and Version POV dimensions; Entity and Account dimensions; and Balance and Rule system dimensions. Multicurrency applications include a Currency dimension. Additionally, your application may include a number of custom dimensions. In order for a rule to run, it must have members assigned to all of these dimensions regardless of whether the dimension applies to the rule you are creating.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The Years, Period, Scenario, and Version POV dimensions and the Balance and Rule system dimensions are not included in the rule definition, and you do not need to explicity assign members to these dimensions when creating a rule. The members for the POV dimensions are assigned when you calculate models on the Calculation Control page (see Calculating Models), and the members for the system dimensions are automatically assigned by the Enterprise Profitability and Cost Management application. This leaves the Entity and Account dimensions, the optional Currency dimension, and any custom dimensions in your application for which you must assign members during rule creation.

For dimensions that are not relevant in a rule, use a "No<*dimname*> " member. For example, if you are creating a rule that allocates data not assigned to a specific Customer, Activity, or Product dimension, then you would assign **No Customer**, **No Activity**, and **No Product** to these dimensions.



> **Note**
>
> You set up "No<*dimname*> " members for dimensions when you are creating your dimensions and members. See Adding Members to a Dimension and Adding "No<dimname>" Members.

> **Note**
>
> If your rule set contains many rules and all of them use the same dimension member selections, it is more efficient to create a Rule Set Context that defines the members for your dimensions rather than selecting the same members for each dimension each time the dimension is used in a rule. See Understanding Model and Rule Set Context.

Understanding Model and Rule Set Context

If you are creating a large number of rules, you can use Model and Rule Set Contexts to define default member selections for dimensions that will use the same member for all the rules in the

Copyright © 2022, 2026, Oracle and/or its affiliates.

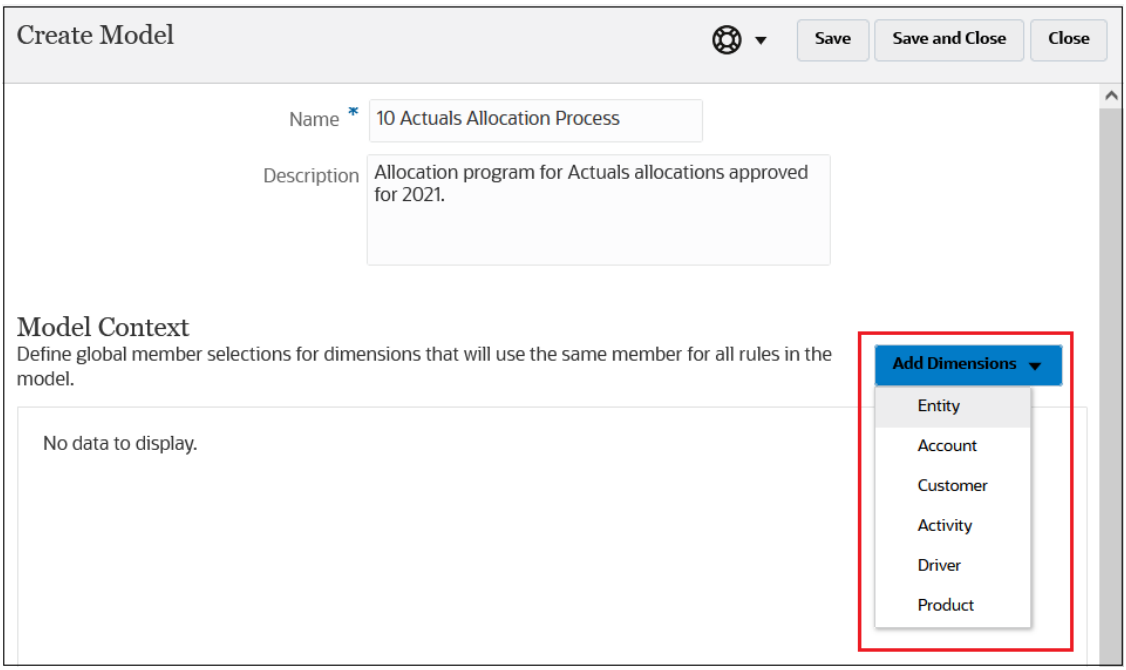
model or rule set. This saves you from having to select the same members for a dimension each time the dimension is used in a rule.

Let's consider an example using the BksML50 sample application that is provided with Enterprise Profitability and Cost Management. In addition to the Entity and Account dimensions required in Enterprise Profitability and Cost Management, the sample application includes Customer, Activity, Driver, and Product custom dimensions. So, for each rule that you create in the sample application, you must select members for Entity, Account, Customer, Activity, Driver, and Product. See Dimension and Member Requirements When Creating Rules.

For this example, we will set up a model and rule set as follows:

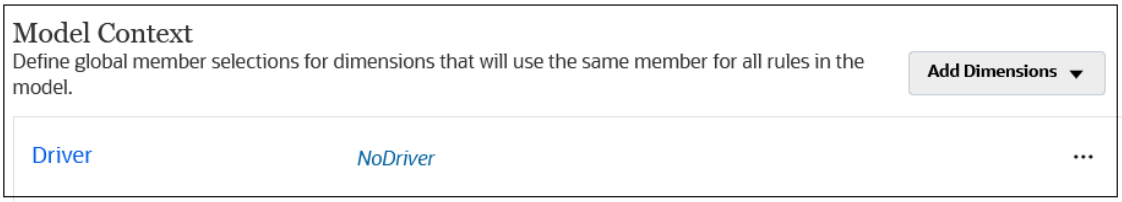
- Model: 10 Actuals Allocation Process
- Rule Set: Occupancy Expense Allocations

Begin by setting up the 10 Actuals Allocation Process model. In this example, we can set up the Model Context to select default members for any of the Entity, Account, Customer, Activity, Driver, and Product dimensions.



As you consider the types of calculations you will be doing, think about whether it makes sense to narrow down the calculations to specific members for any of these dimensions.

In this example, allocations or calculations will affect all of the activities, customers, products, entities, and several accounts at some point. That leaves the Driver dimension. Assume that Driver has only one member, and there is only one rule that uses that member. Since Driver will only be used in one rule, you will save yourself time in the modeling process by creating a Model Context that defines the default selection for the Driver dimension.



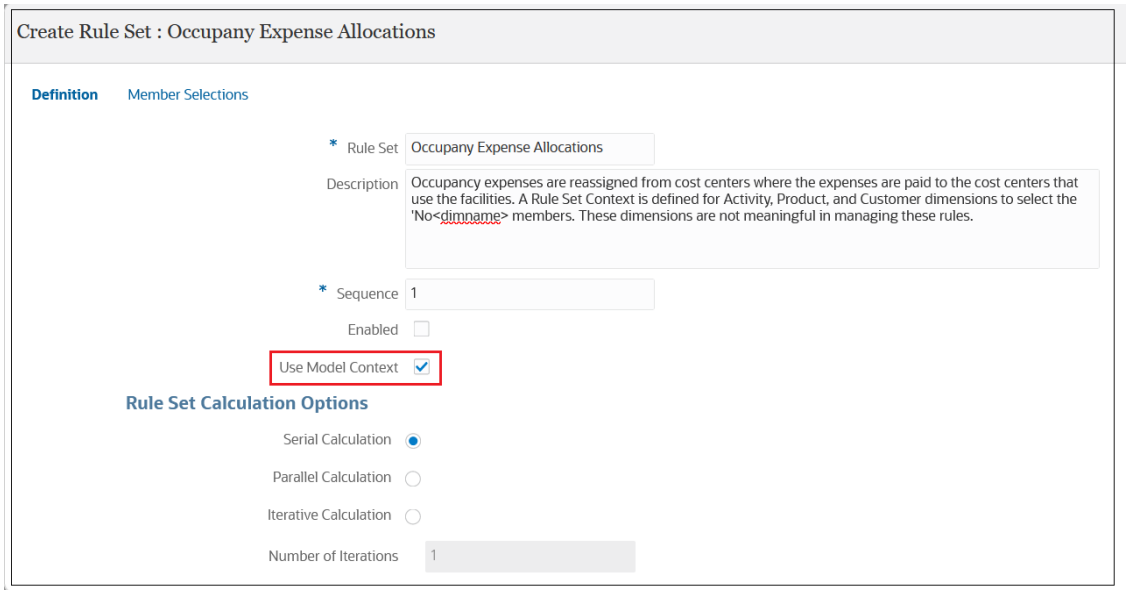
Copyright © 2022, 2026, Oracle and/or its affiliates.

Since we are not assigning an actual database member to the the Driver dimension, we will select *NoDriver* for the default member selection. *NoDriver* is a member that fufills the requirement that every dimension must have a member even if the dimension is not used in the rule. (The *NoDriver* member was set up and added to the Driver custom dimension when the Driver dimension was created.)

At this point, our context selections are:

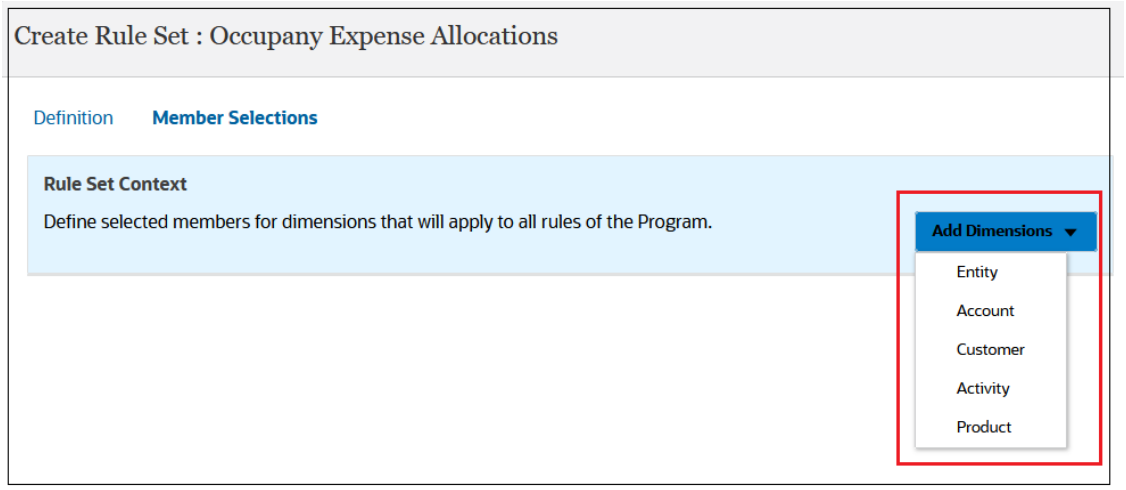
Dimensions required for rule source & destination	Model Context Dimension Selection
Driver	NoDriver
Activity	
Customer	
Product	
Entity	
Account	

The next step is to create the Occupancy Expense Allocations rule set. In this rule set, we want to use the Model Context we defined when we created the 10 Actuals Allocation Process model, where we set the Driver dimension to *NoDriver*. To do this, we will select **Use Model Context** in the **Definition** tab on the **Create Rule Set** page.

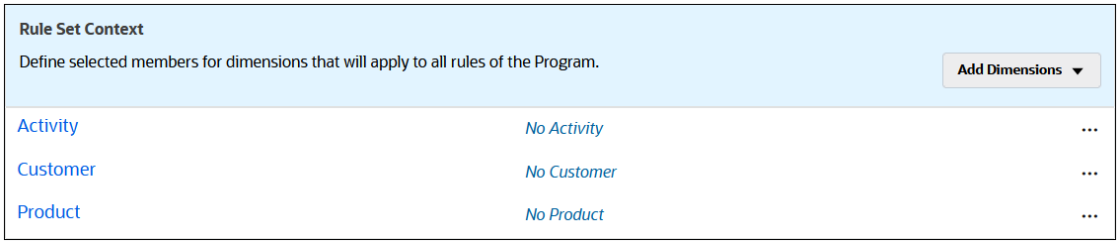


In addition to using the Model Context, we can create a Rule Set Context to define default members for any of the Entity, Account, Customer, Activity, and Product dimensions. (Note that the Driver dimension is not available to select in the Rule Set Context. This is because we enabled the Model Context, which has *NoDriver* defined for the Driver dimension. Any dimensions defined in the Model Context are not available to select in the Rule Set Context.)

Copyright © 2022, 2026, Oracle and/or its affiliates.



Since we are creating rules for the Occupancy Expense Allocations rule set, we will *not* be moving data in the Activity, Product, or Customer dimensions, but we will be moving data in the Entity and Account dimensions. Since the Activity, Product, and Customer dimensions do not apply to the rules we will create in the rule set, we will set the Rule Set Context to *No Activity*, *No Customer*, and *No Product* for these dimensions.



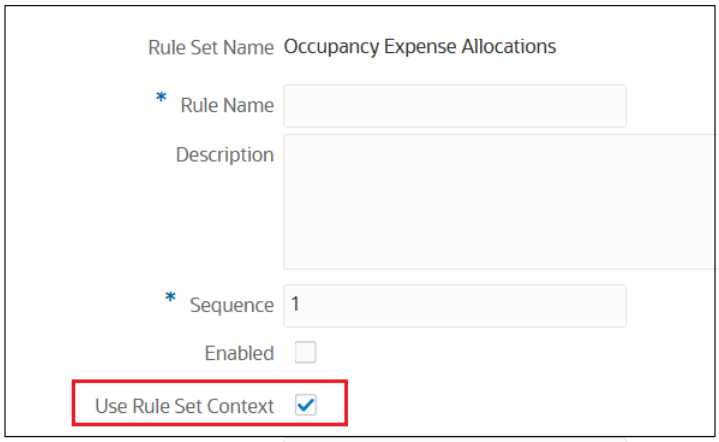
As we did with the *NoDriver* selection we defined in the Model Context, we are assigning these "No<*dimname*>" members to fulfill the requirement that every dimension must have a member even if the dimension does not apply in the rule. Making these selections in the Rule Set Context means that you will not have to select members for these dimensions in any new rules that you create in the rule set.

At this point, our context selections are:

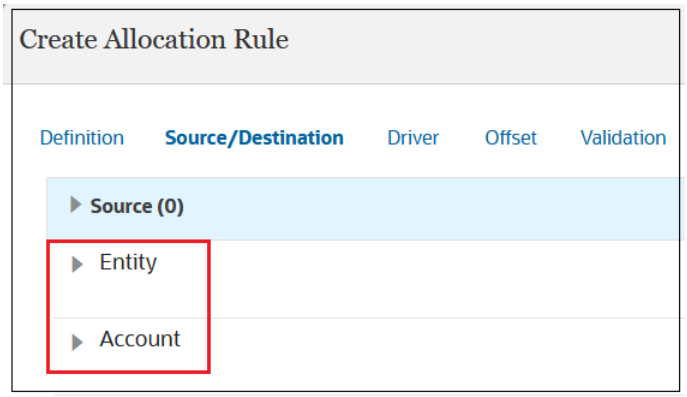
Dimensions required for rule source & destination	Model Context Dimension Selection	Rule Set Context Dimension Selection
Driver	NoDriver	No Driver
Activity		No Activity
Customer		No Customer
Product		No Product
Entity		
Account		

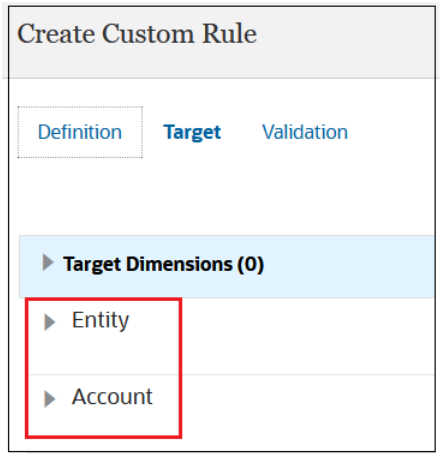
We are now ready to create the rules in the Occupancy Expense Allocations rule set. For each rule that we create in this rule set, we will select **Use Rule Set Context**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Remember that the Rule Set Context in this example includes the Activity, Customer, and Product dimensions. In addition, the Rule Set also uses the Model Context, which set a default value for the Driver dimension. So, when we get to the definiton screen at the rule level, we will only see options to select members for Entity and Account.





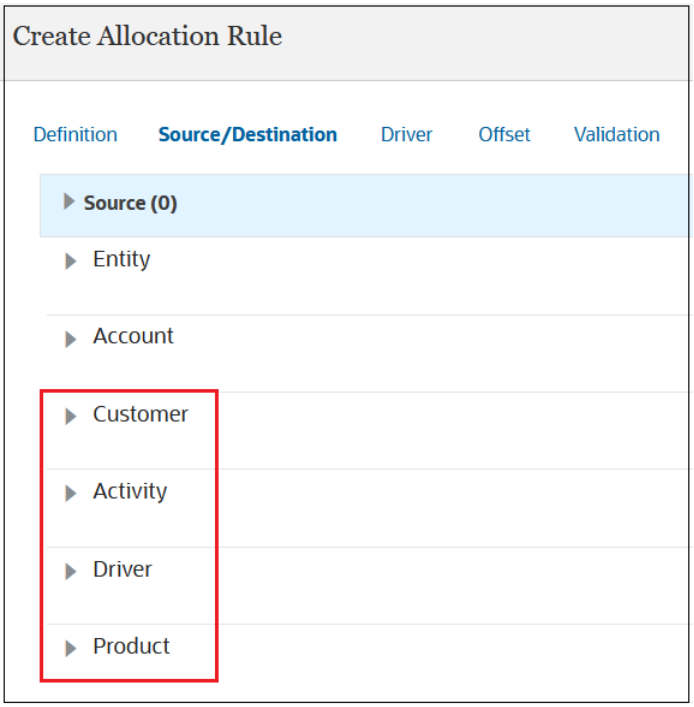
At this point, our context selections are:

Copyright © 2022, 2026, Oracle and/or its affiliates.

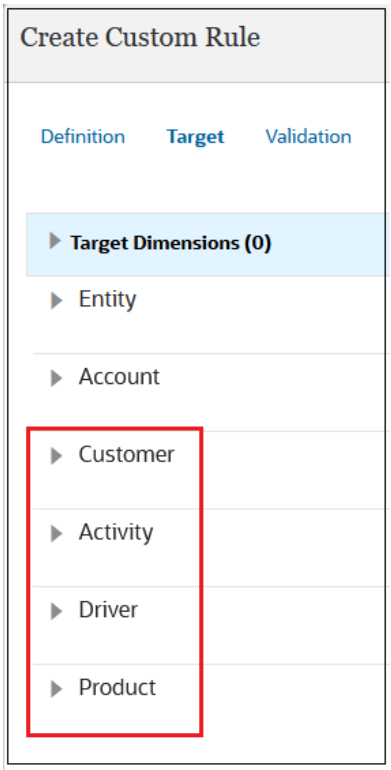
Dimensions required for rule source & destination	Model Context Dimension Selection	Rule Set Context Dimension Selection	Rule Dimension Selection
Driver	NoDriver	No Driver	No Driver
Activity		No Activity	No Activity
Customer		No Customer	No Customer
Product		No Product	No Product
Entity			
Account			

If you are creating a rule where either the Model Context or Rule Set Context does not apply, you can disable these selections. At the Rule level, you handle exceptions by deselecting **Use Rule Set Context**. At the Rule Set level, you handle exceptions by deselecting **Use Model Context**. Note that since the Rule Set Context also includes the Model Context, if you deselect **Use Rule Set Context**, you are also deselecting **Use Model Context**.

In our example, deselecting **Use Rule Set Context** results in all the dimensions in the application being displayed in the **Source/Destination** tab for allocation rules and in the **Target** tab for custom rules. Specifically, in addition to the Entity and Account dimensions, now the Activity, Customer, and Product dimensions from the Rule Set Context are displayed, and the Driver dimension from the Model Context is displayed.



Copyright © 2022, 2026, Oracle and/or its affiliates.



Now let's consider what would happen if you set up rules in the BksML50 sample application and didn't define a Model Context and a Rule Set Context. Each rule still needs all six dimensions defined for the source and destination in allocation rules or for the target in custom rules. If you didn't define a model and rule set context, you would need to manually select members for all the dimensions for every rule you create. If your rule set contains 200 rules and all of them use same dimensions, it is more efficient to define the members for your dimensions in the Rule Set Context than to select then when you define each rule.

Understanding How System Dimensions Are Used in Rules

Related Topics

- Overview of the PCM_Rule and PCM_Balance System Dimensions
- Understanding PCM_Balance Dimension Members
- PCM_Balance Example

Overview of the PCM_Rule and PCM_Balance System Dimensions

System dimensions in Enterprise Profitability and Cost Management include:

- PCM_Rule Dimension
- PCM_Balance Dimension

PCM_Rule Dimension

The **PCM_Rule** dimension contains all your allocation and custom rules. When you run calculations, the results of each rule are tracked separately. This helps you to individually track the impact of each allocation and calculation, and it allows you to undo any rules that were run.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Sample PCM_Rule Dimension

Member Name	Parent Member	Default Data Storage	Hierarchy	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
PCM_Rule		Never Share	Not Set	Unspecified	Ignore	Ignore	
PCM_Calculation Rules	PCM_Rule	Store	Not Set	Unspecified	Addition	Addition	Calculation Rules
PCM_NoRule	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	NoRule
Utilities Expense Adjustment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Rent and Utilities Reassignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Product Material Allocation	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Activity Costing Assignments	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Executive Office Support Activity Charge Out	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Facilities Support Activity Charge Out	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Finance Suport Activity Charge Out	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
HR Support Activity Charge Out	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
IT Support Activity Charge Out	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Marketing Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Shipping Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Assembly Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Machining Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Finishing Actvity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Quality Assurance Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Customer Service Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Inside Sales Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Outside Sales Activity Assignment	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Customer Support Costs Assignment to Market I	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Product Support Costs Assignment to Market Int	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	
Product COGS Assignment to Market Intersectior	PCM_Calculation Rules	Store	Not Set	Unspecified	Addition	Addition	

> **Note**
>
> The rules in this example are from the BksML50 sample application provided with Enterprise Profitability and Cost Management. See Creating the Sample Application for information on how to access the sample application.

PCM_Balance Dimension

The **PCM_Balance** dimension keeps track of adjustments (custom rules) and allocations (allocation rules), while preserving the original input data. The PCM_Balance dimension has three main functions:

- Separates input values from calculated values
- Maintains a Net Balance when many rules act on a single location to allocate funds in or out and adjust values up or down
- Creates a remainder amount to track how much unallocated amounts remain available for future rules to allocate

PCM_Balance Dimension

Member Name	Parent Member	Default Data Storage	Hierarchy	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
PCM_Balance		Label only	Not Set	Unspecified	Ignore	Ignore	
PCM_Net Balance	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Net Balance
PCM_Input	PCM_Net Balance	Store	Not Set	Unspecified	Addition	Addition	Input
PCM_Net Change	PCM_Net Balance	Store	Not Set	Unspecified	Addition	Addition	Net Change
PCM_Adjustment In	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Adjustment In
PCM_Adjustment Out	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Adjustment Out
PCM_Allocation In	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Allocation In
PCM_Allocation Out	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Allocation Out
PCM_Remainder	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Remainder
PCM_Adjustment In.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Adjustment In
PCM_Adjustment Out.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Adjustment Out
PCM_Allocation In.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Allocation In
PCM_Input.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Input
PCM_OutFlow	PCM_Remainder	Store	Not Set	Unspecified	Addition	Addition	OutFlow
PCM_Allocation Offset Amount	PCM_OutFlow	Store	Not Set	Unspecified	Addition	Addition	Allocation Offset Amount
PCM_Allocation Out.[PCM_OutFlow]	PCM_OutFlow	Shared	Not Set	Unspecified	Addition	Addition	Allocation Out
PCM_System	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	System
PCM_CalculatedDriverValue	PCM_System	Store	Not Set	Unspecified	Addition	Addition	CalculatedDriverValue
PCM_ScratchAllocation Out	PCM_System	Store	Not Set	Unspecified	Addition	Addition	ScratchAllocation Out
PCM_ScratchAllocation In	PCM_System	Store	Not Set	Unspecified	Addition	Addition	ScratchAllocation In

Copyright © 2022, 2026, Oracle and/or its affiliates.

Understanding PCM_Balance Dimension Members

PCM_Balance dimension members include:

- PCM_NetBalance
- PCM_Remainder
- PCM_System

PCM_NetBalance

PCM_NetBalance is the sum of the **PCM_Input** and **PCM_Net Change** members.

Member Name	Parent Member	Default Data Storage	Hierarchy	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
PCM_Balance		Label only	Not Set	Unspecified	Ignore	Ignore	
PCM_Net Balance	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Net Balance
PCM_Input	PCM_Net Balance	Store	Not Set	Unspecified	Addition	Addition	Input
PCM_Net Change	PCM_Net Balance	Store	Not Set	Unspecified	Addition	Addition	Net Change
PCM_Adjustment In	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Adjustment In
PCM_Adjustment Out	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Adjustment Out
PCM_Allocation In	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Allocation In
PCM_Allocation Out	PCM_Net Change	Store	Not Set	Unspecified	Addition	Addition	Allocation Out
PCM_Remainder	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Remainder
PCM_System	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	System

- **PCM_Input**: Where data is loaded. The **PCM_Input** value is never overritten. This is important because if a calculation is reversed or calculated values are cleared, you can go back to the original input value.
- **PCM_Net Change**: The sum of **PCM_Adjustment In**, **PCM_Adjustment Out**, **PCM_Allocation In**, and **PCM_Allocation Out**.
  - **PCM_Adjustment In**: Typically used in Custom rules.
  - **PCM_Adjustment Out**: Typically used in Custom rules.
  - **PCM_Allocation In**: Where the allocated values are written in the *destination* in an Allocation rule. An allocation in is typically a positive value.
  - **PCM_Allocation Out**: Where the offsetting entry is written in the *source* in an Allocation rule. An allocation out is typically a negative value.

PCM_Remainder

PCM_Remainder tracks the build up of costs as rules are added to **PCM_Input**.

Member Name	Parent Member	Default Data Storage	Hierarchy	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
PCM_Balance		Label only	Not Set	Unspecified	Ignore	Ignore	
PCM_Net Balance	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Net Balance
PCM_Remainder	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Remainder
PCM_Adjustment In.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Adjustment In
PCM_Adjustment Out.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Adjustment Out
PCM_Allocation In.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Allocation In
PCM_Input.[PCM_Remainder]	PCM_Remainder	Shared	Not Set	Unspecified	Addition	Addition	Input
PCM_OutFlow	PCM_Remainder	Store	Not Set	Unspecified	Addition	Addition	OutFlow
PCM_Allocation Offset Amount	PCM_OutFlow	Store	Not Set	Unspecified	Addition	Addition	Allocation Offset Amount
PCM_Allocation Out.[PCM_OutFlow]	PCM_OutFlow	Shared	Not Set	Unspecified	Addition	Addition	Allocation Out
PCM_System	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	System

Typically, the remainder amount is increased by the allocation amount received from the source (allocation in), and reduced by the amount allocated to the destination (allocation out).

In some rare cases, only a portion of a source is allocated, or a balancing entry is posted to a location other than the source (see Defining an Allocation Rule Offset).

For example, assume you have a cost center hierarchy with an Administration member, and the Administration member includes Finance, Human Resources, and Executive Office.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Assume further that you run a rule that allocates Executive Office salaries, and then you run another rule that allocates Administration salaries. Since Administration salaries also include Executive Office salaries, the System dimension maintains a Remainder amount to ensure that the Executive Office salaries are not allocated a second time, as well as ensuring that any executive salaries received by the Administration department are also allocated.

By default, offsetting entries are wriiten to the **PCM_Allocation Out** member in the source. If you specify an alternate offset location then **PCM_Allocation Out** is written to the alternate location and **PCM_Allocation Offset Amount** is written to the source. This allows you to place the offset to the desired location and still reduce the remainder value in the source so it can no longer allocate any amounts.

The following children of **PCM_Remainder** are shared members. Shared members allow you to roll up the same members in different ways to calculate different values, thereby building an alternative hierarchy.

- PCM_Input
- PCM_Adjustment In
- PCM_Adjustment Out
- PCM_Allocation In
- PCM_Allocation Out

PCM_System

The **PCM_System** member holds temporary values used by the calculation engine during the execution of a rule. The values are erased after the rule is executed.

Member Name	Parent Member	Default Data Storage	Hierarchy	Data Type	PCM_CLC Consol op.	PCM_REP Consol op.	Default Alias Table
PCM_Balance		Label only	Not Set	Unspecified	Ignore	Ignore	
PCM_Net Balance	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Net Balance
PCM_Remainder	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	Remainder
PCM_System	PCM_Balance	Store	Not Set	Unspecified	Addition	Addition	System
PCM_CalculatedDriverValue	PCM_System	Store	Not Set	Unspecified	Addition	Addition	CalculatedDriverValue
PCM_ScratchAllocation Out	PCM_System	Store	Not Set	Unspecified	Addition	Addition	ScratchAllocation Out
PCM_ScratchAllocation In	PCM_System	Store	Not Set	Unspecified	Addition	Addition	ScratchAllocation In

PCM_Balance Example

The **PCM_Balance** dimension keeps track of adjustments (custom rules) and allocations (allocation rules), while preserving the original input data. We will demonstrate this using an example.

Assume you have the following members and POV:

- **Entities:** Corp HQ, Marketing, Sales, Finance
- **Account:** Utilites
- **POV:** Actual, FY22, Jan, Working

The grid shows the **PCM_Balance** members in the columns, and the entites in the rows.

Copyright © 2022, 2026, Oracle and/or its affiliates.

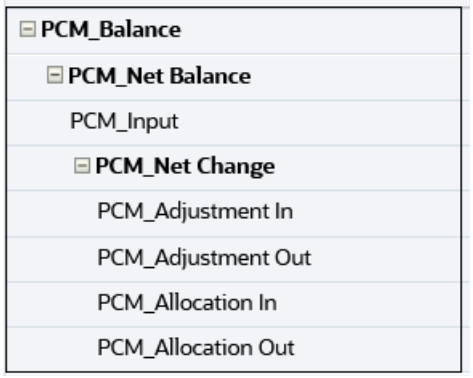
	A	B	C	D	E	F	G
1	Actual	FY22	Jan	Working	Utilities		
2							
3		Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
4	Corp HQ						
5	Marketing						
6	Sales						
7	Finance						
8	Total						

In this example, we will:

- Load input data
- Run a custom rule to adjust the utilities expenses by 10%
- Run an allocation rule to allocate the adjusted data from Corporate HQ to the other three entities (Marketing, Sales, Finance)

After we load the data and run the rules, you will see that the **Input** total does not change, and the **Net Balance** only changes when we add an adjustment entry to modify the data.

As we go through this example, remember that **PCM_Net Balance** is the sum of **Input**, **Allocation In**, **Allocation Out**, **Adjustment In**, and **Adjustment Out**.



Step 1: Load input data

We will begin by loading input data. In this example, we will load **Utilites** expenses of **$3,000** to the intersection of **Actual->FY22->Jan->Working->Utilities->Corp HQ->Input**.

	A	B	C	D	E	F	G
1	Actual	FY22	Jan	Working	Utilities		
2							
3		Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
4	Corp HQ	$ 3,000					$ 3,000
5	Marketing						$ -
6	Sales						$ -
7	Finance						$ -
8	Total	$ 3,000	$ -	$ -	$ -	$ -	$ 3,000

Step 2: Run a custom rule to adjust Corp HQ utilities by 10%

The next step is to run a custom rule to adjust the utilities expenses by 10%. The adjustment calculation is `[PCM_Adjustment In]:=([PCM_Input],[PCM_Rule])*.10;` with a target of **Corp HQ->Utilities**. The system finds the **Input** value for **Corp HQ->Utilities** and writes the adjustment value to the **Adjustment In** member. In this example, we specified the destination in our formula; it wasn't chosen by the system automatically.

Copyright © 2022, 2026, Oracle and/or its affiliates.

	A	B	C	D	E	F	G
1	Actual	FY22	Jan	Working	Utilities		
2							
3		Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
4	Corp HQ	$ 3,000			$ 300		$ 3,300
5	Marketing						$ -
6	Sales						$ -
7	Finance						$ -
8	Total	$ 3,000	$ -	$ -	$ 300	$ -	$ 3,300

Step 3: Run an allocation rule to allocate the adjusted data from Corporate HQ to Marketing, Sales, and Finance

When we run the allocation rule, the system takes **Corp HQ->Utilities->Net Balance** and allocates that to the other **Entities->Utilities->Allocation In** members, while also creating an offsetting entry for **Corp HQ->Utilities->Allocation Out**.

	A	B	C	D	E	F	G
1	Actual	FY22	Jan	Working	Utilities		
2							
3		Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
4	Corp HQ	$ 3,000		$ (3,300)	$ 300		$ -
5	Marketing		$ 1,100				$ 1,100
6	Sales		$ 1,100				$ 1,100
7	Finance		$ 1,100				$ 1,100
8	Total	$ 3,000	$ 3,300	$ (3,300)	$ 300	$ -	$ 3,300

Notice that after running these rules, the **Input** total of **$3,000** did not change, and the **Net Balance** only changed when we added the adjustment entry to modify the data. The allocation moves data around to different places, but *none of the rule calculations ever change the Input data*. If after running the rules, the Net Balance for Corporate HQ was $0, you could still go back and see the $3,000 that was originally loaded.

If we add the **PCM_Rule** dimension to this example, the information in the grid displays as follows. (The **All Rules** section aggregates all three steps.)

Copyright © 2022, 2026, Oracle and/or its affiliates.

	A	B	C	D	E	F	G	H
1	Actual	FY22	Jan	Working	Utilities			
2								
3			Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
4	No Rule	Corp HQ	$ 3,000					$ 3,000
5		Marketing						$ -
6		Sales						$ -
7		Finance						$ -
8		Total	$ 3,000	$ -	$ -	$ -	$ -	$ 3,000
9								
10			Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
11	Rule 1	Corp HQ				$ 300		$ 300
12		Marketing						$ -
13		Sales						$ -
14		Finance						$ -
15		Total	$ -	$ -	$ -	$ 300	$ -	$ 300
16								
17			Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
18	Rule 2	Corp HQ			$ (3,300)			$ (3,300)
19		Marketing		$ 1,100				$ 1,100
20		Sales		$ 1,100				$ 1,100
21		Finance		$ 1,100				$ 1,100
22		Total	$ -	$ 3,300	$ (3,300)	$ -	$ -	$ -
23								
24	All Rules		Input	Allocation In	Allocation Out	Adjustment In	Adjustment Out	Net Balance
25		Corp HQ	$ 3,000		$ (3,300)	$ 300		$ -
26		Marketing		$ 1,100				$ 1,100
27		Sales		$ 1,100				$ 1,100
28		Finance		$ 1,100				$ 1,100
29		Total	$ 3,000	$ 3,300	$ (3,300)	$ 300	$ -	$ 3,300

Working in Rule Designer 1.0

Related Topics

- About Rule Designer 1.0
- Creating Allocation Rules
- Creating Custom Rules
- Creating Rule Sets
- Creating Multiple Rules
- Creating Multiple Rule Sets
- Viewing Rule Definitions
- Renaming Rules
- Using the Designer 1.0 Waterfall Setup Tab
- Using the Designer 1.0 Mass Edit Tab

About Rule Designer 1.0

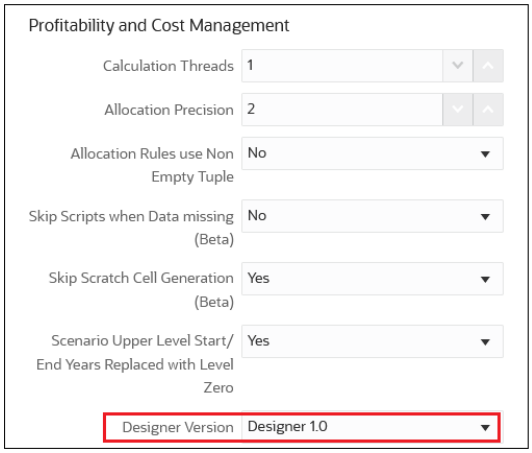
Use the Rule Designer to create and manage rules and rule sets.

To specify 1.0 as the version of the Rule Designer to use:

1. From the Home page, select **Actions**, and then **Settings**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Under **Profitability and Cost Management**, set the **Designer Version** to **Designer 1.0**.



To access Rule Designer 1.0:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Once you are in the Rule Designer, you can:
   - Use the **Waterfall Setup** tab to create, edit, delete, and copy rule sets and rules. The Waterfall Setup tab shows the full sequence of rule sets and rules for the model. See Using the Designer 1.0 Waterfall Setup Tab.
   - Use the **Mass Edit** tab to add and replace members, copy rules to rule sets and models, and enable and disable rules. See Using the Designer 1.0 Mass Edit Tab.

Creating Allocation Rules

Related Topics

- About Creating Allocation Rules
- Creating an Allocation Rule Definition
- Defining an Allocation Rule Source and Destination
- Defining an Allocation Rule Driver
- Defining an Allocation Rule Offset
- Validating Allocation Rules
- Running a Rule Data Validation Report for Allocation Rules
- Using Ad Hoc to Analyze Allocation Rule Data

About Creating Allocation Rules

When you create an allocation rule, you define the following information:

- **Source**: Where the data you are allocating starts out
- **Destination**: Where the allocated data needs to go
- **Driver**: How to split the source data across the destinations
- **Offset**: How to balance out the allocated data

By default, allocation rules allocate 100% of the amounts in the source intersections. The allocation driver determines the proportion each destination intersection receives using a driver

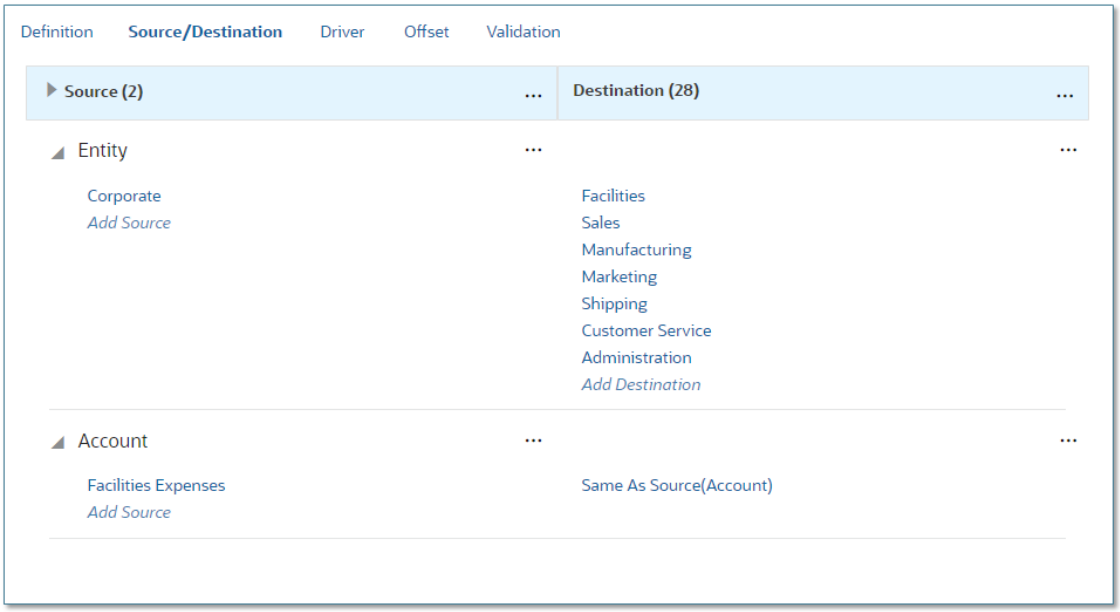
Copyright © 2022, 2026, Oracle and/or its affiliates.

value / total driver value ratio. If a destination has no driver value, then it receives no allocation. The source amounts automatically include any amounts allocated to the source intersections by previously-executed rules.

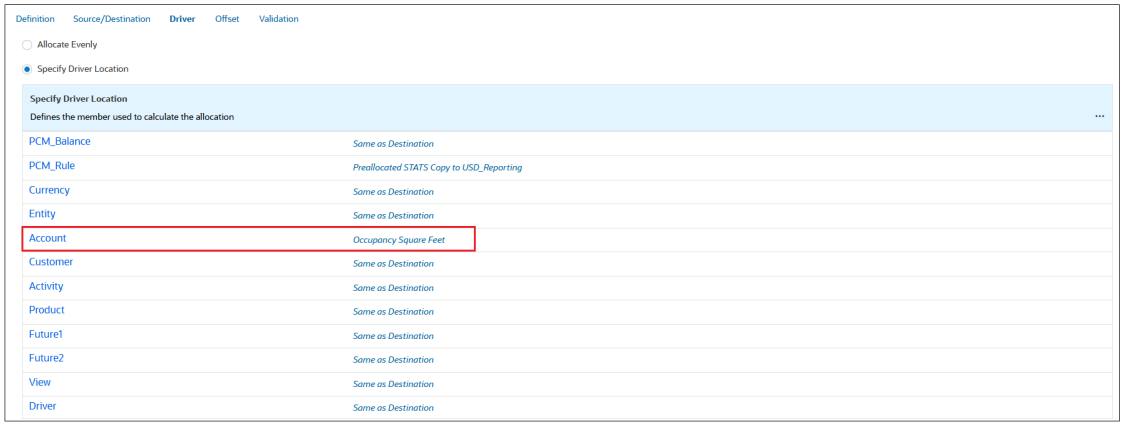
> **Tip**
>
> Review Dimension and Member Requirements When Creating Rules before you begin creating your allocation rules.

Allocation Rule Example

In this example, facilities expenses for the **Corporate** cost center are allocated to the **Facilities** account across multiple cost centers.

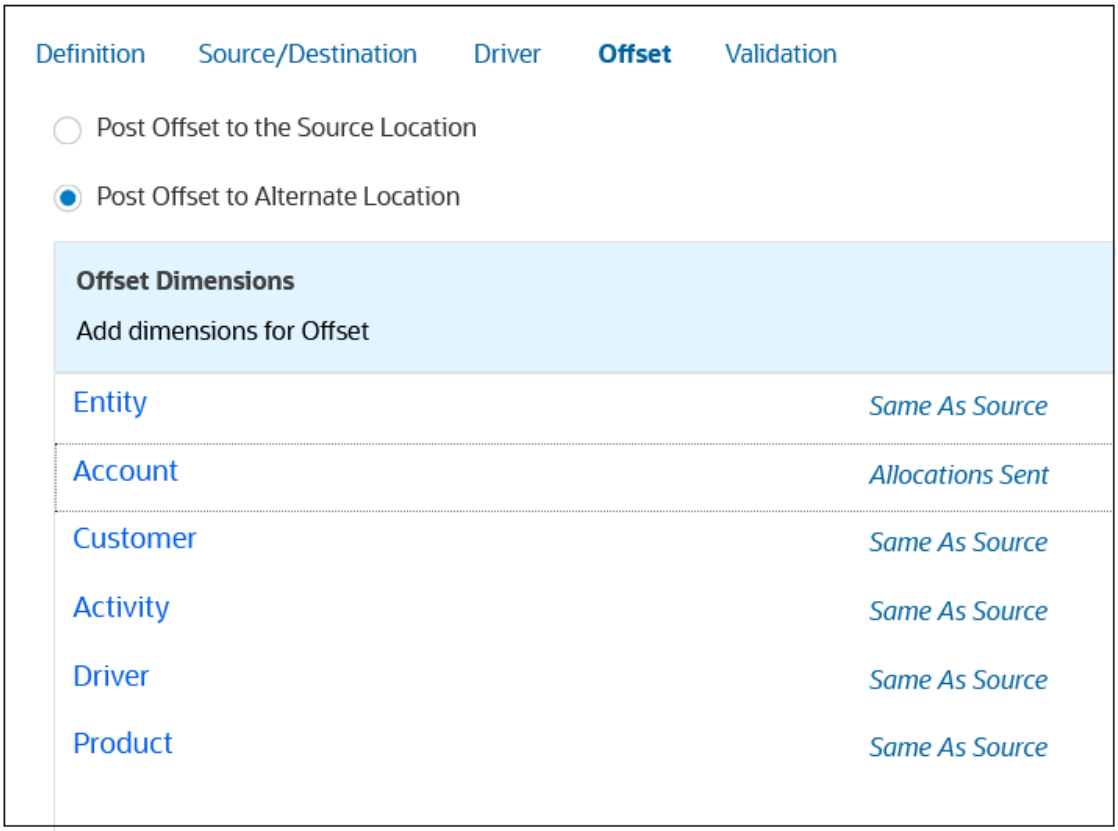


The **Facilities** allocation uses a driver of **Occupancy Square Feet**.



The offset tells the sytem to post the allocated data to an alternate location.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Note

The allocation rule in this example is used in the BksML50 sample application provided with Enterprise Profitability and Cost Management. See Creating the Sample Application for information on how to access the sample application.

Creating an Allocation Rule Definition

To create an allocaton rule definition:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the **Model** drop-down, and select a model.
3. Select the rule set to which you want to add the allocation rule.
4. Click +, and then select **Allocation Rule**.
5. On the **Create Allocation Rule** page, in the **Definition** tab, enter the following information:
   - **Rule Name**: Enter a name for the rule.

     For example, the "Occupancy Expense Allocations" rule set in the the BksML50 sample application provided with Enterprise Profitability and Cost Management, contains an allocation rule called "Rent and Utilities Reassignment" .

     Rule names have the same restrictions as the member names in Oracle Essbase. See Naming Restrictions for Dimensions, Members, and Aliases.
   - **Description**: Enter a description for the rule.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The description you enter here will appear in the Model Documentation report. Enter a description that will make the information about the allocation rule informative for anyone reviewing the model logic in the future. See Generating a Model Documentation Report.

For example, you could say something like; "Rent and Utility expenses are reassigned from the Corporate cost center to the business function cost centers. A driver based on the square feet of each building used by each cost center is used to apportion the expenses."

- **Sequence**: Enter a number to determine the order in which the rule will run in the rule set.

  The Sequence can be any whole number from 1 to 9999.

  Rules with the same sequence number will run at the same time if parallel calculation is enabled for the parent rule set, and the number specified for **Calculation Threads** in the Applications Settings. (See "Step 5: Select a Rule Set Calculation Option" in Creating a Rule Set, and "Calculation Threads" in About Managing Application and System Settings.)

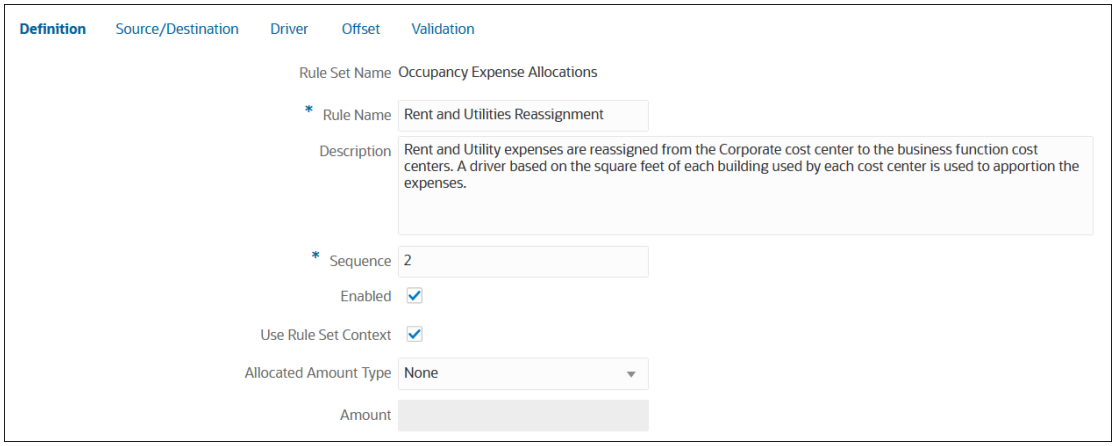
- **Enabled**: If selected, the rule will be active when the calculation is performed.
- **Use Rule Set Context**: If selected, the member selections done when the rule set was created will apply to this rule. If a Model Context has been enabled for the rule set, it will also be applied. See Understanding Model and Rule Set Context.
- **Allocated Amount Type**: Limits how much of the source is allocated. Select an option:
  - **None**: This is the default option. If selected, all of the money in the source is allocated.
  - **Currency**: If selected, limits the amount allocated from each source intersection by the currency value entered in the **Amount** field. For example, an amount of 1000 would limit the allocation from each cell to 1000 of whatever currency is used.
  - **Percentage**: If selected, limits the amount allocated from each source intersection by the percentage entered in the **Amount** field. For example, 50 would limit the allocation from each cell to 50%.
- **Amount**: If you select **Currency** or **Percentage** for the **Allocated Amount Type**, enter the currency value or the percentage value to allocate in the rule.

6. Click **Save**.

Allocation Rule Definition Example

In this example, the Rent and Utilites Reassignment rule will be the second rule run in the Occupancy Expense Allocations rule set. It will use a previously-defined Rule Set Context, and does not have a specific allocated amount type.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Defining an Allocation Rule Source and Destination

Use the **Source/Destination** tab on the **Create Allocation Rule** page to define how to allocate data from the source to the destination.

When you first access the **Source/Destination** tab, the required Entity and Account dimensions, the optional Currency dimension if you have a multicurrency application, and any custom dimensions in your application are displayed in the **Source** column. If you have defined and enabled a Rule Set Context or a Model Context, any dimensions defined in the Rule Set Context or a Model Context are not displayed. See Understanding Model and Rule Set Context.

Review these topics for more information:

- Best Practices for Allocation Rule Source and Destination
- Defining an Allocation Source
- Defining an Allocation Destination
- Setting the Destination to Same As Source
- Allocating to Parent/Siblings
- Using Shadow Parent Members in Hierarchy Allocation
- Defining Member Matching Expressions
- Managing Filters for Source and Destination Members
- Allocation Source/Destination Example

Best Practices for Allocation Rule Source and Destination

- Avoid using tops of hierarchies in rule Source, Destination or Targets whenever possible.

  The database is efficient, but compact rule definitions can make it more efficient.

  For example, a source defined as "AllAccounts", "AllEntities", "AllCompanies", and " AllProducts ", where Accounts, Entities, Companies, and Products each have 1000 level 0 members requires the database to scan 1000^4 (1 trillion) potential locations for source data.

- Use the "Same as Source" option in the allocation destination. See Setting the Destination to Same As Source.

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - Allows you to use a single rule to process many source combinations where you want allocations to "stay home" for some dimensions and spread across others
  - Often allows one Enterprise Profitability and Cost Management rule to replace many rules from a legacy system
- Source member selections should favor the parent member.
  - Avoid picking individual children if you can pick a parent, or use an alternate hierarchy designed for rule processing that allows you to group members in a common parent.
  - Oracle Essbase is often much faster if it can process all descendants of a parent instead of making multiple passes for each child.
- Questionable source and destination combinations need to be challenged.

  For example, if both your Source and Desitnation is "Total Entity", you will have a large cross product of Entity combinations.
- If you adopt allocation rule designs from a legacy system, make sure you understand the true business requiment before applying them to your rules in Enterprise Profitability and Cost Management.

Defining an Allocation Source

Begin by defining the members from which the rule will retrieve the data to allocate.

For each dimension in the **Source** column, select the member or members that hold the data to allocate. You must select a member for every dimension. If a dimension does not apply to the data in your rule, select the No<*dimname*> member. See Dimension and Member Requirements When Creating Rules.

To select members for the source:

1. Expand a dimension in the **Source** column.
2. Click **Add Source**, and then click .
3. In the **Select Members** dialog box, select the desired members, and click **OK**. See Using the Member Selector.

   If you have several members to add to the source dimensions and you know the member names, instead of adding each member one-by-one from the **Select Members** dialog box, you can click to the right of the **Source** heading and enter the members in the **Dimension Member Editor**.

   For example, if you have a list of members in an Excel spreadsheet, you can copy these members from Excel, and then paste them into the **Dimension Member Editor**. The members will be added to the dimensions in the source to which they were assigned when the dimensions were created. See Adding Members to a Dimension.

> **Note**
>
> The members you enter in the **Dimension Member Editor** can be assigned to any applicable dimension in the source. To add multiple members to a specific dimension, click next to the dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Tip**
>
> Selecting an upper-level member selects all the descendants of that member. For example, if you choose "All Accounts", then your selection is really all the Level 0 descendants of "All Accounts". The rule will execute an allocation for each level-0 member. Selecting an upper-level member eliminates the need to pick each specific member individually.

You can also click next to a dimension in the **Source** column, and select one of the following options:

- **Add Multiple Members Source**: Accesses a dialog box where you can assign multiple members to the dimension at one time instead of having to individually select each member.
- **Calculation Segmentation:** If selected, rules are segmented into smaller rules to execute separately. This enables the calculation to process rules with a very large data range, which would otherwise be too large for Oracle Essbase to process. Calculation segmentation is enabled for up to two dimensions in each rule.

  > **Note**
  >
  > You should use Calculation Segmentation only when your source range is extremely large and sparsely populated. As a best practice, you should call support before proceeding with this option.

- **Clear <Dimname> Selections**: Clears all of the members you have selected for the dimension.

  To remove an individual member, click on the member, and then select **Remove*<MemberName>***, where *<MemberName>* is the name of the member you are removing.

> **Note**
>
> See Managing Filters for Source and Destination Members for information on how to filter the source and destination members used in a rule.

Defining an Allocation Destination

After defining an allocation source, the next step is to define the members that describe where to allocate the data.

For each dimension in the **Destination** column, select the members that are to receive the allocated data. If you select a parent member, the allocation will go to its all its level 0 descendants.

To select members for the destination:

1. Click next to a dimension in the **Source** column to expand it.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. In the **Destination** column, click **Add Destination**, and then click .
3. In the **Select Members** dialog box, select the desired members, and click **OK**. See Using the Member Selector

   If you have a large number of members to add to the destination dimensions and you know the member names, instead of adding each member one-by-one from the **Select Members** dialog box, you can click to the right of the **Destination** heading and enter the members in the **Dimension Member Editor**.

   For example, if you have a list of members in an Excel spreadsheet, you can copy these members from Excel, and then paste them into the **Dimension Member Editor**. The members will be added to the dimensions in the desination to which they were assigned when the dimensions were created. See Adding Members to a Dimension.

   > **Note**
   >
   > The members you enter in the **Dimension Member Editor** can be assigned to any applicable dimension in the destination. To add multiple members to a specific dimension, click next to the dimension.

   You can also click next to a dimension in the **Destination** column, and select one of the following options:

   - **Add Multiple Members Destination**: Accesses a dialog box where you can enter multiple members to the dimension at one time instead of having to individually select each member.
   - **Set Destination Same As Source**: Defines the members set for a destination dimension to be the same as the members set for the source dimension. See Setting the Destination to Same As Source.
   - **Allocate to Parent**: Creates a source to destination relationship for every member selection in the source, and targets its value to the member's parent. See Allocating to Parent/Siblings.
   - **Allocate to Siblings**: Creates a source to destination relationship for every member selection in the source, and targets its value to the member's siblings. See Allocating to Parent/Siblings.
   - **Clear <*Dimname*> Selections**: Clears all of the members you have selected for the dimension.

     To remove an individual member, click on the member, and then select **Remove<*MemberName*>**, where <*MemberName*> is the name of the member you are removing.

> **Note**
>
> See Managing Filters for Source and Destination Members for information on how to filter the source and dimension members used in a rule.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Setting the Destination to Same As Source

You can define the members for a dimension in the destination to be the same as the members selected for a dimension in the source. In this case, when the rule runs, members in the destination are selected for allocation by matching to the member selection in the source. Members in the source selection that are not level 0 are resolved to level 0 members and then are matched with level 0 members in the destination. This means that values associated with a source member are not allocated to other members for the dimension, but will remain associated with the same member as the source.

To set the destination members to be the same as the source members:

1. Click ... next to a dimension in the **Destination** column.
2. Select **Set Destination Same As Source**.

When you select **Set Destination Same As Source**, you can select the same dimension used in the source (*Same as Source, Same Dimension*), or you can select a different dimension (*Same as Source, Different Dimension*).

> **Note**
>
> When defining dimensions as Same as Source, you must have at least one dimension that is not defined as Same as Source.

Same as Source, Same Dimension

Select the same dimension that you used in the source if you want to allocate to the same *members* in the destination dimension that you used in the source dimension. This is the default.

In this example, we selected the Account dimension, which is the same as the source Account dimension.

When defining the destination range, you can use the *Same as Source, Same Dimension* option for as many dimensions as desired.

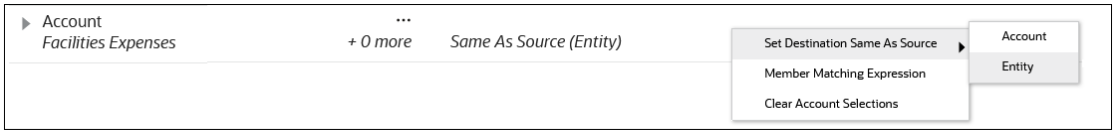
Same as Source, Different Dimension

In rare cases when dimension members in different dimensions are nearly identical, you can use the *Same as Source, Different Dimension* option. In this case, you are requesting that the destination members match the source members you selected for a different dimension.

Selecting a different dimension than the source dimension allows you to create source and destination references with dimensions that use members names that occur in multiple dimensions. For example, you could use both the Origin Entity and Target Entity dimensions in order to track sending and receiving entities in the allocation results.

In this example, we selected the Entity dimension, which is different than the source Account dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.



When defining the destination range, you can use the *Same as Source, Different Dimension* option for only one dimension.

> **Note**
>
> When using the *Same as Source, Different Dimension* option, keep in mind that you cannot have duplicate member names, even if the members are in different dimensions. For example, if you had an Entity called *Sales* and an Account called *Sales*, you would use a prefix to differentiate the members. For example, *ENT_Sales* and *ACC_Sales*.
>
> See Defining Member Matching Expressions for information on how to define expressions to match member names.

Allocating to Parent/Siblings

The **Allocate to Parent** and **Allocate to Siblings** destination options create a source to destination relationship for every member selection in the source, and target its value to either the member's parent or siblings. Members are allocated by specific member selection and/or by the result of a filter.

These destination options eliminate the need to create individual rules for every unique source and destination combination when trying to express this kind of relationship. With the **Allocate to Parent** destination options, you can define multiple such relationships in a single rule, resulting in decreased maintenance and more easily understandable trace results.

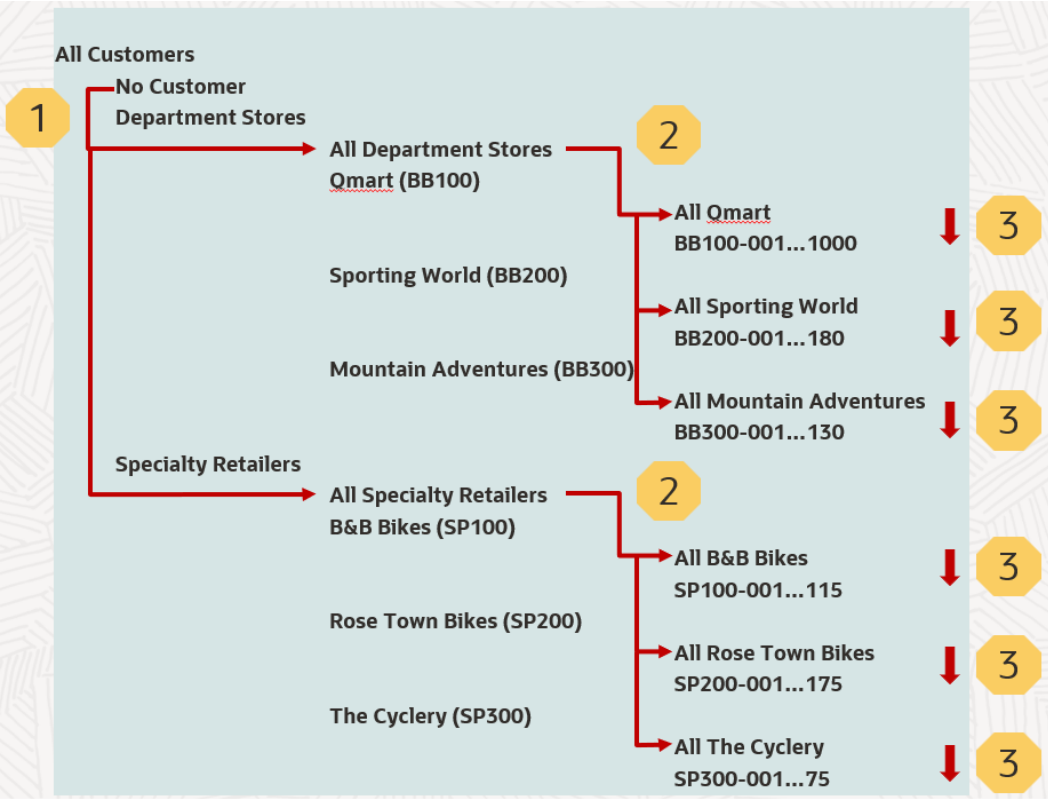
To allocate members in the source to a parent or siblings in the destination:

1. Click ... next to a dimension in the **Destination** column.
2. Select **Allocate to Parent** or **Allocate to Siblings**.

Allocate to Parent/Siblings Example

As an example, assume you have an advertising budget and want to allocate money through Channel categories to Customer Groups and down to Customer Locations.

Copyright © 2022, 2026, Oracle and/or its affiliates.



In this example:

- **1:** Advertising is allocated to Channel categories [All Department Stores, All Speciality Retailers]
- **2:** Channel categories are allocated to Customer Groups [All Qmart, All Sporting World, All Mountain Adventures, All B&B Bikes, All Rose Town Bikes, All the Cyclery]
- **3:** Customer Groups are allocated to Customer Locations [1000 Qmart, 180 Sporting World, 130 Mountain Adventures, 115 B&B Bikes, 175 Rose Town Bikes, 75 The Cyclery]

Now assume you select **All Department Stores**. The results differ depending on whether you choose **Allocate to Parent** or **Allocate to Siblings**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

All Department Stores - Allocate to Parent

With this option, the source Level 0 descendants of All Department Stores are allocated to the following destination:

- Level 0 Descendants of All Department Stores
- (including All Department Stores)

All Department Stores - Allocate to Siblings

With this option, the source Level 0 descendants of All Department Stores are allocated to the following destination:

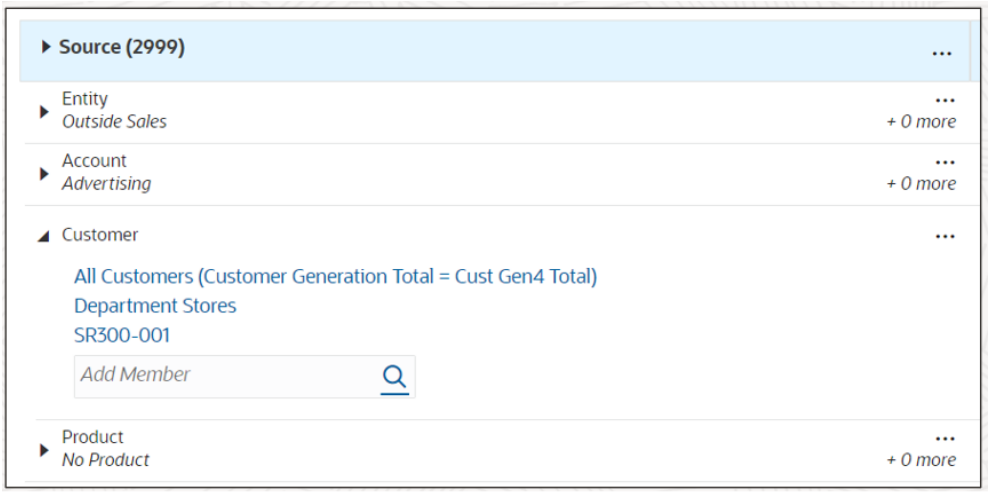
- Level 0 descendants of Qmart
- Level 0 descendants of Sporting World
- Level 0 descendants of Mountain Adventures
- (and *not* All Department Stores)

> **Note**
>
> In this example, **All Department Stores** is a "Shadow Parent Member". See Using Shadow Parent Members in Hierarchy Allocation for more information.

Parent/Sibling Allocations Source Resolution Example

Consider the following allocation information:

Copyright © 2022, 2026, Oracle and/or its affiliates.



Following is the process when allocating to parents or siblings:

First: Source member *selections* are resolved:

- Explicit member selections (Parent or Level 0)
- Resolution of member selections returned from a filter
- Source selection result is:
  - Descendants of All Customers matching filter the "All Customers (Customer Generation Total = Cust Gen4 Total")
  - Upper-Level member "Department Stores"
  - Level 0 member "SR300-001"

Second: Member-based destinations options are applied:

Allocation logic becomes allocate to parent (or siblings) of:

- All Department Stores
- All Specialty Retailers
- Department Stores
- SR300-001

Using Shadow Parent Members in Hierarchy Allocation

ASO databases do not allow storing data at the parent member level, so for each hierarchy branch where a value for the entire branch is desired, you can create a level 0 "shadow" parent member.

Consider the following customer hierarchy:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Member Name	Default Alias Table
Customer	
TotalCustomer	Total Customer
All Customers	All Customers
Department Stores	Department Stores
All Department Stores	All Department Stores
BB100	Qmart
BB200	Sporting World
BB300	Moutain Adventures
Specialty Retailers	Specialty Retailers
All Specialty Retailers	All Specialty Retailers
SR100	B&B Bikes
All B&B Bikes	All B&B Bikes
SR100-001	SR100-001
SR100-002	SR100-002

In this hierarchy, the "shadow" Parent members are:

- All Department Stores
- All Specialty Retailers
- All B&B Bikes

Defining Member Matching Expressions

When selecting a destination dimension that is different than the source dimension, you can define expressions that use wildcard characters to match member names. To do this:

1. Click ... next to the destination dimension, and select **Member Matching Expression**.
2. Enter the expressions for the member names in the **Member Matching Expression** dialog box.

The following characters are available when creating member matching expressions:

- "#" means ignore (trim) one character in the member name
- "*" represents the characters that are left after the characters represented by # are trimmed.

Using the " #" and "*" characters, you can trim a prefix, a suffix, or both a prefix and a suffix from a member name before a match is attempted.

Each expression can have multiple #s, but only one *. For example:

###* trims a 3-char prefix

*#### trims a 4-char suffix

##*### trims both a prefix and a suffix

##*#*## is not allowed

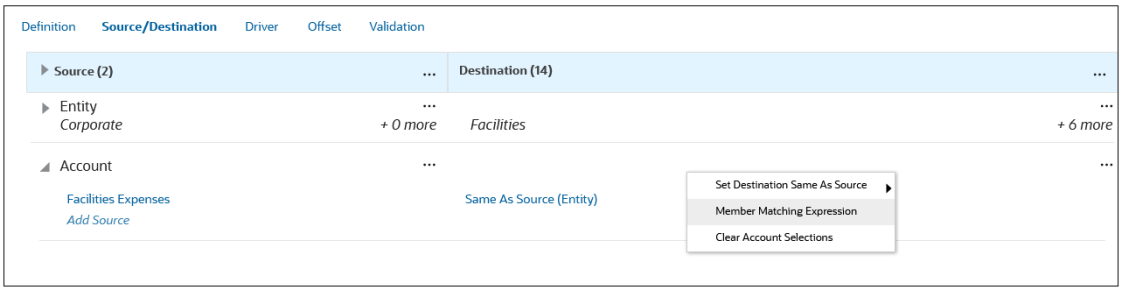
Member Matching Expression Example

Copyright © 2022, 2026, Oracle and/or its affiliates.

Let's consider an example where your application has two dimensions, Entity and Account, with members as follows:

- Entity: mem1_ENT, mem2_ENT, mem3_ENT
- Account: ACCT_mem1, ACCT_mem2, ACCT_mem3

In this example, we will select Account for the source dimension, and set the members in the destination dimension to be the same as the members in the source Account dimension, but with Entity selected for the destination dimension. We will then add expressions to match the members for the Entity and Account dimensions.



In this example, the expressions to match the members for the Entity and Account dimensions are follows:

For Entity, the expression *#### ignores the four characters at the end of the member name _ENT and leaves the characters in the front.

For Account, the expression #####* ignores the five characters ACCT_ and leaves the rest of the characters in the member name to be matched.

Applying both of these expressions results in Entity's mem1_ENT matching with Account's ACCT_mem1.

Managing Filters for Source and Destination Members

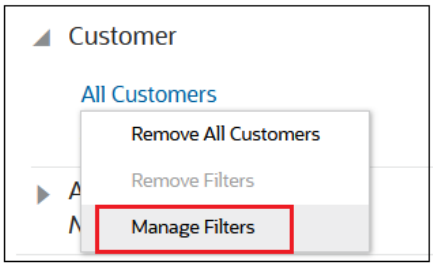
When you select an upper level member for a source or destination dimension in an allocation rule, all level-0 descendants of that member are included in the rule. If you do not want to include all the level-0 descendants in a rule, you can apply a filter to limit the included members.

For example, assume your member selection is All Customers, and All Customers has 1,000 level-0 descendants. Assume further that you want to include only the customers in Delivery Zone B in your rule. In this case, you could apply a filter to limit the level-0 descendants included in your rule to only customers in Delivery Zone B.

To add a filter to a member:

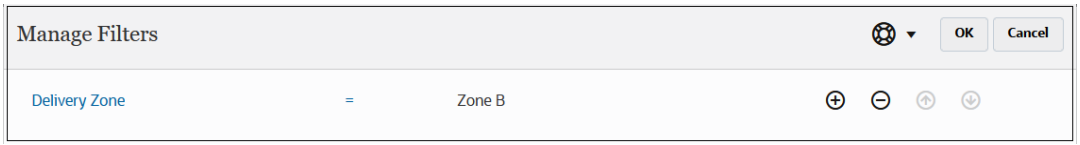
1. In the **Source/Destination** tab, click the desired member and select **Manage Filters**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

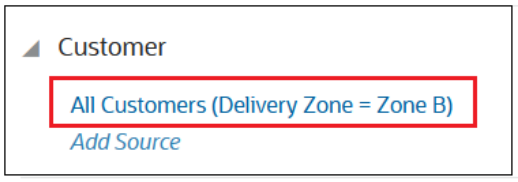


2. In the **Manage Filters** dialog box, click ⊕.
3. Enter the member name and a filter value.

   In our example, we filtered the customers to Delivery Zone B.



   You can add more than one filter. When you add a filter, it is shown next to the member.

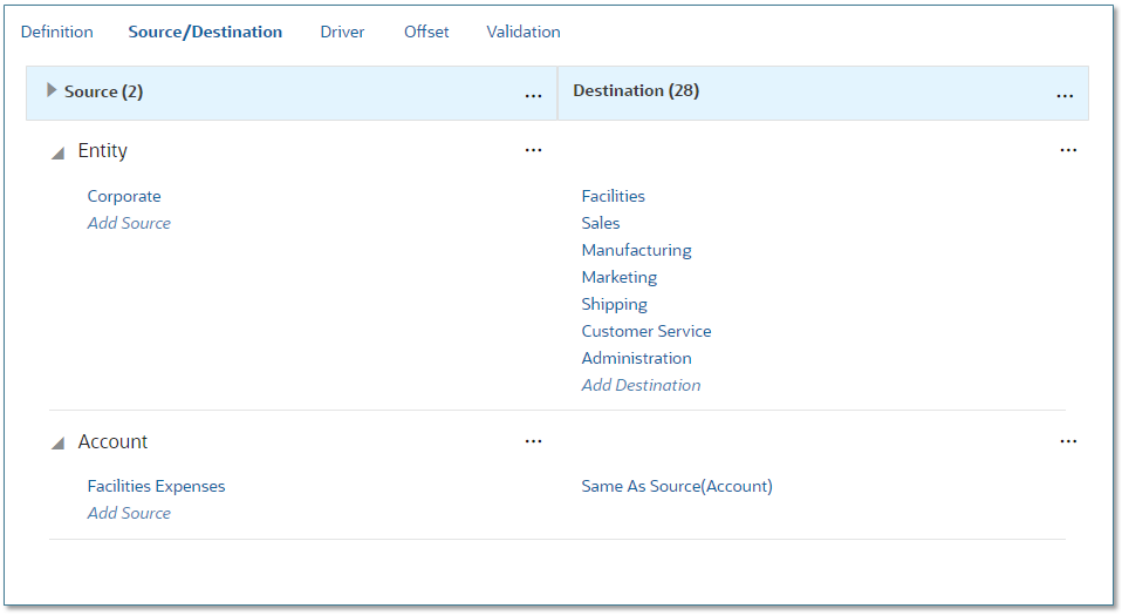


> **Note**
>
> To remove a filter, click the member and select **Remove Filters**. If you have more than one filter, click the filter you want to remove.

Allocation Source/Destination Example

In this example, facilities expenses for the **Corporate** cost center are allocated to the **Facilities Expenses** account across multiple cost centers.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Defining an Allocation Rule Driver

The driver definition tells the system how to split the source data across the destinations.

Select an option to specify how to allocate the data:

- **Allocate Evenly**: Allocates data evenly across all destinations.
- **Specify Driver Location**: Uses a driver to determine the percentages to allocate to each destination. If a destination has no driver value, then it receives no allocation.

If you choose to use a driver to determine the allocation proportions, note the following:

- All of the dimensions in the database are available to use as a driver, regardless of whether a Rule Set Context or a Model Context has been enabled for the rule. (See Understanding Model and Rule Set Context.)
- In addition to the Entity and Account dimensions, optional Currency dimension, and any custom dimensions required to create a rule, the Years, Period, Scenario, and Version POV dimensions and the PCM_Balance and PCM_Rule system dimensions are available for driver selection.
  - The POV dimensions enable you to use a data value from another POV for the driver.
  - The PCM_Rule dimension enables you to use a data value generated by a previous rule for the driver.
  - The PCM_Balance dimension is usually used in combination with the PCM_Rule dimension. When a rule runs, it writes the result to the intersection of the rule member and the Allocation In or Allocation Out balance members.

All of the dimensions, with the exception of the system dimensions, are initially set to *Same As Destination*. PCM_Rule is set to *NoRule*, and PCM_Balance is set to *Input*. These are the default settings. Leave the dimensions at their default values if you want the driver value to be referenced by the destination locations defined on the **Source/Destination** tab.

If you want the driver value to be referenced by a fixed member that is different than the destination location, you can have only one driver member selection per dimension, and it must be a single member. It can be either an upper-level member or a level-0 member, but you can have only one selection per dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To change the driver location reference to a fixed member:

1. Click the default *Same As Destination* value next to a dimension, and then click .

   If you are specifying a fixed member for the PCM_Balance dimension, click the default *Input* value and select **Remove Input**. The driver value changes to *Same As Destination*.

   Click *Same As Destination*, and then click .

   If you are specifying a fixed member for the PCM_Rule dimension, click the default *NoRule* value,and select **Remove NoRule**. The driver value changes to *Same As Destination*.

   Click *Same As Destination*, and then click .

2. In the **Select Members** dialog box, select the dimension member that will be used to calculate the allocation. See Using the Member Selector.

   You can select only one member per dimension for the driver. The member selected can be an upper-level member or a level-0 member.

   You can optionally click to the right of the **Specify Driver Location** heading and enter the members to use as the driver in the **Dimension Member Editor**. The members will be added to the dimensions to which they were assigned when the dimensions were created. See Adding Members to a Dimension.

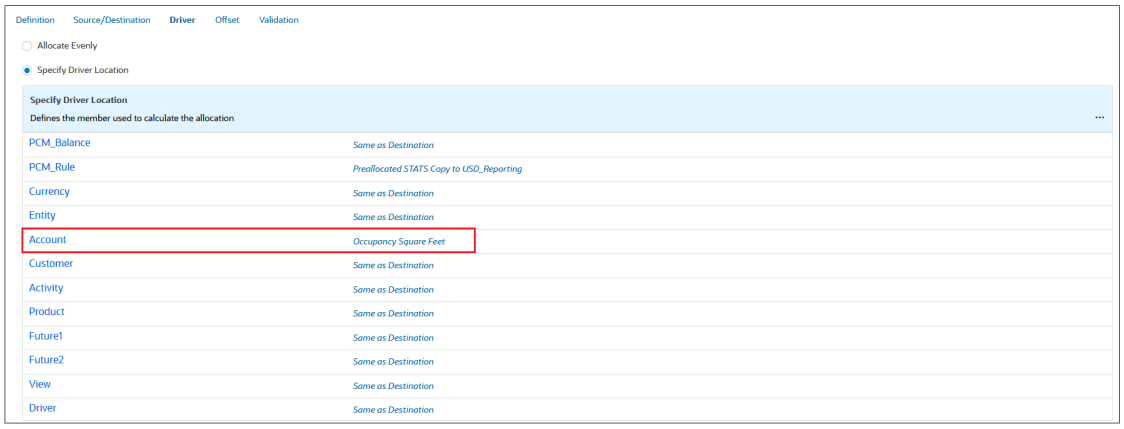
Best Practices for Allocation Rule Drivers

- Avoid using dynamic members (upper-level members or members with a formula) in the driver definition.
  - Oracle Essbase ignores destinations with no driver data.
  - Dynamic members require a computation or aggregation before Essbase can determine if driver data is present.
  - A large destination range can result in many unnecessary computation steps for determining whether the driver data is absent.
  - An upper-level member returns an aggregated value – it does not define where to allocate.
- Use data prep rules to compute driver data in ranges where allocation rules will need it – compute once, use many.
- Keep in mind that if you are migrating from EBS, PSFT or other ledger-based allocations, the driver does *not* contribute to the destination definition.

Allocation Rule Driver Example

This example defines a driver of **Occupancy Square Feet**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

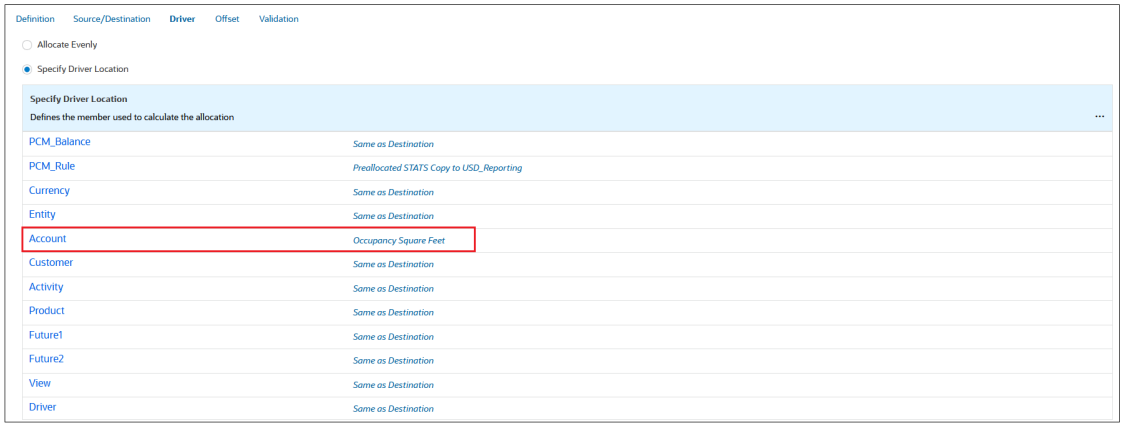


Using Substitution Variables in an Allocation Rule Driver

You can use substitution variables in an allocation rule driver. This is useful when driver data needs to be retrieved from a POV other than the current calculation POV. Using a substitution variable instead of selecting a value in the driver definition, makes it so you do not need to update the driver definition each month.

> **Note**
>
> You can only use substitution variables in the POV dimensions (Year, Period, Scenario, and Version).

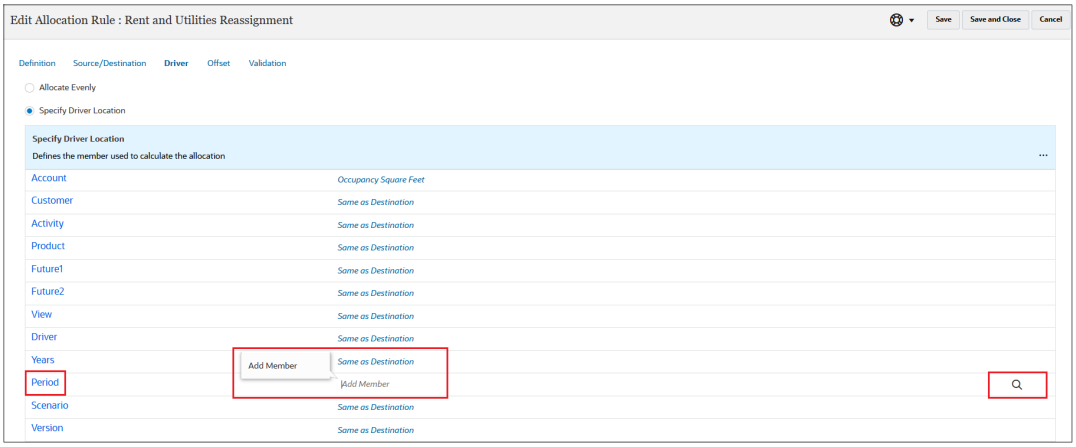
For example, assume you are creating a driver for a Rent and Utilities Ressignment rule. In this example, you are allocating rent and need to know the value for occupancy square feet.



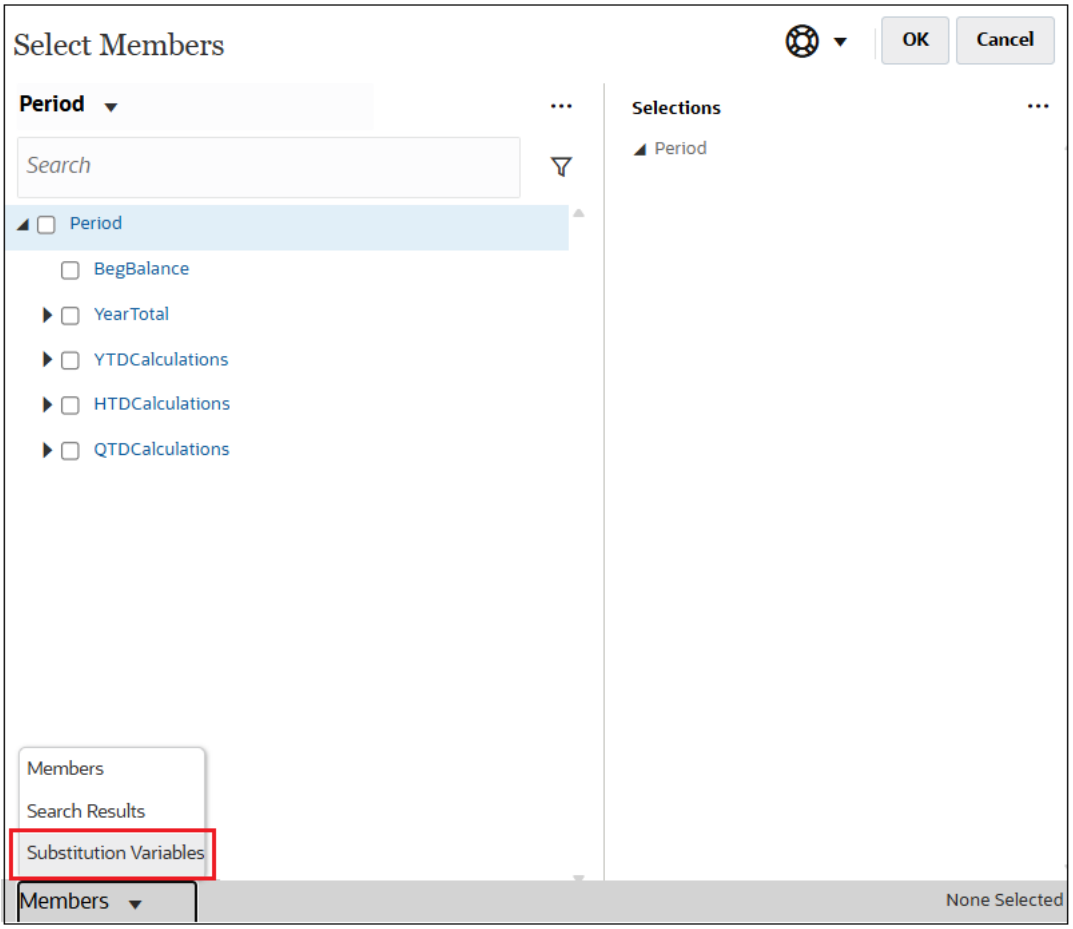
Assume that the occupancy square feet value never changes. As a result, you don't need to import the value every month. In this case, you can create a substitution varible for occupancy square feet and use the substitution variable in the allocation rule driver. To do this, we will add a substitution variable to the Period dimension as follows:

1. Click **Same As Destination** next to the **Period** dimension, and then click to open the Member Selector.

Copyright © 2022, 2026, Oracle and/or its affiliates.

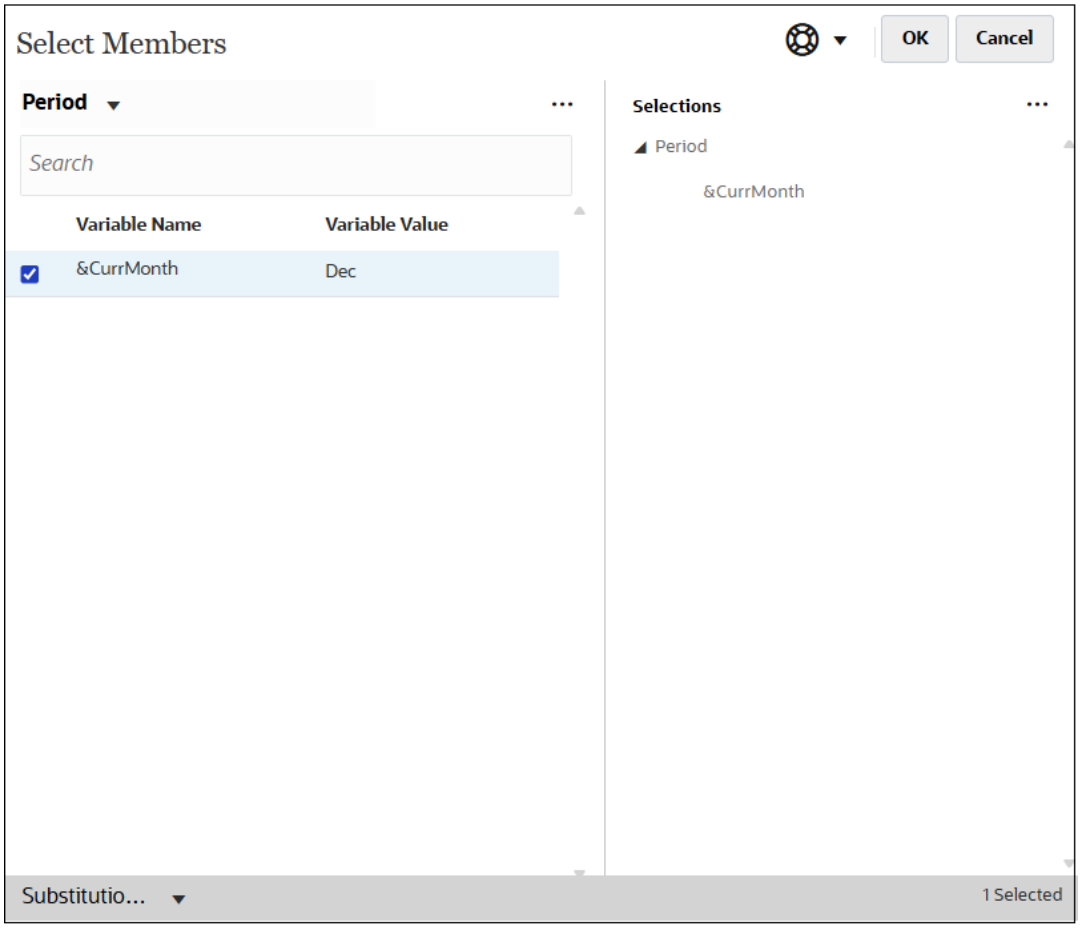


2. Click **Members** at the bottom of the Member Selector, and select **Substitution Variables**.

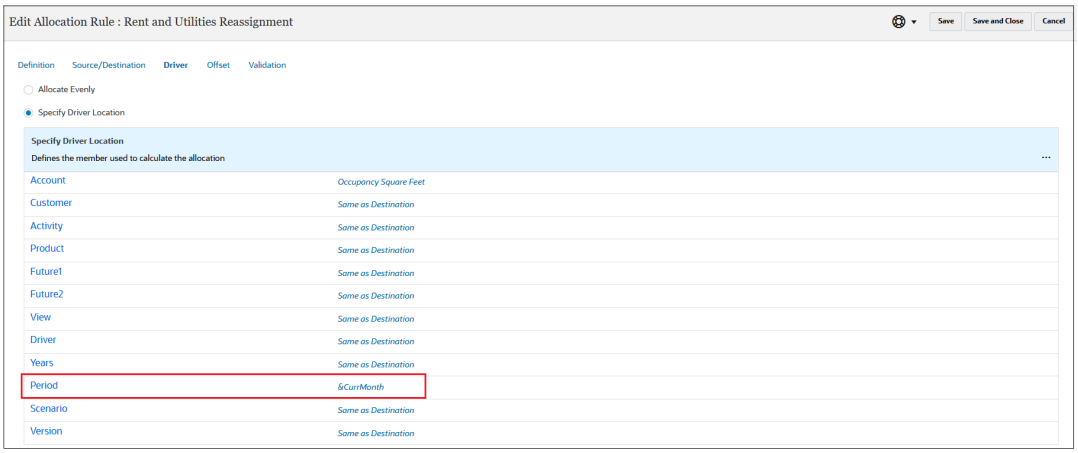


The substitution variables that have been defined for Period are displayed. In this example, one substitution variable, `$CurrMonth`, has been defined. Select the substitution variable, and click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



After you select the `$CurrMonth` substitution variable, it is displayed as the value for the **Period** dimension in the allocation rule **Driver** tab.

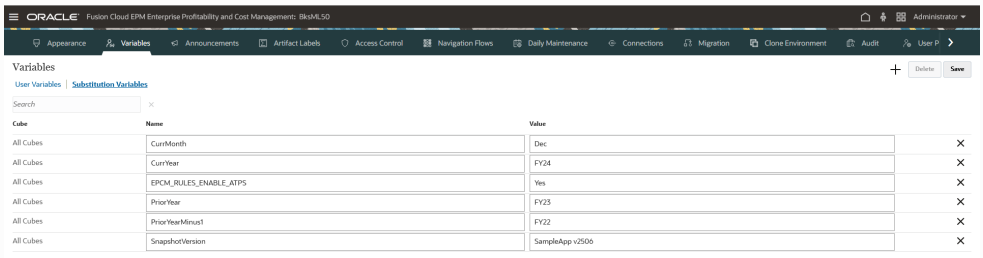


Copyright © 2022, 2026, Oracle and/or its affiliates.

Note

To define substitution variables:

1. From the Home screen, select **Tools** and then **Variables**.
2. On the **Variables** page, click **Substitution Variables**.



Defining an Allocation Rule Offset

The offset tells the system how to balance out the allocated data. Select an option to specify where to post the offset:

- **Post Offset to the Source Location**: If you select this option, the selected Source dimension members are used as the offset.
- **Post Offset to an Alternate Location**: If you select this option, you specify a dimension target to calculate the offset values.

By default the offset is the same as the source location.

If you want to post the offset to an alternate location:

1. Select **Post Offset to an Alternate Location**.
2. Click the default *Same As Source* value next to a dimension, and then click .
3. In the **Select Members** dialog box, select the dimension member to use for the offset. You must select a single, level-0 member. See Using the Member Selector.

   You can optionally click to the right of the **Offset Dimensions** heading and enter the members in the **Dimension Member Editor**.

   The members will be added to the dimensions to which they were assigned when the dimensions were created. See Adding Members to a Dimension.

Note

You do not need to select an alternate member for every dimension. Instead, select an alternate member only for those dimensions whose members are different from the members in the source location.

Best Practices for Allocation Rule Offsets

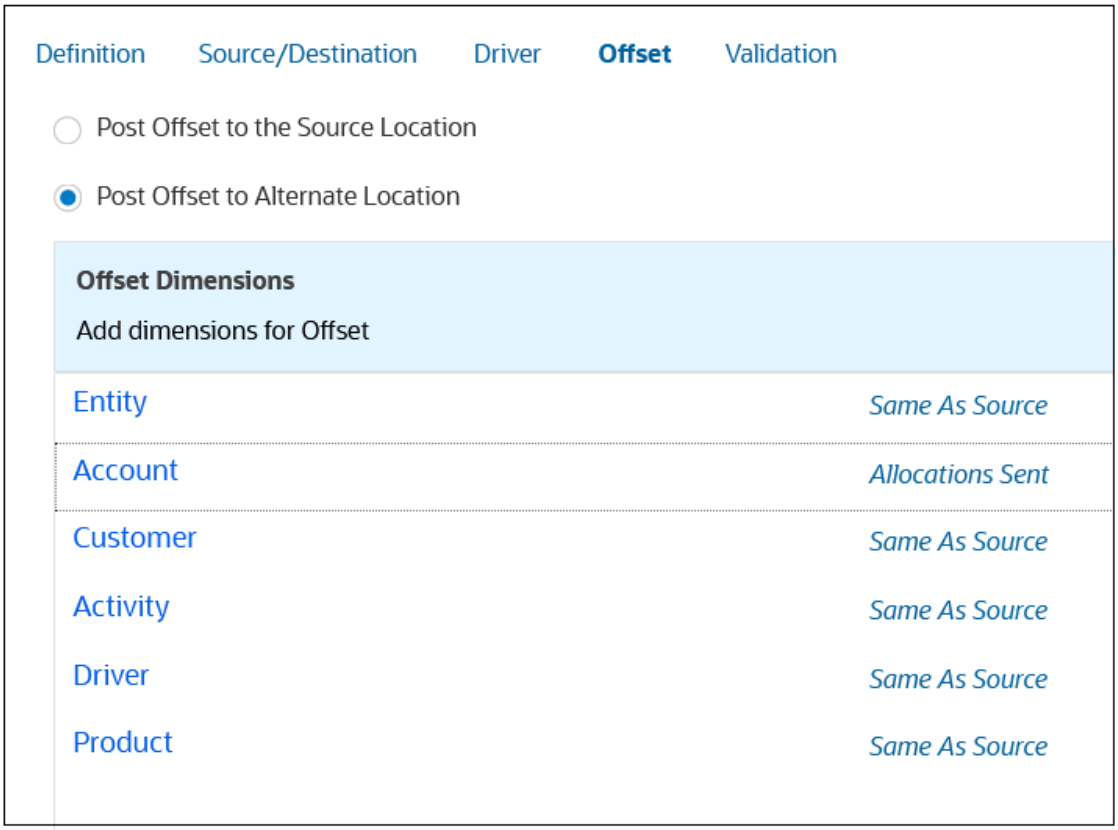
- Use offset source if no integration to GL is required and reporting needs are only management reports.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Because the offset *writes* the data, do not use upper-level members in the offset definition. You should question any design that requires an upper-level offset as this implies another allocation of offset amounts.
- Use the Allocation Accounts and/or Data Step dimensions to categorize offsets and make them easier to isolate for integration purposes.

Allocation Offset Example

In this example, the offset tells the sytem to post the allocated data for the Account dimension to an Allocations Sent account. For all of the other dimensions, the allocated data will be posted to the same member as defined in the source.



Validating Allocation Rules

When you access the **Validation** tab, any errors or warnings in your allocation rules are displayed. The validation checks each rule for these conditions:

- The rule is fully defined

  This means that the source and destination definitions for each rule must include members for every dimension.

- Dimension members referenced in your rule definitions exist in the database

  If you delete members from dimensions that are referenced in existing rules, the rules can't run.

If you have several validation errors or warnings, you can click **Export to Excel**, and use the Excel spreadsheet as a checklist as you go back to the **Source/Destination** tab to fix the errors and warnings.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Continue fixing any errors in your rules until there are no errors listed on the **Validation** tab.

> **Note**
>
> See Validation Errors and Warnings for details on the errors and warnings that may occur when validating your allocation rules.

Running a Rule Data Validation Report for Allocation Rules

Rule Data Validation reports help you verify that all required source and driver data is included for allocation rules. The report displays a summary of the intersections for the selected rule's source and driver as well as any rule and driver data totals and number of total records. You can select to display Summary Values Only or Summary Values along with Source Data and/or Driver Data. If the intersection count is greater than 1000, only the first 100 intersections are displayed. If either Source Data or Driver Data is not selected, that portion of the report is blank.

Use this report to validate that your source and driver allocations are set up correctly.

For example, assume you run a Rule Balancing report and notice that a particular rule is not allocating anything, or maybe the rule is not allocating in the way that you expected. In this scenario, the Rule Data Validation report can help you pinpoint the problem by querying both the source and driver to determine exactly what data is being allocated and what driver data is being used.

To continue with this example, assume that you are allocating $8 million dollars of rent, but your rule source only comes up with $6 million dollars. If this happens, either the rule source was set up incorrectly, or the correct data did not get imported to the source. The Rule Data Validation report is where you would be able to see exactly how much money is included in the source range that you defined.

To run a Rule Data Validation report:

1. From the Home page, select **Modeling**, and then **Designer**.
2. From the **Waterfall Setup** tab, select an allocation rule.
3. Click **Actions**, and select **Rule Data Validation Report**.
4. In the **Rule Data Validation Report** dialog box:
   - Select values for the **Years**, **Period**, **Scenario**, and **Version** POV dimensions.
   - Select whether to include **Summary Values Only** or **Summary Values and Data Sample**.

     If you select to include **Summary Values and Data Sample**, select whether to include **Source Data**, **Driver Data**, or both Source and Driver data.

     > **Tip**
     >
     > Including all the detail in a Rule Data Validation report can take a long time and produce a large report. Try displaying just the summary information as a first step.

   - Specify a **Rounding Precision** to apply to the results. The default is two decimal places. You can round up to ten decimal places. The rounding precision you specify applies to both the source and driver data values.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. Click **Run**, and select a format in which to display the report:
   - PDF
   - EXCEL
   - WORD
   - XML
   - HTML

> **Note**
>
> When reviewing Rule Data Validation reports:
>
> - If *No Data* is displayed next to **Source Data Total**, it means that either the data is not loaded or the rule source isn't correctly defined to find the data.
> - If *No Data* is displayed next to **Driver Data Total**, it means that either the data is not loaded or driver definition is incorrectly defined.
> - If either source or driver data cannot be found, the rule will not produce any results.

In the sample reports below, a driver of "Occupancy Square Feet" is used to determine how much Rent and Utilites charges to allocate. The Source Data Total (the total amount of money in all of the source intersections combined) came to $8,420,000, and the Driver Data Total (the total square feet for all for all of the destinations defined by the allocation rule) came to 18,500 square feet.

Sample Rule Data Validation Report with Summary Values Only

Rule Data Validation Report

Application	:	BksML50
POV	:	FY24::Jan::Actual::Working
Rule Set Name	:	Occupancy Expense Allocations
Rule Name	:	Rent and Utilities Reassignment
Rule Type	:	Allocation
Data Option	:	Summary Values Only

Source Data Total	:	8420000
Driver Data Total	:	18500

Sample Rule Data Validation Report with Summary Values and a Data Sample for both Source Data and Driver Data

Copyright © 2022, 2026, Oracle and/or its affiliates.

Rule Data Validation Report

Application	:	BksML50
POV	:	FY24::Jan::Actual::Working
Rule Set Name	:	Occupancy Expense Allocations
Rule Name	:	Rent and Utilities Reassignment
Rule Type	:	Allocation
Data Option	:	Summary Values and Data Sample
Source Data	:	Yes
Driver Data	:	No

Source Data Total : 8420000
Driver Data Total : 18500

Source Data

Source Data Count : 2
Context : NoActivity : NoCustomer : NoProduct : NoDriver : FY21 : Jan : Actual : Working : PCM_Remainder : PCM_Rule

Cell Name Account : Entity	Value
FAC8100 : CC1001	6000000
FAC8200 : CC1001	2420000

Driver Data

Driver Data Count : 13
Context : NoActivity : NoCustomer : NoProduct : NoDriver : FY21 : Jan : Actual : Working : PCM_Input : PCM_NoRule

Cell Name Account : Entity	Value
STAT1101 : CC8200	300
STAT1101 : CC8300	600
STAT1101 : CC8400	1000
STAT1101 : CC7001	750
STAT1101 : CC6001	2000
STAT1101 : CC5001	500
STAT1101 : CC4100	2500
STAT1101 : CC4200	7500
STAT1101 : CC4300	1000
STAT1101 : CC4400	1000
STAT1101 : CC3100	150
STAT1101 : CC3200	750
STAT1101 : CC2001	450

Using Ad Hoc to Analyze Allocation Rule Data

You can create an ad hoc grid to analyze a preconfigured data slice targeted for a specific rule's data elements.

To perform ad hoc analysis for a specific allocation rule:

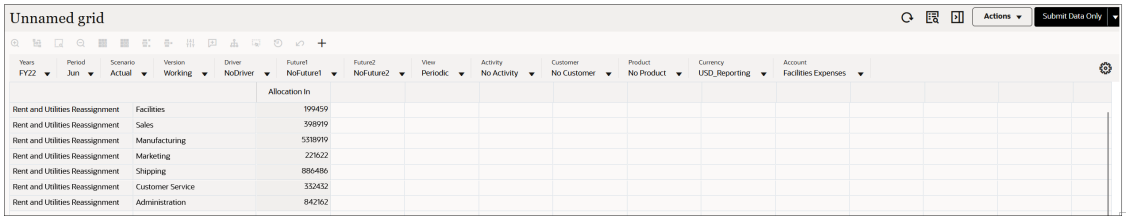
1. From the Home page, select **Modeling**, and then **Designer**.
2. From the **Waterfall Setup** tab, select an allocation rule.
3. From the **Actions** menu, select **View Rule Data**, and then select an option to define what data element to include. For allocation rules, you can perform ad hoc analysis on these elements:
   - **Source**
   - **Destination**
   - **Driver Basis** (only available of you specifyed a driver location when you defined the rule)
   - **Offset** (only available if you specified an alternate location for the offset when you defined the rule)
4. The ad hoc grid opens in a new tab. See Using Ad Hoc for Data Entry and Analysis for details on how to work in the grid.

The following is an ad hoc grid displaying the destination data elements for the Rent and Utilities Reassignment allocation rule in the BKSML50 sample application that is provided with

Copyright © 2022, 2026, Oracle and/or its affiliates.

Enterprise Profitability and Cost Management. (See Creating the Sample Application for information on how to access the sample application.)

Ad Hoc Grid Showing the Destination Data for a Sample Rent and Utilities Reassignment Allocation Rule



> **Note**
>
> Before performing ad hoc analysis, the rule must be calculated and a POV defined. The current POV selected on the Rule Balancing page is the POV that is used to show the allocation rule data. See Calculating Models and Viewing Rule Balancing Reports.

Creating Custom Rules

Related Topics

- About Creating Custom Rules
- Creating a Custom Rule Definition
- Defining a Custom Rule Target
- Validating Custom Rules
- Using Ad Hoc to Analyze Custom Rule Data

About Creating Custom Rules

Custom rules let you modify or create data in place. In a custom rule, you define:

- The target range for the calculation
- The formula to execute for all cells in the target range

You can use custom rules to:

- Calculate driver data
- Create what-if changes
- Adjust costs and revenues

Design Considerations

When creating custom rules, keep in mind the following:

- Member selections in the rule target really means "traverse these intersections"
- The target range defines the Level 0 intersections the rule will visit, executes the formula, and writes the result to the result member.
- The rule formula supports basic math functions
- CASE statements work, other MDX functions are not supported

Copyright © 2022, 2026, Oracle and/or its affiliates.

Best Practices

Custom rules are very sensitive to sparse ranges. To prevent performance challenges:

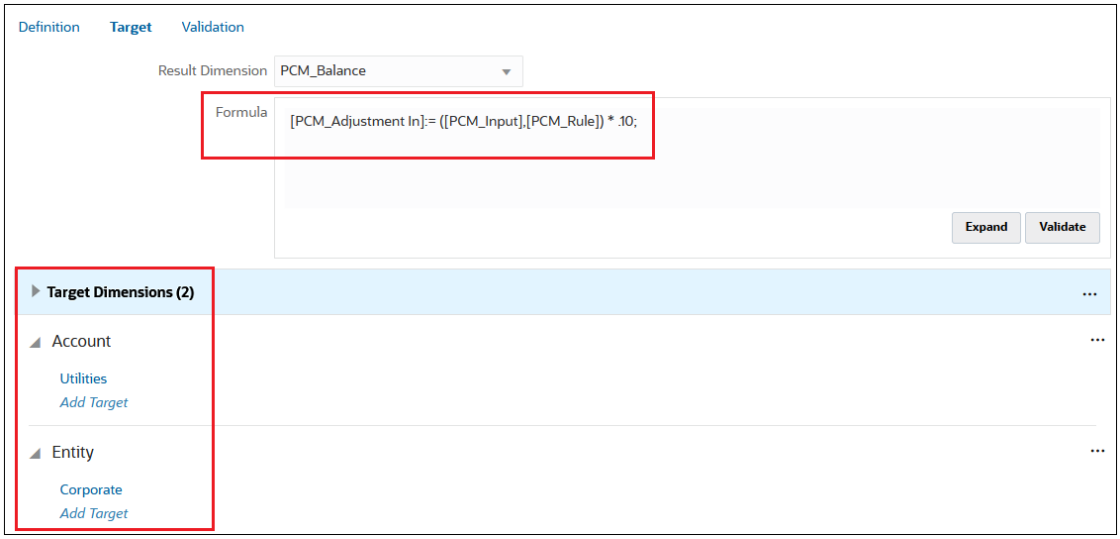
- Minimize the target range as much as is practical.
- Use `NONEMPTYTUPLE` on one of the formula operand tuples preceding formula. See Skipping Empty Tuples to Optimize Calculations.

  For example:

  ```
  [PCM_Adjustment In]:= NONEMPTYTUPLE ([PCM_Input],[PCM_Rule]) ([PCM_Input],
  [PCM_Rule]) * .10;
  ```

Custom Rule Example

In this example, the Entity and Account dimensions are specified for the target range for the calculation, and the formula will be executed for all cells in that range.



> **Note**
>
> The custom rule in this example is used in the BksML50 sample application provided with Enterprise Profitability and Cost Management. See Creating the Sample Application for information on how to access the sample application.

Creating a Custom Rule Definition

To create a custom rule definition:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the **Model** drop-down, and select a model.
3. Select the rule set to which you want to add the custom rule.
4. Click +, and then select **Custom Rule**.
5. On the **Create Custom Rule** page, in the **Definition** tab, enter the following information:
   - **Rule Name**: Enter a name for the rule.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example, the "Occupancy Expense Allocations" rule set in the the BksML50 sample application provided with Enterprise Profitability and Cost Management, contains a custom rule called "Utilities Expense Adjustment".

Rule names have the same restrictions as the member names in Oracle Essbase. See Naming Restrictions for Dimensions, Members, and Aliases.

- **Description**: Enter a description for the rule.

  For example, you could say something like; "Increases utilities expenses by 10%"

  The description you enter here will appear in the Model Documentation report. Enter a description that will make the information about the custom rule informative for anyone reviewing the model logic in the future. See Generating a Model Documentation Report.

- **Sequence**: Enter a number to determine the order in which the rule will run in the rule set.

  The Sequence can be any whole number from 1 to 9999.

  Rules with the same sequence number will run at the same time if parallel calculation is enabled for the parent rule set, and depending on the number specified for **Calculation Threads** in the Applications Settings. (See "Step 5: Select a Rule Set Calculation Option" in Creating a Rule Set and "Calculation Threads" in About Managing Application and System Settings.)

- **Enabled**: If selected, the rule will be active when the calculation is performed.

- **Use Rule Set Context**: If selected, the member selections done when the rule set was created will apply to this rule. If a Model Context has been enabled for the rule set, it will also be applied. See Understanding Model and Rule Set Context.

Defining a Custom Rule Target

Define the target range for the calculation and the formula to execute for all cells in the target range.

When you first access the **Target** tab, the required Entity and Account dimensions, the optional Currency dimension if you have a multicurrency application, and any custom dimensions in your application are displayed under **Target Dimensions**. (If you have defined and enabled a Rule Set Context or a Model Context, any dimensions defined in the Rule Set Context or a Model Context are not displayed. See Understanding Model and Rule Set Context.)

To define a custom rule target:

1. On the **Target** tab, click the drop down, and select a **Result Dimension**.
2. Enter the MDX formula for the calculation.

   If you have a large formula, click **Expand** to expand the formula text box to a larger pop-up window. After you enter a formula, click **Validate** to ensure that the formula is valid.

   See Formula Syntax for Custom Rules and Skipping Empty Tuples to Optimize Calculations for information on how to create the formula.
3. Select a member or members for each target dimension.

   You must select a member for every dimension. If a dimension does not apply to the data in your rule, select the No<*dimname*> member. See Dimension and Member Requirements When Creating Rules.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The dimension you selected for the **Result Dimension** is not included as a target dimension since a member from the result dimension must appear in the left hand (results side) of the formula.

To select members, expand a target dimension, click **Add Target**, and then click to invoke the **Select Members** dialog box. See Using the Member Selector.

If you have a large number of members to add to the target dimensions and you know the member names, instead of adding each member one-by-one from the **Select Members** dialog box, you can click to the right of the **Target Dimensions** heading and enter the members in the **Dimension Member Editor**.

For example, if you have a list of members in an Excel spreadsheet, you can copy these members from Excel, and then paste them into the **Dimension Member Editor**. The members will be added to the dimensions in the target to which they were assigned when the dimensions were created. See Adding Members to a Dimension.

> **Note**
>
> The members you enter in the **Dimension Member Editor** can be assigned to any applicable dimension in the target. To add multiple members to a specific dimension, click next to the dimension.

You can also click next to a dimension, and select one of the following options:

- **Add Multiple Target Members**: Accesses a dialog box where you can assign multiple members to the dimension at one time instead of having to individually select each member.
- **Calculation Segmentation:** If selected, rules are segmented into smaller rules to execute separately. This enables the calculation to process rules with a very large data range, which would otherwise be too large for Oracle Essbase to process. Calculation segmentation is enabled for up to two dimensions in each rule.

  > **Note**
  >
  > You should use Calculation Segmentation only when your source range is extremely large and sparsely populated. As a best practice, you should call support before proceeding with this option.

- **Clear <Dimname> Selections**: Clears all of the members you have selected for the target dimension.

  To remove an individual member, click on the member, and then select **Remove<*MemberName*>**, where <*MemberName*> is the name of the member you are removing.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> See Managing Filters for Target Members for information on how to filter the target members used in a rule.

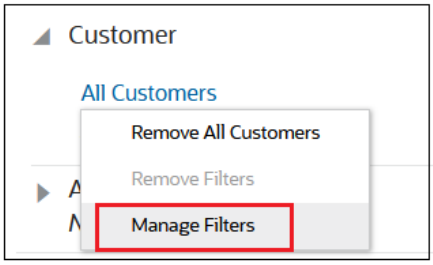
Managing Filters for Target Members

When you select an upper level member for a target dimension in a custom rule, all level 0 descendants of that member are included in the rule. If you do not want to include all the level 0 descendants in a rule, you can apply a filter to limit the included members.

For example, assume your member selection is All Customers, and All Customers has 1,000 level 0 descendants. Assume further that you want to include only the customers in Delivery Zone B in your rule. In this case, you could apply a filter to limit the level 0 descendants included in your rule to only customers in Delivery Zone B.

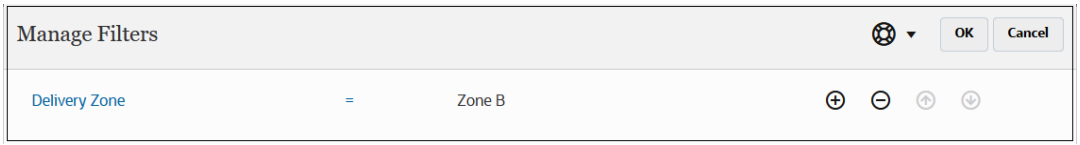
To add a filter to a member:

1. In the **Target** tab, click the desired member and select **Manage Filters**.

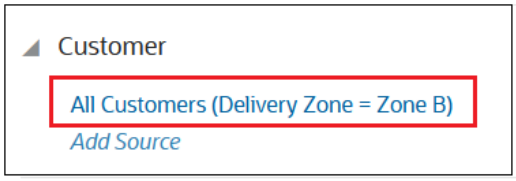


2. In the **Manage Filters** dialog box, click ⊕.
3. Enter the member name and a filter value.

   In our example, we filtered the customers to Delivery Zone B.



   You can add more than one filter. When you add a filter, it is shown next to the member.



> **Note**
>
> To remove a filter, click the member and select **Remove Filters**. If you have more than one filter, click the filter you want to remove.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Formula Syntax for Custom Rules

This topic describes the syntax to use when creating custom rules.

The syntax is summarized as follows:

- The basic formula format is Result equals Formula, where Result and Formula are separated by :=, so Result := Formula.
- The left side of the equation is the Result, a tuple that determines where calculated results are written.

> **Note**
>
> A tuple is a comma-separated list of members enclosed in parentheses.

The tuple is an MDX specification of one or more members where no two members are in the same dimension. Only member names are allowed in the tuple expression. Member functions are not supported for calculations. Dynamic and attribute members are not allowed in the Result. The Result must include a single member from the Result dimension. It must be Level 0 and may be part of a Level 0 tuple, such as `([STA1120], [Feb])`. The Result dimension is defined in the **Target** tab of the **Create Custom Rule** page.

> **Note**
>
> MDX is a joint specification of the XML for Analysis founding members. For more information about allowable MDX syntax, see Chapter 7, "MDX", of the *Oracle Essbase Technical Reference*.

- The right side of the equation is the Formula, a simple MDX numeric value expression. It includes the other members, tuples, or constants at any level and the mathematical expression to perform. It must include at least one member from the Result dimension and may be Level 0, upper level, or a tuple.

> **Note**
>
> Members on either side of the equation must be enclosed in square brackets, [ ].
>
> Tuples must be enclosed in parentheses, ( ).
>
> The Formula expression must end in a semicolon, ;.

The Formula can use the following:

  - **Constants:** `[STAT1120]:=1;`

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> A constant can be a numeric constant such as 7. It can be an expression that references values from other members in the result dimension, and it can reference values expressed as member tuples.

  - **A mathematical operation:** `[STAT1114]:=([STAT1305],[Rule])*([STAT1307],[Rule]);`

> **Note**
>
> Mathematical operations must always include a Rule dimension member.

- Custom rules support the following syntax formats for member names:
  - **No qualification:** Only the member name is provided.

    Example: `[MemberName]`
  - **Full qualification:** The fully qualified name (FQN) for the member.

    Example: *`[Dimension].[Gen2].[Gen3].[Gen4]...[MemberName]`*
- Custom rules support the following sytnax for substitution variables:
  - The substitution variable name must be written inside square brackets ([]) and start with an &(ampersand) in the formula.

    Example Formula: `([Rule1],[PCM_Adjustment In]) := ([PCM_Input],[PCM_Rule],[&Prior_Year]) *.10;`
  - Do *not* use square brackets to enclose the substitution variable.

    Correct variable value: `2022`

    Incorrect variable value: `[2022]`

> **Note**
>
> For information about optimizing performance when defining custom rules, see Skipping Empty Tuples to Optimize Calculations.

Skipping Empty Tuples to Optimize Calculations

Data sets can be very sparse and calculating empty result sets can noticeably degrade performance. To avoid calculating empty result sets, you can use the NONEMPTYTUPLE property clause in calculation formulas. Using NONEMPTYTUPLE restricts where the system attempts to calculate. To set this up, you define a tuple that will only be calculated if it isn't empty. Then, you define a simple numeric operation to be applied to the tuple.

Syntax

The syntax for using NONEMPTYTUPLE is as follows:

`tuple := NONEMPTYTUPLE (`*`nonempty_member_list`*`) `*`numeric_value_expression`*`;`

Where:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- `tuple`: An MDX specification of one or more members, where no two members can be from the same dimension
- `NONEMPTYTUPLE`: An optional property you can use to optimize calculation performance. If used, then you must follow this literal property with *`nonempty_member_list`*.
- *`nonempty_member_list`*: One or more comma-separated member names from different dimensions. A tuple must be present in *`numeric_value_expression`*.
- *`numeric_value_expression`*: A simple MDX numeric value expression, such as a number or an arithmetic operation

  The expression must be on the right side of the equation. You must use only arithmetic operators. An error is returned if you use non-arithmetic operators such as AND, OR, or IF.

For example:

```
[UnitCost] := NONEMPTYTUPLE ([TotalExpense], [NetBalance]) ([TotalExpense],
[NetBalance]) / ([Units], [CostPool]);
```

This example says the following:

1. Look at the tuple `([TotalExpense], [NetBalance])`.
2. If that tuple, or intersection, is not empty (that is, it contains a real value), then perform the following operation:

   Take the tuple `([TotalExpense], [NetBalance])` and divide it by the tuple `([Units], [CostPool])` to yield `UnitCost`.
3. If the tuple is empty, skip it and evaluate the next instance.

Rules for Use

A tuple is a combination of members from some set of different dimensions, for example:

```
([product2], [account5], customer3])
```

```
([myactivity], [yourdepartment])
```

The requirements for adding NONEMPTYTUPLE to the formula of Enterprise Profitability and Cost Management custom rules are as follows, where A, B, and C represent tuples:

- You can use NONEMPTYTUPLE only when a tuple has some value. Otherwise, the result could be unexpected. Suppose the following:
  - `A=B+C` -- You can't use NONEMPTYTUPLE on either `B` or `C`. If `B` or `C` is missing, the result will be None, which is incorrect.

    > **Note**
    >
    > To calculate A=B+C using NONEMPTYTUPLE, use two rules:
    >
    > * Rule 1: `A=A+B` with NONEMPTYTUPLE on `B`
    > * Rule 2: `A=A+C` (or `A=A-C`) with NONEMPTYTUPLE on `C`
    >
    > In this case, whenever the value for `B` is *not* missing, it will be added to `A`; and whenever the value for `C` is *not* missing, it will be added to `A`.

  - `A=B-C` -- You can't use NONEMPTYTUPLE on either `B` or `C`. If `B` or `C` is missing, the result will be None, which is incorrect (unless you use two rules as described previously).

Copyright © 2022, 2026, Oracle and/or its affiliates.

- You can use NONEMPTYTUPLE when the result is the same whether the tuple is missing or not. Suppose the following:
  - `A=B` -- You can use NONEMPTYTUPLE on `B`.
  - `A=B*C` -- You can use NONEMPTYTUPLE on either `B` or `C`.
  - `A=B/C` -- You can use NONEMPTYTUPLE on either `B` or `C`.

To summarize, you can safely use NONEMPTYTUPLE in multiplication or division operations. For addition or subtraction, you must evaluate its use for each separate case to avoid unexpected results.

> **Note**
>
> For information on writing custom rules, see Formula Syntax for Custom Rules. For information on enabling non-empty tuples, see "How do you enable Non-Empty Tuples (NET) in Enterprise Profitability and Cost Management?" in Frequently Asked Questions (FAQ) about Enterprise Profitability and Cost Management.

Validating Custom Rules

When you access the **Validation** tab, any errors or warnings in your custom rules are displayed. The validation checks each rule for these conditions:

- The rule is fully defined

  This means that the target definitions for each rule must include members for every dimension.
- Dimension members referenced in your rule definitions exist in the database

  If you delete members from dimensions that are referenced in existing rules, the rules cannot run.

If you have several validation errors or warnings, click **Export to Excel**. You can use the Excel spreadsheet as a checklist as you go back to the **Target** tab to fix the errors and warnings.

Continue fixing any errors in your rules until there are no errors listed on the **Validation** tab.

> **Note**
>
> See Validation Errors and Warnings for details on the errors and warnings that may occur when validating your custom rules.

Using Ad Hoc to Analyze Custom Rule Data

You can create an ad hoc grid to analyze a preconfigured data slice targeted for a specific rule's data elements.

To perform ad hoc analysis for a specific custom rule:

1. From the Home page, select **Modeling**, and then **Designer**.
2. From the **Waterfall Setup** tab, select a custom rule.
3. From the **Actions** menu, select **View Rule Data**, and then select **Target**.

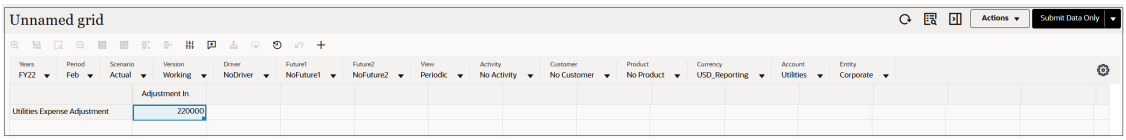
Copyright © 2022, 2026, Oracle and/or its affiliates.

Note: You can only select **Target** as a data element for Custom rules. The other options on the drop-down menu are for Allocation rules.

4. The ad hoc grid opens in a new tab. See Using Ad Hoc for Data Entry and Analysis for details on how to work in the grid.

The following is an ad hoc grid displaying the target data for Utilities Expense Adjustment custom rule in the BKSML50 sample application that is provided with Enterprise Profitability and Cost Management. (See Creating the Sample Application for information on how to access the sample application.)

Ad Hoc Grid Showing the Target Data for a Sample Utilites Expense Adjustement Custom Rule



> **Note**
>
> Before performing ad hoc analysis, the rule must be calculated and a POV defined. The current POV selected on the Rule Balancing page is the POV that is used to show the Custom rule data. See Calculating Models and Viewing Rule Balancing Reports.

Creating Rule Sets

Related Topics

- About Rule Sets
- Rule Set Design Best Practices
- Creating a Rule Set

About Rule Sets

Rule sets enable you to group related rules together to better organize calculation logic definitions, to calculate similar rules together, and to simplify the definition of rules that share common dimension members.

Rule sets have a set order, determined by the rule set sequence number, and may also contain options specific to the execution of rules within the rule set.

You must create a rule set before creating rules.

The following are some examples of rule sets in the BksML50 sample application provided with Enterprise Profitability and Cost Management:

- Occupancy Expense Allocations
- Manufacturing COGs Related Expense Assignment
- Activity Costing
- Customer Product Region Profitability Calculation

Copyright © 2022, 2026, Oracle and/or its affiliates.

Rule Set Design Best Practices

Calculation options at the rule set level are Serial, Parallel, and Interative.

Best practices for Parallel rule sets:

- Designing rules that are independent of each others' source and destination targets allows you to use parallel calculation.
- Because parallel calculation has diminishing returns, more than five concurrent threads generally does not improve performance.

Best practices for Interative rule sets:

- Interative rule sets are only useful for solving reciprocal allocation systems.
- Ensure that each rule has a portion of the destination range that exits the reciprocal system.
- Experiment with the number of iterations.
- Create a no reciprocal sweep rule for each rule in the reciprocal system to sweep out any remainders.

Creating a Rule Set

To create a rule set:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the **Model** drop-down, and select a model.
3. Click +, and select **Rule Set**.
4. In the **Definition** tab, enter information about the rule set:
   - **Rule Set**: Enter a name for the rule set.

     For example, the BksML50 sample application provided with Enterprise Profitability and Cost Management has a rule set called "Occupancy Expense Allocations".
   - **Description**: Enter a description for the rule set.

     The description you enter here will appear in the Model Documentation report. Enter a description that will make the information about the rule set informative for anyone reviewing the model logic in the future. See Generating a Model Documentation Report.

     For example, a description for an Occupancy Expense Allocations rule set could be: "Occupancy expenses are reassigned from cost centers where the expenses are paid to the cost centers that use the facilities. A Rule Set Context is defined for Activity, Product, Customer, and Region dimensions to select the No<dimname> members as the dimensions are not used in these rules."
   - **Sequence**: Enter a number to determine the order in which the rule set will run. The sequence also determines the order in which the rule set is displayed on the **Waterfall Setup** tab. The sequence can be any whole number from 1 to 9999.
   - **Enabled**: If selected, the rule set will be active when the calculation is performed.
   - **Use Model Context**: If selected, the member selections done during model creation will apply to all the rules in the rule set. When you use a model context, you avoid having to select the same members for every rule, which saves time and ensures consistency. See Understanding Model and Rule Set Context.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. Select a **Rule Set Calculation** option:
   - **Serial Calculation**: Runs all rules in the rule set sequentially, depending on their sequence number.
   - **Parallel Calculation**: Runs rules with the same sequence number at the same time. The number of rules that can be executed in parallel is defined in the **Calculation Threads** setting in **Application Settings**. See About Managing Application and System Settings.
   - **Iteratiave Calculation**: Runs the rule set multiple times in sequence. If you select this option, enter the number of iterations to run. Iterative Calculations are used to resolve the impact of reciprocal allocation relationships in a model.
6. **Optional**: In the **Member Selections** tab, create a **Rule Set Context** to define members for dimensions that will apply to all rules in the rule set. Defining default member selections saves you from having to select the members for a dimension each time the dimension is used in a rule. You can make default member selections for dimensions that are used in defining the source and destination in allocation rules or the target in custom rules. See Understanding Model and Rule Set Context.

   To define default member selections for the dimensions in a rule set:

   a. Click the **Add Dimensions** drop-down, and select a dimension.

   b. Click **Select Member**, and then click .

   c. In the **Select Members** dialog box, select the member that you want to assign to the dimension, and then click **OK**.

      When making default member selections for a Rule Set Context, you can select only level 0 members. See Using the Member Selector for more information about using the **Select Members** dialog box.
7. Click **Save and Close**.

Creating Multiple Rules

Use the **Rules** page to create multiple rules at once. This is useful when you need to create a large number of rules in a rule set. You can create the initial outline of the rules, and then come back later and fill in the details for each rule. This can save you time and help you manage your models more efficiently.

To create multiple rules:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the **Model** drop-down, and select a model.
3. Select the rule set to which you want to add the rules.
4. Click +, and then select **Multiple Rules**.
5. On the **Rules** page, click + to add a new rule, and then enter the following information:
   - **Name**: Enter a name for the rule.

     For example, the "Occupancy Expense Allocations" rule set in the the BksML50 sample application provided with Enterprise Profitability and Cost Management, contains an allocation rule called "Rent and Utilities Reassignment" .

     Rule names have the same restrictions as the member names in Oracle Essbase. See Naming Restrictions for Dimensions, Members, and Aliases.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Rule Type**: Select **Allocation** or **Calculation**.

  Allocation rules define the source and destination of allocated data, which drivers are used to allocate the data, and where offsets are placed to balance accounts. See About Creating Allocation Rules.

  Custom rules contain formulas in an Essbase MDX format and are primarily used for adjusting data or creating driver values used in subsequent allocation rules. See About Creating Custom Rules.

- **Sequence**: Enter a number to determine the order in which the rule will run in the rule set. The sequence also determines the order in which the rule is displayed under the rule set on the **Waterfall Setup** tab.

  The Sequence can be any whole number from 1 to 9999.

  Rules with the same sequence number will run at the same time if parallel calculation is enabled for the parent rule set, and the number specified for **Calculation Threads** in the Applications Settings. (See "Step 5: Select a Rule Set Calculation Option" in Creating a Rule Set, and "Calculation Threads" in About Managing Application and System Settings.)

- **Enabled**: If selected, the rule will be active when the calculation is performed.
- **Use Rule Set Context**: If selected, the member selections done when the rule set was created will apply to this rule. If a Model Context has been enabled for the rule set, it will also be applied. See Understanding Model and Rule Set Context.
- **Description**: Enter a description for the rule.

  Enter a description that will make the information about the allocation rule informative for anyone reviewing the model logic in the future.

  For example, you could say something like; "Rent and Utility expenses are reassigned from the Corporate cost center to the business function cost centers. A driver based on the square feet of each building used by each cost center is used to apportion the expenses."

  The description you enter here will appear in the Model Documentation report. See Generating a Model Documentation Report.

6. Add as many rules as desired, and then click **Save**.
7. Click **OK** in the **Express Edit Rules Status** dialog box to return to the Rule Designer.

After you add rules, they are displayed under the rule set in the Rule Designer. You can then select each individual rule and click (Edit) to add detailed information about the rule.

> **Note**
>
> If you reopen the **Rules** page to add additional rules or to make changes to rule information, you cannot edit the selections for **Rule Type** or **Rule Set Context** on previously-created rules.

Creating Multiple Rule Sets

Use the **Rule Sets** page to create multiple rule sets at once. This is useful when you need to create a large number of rule sets in a model. You can create the initial outline of the rule sets, and then later come back to define the specific details for each rule set. This can save you time and help you manage your models more efficiently.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To create multipe rule sets:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the **Model** drop-down, and select a model.
3. Click +, and select **Multiple Rule Sets**.
4. On the **Rule Sets** page, click + to add a new rule set, and then enter the following information:
   - **Name**: Enter a name for the rule set.

     For example, the BksML50 sample application provided with Enterprise Profitability and Cost Management has a rule set called "Occupancy Expense Allocations".
   - **Sequence**: Enter a number to determine the order in which the rule set will run. The sequence also determines the order in which the rule set is displayed on the **Waterfall Setup** tab. The sequence can be any whole number from 1 to 9999.
   - **Enabled**: If selected, the rule set will be active when the calculation is performed.
   - **Use Model Context**: If selected, the member selections done during model creation will apply to all the rules in the rule set. When you use a model context, you avoid having to select the same members for every rule, which saves time and ensures consistency. See Understanding Model and Rule Set Context.
   - **Description**: Enter a description for the rule set.

     Enter a description that will make the information about the rule set informative for anyone reviewing the model logic in the future.

     For example, a description for an Occupancy Expense Allocations rule set could be: "Occupancy expenses are reassigned from cost centers where the expenses are paid to the cost centers that use the facilities. A Rule Set Context is defined for Activity, Product, Customer, and Region dimensions to select the No<dimname> members as the dimensions are not used in these rules."

     The description you enter here will appear in the Model Documentation report. See Generating a Model Documentation Report.
5. Add as many rule sets as desired, and then click **Save**.
6. Click **OK** in the **Express Edit Rule Sets Status** dialog box to return to the Rule Designer.

When you add a new rule set, it is displayed with the existing rule sets on the **Waterfall Setup** page. You can then select the rule set and click (Edit) to add more detailed information about the rule set.

> **Note**
>
> If you reopen the **Rule Sets** page to add additional rule sets or to make changes to rule set information, you cannot edit the selection for **Use Model Context** on previously-created rule sets.

Viewing Rule Definitions

You can view the complete definition for each rule you create from the following places in Enterprise Profitability and Cost Management:

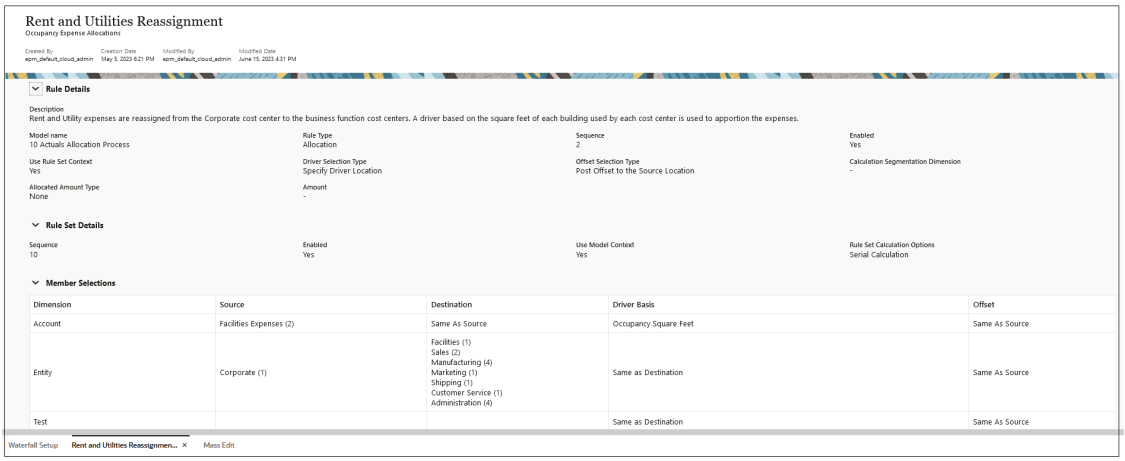
Copyright © 2022, 2026, Oracle and/or its affiliates.

- From the **Waterfall Setup** tab, select a rule, and then click (**View Rule Definition**).
- From the **Mass Edit** tab, select a rule, and then click (**View Rule Definition**).
- From the **Rule Balancing** page, generate a Rule Balancing report, select a rule, and then click (**View Rule Definition**).

Rule defintion information includes:

- Rule Details
- Rule Set Details
- Member Selections
- Formulas (if defined for custom rules)

The following is a sample rule definition for the Rent and Utilities Reassignment Rule in the BksML50 sample application provided with Enterprise Profitability and Cost Management. (See Creating the Sample Application for information on how to access the sample application.)



Renaming Rules

If you decide to rename a rule, keep in mind the following points:

- The default behavior is to keep existing data under the original rule name. Any new calculations will be writen to the new rule name.

  Rules can exist in multiple models, and the data calculated by the rule can exist in many POVs. Because you may want to retain rule data previously calculated under an old rule name, Enterprise Profitability and Cost Management does not automatically delete or move data from an old rule name to new rule name.

- If you want to move existing data to a new rule name:

  1. Rename the rule member.

     Double-click the member name on the **Edit Member Properites** page, enter the new member name, and click **Save**. See Editing Member Properties.

  2. Refresh the database.

     On the **Application** page, select **Actions,** and then **Refresh Database**. See Refreshing the Application Database.

  3. Rename the rule in all the models where it is used.

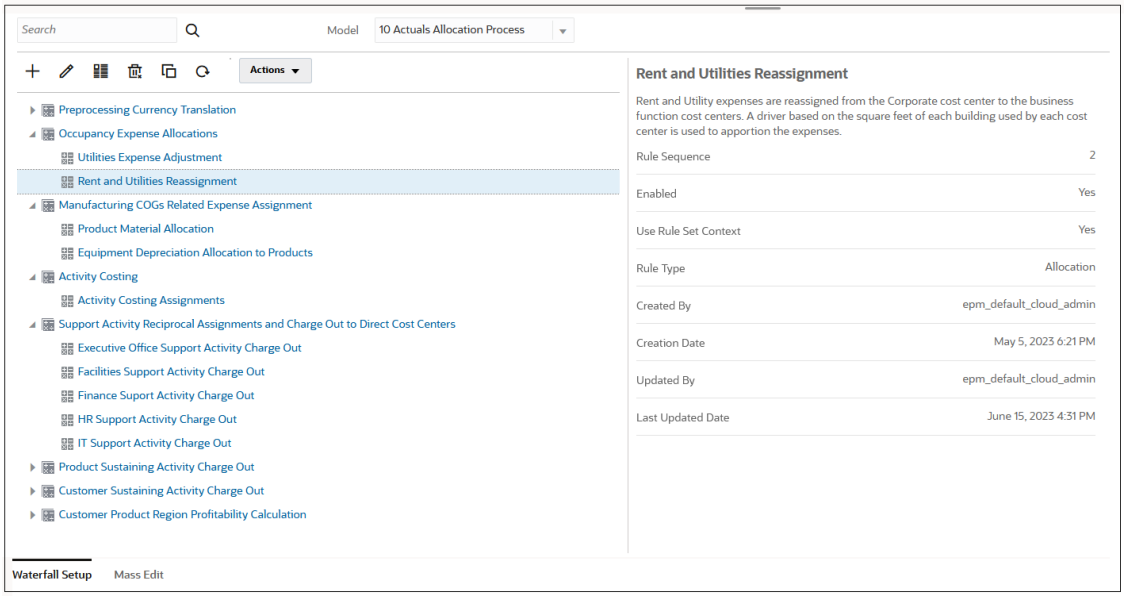
Copyright © 2022, 2026, Oracle and/or its affiliates.

See Editing a Rule or Rule Set.

> **Tip**
>
> Review the note under the "Clear Calculated Data" processing option in Calculating a Model 1.0 for information on how data is calculated if a rule name has changed.

Using the Designer 1.0 Waterfall Setup Tab

The **Waterfall Setup** tab in the Rule Designer shows the full sequence of rule sets and rules for the selected model. The sequence manages the order in which the rule set and rules are run. When you select a rule set or rule, information about it is displayed on the right side of the page.



Tasks that you can complete on the **Waterfall Setup** tab include:

- Creating Allocation Rules
- Creating Custom Rules
- Creating a Rule Set
- Creating Multiple Rules
- Creating Multiple Rule Sets
- Editing a Rule or Rule Set
- Viewing Rule Definitions
- Deleting a Rule or Rule Set
- Copying a Rule or Rule Set
- Running a Rule Data Validation Report for Allocation Rules

To refresh the rule sets and rules displayed on the **Waterfall Setup** tab, click .

Copyright © 2022, 2026, Oracle and/or its affiliates.

Editing a Rule or Rule Set

To edit a rule or rule set:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, select a rule or rule set.
3. Click (Edit icon).
4. Change the desired rule or rule set details, and then click **Save and Close**.

> **Tip**
>
> If you change a rule name, see Renaming Rules for points to consider when renaming a rule.

Copying a Rule or Rule Set

When you copy a rule or rule set, all of the information in the source rule or rule set is copied to the new rule or rule set. In the case of a rule set, you can select whether to copy all the rules in the source rule set into the new rule set.

To copy a rule:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, select a rule.
3. Click (Copy icon).
4. In the **Copy Rule** dialog box, enter a name for the new rule.

> **Note**
>
> The name for the copied rule must be unique. You cannot have two rules with the same name in a model.

5. Click **OK**.

   The copied rule is displayed under its associated rule set. The new rule is initially created with the same sequence number as the source rule. To change the sequence (the order in which the rule will run), select the copied rule, and click (Edit icon).

To copy a rule set:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, select a rule set.
3. Click (Copy icon).
4. In the **Copy Rule Set** dialog box, specify the following information:
   - **New Rule Set Name**: Enter a name for the new rule set.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The name for the copied rule set must be unique. You cannot have two rule sets with the same name in a model.

- **Copy rules**: Select to copy all the rules in the source rule set into the new rule set.
- **Prefix for Rule Name**: If you selected to copy rules, enter a prefix to use for the new rule names that will be created as part of the copy operation.

> **Note**
>
> Since you cannot have rules with the same name in a single model, the prefix is to ensure that each copied rule has a unique name.

5. Click **OK**.

   The copied rule set is displayed under the existing rule sets. The new rule set is initially created with the same sequence number as the source rule set. To change the sequence (the order in which the rule set will run), select the new rule set, and click (Edit icon).

Deleting a Rule or Rule Set

> **Note**
>
> - When you delete a rule from the **Waterfall Setup** tab in the Rule Designer, the rule member assigned to that rule is *not* also deleted. You delete rule members on the **Edit Member Properties** page accessed from the **Application**, **Dimensions** tab. See Deleting Members,
> - Deleting a rule does not delete the associated rule member in Oracle Essbase.

To delete a rule or rule set:

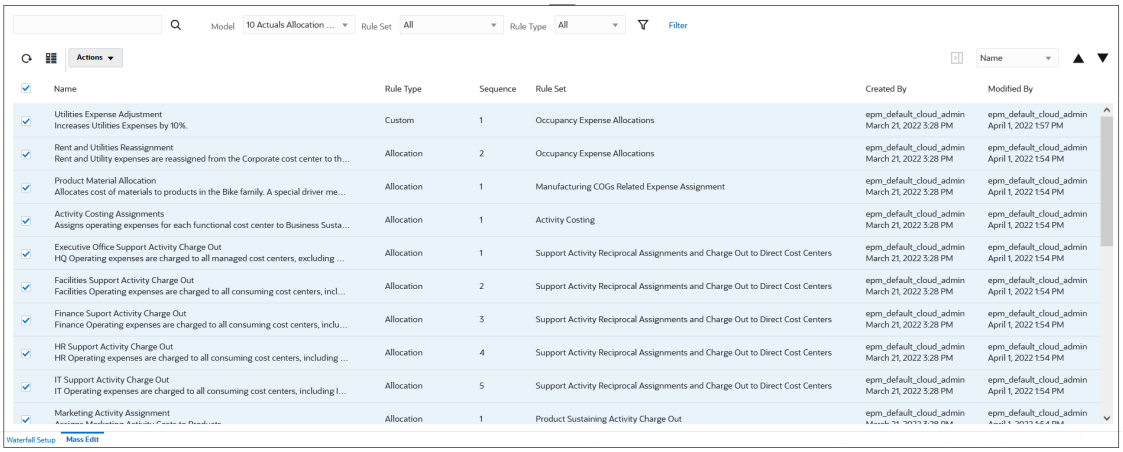
1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, select the rule or rule set that you want to delete.
3. Click (Delete icon).
4. Click **OK** to confirm that you want to delete the rule or rule set.

Using the Designer 1.0 Mass Edit Tab

Use the **Mass Edit** tab to make edits to multiple rules at once. This is useful if you have a large number of rules and you know that a change you are making will impact many of your rules.

For example, assume that you have a model that has a large number of rules, and you want to add a member to all the rules in all the rule sets in the model. Instead of editing each rule individually on the **Waterfall Setup** tab, you can filter and select rules on the **Mass Edit** tab, and then add the member to all the selected rules at once.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Edits that you can make include:

- Adding Members to Rules
- Replacing Members in Rules
- Copying Rules to a Rule Set
- Copying Rules to a Model
- Enabling and Disabling Rules

Edits that you make to your rules on the **Mass Edit** tab are displayed as jobs in the **Jobs** console. See Viewing Rules Jobs.

> **Note**
>
> Edits made on the **Mass Edit** tab cannot be undone. Use the migration tools for backups if necessary. To access the migration tools, from the Home page, select **Tools**, and then **Migration**. See Using Migration.

> **Tip**
>
> From the **Mass Edit** tab, you can also view the complete rule definition for a rule. See Viewing Rule Definitions.

Filtering Which Rules Are Displayed

You can use the following filtering options to filter the rules displayed on the **Mass Edit** tab:

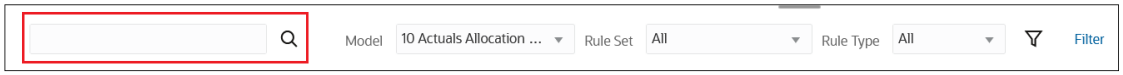
- Search term in the rule name or description
- Model
- Rule Set
- Rule Type
- Custom Filter

You can use as few or as many filters as you want.

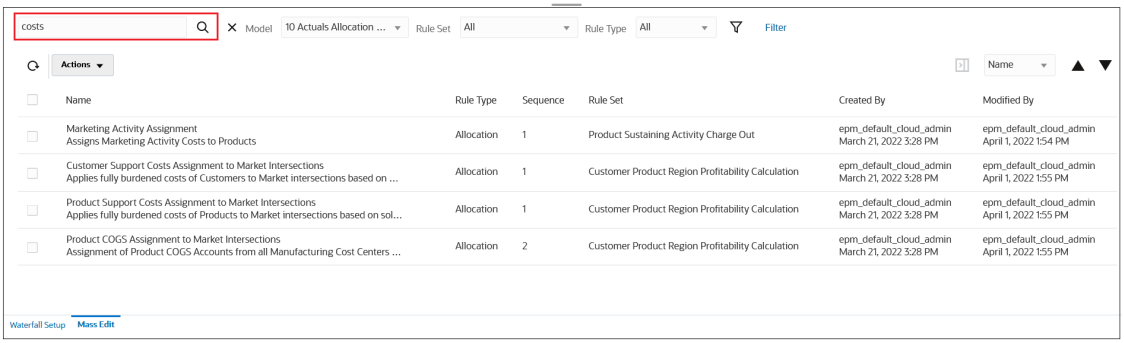
Copyright © 2022, 2026, Oracle and/or its affiliates.

Using a Search Term to Find Rules

To search for a rule or rules, enter all or part of a rule name or description in the Search field, and click .



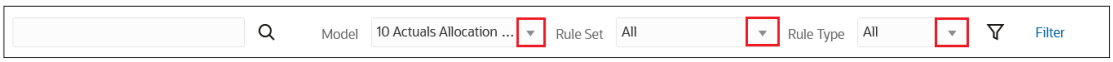
For example, entering "costs" in the Search field displays all the rules with "costs" somewhere in the rule name or description.



To remove the search filter, click .

Filtering by Model, Rule Set, or Rule Type

To filter by **Model**, **Rule Set**, or **Rule Type**, click the drop-down next to each of these to select your filter options.

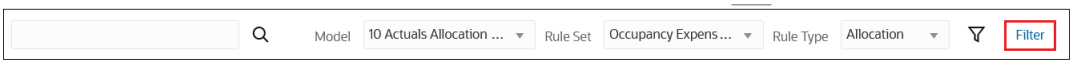


Setting a Custom Filter

A custom filter helps you identify all the rules that reference a specific dimension member within a specific rule component.

To set a custom filter:

1. Click **Filter**.



2. Enter the filter criteria in the **Custom Filter** dialog box:
   - **Dimension**: Select the dimension on which you want to filter.
   - **Rule Component**: Select whether to filter by the **Source**, **Destination**, **Target**, **Driver Basis** or **Offset**. See Defining an Allocation Rule Driver and Defining an Allocation Rule Offset.

> **Note**
>
> If you selected a Years, Period, Scenario, or Version POV dimension, only **Driver Basis** and **Offset** are available to select for the Rule Component.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Operator**: Select **Contains** or **Does Not Contain**, and then select a member in the **Find Member** field.
- **Find Member**: Define the member on which to search. Either type in the member, or click and select a member from the **Select Members** dialog box. See Using the Member Selector.

3. Click **OK**.

To remove the custom filter, click the filter, and then click **Remove**.

Adding Members to Rules

To add members to one or more rules:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Select the **Mass Edit** tab.
3. Make selections for **Model**, **Rule Set**, and **Rule Type**.
4. **Optional:** Further refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed.
5. Select the rules for which you want to add members, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
6. Select **Actions**, and then **Add Member**.
7. In the **Add Member** dialog box, enter the following information:
   - **Dimension**: Select the dimension for which you would like to add a member.
   - **Member**: Enter the member to add. Either type in the member name, or click and select a member from the **Select Members** dialog box. See Using the Member Selector.

     You can add more than one member. The members you add are displayed below the **Member** field.
   - **Rule Component**: Select the rule component to which you would like to add a member.

     Source, Destination, Driver Basis, and Offset apply to Allocation rules, and Target applies to Custom rules.
   - **Job Comment**: Enter a note or comment about the job that will be displayed in the **Job Details** accessed from the **Jobs** console.
8. Click **OK** in the **Information** window that is displayed letting you know that the job to add a member has been submitted successfuly.
9. **Optional**: Go to the **Jobs** console and verify that the member or members were successfully added.

   The job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Replacing Members in Rules

You can find and replace members in one or more rules. As you are finding and replacing members, you can specify a specific member to replace, or you can specify the member for a

Copyright © 2022, 2026, Oracle and/or its affiliates.

dimension in the destination to be the same as the member selected for a dimension in the source.

You specify member replacement in the **Find and Replace** dialog box. Complete these steps:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Select the **Mass Edit** tab.
3. Make selections for **Model**, **Rule Set**, and **Rule Type**.
4. **Optional:** Further refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed.
5. Select the rules for which you want to replace members, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
6. Select **Actions**, and then **Replace Member**.
7. Select an option:
   - **Replace Member**: See Specifying a Specific Member to Replace
   - **Change to Same as Source**: See Specifying the Replacment Member to be the Same as Source
8. Click **OK** in the **Information** window that is displayed letting you know that the Rules Replace Member job has been submitted successfuly.
9. **Optional**: Go to the **Jobs** console and verify that the members were successfully replaced.

   The job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Specifying a Specific Member to Replace

To find and replace a member in one or more rules, enter the following information in the **Find and Replace** dialog box:

- **Dimension**: Select the dimension for which you would like to replace a member.
- Select **Replace Member**.
- **Find Member**: Enter the member to find. Either type in the member name, or click and select a member from the **Select Members** dialog box. See Using the Member Selector.

  > **Tip**
  >
  > If you delete a member that was used in multiple rules, you can enter the deleted member in the **Find Member** field, and then use the **Replace Member** field to replace that member reference with another member selected from the dimension hierarchy.

- **Replace Member**: Enter the replacement member. Either type in the member name, or click and select a member from the **Select Members** dialog box. See Using the Member Selector.
- **Rule Component**: Select the rule component to which you would like to add a member.

  Source, Destination, Driver Basis, and Offset apply to Allocation rules, and Target applies to Custom rules.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Preserve Filters**: If selected, any filters defined on the **Mass Edit** tab are applied to the replaced member. (See Filtering Which Rules Are Displayed.)
- **Job Comment**: Enter a note or comment about the job that will be displayed in the **Job Details** accessed from the **Jobs** console.

Specifying the Replacment Member to be the Same as Source

To replace member selections for a rule destination dimension to be the same as the member selection in the source, enter the following information in the **Find and Replace** dialog box:

- **Dimension**: Select the dimension for which you would like to replace a member.
- Select **Change to Same as Source**.
- **Rule Component**: "Destination" is automatically selected as the rule component.
- **Job Comment**: Enter a note or comment about the job that will be displayed in the **Job Details** accessed from the **Jobs** console.

> **Note**
>
> When you select **Change to Same as Source** for a dimension, any existing destination member selections for that dimension are removed for all rules on the **Mass Edit** tab.

> **Note**
>
> For information on setting the destination to Same as Source when defining an allocation destination, see Setting the Destination to Same As Source.

Copying Rules to a Rule Set

This feature is useful if you need to include identical or similar rules in several rule sets. You can copy the rule with a slightly different name and leave it unchanged or modify it. You can select multiple rules to copy to a rule set.

> **Note**
>
> If a rule uses a Rule Set Context and the rule has dimension members that conflict with members in the target rule set, the rule is not copied, and an error is displayed in the Job Details log.

To copy rules to a rule set:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Select the **Mass Edit** tab.
3. Make selections for **Model**, **Rule Set**, and **Rule Type**.
4. **Optional:** Further refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. Select the desired rules, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
6. Select **Actions**, and then **Copy Rules to Rule Set**.
7. In the **Copy Rules to Rule Set** dialog box, enter the following information:
   - **Rule Set**: Select the rule set to which you want to copy the rules.
   - **Job Comment**: Enter a note or comment about the job that will be displayed in the **Job Details** accessed from the **Jobs** console.

   > **Note**
   >
   > To keep rule names unique in the model, a number is added to the end of rule names as they are copied.

8. Click **OK** in the **Information** window that is displayed letting you know that the job to copy rules to a rule set has been submitted successfuly.
9. **Optional**: Go to the **Jobs** console and verify that the rules were successfully copied.

   The job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Copying Rules to a Model

This feature is useful if you are creating a new model and want to include identical or similar rules from an existing model in the new model. You can select multiple rules to copy to a model.

> **Note**
>
> If a rule uses a Model Context and the rule has dimension members that conflict with members in the target model, the rule is not copied, and an error displays in the Job Details log.

To copy rules to a model:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Select the **Mass Edit** tab.
3. Make selections for **Model**, **Rule Set**, and **Rule Type**.
4. **Optional:** Further refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed.
5. Select the desired rules, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
6. Select **Actions**, and then **Copy Rules to Model**.
7. In the **Copy Rules to Model** dialog box, enter the following information:
   - **Model**: Select the model to which you want to copy the rules.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Overwrite**: Select to indicate that if a rule with the same name is already in the target model, then it will be overwritten by the rule being copied using its definition.
- **Job Comment**: Enter a note or comment about the job that will be displayed in the **Job Details** accessed from the **Jobs** console.

8. Click **OK** in the **Information** window that is displayed letting you know that the job to copy rules to a model has been submitted successfuly.
9. **Optional**: Go to the **Jobs** console and verify that the rules were successfully copied.

   The job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Enabling and Disabling Rules

You can enable or disable multiple rules at one time. This feature is useful if you need to enable a number of rules at once, or make other changes that will affect the validity of enabled rules.

To enable or disable rules:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Select the **Mass Edit** tab.
3. Make selections for **Model**, **Rule Set**, and **Rule Type**.
4. **Optional:** Further refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed.
5. Select the rules that you want to enable or disable, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
6. Select **Actions**, and then **Enable Rules** or **Disable Rules**.
7. Click **OK** in the **Information** window that is displayed letting you know that the job to enable or disable rules has been submitted successfuly.
8. **Optional**: Go to the **Jobs** console and verify that the rules were successfully enabled or disabled.

   The job you is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Viewing Rules Jobs

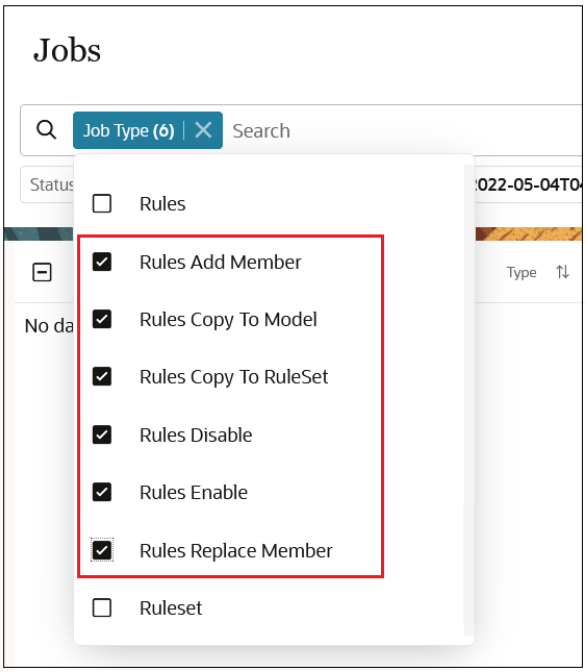
You can view the jobs you created from the **Mass Edit** tab in the **Jobs** console.

To access the **Jobs** console and view your Rules jobs:

1. Complete a step:
   - If you are currently editing rules, select the **Jobs** card above the **Mass Edit** page.
   - From the Home page, select **Modeling**, and then **Jobs**.

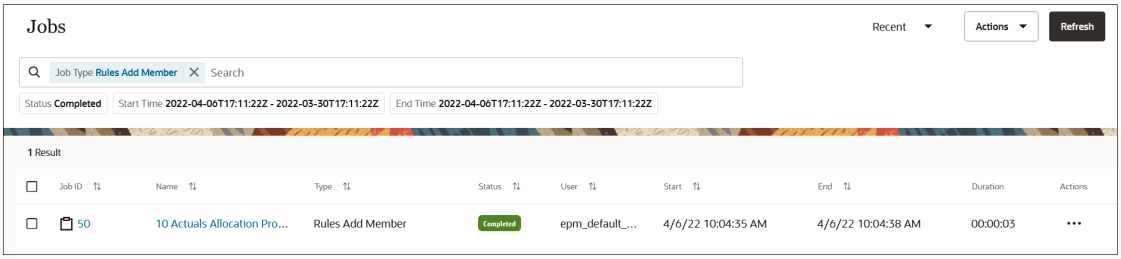
   When you first access the **Jobs** console, the Rules jobs that have been submitted are displayed along with all of the other jobs that have been submitted.
2. To limit the jobs displayed to just Rules jobs, click the **Job Type** tile to move it to the **Search** field. Once it is in the **Search** field, click the tile again and scroll down to select the desired Rule job.

Copyright © 2022, 2026, Oracle and/or its affiliates.



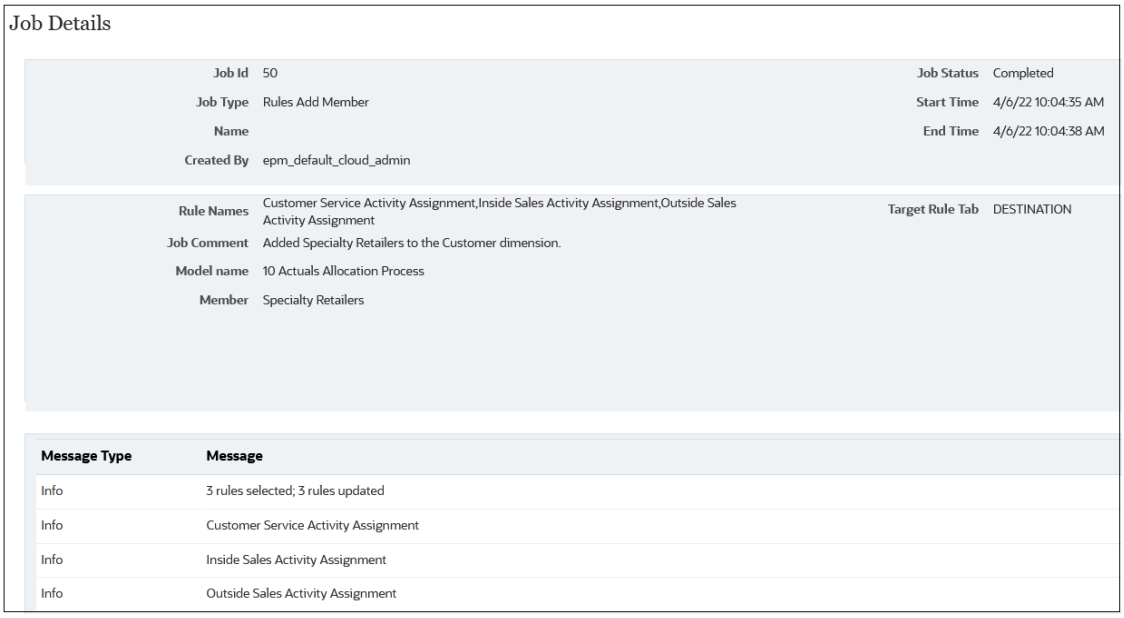
Note: By default, the last three days' jobs are displayed. Click the **Start Time** and **End Time** tiles to select a different date range.

Jobs are displayed with a "Completed" or "Completed with Errors" status. In the following example, one **Rules Add Member** job has been submitted, and it has successfully run without an errors.



Click the job to display job details.

Copyright © 2022, 2026, Oracle and/or its affiliates.


Job Details

Job Id	50	Job Status	Completed
Job Type	Rules Add Member	Start Time	4/6/22 10:04:35 AM
Name		End Time	4/6/22 10:04:38 AM
Created By	epm_default_cloud_admin		
Rule Names	Customer Service Activity Assignment,Inside Sales Activity Assignment,Outside Sales Activity Assignment	Target Rule Tab	DESTINATION
Job Comment	Added Specialty Retailers to the Customer dimension.		
Model name	10 Actuals Allocation Process		
Member	Specialty Retailers		

Message Type	Message
Info	3 rules selected; 3 rules updated
Info	Customer Service Activity Assignment
Info	Inside Sales Activity Assignment
Info	Outside Sales Activity Assignment

Working in Rule Designer 2.0

Related Topics

- About Rule Designer 2.0
- Creating Allocation Rules
- Creating Custom Rules
- Creating Rule Sets
- Renaming Rules
- Using the Designer 2.0 Waterfall Setup Tab
- Using the Designer 2.0 Mass Edit Tab

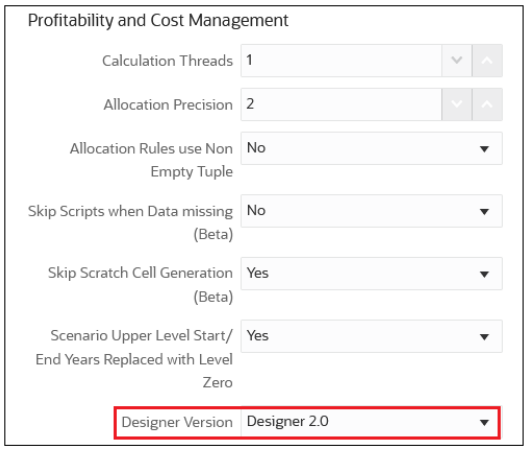
About Rule Designer 2.0

Use the Rule Designer to create and manage rules and rule sets. Rule Designer 2.0 has the same functionality as Rule Designer 1.0, but it provides a more modern and updated user interface with more streamlined actions.

To specify 2.0 as the version of the Rule Designer to use:

1. From the Home page, select **Actions**, and then **Settings**.
2. Under **Profitability and Cost Management**, set the **Designer Version** to **Designer 2.0**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



To access Rule Designer 2.0:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Once you are in the Rule Designer, you can:
   - Use the **Waterfall Setup** tab to create, edit, delete, and copy rule sets and rules. The Waterfall Setup tab shows the full sequence of rule sets and rules for the model. See Using the Designer 2.0 Waterfall Setup Tab.
   - Use the **Mass Edit** tab to add and replace members, copy rules to rule sets and models, and enable and disable rules. See Using the Designer 1.0 Mass Edit Tab.

Creating Allocation Rules

Related Topics

- About Creating Allocation Rules
- Creating an Allocation Rule Definition
- Defining an Allocation Rule Source and Destination
- Defining an Allocation Rule Driver
- Defining an Allocation Rule Offset
- Validating Allocation Rules
- Running a Rule Data Validation Report for Allocation Rules
- Using Ad Hoc to Analyze Allocation Rule Data

About Creating Allocation Rules

When you create an allocation rule, you define the following information:

- **Source**: Where the data you are allocating starts out
- **Destination**: Where the allocated data needs to go
- **Driver**: How to split the source data across the destinations
- **Offset**: How to balance out the allocated data

By default, allocation rules allocate 100% of the amounts in the source intersections. The allocation driver determines the proportion each destination intersection receives using a driver value / total driver value ratio. If a destination has no driver value, then it receives no allocation.

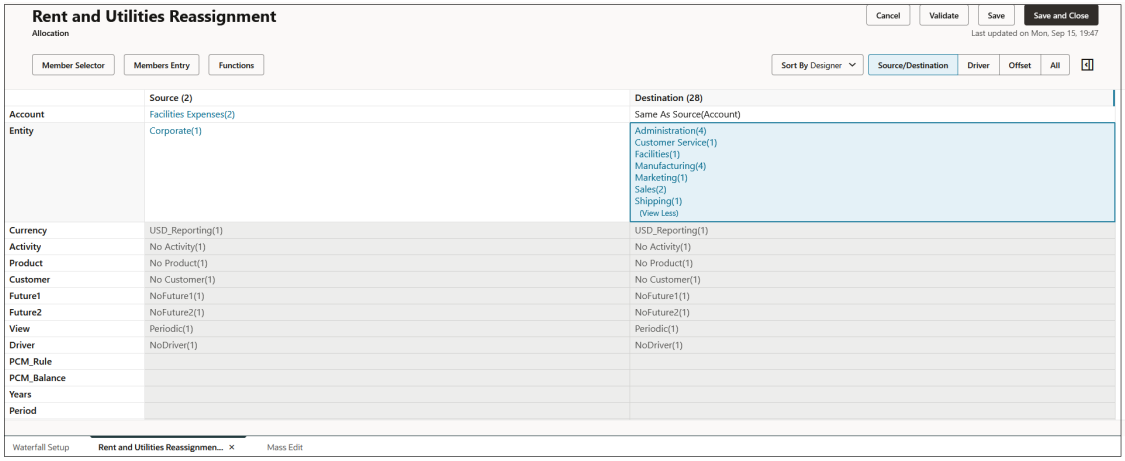
Copyright © 2022, 2026, Oracle and/or its affiliates.

The source amounts automatically include any amounts allocated to the source intersections by previously-executed rules.

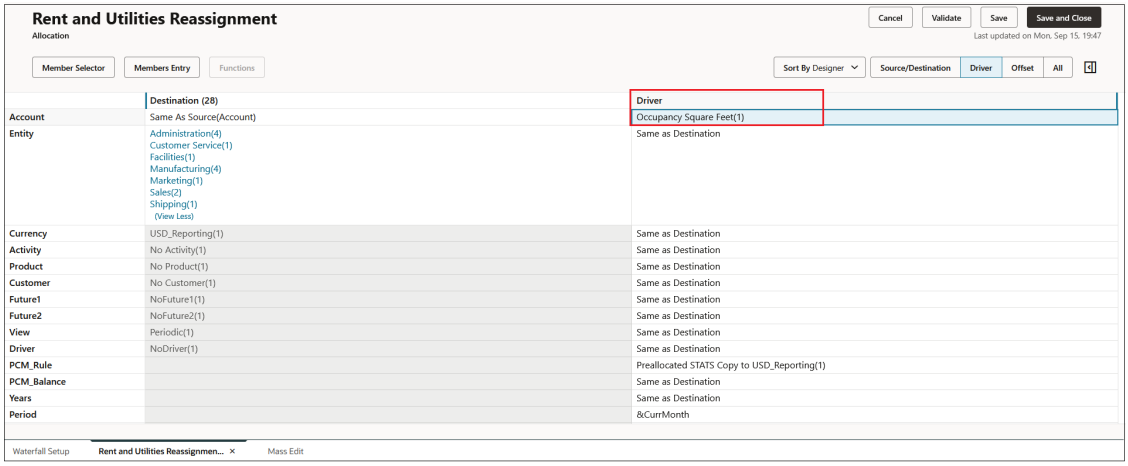
> **Tip**
>
> Review Dimension and Member Requirements When Creating Rules before you begin creating your allocation rules.

Allocation Rule Example

In this example, facilities expenses for the **Corporate** cost center are allocated to the **Facilities** account across multiple cost centers.

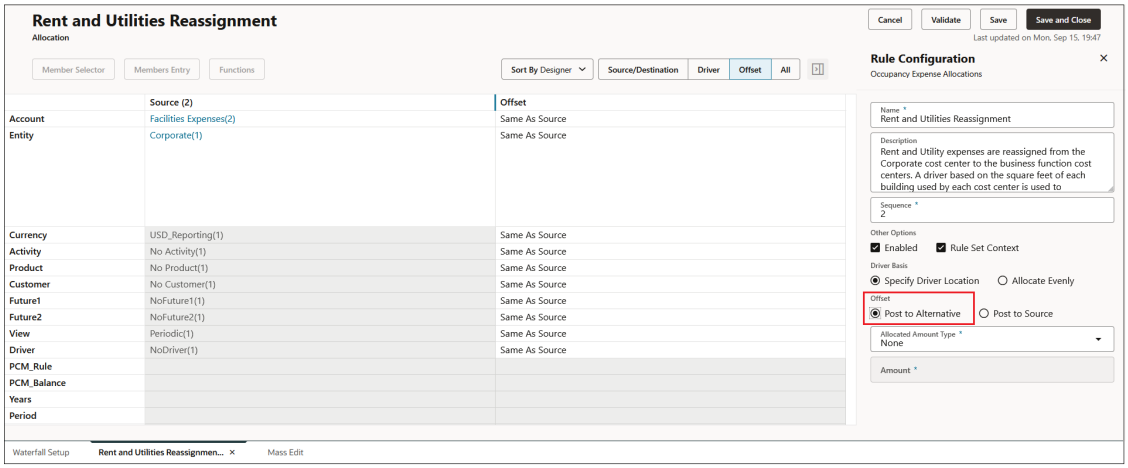


The **Facilities** allocation uses a driver of **Occupancy Square Feet**.



The offset tells the sytem to post the allocated data to an alternative location.

Copyright © 2022, 2026, Oracle and/or its affiliates.



> **Note**
>
> The allocation rule in this example is used in the BksML50 sample application provided with Enterprise Profitability and Cost Management. See Creating the Sample Application for information on how to access the sample application.

Creating an Allocation Rule Definition

An allocation rule definition is the outline of an allocation rule. You initially set up the rule with some basic information, and then you can edit the rule to add more details. You can set up rule definitions for several rules at one time, and then edit them later.

To create an allocaton rule definition:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the drop-down next to **Designer**, and select a model.
3. Select the rule set to which you want to add the allocation rule, and do one of the following:
   - Click , and then select **Rule**, or
   - Click ••• next to the rule set, and then select **Add Rule**
4. In the **Create Rule** panel, enter the following information:
   - **Name**: Enter a name for the rule.

     For example, the "Occupancy Expense Allocations" rule set in the the BksML50 sample application provided with Enterprise Profitability and Cost Management, contains an allocation rule called "Rent and Utilities Reassignment" .

     Rule names have the same restrictions as the member names in Oracle Essbase. See Naming Restrictions for Dimensions, Members, and Aliases.
   - **Description**: Enter a description for the rule.

     The description you enter here will appear in the Model Documentation report. Enter a description that will make the information about the allocation rule informative for anyone reviewing the model logic in the future. See Generating a Model Documentation Report.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example, you could say something like; "Rent and Utility expenses are reassigned from the Corporate cost center to the business function cost centers. A driver based on the square feet of each building used by each cost center is used to apportion the expenses."

- **Type**: Select **Allocation**.
- **Sequence**: Enter a number to determine the order in which the rule will run in the rule set.

  The Sequence can be any whole number from 1 to 9999.

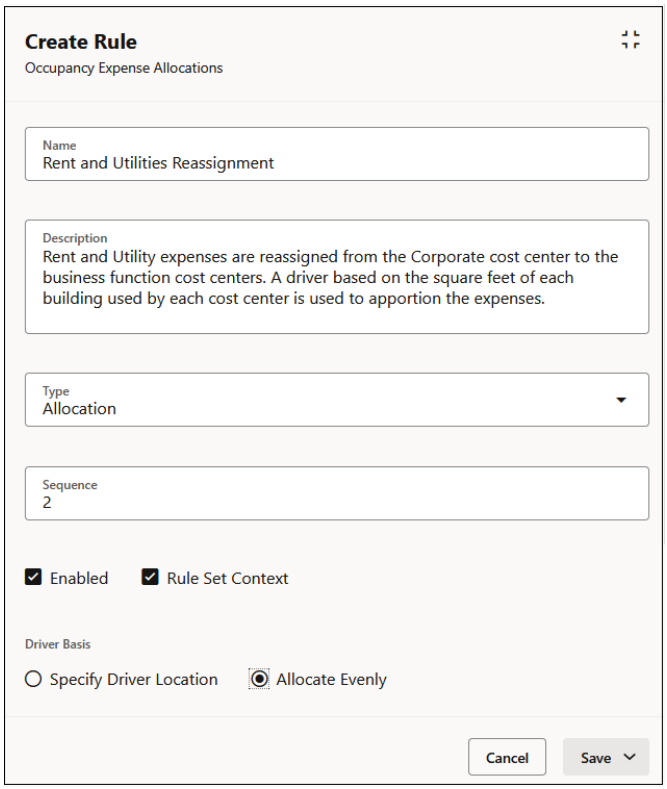
  Rules with the same sequence number will run at the same time if parallel calculation is enabled for the parent rule set, and the number specified for **Calculation Threads** in the Applications Settings. (See "Step 5: Select a Rule Set Calculation Option" in Creating a Rule Set, and "Calculation Threads" in About Managing Application and System Settings.)
- **Enabled**: If selected, the rule will be active when the calculation is performed.
- **Rule Set Context**: If selected, the member selections done when the rule set was created will apply to this rule. If a Model Context has been enabled for the rule set, it will also be applied. See Understanding Model and Rule Set Context.
- **Driver Basis**: Select a option to specify how to allocate the data:
  - **Specify Driver Location**: Uses a driver to determine the percentages to allocate to each destination. If a destination has no driver value, then it receives no allocation.
  - **Allocate Evenly**: Allocates data evenly across all destinations.
- **Offset**: Select an option to specify where to post the offset. The offset tells the system how to balance out the allocated data.
  - **Post to Alternative**: If you select this option, you specify a dimension target to calculate the offset values.
  - **Post to Source**: If you select this option, the selected Source dimension members are used as the offset.

  By default the offset is the same as the source location.
- **Allocated Amount Type**: Limits how much of the source is allocated. Select an option:
  - **None**: This is the default option. If selected, all of the money in the source is allocated.
  - **Currency**: If selected, limits the amount allocated from each source intersection by the currency value entered in the **Amount** field. For example, an amount of 1000 would limit the allocation from each cell to 1000 of whatever currency is used.
  - **Percentage**: If selected, limits the amount allocated from each source intersection by the percentage entered in the **Amount** field. For example, 50 would limit the allocation from each cell to 50%.

5. When you are finished entering the information in the **Create Rule** panel, click **Save**, and then select either:
   - **Save and Close** to return to the **Waterfall Setup** tab, or
   - **Save and Next** to continue adding rule definitions for additional rules

In the following example, the Rent and Utilites Reassignment rule is defined as an Allocation rule and will be the second rule run in the Occupancy Expense Allocations rule set. It will be enabled by default, use a previously-defined Rule Set Context, and the data will be allocated evenly across all destinations.

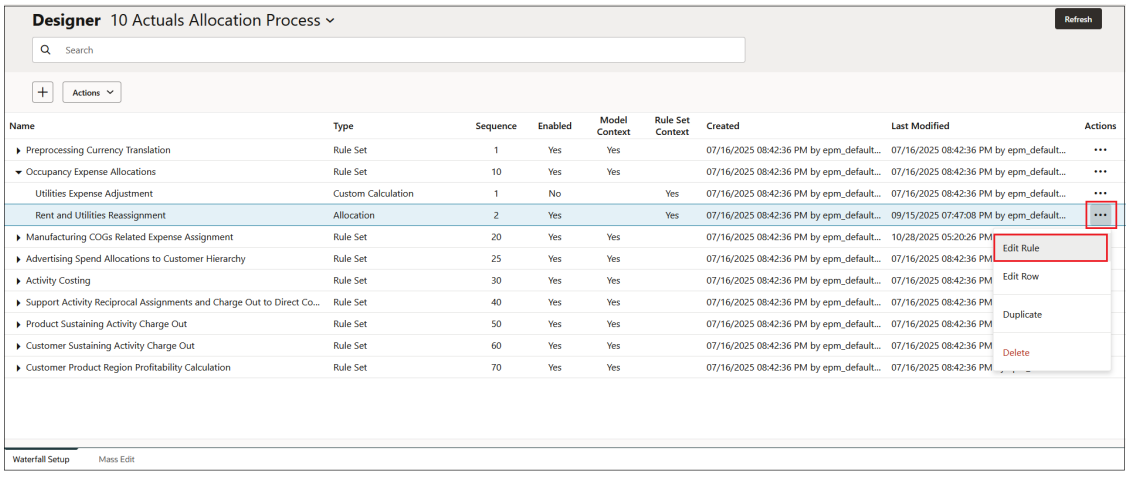
Copyright © 2022, 2026, Oracle and/or its affiliates.



Tip

Use the scroll bar on the right of the **Create Rule** panel to see additional information about the rule.

The rules defined in the **Create Rule** panel are displayed in the **Waterfall Setup** tab. Click ••• next to a rule, and select **Edit Rule** to enter additional information about the source and destination, driver, and offset for the allocation rule.



Defining an Allocation Rule Source and Destination

Use the **Source/Destination** tab to define how to allocate data from the source to the destination.

Copyright © 2022, 2026, Oracle and/or its affiliates.

When you first access the **Source/Destination** tab, the required Entity and Account dimensions, the optional Currency dimension if you have a multicurrency application, and any custom dimensions in your application are displayed in the **Source** column. If you have defined and enabled a Rule Set Context or a Model Context, any dimensions defined in the Rule Set Context or a Model Context are not displayed. See Understanding Model and Rule Set Context.

Review these topics for more information:

- Best Practices for Allocation Rule Source and Destination
- Defining an Allocation Source
- Defining an Allocation Destination
- Setting the Destination to Same as Source
- Defining Member Matching Expressions
- Allocating to Parent/Siblings
- Using Shadow Parent Members in Hierarchy Allocation
- Managing Filters for Source and Destination Members
- Allocation Source/Destination Example

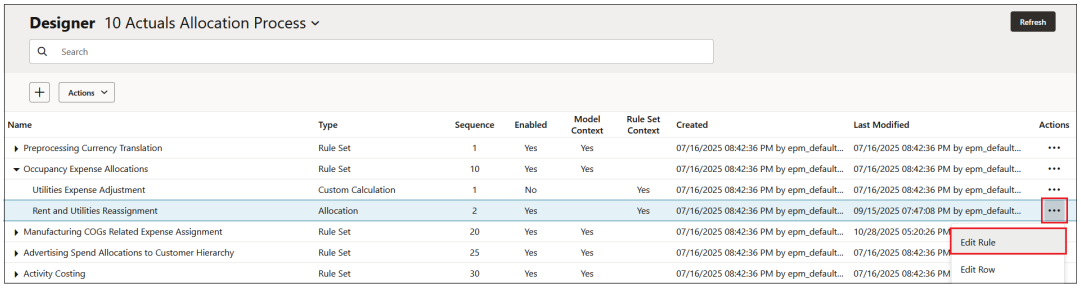
Defining an Allocation Source

Begin by defining the members from which the rule will retrieve the data to allocate.

For each dimension in the **Source** column, select the member or members that hold the data to allocate. You must select a member for every dimension. If a dimension does not apply to the data in your rule, select the No<*dimname*> member. See Dimension and Member Requirements When Creating Rules.

To select members for the source:

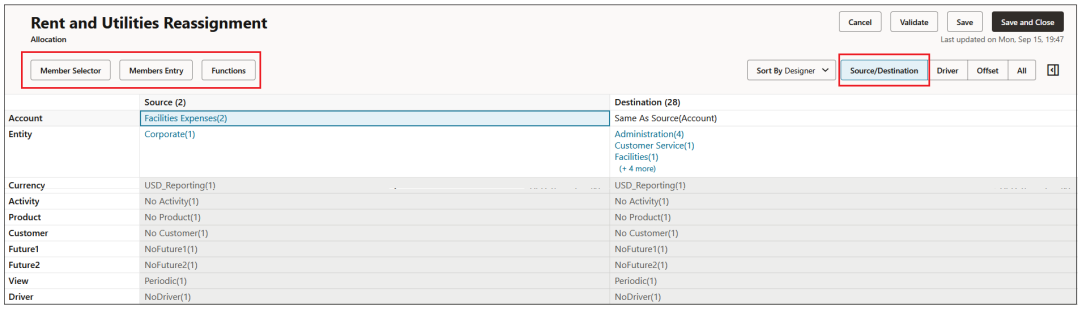
1. On the **Waterfall Setup** tab, click ••• next to an allocation rule, and then select **Edit Rule**.



   The rule is opened with **Source/Destination** information displayed.

2. Click in the **Source** column next to a dimension to enable **Member Selector**, **Members Entry**, and **Functions**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

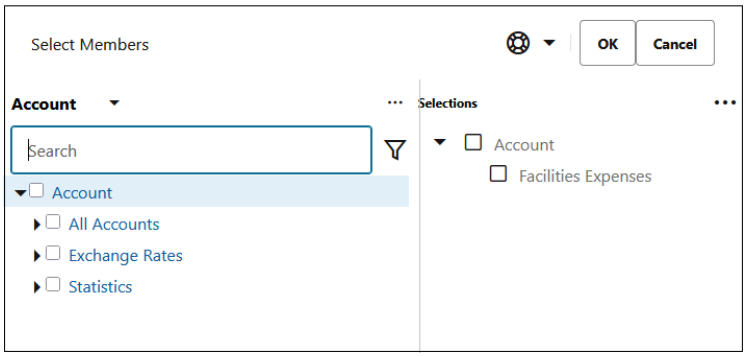


3. With the row for the dimension selected, click an option to define the source members for the dimension:

- **Member Selector**:

  Click **Member Selector** to open the **Select Members** dialog box, where you can select the members to add to the source dimension. See Using the Member Selector.

  In this example, the Facilities Expenses member has been added to the Account dimension.



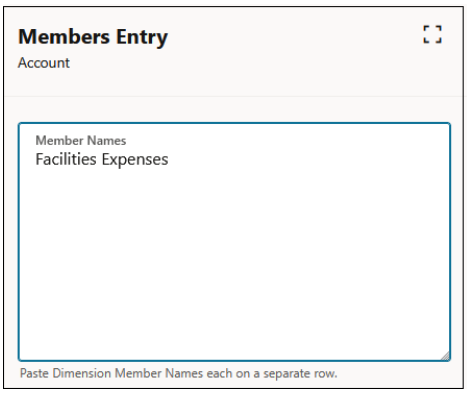
> **Tip**
>
> Selecting an upper-level member selects all the descendants of that member. For example, if you choose "All Accounts", then your selection is really all the Level 0 descendants of "All Accounts". The rule will execute an allocation for each level-0 member. Selecting an upper-level member eliminates the need to pick each specific member individually.

- **Members Entry**:

  If you have several members to add to the source dimensions and you know the member names, instead of adding each member one-by-one from the **Select Members** dialog box, click **Members Entry** and enter the dimension member names.

  For example, if you have a list of members in an Excel spreadsheet, you can copy these members from Excel, and then paste them into the **Members Entry** dialog box. The members will be added to the dimensions in the source to which they were assigned when the dimensions were created. See Adding Members to a Dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

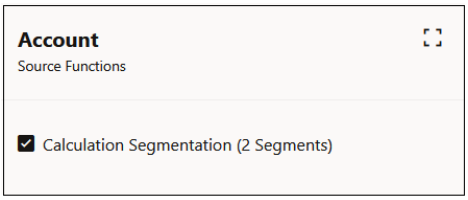


Tip

To add members to all applicable dimensions in the source, click on the **Source** row, and then click **Members Entry**. To add multiple members to a specific dimension, click on the dimension row, and then click **Members Entry**.

4. **Optional:** To segement rules into smaller rules to execute separately, click in the **Source** column next to a dimension, and then click **Functions**. In the **Source Functions** dialog box, select **Calculation Segementation**.

   Calculation segmentation enables the calculation to process rules with a very large data range, which would otherwise be too large for Oracle Essbase to process. Calculation segmentation is enabled for up to two dimensions in each rule.



Tip

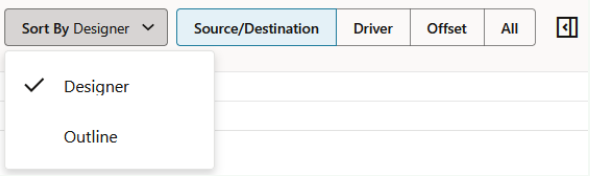
Use Calculation Segmentation only when your source range is extremely large and sparsely populated. As a best practice, you should call support before proceeding with this option.

5. Click **Save** to save the information you have added for the source.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Tip

- To view details about the rule configuration, click to open the **Rule Configuration** panel.
- The numbers in parenthesis to the right of each member indicates the number if level 0 descendants. This helps you identify the size of the range you are defining.
- The default sort order for the dimensions is set to **Designer**. If you need to compare the data on this page to Smart View or another data output, change the sort order from **Designer** to **Outline** so that the sort order is the same as the sort order in Smart View or your other data output.



- See Managing Filters for Source and Destination Members for information on how to filter the source members used in a rule.

Defining an Allocation Destination

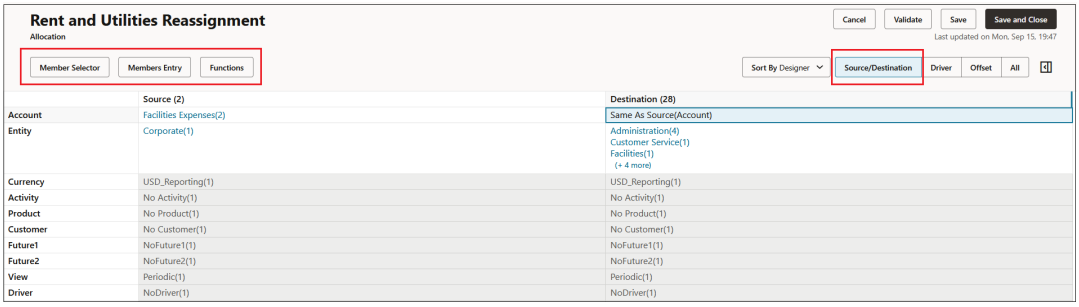
After defining an allocation source, the next step is to define the members that describe where to allocate the data and how to allocate to the destination.

Selecting Members for the Destination

For each dimension in the **Destination** column, select the members that are to receive the allocated data. If you select a parent member, the allocation will go to its all its level 0 descendants.

To select members for the destination:

1. Click in the **Destination** column next to a dimension to enable **Member Selector**, **Members Entry**, and **Functions**.

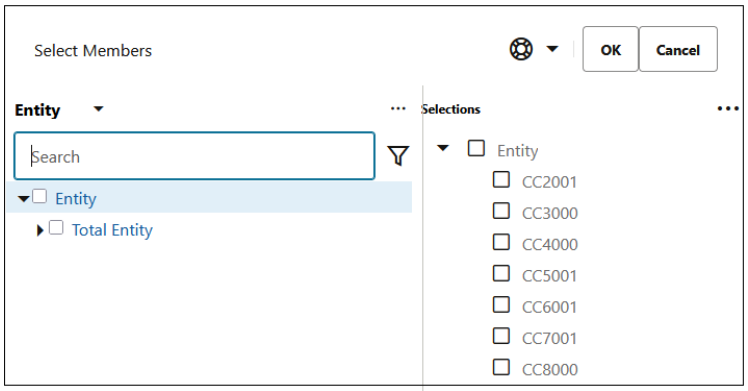


2. With the row for the dimension selected, click an option to define the destination members for the dimension:
   - **Member Selector**:

     Click **Member Selector** to open the **Select Members** dialog box, where you can select the members to add to the source dimension. See Using the Member Selector.

     In this example, seven members have been defined for the Entity dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

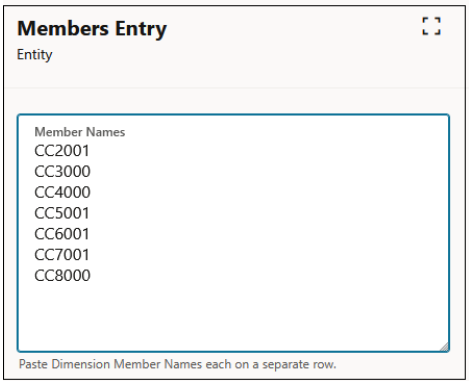


> **Tip**
>
> Selecting an upper-level member selects all the descendants of that member. For example, if you choose "All Accounts", then your selection is really all the Level 0 descendants of "All Accounts". The rule will execute an allocation for each level-0 member. Selecting an upper-level member eliminates the need to pick each specific member individually.

- **Members Entry**:

  If you have several members to add to the destination dimensions and you know the member names, instead of adding each member one-by-one from the **Select Members** dialog box, click **Members Entry** and enter the dimension member names.

  For example, if you have a list of members in an Excel spreadsheet, you can copy these members from Excel, and then paste them into the **Members Entry** dialog box. The members will be added to the dimensions in the source to which they were assigned when the dimensions were created. See Adding Members to a Dimension.



> **Tip**
>
> To add members to all applicable dimensions in the destination, click on the **Destination** row, and then click **Members Entry**. To add multiple members to a specific dimension, click on the dimension row, and then click **Members Entry**.

Defining How to Allocate to the Destination

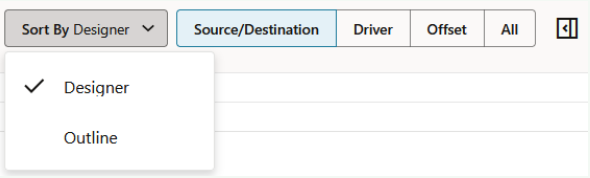
Copyright © 2022, 2026, Oracle and/or its affiliates.

The following options are available when defining how to allocation to the destination. To specify an option, click in the **Destination** column next to a dimension, and then click **Functions**.

- **Same As Source**: Defines the members set for a destination dimension to be the same as the members set for the source dimension. See Setting the Destination to Same as Source.
- **Allocate to Parent**: Creates a source to destination relationship for every member selection in the source, and targets its value to the member's parent. See Allocating to Parent/Siblings.
- **Allocate to Siblings**: Creates a source to destination relationship for every member selection in the source, and targets its value to the member's siblings. See Allocating to Parent/Siblings.

Tip

- To view details about the rule configuration, click to open the **Rule Configuration** panel.
- The numbers in parenthesis to the right of each member indicates the number if level 0 descendants. This helps you identify the size of range you are defining.
- The default sort order for the dimensions is set to **Designer**. If you need to compare the data on this page to Smart View or another data output, change the sort order from **Designer** to **Outline** so that the sort order is the same as the sort order in Smart View or your other data output.



- See Managing Filters for Source and Destination Members for information on how to filter the source members used in a rule.

Setting the Destination to Same as Source

You can define the members for a dimension in the destination to be the same as the members selected for a dimension in the source. In this case, when the rule runs, members in the destination are selected for allocation by matching to the member selection in the source. Members in the source selection that are not level 0 are resolved to level 0 members and then are matched with level 0 members in the destination. This means that values associated with a source member are not allocated to other members for the dimension, but will remain associated with the same member as the source.

To set the destination members to be the same as the source members:

1. Click in the **Destination** column next to a dimension, and then click **Functions**.
2. In the **Destination Functions** dialog box, select **Same As Source**.
3. Click the drop-down under **Destination Same As Source**, and select a dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

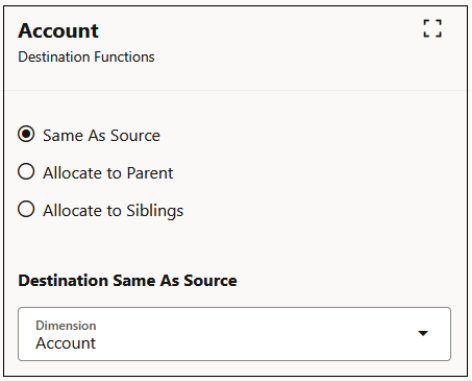
When you select **Same As Source**, you can select the same dimension used in the source (*Same as Source, Same Dimension*), or you can select a different dimension (*Same as Source, Different Dimension*).

> **Note**
>
> When defining dimensions as Same as Source, you must have at least one dimension that is not defined as Same as Source.

Same as Source, Same Dimension

Select the same dimension that you used in the source if you want to allocate to the same *members* in the destination dimension that you used in the source dimension. This is the default.

In this example, we selected the Account dimension, which is the same as the source Account dimension.



When defining the destination range, you can use the *Same as Source, Same Dimension* option for as many dimensions as desired.

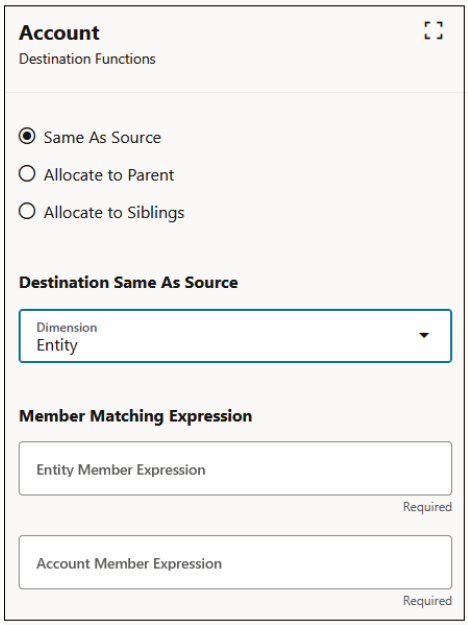
Same as Source, Different Dimension

In rare cases when dimension members in different dimensions are nearly identical, you can use the *Same as Source, Different Dimension* option. In this case, you are requesting that the destination members match the source members you selected for a different dimension.

Selecting a different dimension than the source dimension allows you to create source and destination references with dimensions that use members names that occur in multiple dimensions. For example, you could use both the Origin Entity and Target Entity dimensions in order to track sending and receiving entities in the allocation results.

In this example, we selected the Entity dimension, which is different than the source Account dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.



When selecting a destination dimension that is different than the source dimension, keep in mind the following points:

- You must define expressions to match member names. See Defining Member Matching Expressions for information on how to define member matching expressions.
- When defining the destination range, you can use the *Same as Source, Different Dimension* option for only one dimension.
- You cannot have duplicate member names, even if the members are in different dimensions. For example, if you had an Entity called *Sales* and an Account called *Sales*, you would use a prefix to differentiate the members. For example, *ENT_Sales* and *ACC_Sales*.

Defining Member Matching Expressions

When selecting a destination dimension that is different than the source dimension, you must define member matching expressions. You can define expressions that use wildcard characters to match member names.

The following characters are available when creating member matching expressions:

- "#" means ignore (trim) one character in the member name
- "*" represents the characters that are left after the characters represented by # are trimmed.

Using the " #" and "*" characters, you can trim a prefix, a suffix, or both a prefix and a suffix from a member name before a match is attempted.

Each expression can have multiple #s, but only one *. For example:

###* trims a 3-char prefix

*#### trims a 4-char suffix

##*### trims both a prefix and a suffix

##*#*## is not allowed

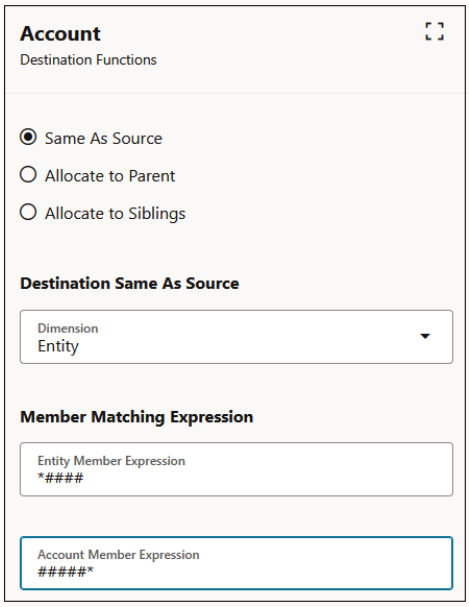
Copyright © 2022, 2026, Oracle and/or its affiliates.

Member Matching Expression Example

Let's consider an example where your application has two dimensions, Entity and Account, with members as follows:

- Entity: mem1_ENT, mem2_ENT, mem3_ENT
- Account: ACCT_mem1, ACCT_mem2, ACCT_mem3

In this example, we will select Account for the source dimension, and set the members in the destination dimension to be the same as the members in the source Account dimension, but with Entity selected for the destination dimension. We will then add expressions to match the members for the Entity and Account dimensions.



For Entity, the expression *#### ignores the four characters at the end of the member name _ENT and leaves the characters in the front.

For Account, the expression #####* ignores the five characters ACCT_ and leaves the rest of the characters in the member name to be matched.

Applying both of these expressions results in Entity's mem1_ENT matching with Account's ACCT_mem1.

Allocating to Parent/Siblings

The **Allocate to Parent** and **Allocate to Siblings** destination options create a source to destination relationship for every member selection in the source, and target its value to either the member's parent or siblings. Members are allocated by specific member selection and/or by the result of a filter.

These destination options eliminate the need to create individual rules for every unique source and destination combination when trying to express this kind of relationship. With the **Allocate to Parent** destination options, you can define multiple such relationships in a single rule, resulting in decreased maintenance and more easily understandable trace results.

The allocation process when allocating to parents or siblings is as follows:

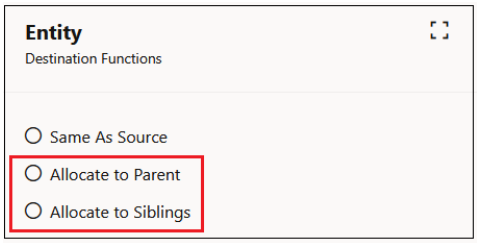
- Source member *selections* are resolved
  - Explicit member selections (Parent or Level 0)

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - Resolution of member selections returned from a filter
- Member-based destinations options are applied

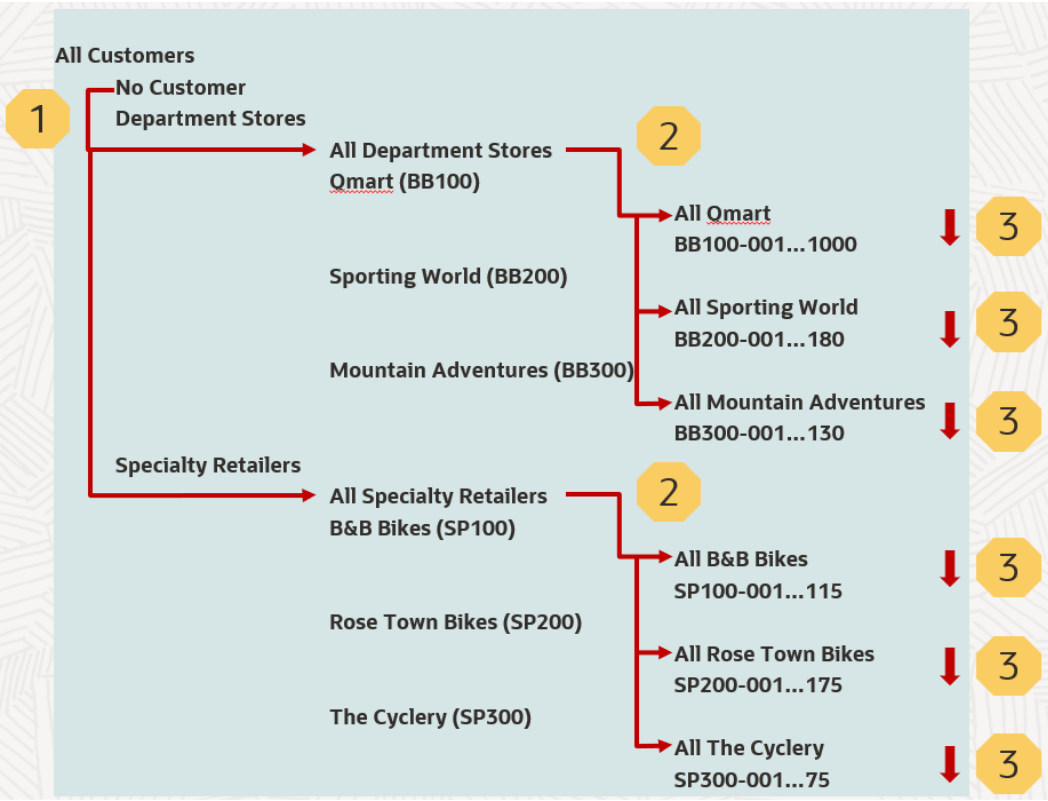
To allocate members in the source to a parent or siblings in the destination:

1. Click in the **Destination** column next to a dimension, and then click **Functions**.
2. Select **Allocate to Parent** or **Allocate to Siblings**.



Allocate to Parent/Siblings Example

As an example, assume you have an advertising budget and want to allocate money through Channel categories to Customer Groups and down to Customer Locations.

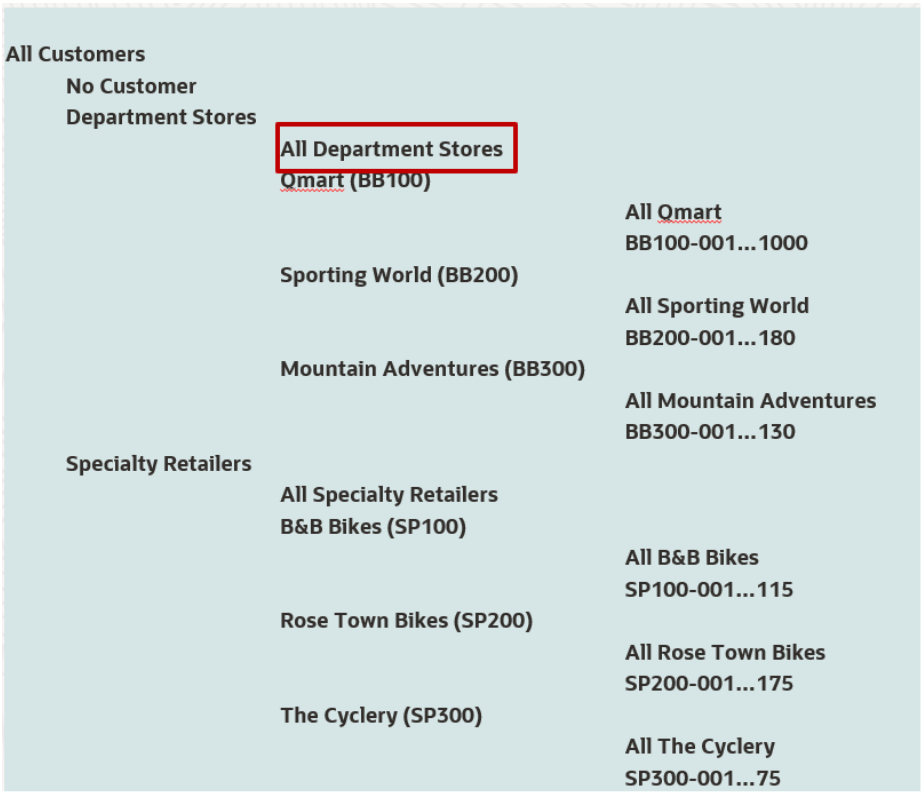


In this example:

- **1:** Advertising is allocated to Channel categories [All Department Stores, All Speciality Retailers]
- **2:** Channel categories are allocated to Customer Groups [All Qmart, All Sporting World, All Mountain Adventures, All B&B Bikes, All Rose Town Bikes, All the Cyclery]
- **3:** Customer Groups are allocated to Customer Locations [1000 Qmart, 180 Sporting World, 130 Mountain Adventures, 115 B&B Bikes, 175 Rose Town Bikes, 75 The Cyclery]

Copyright © 2022, 2026, Oracle and/or its affiliates.

Now assume you select **All Department Stores**. The results differ depending on whether you choose **Allocate to Parent** or **Allocate to Siblings**.



All Department Stores - Allocate to Parent

With this option, the source Level 0 descendants of All Department Stores are allocated to the following destination:

- Level 0 Descendants of All Department Stores
- (including All Department Stores)

All Department Stores - Allocate to Siblings

With this option, the source Level 0 descendants of All Department Stores are allocated to the following destination:

- Level 0 descendants of Qmart
- Level 0 descendants of Sporting World
- Level 0 descendants of Mountain Adventures
- (and *not* All Department Stores)

> **Note**
>
> In this example, **All Department Stores** is a "Shadow Parent Member". See Using Shadow Parent Members in Hierarchy Allocation for more information.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Using Shadow Parent Members in Hierarchy Allocation

ASO databases do not allow storing data at the parent member level, so for each hierarchy branch where a value for the entire branch is desired, you can create a level 0 "shadow" parent member.

Consider the following customer hierarchy:

Member Name	Default Alias Table
Customer	
TotalCustomer	Total Customer
All Customers	All Customers
Department Stores	Department Stores
All Department Stores	All Department Stores
BB100	Qmart
BB200	Sporting World
BB300	Moutain Adventures
Specialty Retailers	Specialty Retailers
All Specialty Retailers	All Specialty Retailers
SR100	B&B Bikes
All B&B Bikes	All B&B Bikes
SR100-001	SR100-001
SR100-002	SR100-002

In this hierarchy, the "shadow" Parent members are:

- All Department Stores
- All Specialty Retailers
- All B&B Bikes

Managing Filters for Source and Destination Members

When you select an upper level member for a source or destination dimension in an allocation rule, all level-0 descendants of that member are included in the rule. If you do not want to include all the level-0 descendants in a rule, you can apply a filter to limit the included members.

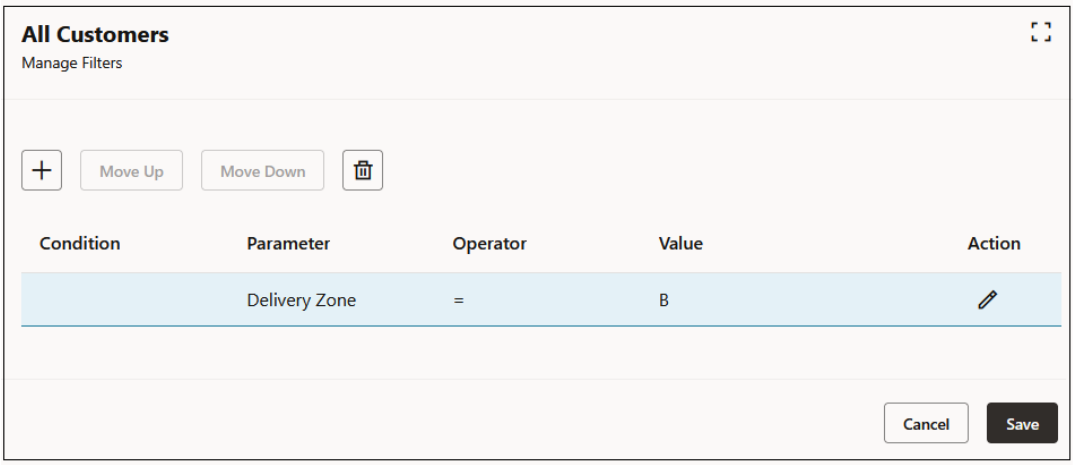
For example, assume your member selection is All Customers, and All Customers has 1,000 level-0 descendants. Assume further that you want to include only the customers in Delivery Zone B in your rule. In this case, you could apply a filter to limit the level-0 descendants included in your rule to only customers in Delivery Zone B.

To add a filter to a member:

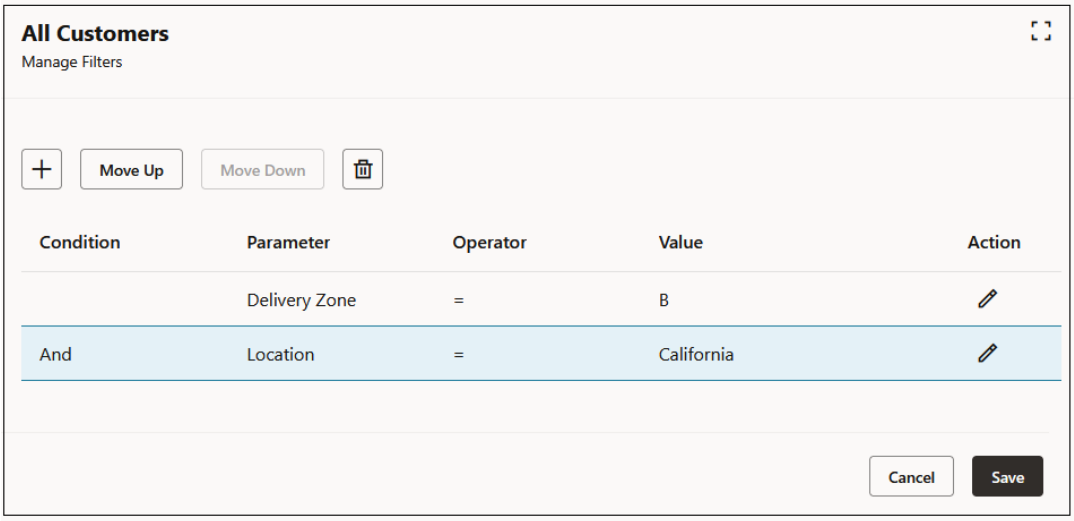
1. In **Source/Destination**, click on a member in the **Source** or **Destination** column.
2. In the **Manage Filters** dialog box, click .
3. Define a **Parameter**, **Operator**, and **Value** for the filter, and then click .

Copyright © 2022, 2026, Oracle and/or its affiliates.

In our example, we filtered the customers to Delivery Zone B.

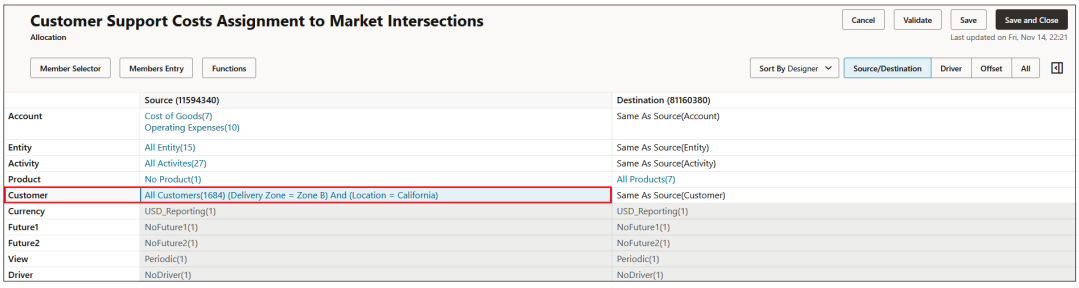


You can add more than one filter. When you have several filters, you can arrange the filter order by clicking **Move Up** or **Move Down**.



4. Click **Save**.

When you add a filter, it is shown next to the member on the **Source/Destination** tab.



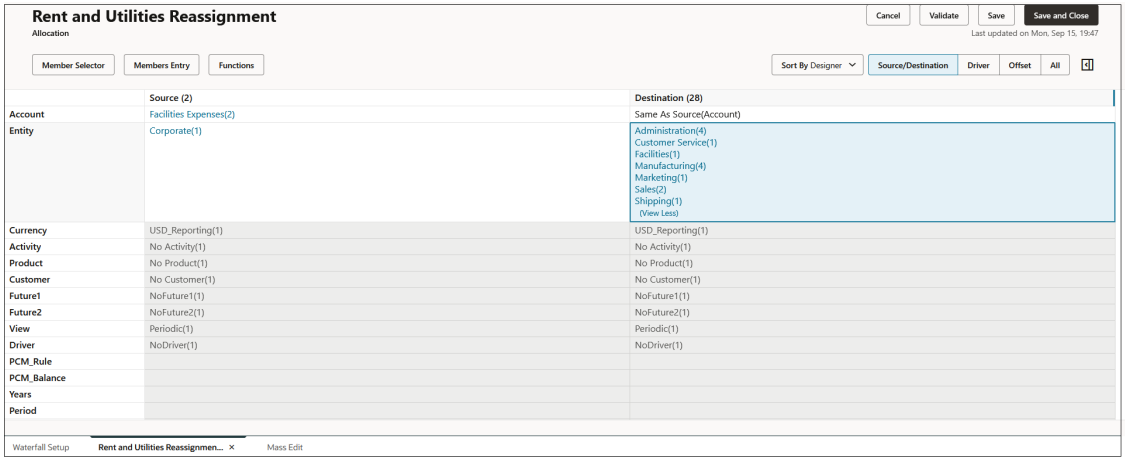
Copyright © 2022, 2026, Oracle and/or its affiliates.

Tip

- When you add a filter, you must click ✓ next to the filter before you add additional filters and before you click **Save**. If you have multiple filters, click ✓ next to each filter.
- To remove a filter, select the filter and click 🗑.

Allocation Source/Destination Example

In this example, facilities expenses for the **Corporate** cost center are allocated to the **Facilities Expenses** account across multiple cost centers.



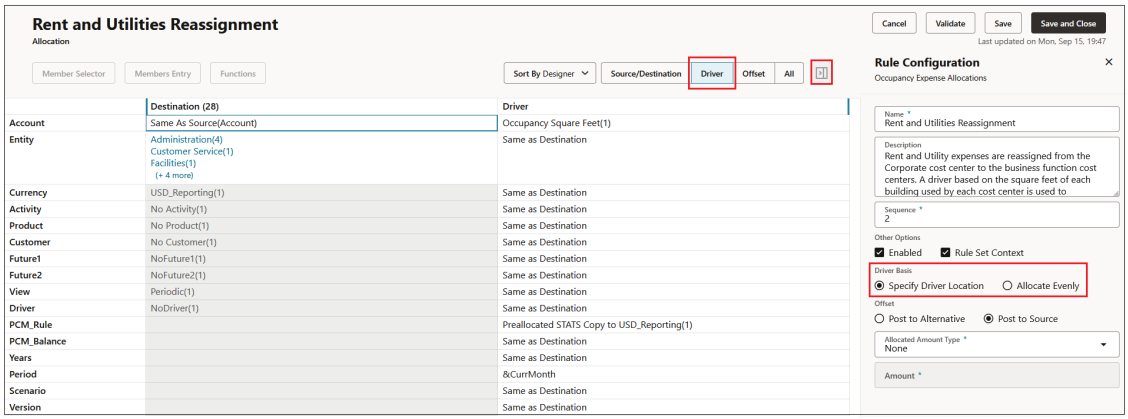
Defining an Allocation Rule Driver

The driver definition tells the system how to split the source data across the destinations.

To define a driver, click ◧ to open the **Rule Configuration** panel, and select an option to specify how to allocate the data:

- **Specify Driver Location**: Uses a driver to determine the percentages to allocate to each destination. If a destination has no driver value, then it receives no allocation.
- **Allocate Evenly**: Allocates data evenly across all destinations.

Copyright © 2022, 2026, Oracle and/or its affiliates.



If you choose to use a driver to determine the allocation proportions, note the following:

- All of the dimensions in the database are available to use as a driver, regardless of whether a Rule Set Context or a Model Context has been enabled for the rule. (See Understanding Model and Rule Set Context.)
- In addition to the Entity and Account dimensions, optional Currency dimension, and any custom dimensions required to create a rule, the Years, Period, Scenario, and Version POV dimensions and the PCM_Balance and PCM_Rule system dimensions are available for driver selection.
  - The POV dimensions enable you to use a data value from another POV for the driver.
  - The PCM_Rule dimension enables you to use a data value generated by a previous rule for the driver.
  - The PCM_Balance dimension is usually used in combination with the PCM_Rule dimension. When a rule runs, it writes the result to the intersection of the rule member and the Allocation In or Allocation Out balance members.
- All of the dimensions, with the exception of the system dimensions, are initially set to *Same As Destination*. PCM_Rule is set to *NoRule*, and PCM_Balance is set to *Input*. These are the default settings. Leave the dimensions at their default values if you want the driver value to be referenced by the destination locations defined on the **Source/Destination** tab.
- If you want the driver value to be referenced by a fixed member that is different than the destination location, you can have only one driver member selection per dimension, and it must be a single member. It can be either an upper-level member or a level-0 member, but you can have only one selection per dimension.

To change the driver location reference to a fixed member:

1. On the **Driver** tab, click **Same As Destination** in the **Driver** column next to a dimension, and then click **Member Selector**.
2. In the **Select Members** dialog box, select the dimension member that will be used to calculate the allocation. See Using the Member Selector.

   You can select only one member per dimension for the driver. The member selected can be an upper-level member or a level-0 member.

   You can optionally click **Members Entry** and enter the members to use as the driver in the **Members Entry** dialog box. The members will be added to the dimensions to which they were assigned when the dimensions were created. See Adding Members to a Dimension.

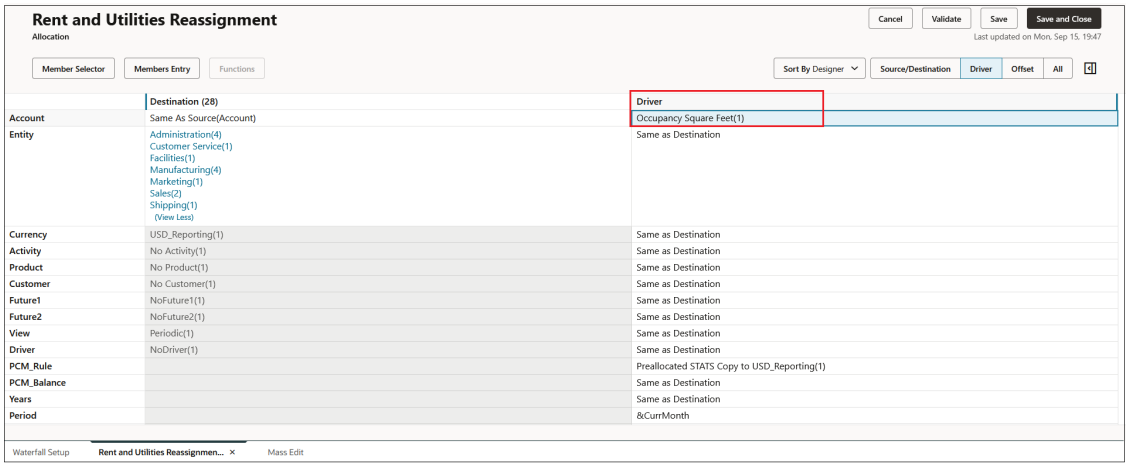
Copyright © 2022, 2026, Oracle and/or its affiliates.

Best Practices for Allocation Rule Drivers

- Avoid using dynamic members (upper-level members or members with a formula) in the driver definition.
  - Oracle Essbase ignores destinations with no driver data.
  - Dynamic members require a computation or aggregation before Essbase can determine if driver data is present.
  - A large destination range can result in many unnecessary computation steps for determining whether the driver data is absent.
  - An upper-level member returns an aggregated value – it does not define where to allocate.
- Use data prep rules to compute driver data in ranges where allocation rules will need it – compute once, use many.
- Keep in mind that if you are migrating from EBS, PSFT or other ledger-based allocations, the driver does *not* contribute to the destination definition.

Allocation Rule Driver Example

This example defines a driver of **Occupancy Square Feet**.



Using Substitution Variables in an Allocation Rule Driver

You can use substitution variables in an allocation rule driver. This is useful when driver data needs to be retrieved from a POV other than the current calculation POV. Using a substitution variable instead of selecting a value in the driver definition, makes it so you do not need to update the driver definition each month.

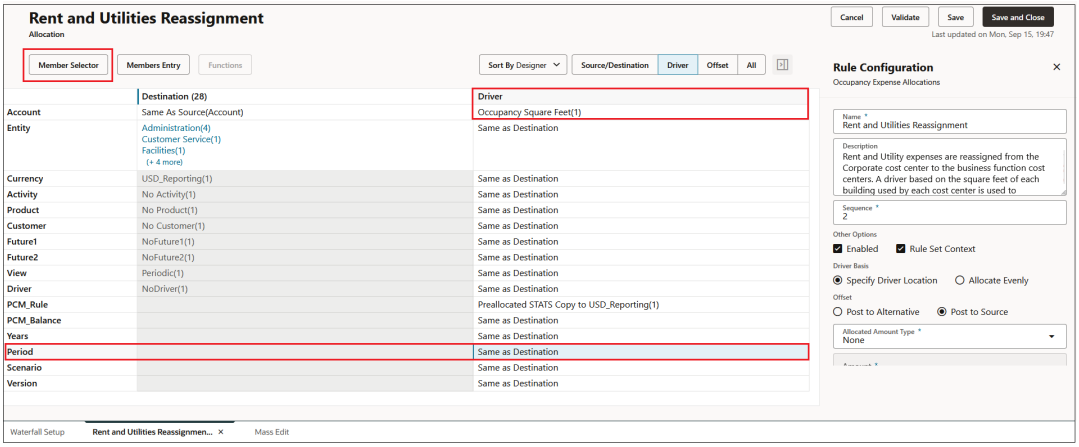
> **Note**
>
> You can only use substitution variables in the POV dimensions (Year, Period, Scenario, and Version).

For example, assume you are creating a driver for a Rent and Utilities Ressignment rule. In this example, you are allocating rent and need to know the value for occupancy square feet.

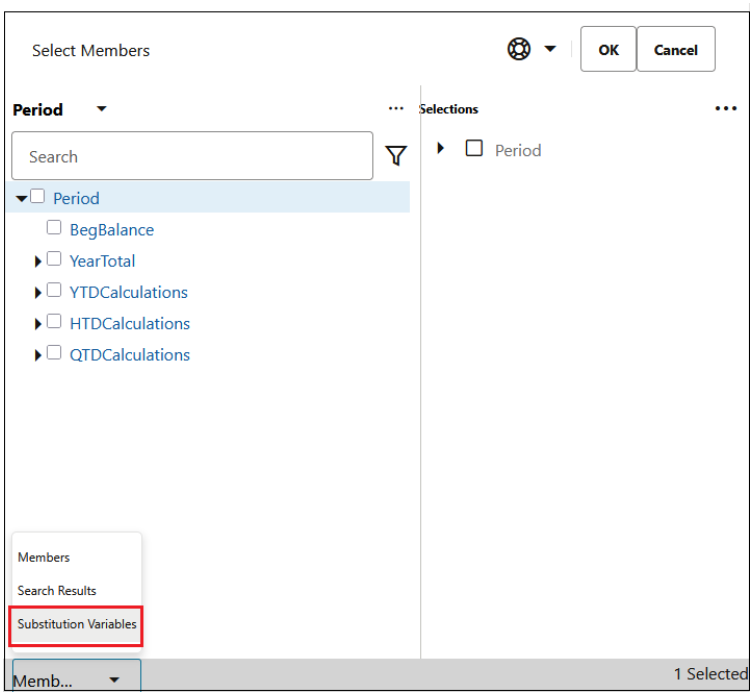
Copyright © 2022, 2026, Oracle and/or its affiliates.

Assume that the occupancy square feet value never changes. As a result, you don't need to import the value every month. In this case, you can create a substitution varible for occupancy square feet and use the substitution variable in the allocation rule driver. To do this, we will add a substitution variable to the Period dimension as follows:

1. Click **Same As Destination** next to the **Period** dimension, and then click **Member Selector**.

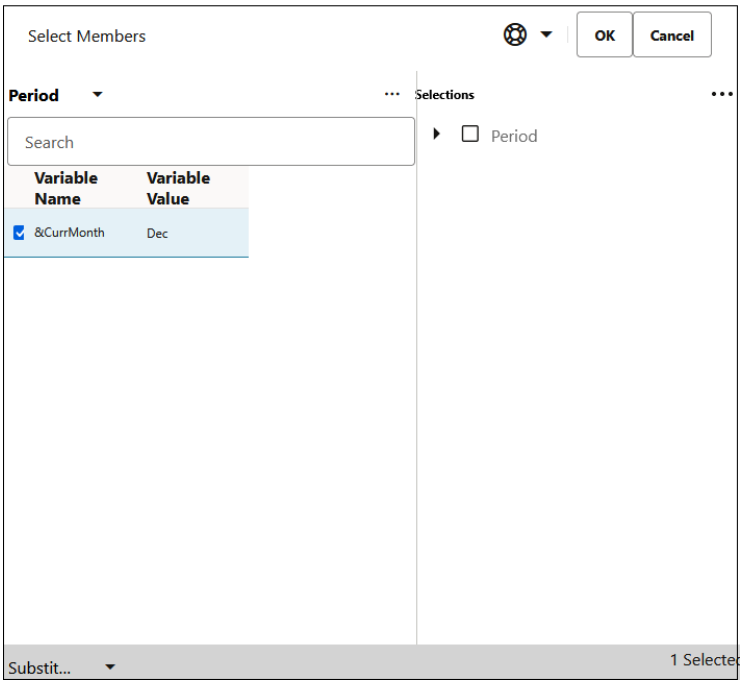


2. Click **Members** at the bottom of the **Select Members** dialog box, and select **Substitution Variables**.

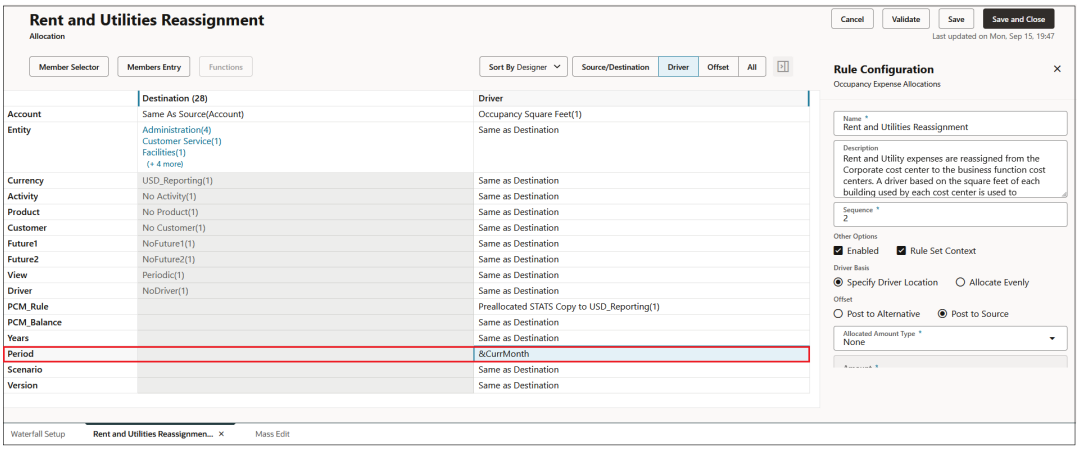


The substitution variables that have been defined for Period are displayed. In this example, one substitution variable, `$CurrMonth`, has been defined. Select the substitution variable, and click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

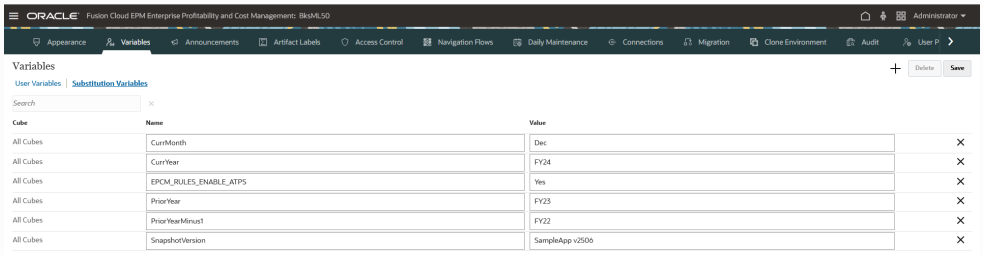


After you select the `$CurrMonth` substitution variable, it is displayed as the value for the **Period** dimension in the allocation rule **Driver** tab.



Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> To define substitution variables:
>
> 1. From the Home screen, select **Tools** and then **Variables**.
> 2. On the **Variables** page, click **Substitution Variables**.

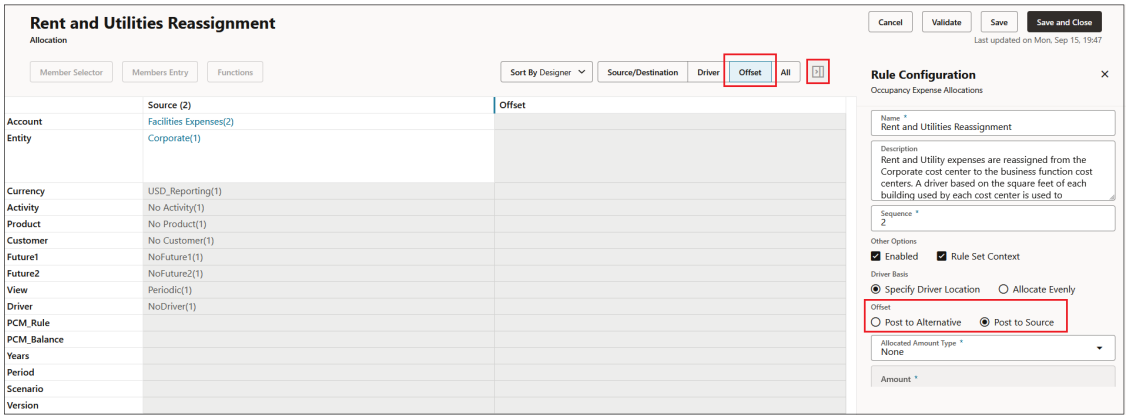


Defining an Allocation Rule Offset

The offset tells the system how to balance out the allocated data. Select an option to specify where to post the offset:

To specify where to post the offset, click to open the **Rule Configuration** panel, and select an option:

- **Post to Alternative**: If you select this option, you specify a dimension target to calculate the offset values.
- **Post to Source**: If you select this option, the selected Source dimension members are used as the offset.

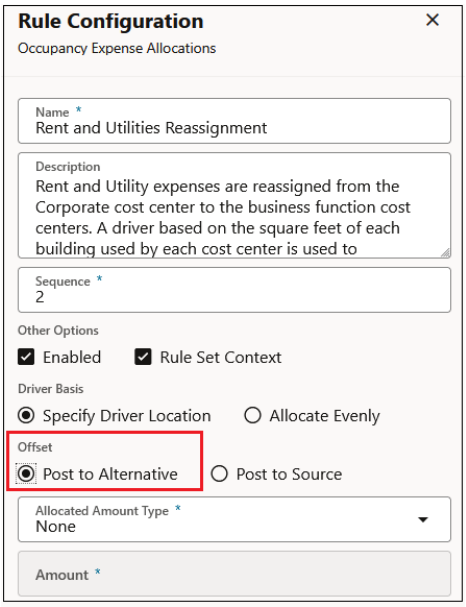


By default the offset is the same as the source location.

To post the offset to an alternative location:

1. In the **Rule Configuration** panel, under **Offset**, select **Post to Alternative**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



2. Click next to a dimension in the **Offset** column, and then:
   - Click **Member Selector** to open the **Select Members** dialog box, where you can select the dimension member to use for the offset (see Using the Member Selector) or,
   - Click **Members Entry** and enter the dimension member name.

> **Tip**
>
> When posting the offiset to an alternative location:
>
> - You must select a single, level-0 member.
> - You do not need to select an alternative member for every dimension. Instead, select an alternate member only for those dimensions whose members are different from the members in the source location.

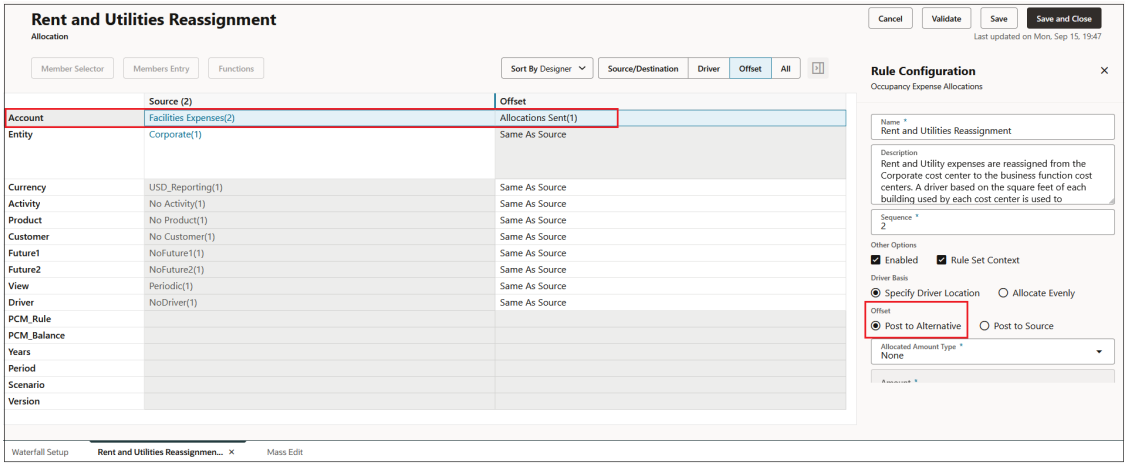
Best Practices for Allocation Rule Offsets

- Use offset source if no integration to GL is required and reporting needs are only management reports.
- Because the offset *writes* the data, do not use upper-level members in the offset definition. You should question any design that requires an upper-level offset as this implies another allocation of offset amounts.
- Use the Allocation Accounts and/or Data Step dimensions to categorize offsets and make them easier to isolate for integration purposes.

Allocation Offset Example

In this example, the offset tells the sytem to post the allocated data for the Account dimension to an Allocations Sent account. For all of the other dimensions, the allocated data will be posted to the same member as defined in the source.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Validating Allocation Rules

Click **Validate** to validate your allocation rule.

The **Validation** dialog box displays any errors or warnings in your allocation rules. The validation checks each rule for these conditions:

- The rule is fully defined

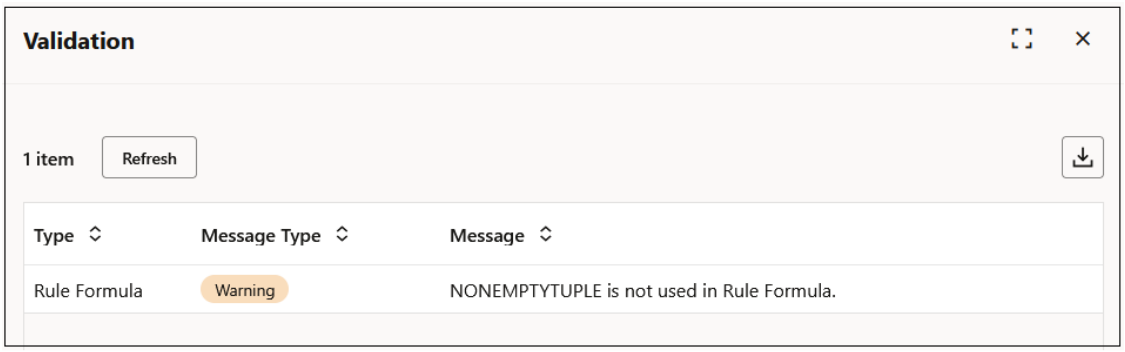
  This means that the source and destination definitions for each rule must include members for every dimension.

- Dimension members referenced in your rule definitions exist in the database

  If you delete members from dimensions that are referenced in existing rules, the rules can't run.

If you have several validation errors or warnings, you can click (**Export**), to export the information to Excel. You can then use the Excel spreadsheet as a checklist as you go back to the **Source/Destination** tab to fix the errors and warnings.

The following rule has one warning.



Continue fixing any errors in your rules until there are no errors listed in the **Validation** dialog box.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> See Validation Errors and Warnings for details on the errors and warnings that may occur when validating your allocation rules.

Running a Rule Data Validation Report for Allocation Rules

Rule Data Validation reports help you verify that all required source and driver data is included for allocation rules. The report displays a summary of the intersections for the selected rule's source and driver as well as any rule and driver data totals and number of total records. You can select to display Summary Values Only or Summary Values along with Source Data and/or Driver Data. If the intersection count is greater than 1000, only the first 100 intersections are displayed. If either Source Data or Driver Data is not selected, that portion of the report is blank.

Use this report to validate that your source and driver allocations are set up correctly.

For example, assume you run a Rule Balancing report and notice that a particular rule is not allocating anything, or maybe the rule is not allocating in the way that you expected. In this scenario, the Rule Data Validation report can help you pinpoint the problem by querying both the source and driver to determine exactly what data is being allocated and what driver data is being used.

To continue with this example, assume that you are allocating $8 million dollars of rent, but your rule source only comes up with $6 million dollars. If this happens, either the rule source was set up incorrectly, or the correct data did not get imported to the source. The Rule Data Validation report is where you would be able to see exactly how much money is included in the source range that you defined.

To run a Rule Data Validation report:

1. From the Home page, select **Modeling**, and then **Designer**.
2. From the **Waterfall Setup** tab, select an allocation rule.
3. Click **Actions**, and select **Rule Data Validation Report**.
4. In the **Rule Data Validation Report** dialog box:
   - Select values for the **Years**, **Period**, **Scenario**, and **Version** POV dimensions.
   - Select whether to include **Summary Values Only** or **Summary Values and Data Sample**.

     If you select to include **Summary Values and Data Sample**, select whether to include **Source Data**, **Driver Data**, or both Source and Driver data.

     > **Tip**
     >
     > Including all the detail in a Rule Data Validation report can take a long time and produce a large report. Try displaying just the summary information as a first step.

   - Specify a **Rounding Precision** to apply to the results. The default is two decimal places. You can round up to ten decimal places. The rounding precision you specify applies to both the source and driver data values.
5. Click **Run**, and select a format in which to display the report:

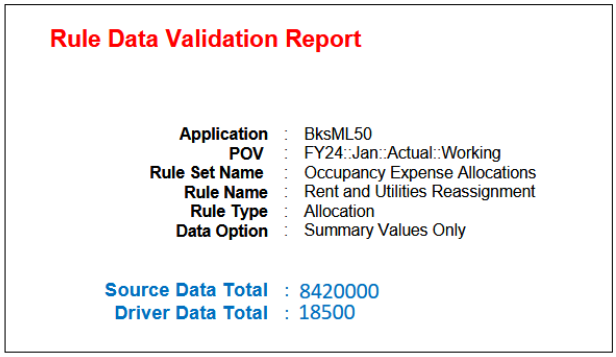
Copyright © 2022, 2026, Oracle and/or its affiliates.

- PDF
- EXCEL
- WORD
- XML
- HTML

> **Note**
>
> When reviewing Rule Data Validation reports:
>
> - If *No Data* is displayed next to **Source Data Total**, it means that either the data is not loaded or the rule source isn't correctly defined to find the data.
> - If *No Data* is displayed next to **Driver Data Total**, it means that either the data is not loaded or driver definition is incorrectly defined.
> - If either source or driver data cannot be found, the rule will not produce any results.

In the sample reports below, a driver of "Occupancy Square Feet" is used to determine how much Rent and Utilites charges to allocate. The Source Data Total (the total amount of money in all of the source intersections combined) came to $8,420,000, and the Driver Data Total (the total square feet for all for all of the destinations defined by the allocation rule) came to 18,500 square feet.

Sample Rule Data Validation Report with Summary Values Only



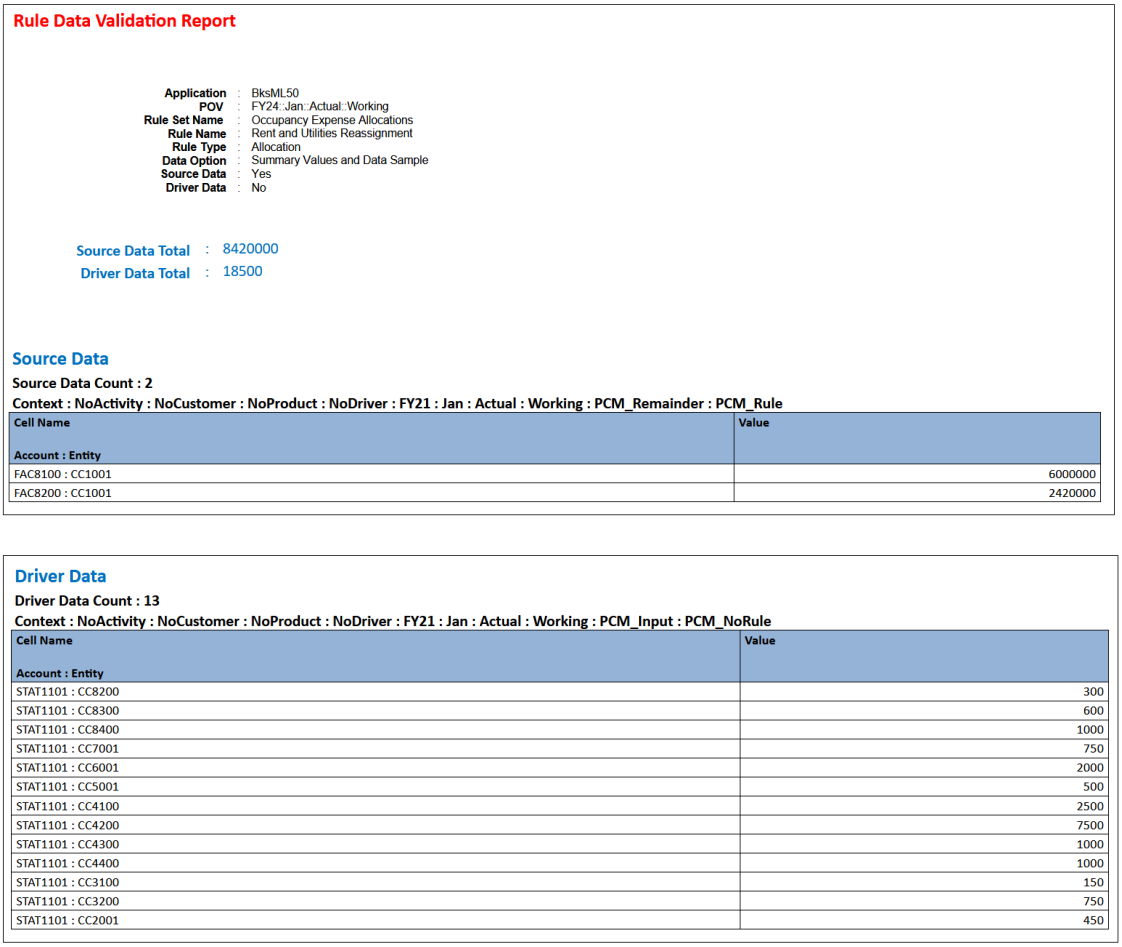
Rule Data Validation Report

Application	:	BksML50
POV	:	FY24::Jan::Actual::Working
Rule Set Name	:	Occupancy Expense Allocations
Rule Name	:	Rent and Utilities Reassignment
Rule Type	:	Allocation
Data Option	:	Summary Values Only

Source Data Total	:	8420000
Driver Data Total	:	18500

Sample Rule Data Validation Report with Summary Values and a Data Sample for both Source Data and Driver Data

Copyright © 2022, 2026, Oracle and/or its affiliates.



Rule Data Validation Report

Application	:	BksML50
POV	:	FY24::Jan::Actual::Working
Rule Set Name	:	Occupancy Expense Allocations
Rule Name	:	Rent and Utilities Reassignment
Rule Type	:	Allocation
Data Option	:	Summary Values and Data Sample
Source Data	:	Yes
Driver Data	:	No

Source Data Total : 8420000
Driver Data Total : 18500

Source Data

Source Data Count : 2

Context : NoActivity : NoCustomer : NoProduct : NoDriver : FY21 : Jan : Actual : Working : PCM_Remainder : PCM_Rule

Cell Name Account : Entity	Value
FAC8100 : CC1001	6000000
FAC8200 : CC1001	2420000

Driver Data

Driver Data Count : 13

Context : NoActivity : NoCustomer : NoProduct : NoDriver : FY21 : Jan : Actual : Working : PCM_Input : PCM_NoRule

Cell Name Account : Entity	Value
STAT1101 : CC8200	300
STAT1101 : CC8300	600
STAT1101 : CC8400	1000
STAT1101 : CC7001	750
STAT1101 : CC6001	2000
STAT1101 : CC5001	500
STAT1101 : CC4100	2500
STAT1101 : CC4200	7500
STAT1101 : CC4300	1000
STAT1101 : CC4400	1000
STAT1101 : CC3100	150
STAT1101 : CC3200	750
STAT1101 : CC2001	450

Using Ad Hoc to Analyze Allocation Rule Data

You can create an ad hoc grid to analyze a preconfigured data slice targeted for a specific rule's data elements.

To perform ad hoc analysis for a specific allocation rule:

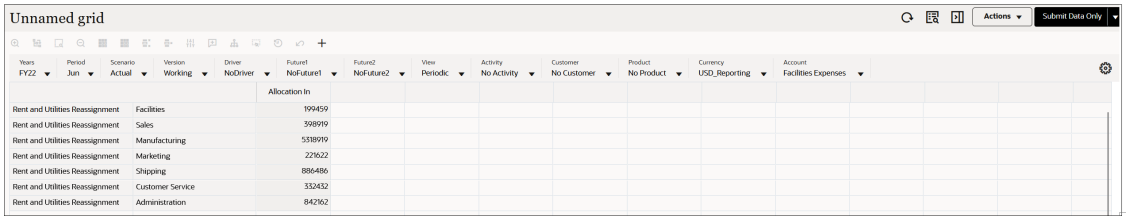
1. From the Home page, select **Modeling**, and then **Designer**.
2. From the **Waterfall Setup** tab, select an allocation rule.
3. From the **Actions** menu, select **View Rule Data**.
4. In the **View Rule Data** dialog box:
   - Select values for the **Years**, **Period**, **Scenario**, and **Version** POV dimensions.
   - Select an option to define what rule component to include. For allocation rules, you can perform ad hoc analysis on these elements:
     - **Source**
     - **Destination**
     - **Driver Basis** (only available of you specifyed a driver location when you defined the rule)
     - **Offset** (only available if you specified an alternate location for the offset when you defined the rule)
5. Click **View**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The ad hoc grid opens in a new tab. See Using Ad Hoc for Data Entry and Analysis for details on how to work in the grid.

The following is an ad hoc grid displaying the destination data elements for the Rent and Utilities Reassignment allocation rule in the BKSML50 sample application that is provided with Enterprise Profitability and Cost Management. (See Creating the Sample Application for information on how to access the sample application.)

Ad Hoc Grid Showing the Destination Data for a Sample Rent and Utilities Reassignment Allocation Rule



> **Note**
>
> Before performing ad hoc analysis, the rule must be calculated and a POV defined. The current POV selected on the Rule Balancing page is the POV that is used to show the allocation rule data. See Calculating Models and Viewing Rule Balancing Reports.

Creating Custom Rules

Related Topics

- About Creating Custom Rules
- Creating a Custom Rule Definition
- Defining a Custom Rule Target
- Validating Custom Rules
- Using Ad Hoc to Analyze Custom Rule Data

About Creating Custom Rules

Custom rules let you modify or create data in place. In a custom rule, you define:

- The target range for the calculation
- The formula to execute for all cells in the target range

You can use custom rules to:

- Calculate driver data
- Create what-if changes
- Adjust costs and revenues

Design Considerations

When creating custom rules, keep in mind the following:

- Member selections in the rule target really means "traverse these intersections"

Copyright © 2022, 2026, Oracle and/or its affiliates.

- The target range defines the Level 0 intersections the rule will visit, executes the formula, and writes the result to the result member
- The rule formula supports basic math functions
- CASE statements work, other MDX functions are not supported

Best Practices

Custom rules are very sensitive to sparse ranges. To prevent performance challenges:

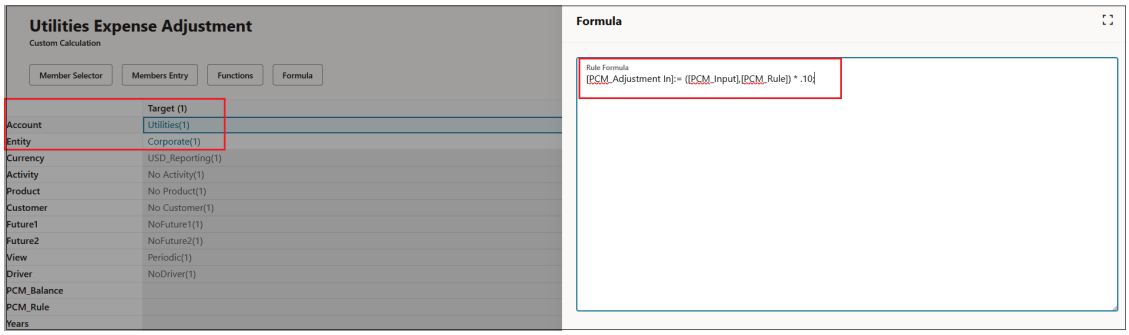
- Minimize the target range as much as is practical.
- Use `NONEMPTYTUPLE` on one of the formula operand tuples preceding formula. See Skipping Empty Tuples to Optimize Calculations.

  For example:

```
[PCM_Adjustment In]:= NONEMPTYTUPLE ([PCM_Input],[PCM_Rule]) ([PCM_Input],
[PCM_Rule]) * .10;
```

Custom Rule Example

In this example, the Account and Entity dimensions are specified for the target range for the calculation, and the formula will be executed for all cells in that range.



> **Note**
>
> The custom rule in this example is used in the BksML50 sample application provided with Enterprise Profitability and Cost Management. See Creating the Sample Application for information on how to access the sample application.

Creating a Custom Rule Definition

A custom rule definition is the outline of a custom rule. You initially set up the rule with some basic information, and then you can edit the rule to add more details. You can set up rule definitions for several rules at one time, and then edit them later.

To create a custom rule definition:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the drop-down next to **Designer**, and select a model.
3. Select the rule set to which you want to add the custom rule, and do one of the following:
   - Click , and then select **Rule**, or

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Click ••• next to the rule set, and then select **Add Rule**.

4. In the **Create Rule** panel, enter the following information:
   - **Name**: Enter a name for the rule.

     For example, the "Occupancy Expense Allocations" rule set in the the BksML50 sample application provided with Enterprise Profitability and Cost Management, contains a custom rule called "Utilities Expense Adjustment".

     Rule names have the same restrictions as the member names in Oracle Essbase. See Naming Restrictions for Dimensions, Members, and Aliases.
   - **Description**: Enter a description for the rule.

     For example, you could say something like; "Increases utilities expenses by 10%"

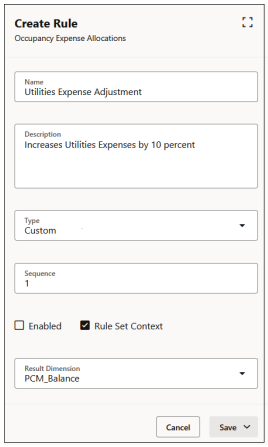
     The description you enter here will appear in the Model Documentation report. Enter a description that will make the information about the custom rule informative for anyone reviewing the model logic in the future. See Generating a Model Documentation Report.
   - **Type**: Select **Custom**.
   - **Sequence**: Enter a number to determine the order in which the rule will run in the rule set.

     The Sequence can be any whole number from 1 to 9999.

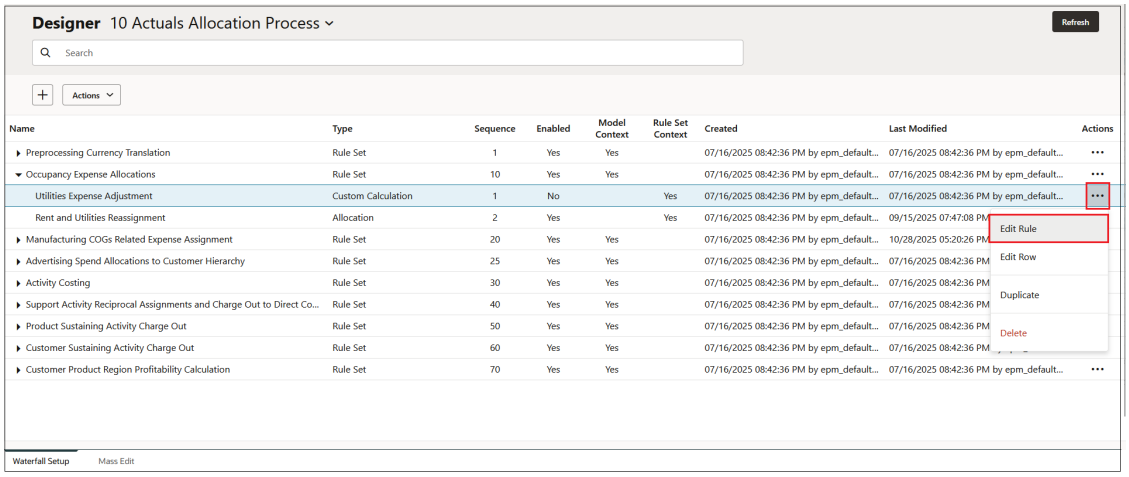
     Rules with the same sequence number will run at the same time if parallel calculation is enabled for the parent rule set, and depending on the number specified for **Calculation Threads** in the Applications Settings. (See "Step 5: Select a Rule Set Calculation Option" in Creating a Rule Set and "Calculation Threads" in About Managing Application and System Settings.)
   - **Enabled**: If selected, the rule will be active when the calculation is performed.
   - **Rule Set Context**: If selected, the member selections done when the rule set was created will apply to this rule. If a Model Context has been enabled for the rule set, it will also be applied. See Understanding Model and Rule Set Context.
   - **Result Dimension**: Select a result dimension. The Result Dimension defaults to the PCM_Balance Dimension.
5. When you are finished entering the information in the **Create Rule** panel, click **Save**, and then select either:
   - **Save and Close** to return to the **Waterfall Setup** tab, or
   - **Save and Next** to continue adding rule definitions for additional rules

In the following example, the Utilities Expense Adjustment rule is defined as a Custom rule and will be the first rule run in the Occupancy Expense Allocations rule set. It will not be enabled by default, it will use a previously-defined Rule Set Context, and PCM_Balance is the Result Dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.



The rules defined in the **Create Rule** panel are displayed in the **Waterfall Setup** tab. Click ••• next to a rule, and select **Edit Rule** to enter additional information about the custom rule.

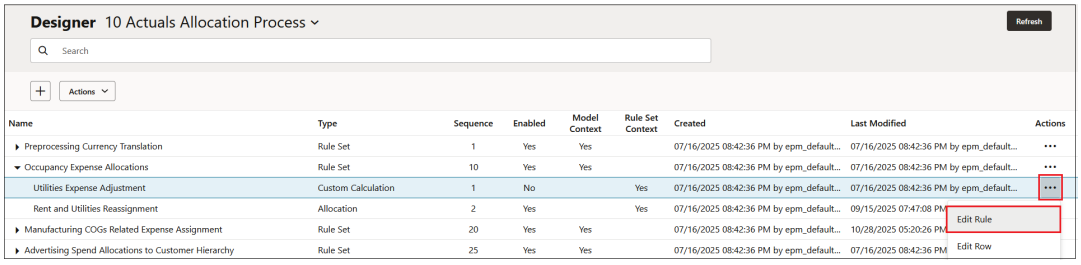


Defining a Custom Rule Target

After you have created a custom rule definition, edit the rule to define the target range for the custom calculation and the formula to execute for all cells in the target range.

To define a custom rule target:

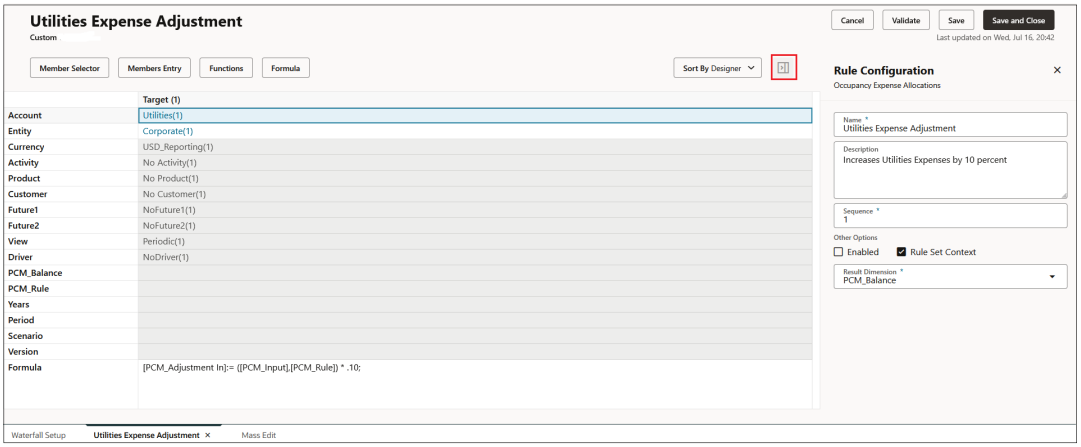
1. On the **Waterfall Setup** tab, click ••• next to a custom rule, and then select **Edit Rule**.



   The rule is opened with the required Entity and Account dimensions, the optional Currency dimension if you have a multicurrency application, and any custom dimensions in your application are displayed. (If you have defined and enabled a Rule Set Context or a Model Context, any dimensions defined in the Rule Set Context or a Model Context are not displayed. See Understanding Model and Rule Set Context.)

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click to open the **Rule Configuration** panel where you can see the information you defined in the rule definition.



3. Click **Formula**, and enter the MDX formula for the custom rule.

   After you enter a formula, click **Validate** to ensure that the formula is valid, and then click **Save**.

   See Formula Syntax for Custom Rules and Skipping Empty Tuples to Optimize Calculations for information on how to create the formula.

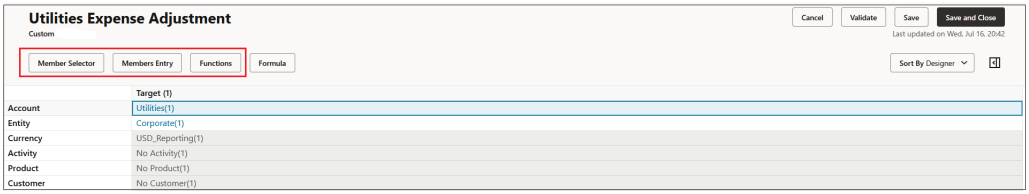
4. Select a member or members for each target dimension.

   You must select a member for every dimension. If a dimension does not apply to the data in your rule, select the No<*dimname*> member. See Dimension and Member Requirements When Creating Rules.

> **Note**
>
> The dimension you selected for the **Result Dimension** is not included as a target dimension since a member from the result dimension must appear in the left hand (results side) of the formula.

   To select members for a target dimension:

   - Click in the **Target** column next to a dimension, to enable **Member Selector**, **Members Entry**, and **Functions**.

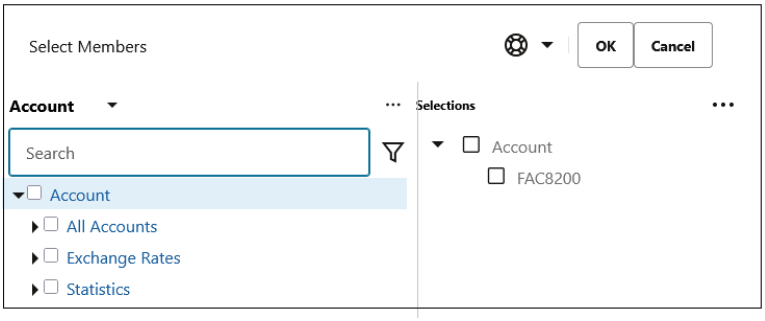


   - Click next to a dimension in the **Target** column, and then click an option to define the members for the dimension:

     – **Member Selector**:

       Click **Member Selector** to open the **Select Members** dialog box, where you can select the members to add to the target dimension. See Using the Member Selector.

Copyright © 2022, 2026, Oracle and/or its affiliates.

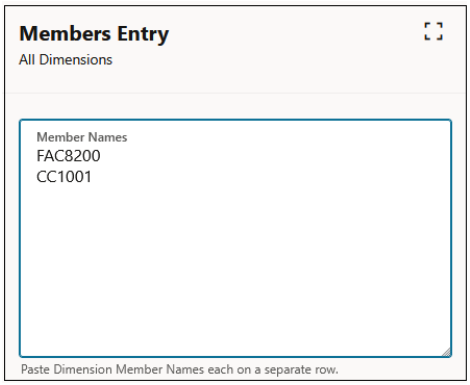


> **Tip**
>
> Selecting an upper-level member selects all the descendants of that member. For example, if you choose "All Accounts", then your selection is really all the Level 0 descendants of "All Accounts". The rule will execute an allocation for each level-0 member. Selecting an upper-level member eliminates the need to pick each specific member individually.

– **Members Entry**:

If you have several members to add to the target dimension and you know the member names, instead of adding each member one-by-one from the **Select Members** dialog box, click **Members Entry** and enter the dimension member names.

For example, if you have a list of members in an Excel spreadsheet, you can copy these members from Excel, and then paste them into the **Members Entry** dialog box. The members will be added to the dimensions in the source to which they were assigned when the dimensions were created. See Adding Members to a Dimension.



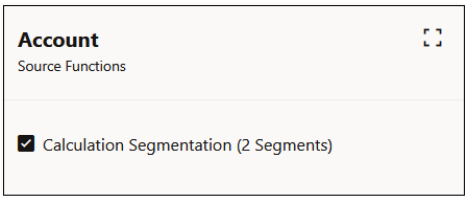
> **Tip**
>
> To add members to all applicable dimensions in the source, click on the **Target** row, and then click **Members Entry**. To add multiple members to a specific dimension, click on the dimension row, and then click **Members Entry**.

5. **Optional:** To segement rules into smaller rules to execute separately, select the row for a dimension in the **Source** column, and then click **Functions**. In the **Source Functions** dialog box, select **Calculation Segementation**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

6. Click **Save** to save the information you have added for the target.

   Calculation segmentation enables the calculation to process rules with a very large data range, which would otherwise be too large for Oracle Essbase to process. Calculation segmentation is enabled for up to two dimensions in each rule.

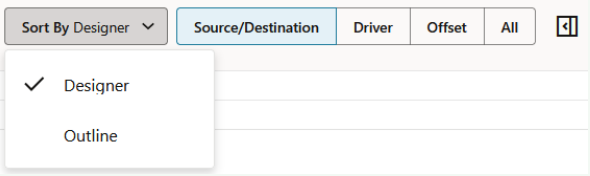


Tip

Use Calculation Segmentation only when your source range is extremely large and sparsely populated. As a best practice, you should call support before proceeding with this option.

Tip

- To view details about the rule configuration, click to open the **Rule Configuration** panel.
- The numbers in parenthesis to the right of each member indicates the number if level 0 descendants. This helps you identify the size of the range you are defining.
- The default sort order for the dimensions is set to **Designer**. If you need to compare the data on this page to Smart View or another data output, change the sort order from **Designer** to **Outline** so that the sort order is the same as the sort order in Smart View or your other data output.



- See Managing Filters for Target Members for information on how to filter the target members used in a rule.

Managing Filters for Target Members

When you select an upper level member for a target dimension in a custom rule, all level-0 descendants of that member are included in the rule. If you do not want to include all the level-0 descendants in a rule, you can apply a filter to limit the included members.

For example, assume your member selection is All Customers, and All Customers has 1,000 level-0 descendants. Assume further that you want to include only the customers in Delivery Zone B in your rule. In this case, you could apply a filter to limit the level-0 descendants included in your rule to only customers in Delivery Zone B.

To add a filter to a member:

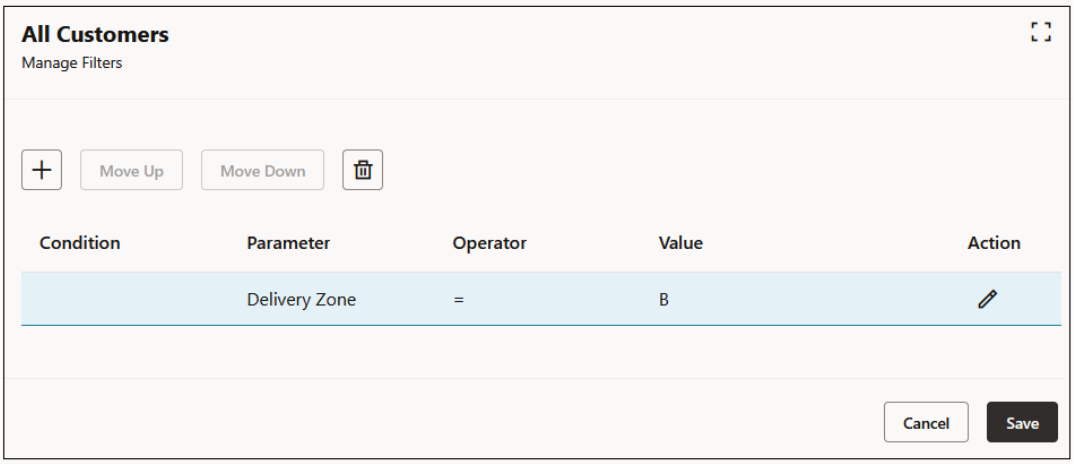
1. Click on a member in the **Target** column.

Copyright © 2022, 2026, Oracle and/or its affiliates.

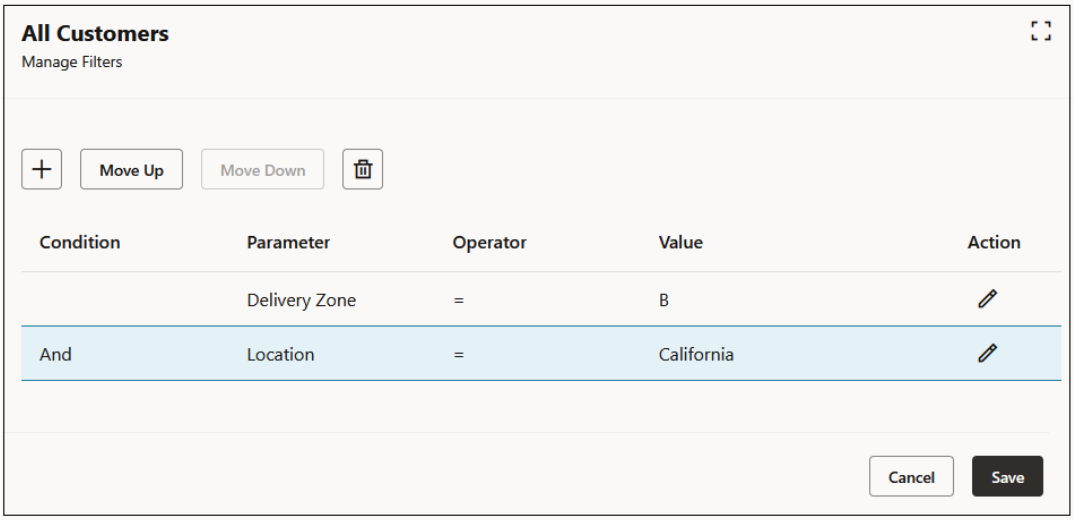
2. In the **Manage Filters** dialog box, click .

3. Define a **Parameter**, **Operator**, and **Value** for the filter, and then click .

   In our example, we filtered the customers to Delivery Zone B.

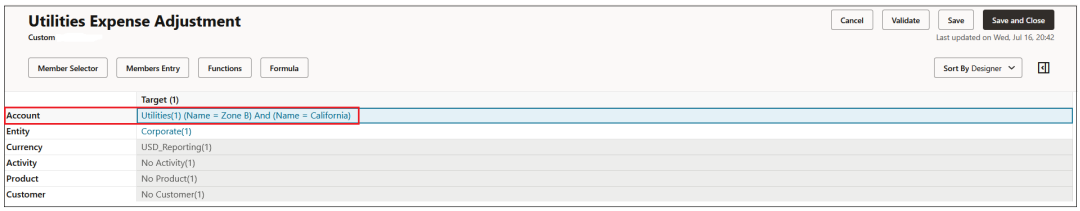


   You can add more than one filter. When you have several filters, you can arrange the filter order by clicking **Move Up** or **Move Down**.



4. Click **Save**.

   When you add a filter, it is shown next to the member on the **Custom** page.



Copyright © 2022, 2026, Oracle and/or its affiliates.

Tip

- When you add a filter, you must click next to the filter before you add additional filters and before you click **Save**. If you have multiple filters, click next to each filter.
- To remove a filter, select the filter and click .

Formula Syntax for Custom Rules

This topic describes the syntax to use when creating custom rules.

The syntax is summarized as follows:

- The basic formula format is Result equals Formula, where Result and Formula are separated by :=, so Result := Formula.
- The left side of the equation is the Result, a tuple that determines where calculated results are written.

  Note

  A tuple is a comma-separated list of members enclosed in parentheses.

  The tuple is an MDX specification of one or more members where no two members are in the same dimension. Only member names are allowed in the tuple expression. Member functions are not supported for calculations. Dynamic and attribute members are not allowed in the Result. The Result must include a single member from the Result dimension. It must be Level 0 and may be part of a Level 0 tuple, such as `([STA1120], [Feb])`. The Result dimension is defined in the **Target** tab of the **Create Custom Rule** page.

  Note

  MDX is a joint specification of the XML for Analysis founding members. For more information about allowable MDX syntax, see Chapter 7, "MDX", of the *Oracle Essbase Technical Reference*.

- The right side of the equation is the Formula, a simple MDX numeric value expression. It includes the other members, tuples, or constants at any level and the mathematical expression to perform. It must include at least one member from the Result dimension and may be Level 0, upper level, or a tuple.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Members on either side of the equation must be enclosed in square brackets, [ ].
>
> Tuples must be enclosed in parentheses, ( ).
>
> The Formula expression must end in a semicolon, ;.

The Formula can use the following:

- **Constants:** `[STAT1120]:=1;`

  > **Note**
  >
  > A constant can be a numeric constant such as `7`. It can be an expression that references values from other members in the result dimension, and it can reference values expressed as member tuples.

- **A mathematical operation:** `[STAT1114]:=([STAT1305],[Rule])*([STAT1307],[Rule]);`

  > **Note**
  >
  > Mathematical operations must always include a Rule dimension member.

- Custom rules support the following syntax formats for member names:
  - **No qualification:** Only the member name is provided.

    Example: `[`*`MemberName`*`]`
  - **Full qualification:** The fully qualified name (FQN) for the member.

    Example: *`[Dimension].[Gen2].[Gen3].[Gen4]...[MemberName]`*
- Custom rules support the following sytnax for substitution variables:
  - The substitution variable name must be written inside square brackets ([]) and start with an &(ampersand) in the formula.

    Example Formula: `([Rule1],[PCM_Adjustment In]) := ([PCM_Input],[PCM_Rule],[&Prior_Year]) *.10;`
  - Do *not* use square brackets to enclose the substitution variable.

    Correct variable value: `2022`

    Incorrect variable value: `[2022]`

> **Note**
>
> For information about optimizing performance when defining custom rules, see Skipping Empty Tuples to Optimize Calculations.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Skipping Empty Tuples to Optimize Calculations

Data sets can be very sparse and calculating empty result sets can noticeably degrade performance. To avoid calculating empty result sets, you can use the NONEMPTYTUPLE property clause in calculation formulas. Using NONEMPTYTUPLE restricts where the system attempts to calculate. To set this up, you define a tuple that will only be calculated if it isn't empty. Then, you define a simple numeric operation to be applied to the tuple.

Syntax

The syntax for using NONEMPTYTUPLE is as follows:

`tuple := NONEMPTYTUPLE (`*`nonempty_member_list`*`) `*`numeric_value_expression`*`;`

Where:

- `tuple`: An MDX specification of one or more members, where no two members can be from the same dimension
- `NONEMPTYTUPLE`: An optional property you can use to optimize calculation performance. If used, then you must follow this literal property with *`nonempty_member_list`*.
- *`nonempty_member_list`*: One or more comma-separated member names from different dimensions. A tuple must be present in *`numeric_value_expression`*.
- *`numeric_value_expression`*: A simple MDX numeric value expression, such as a number or an arithmetic operation

  The expression must be on the right side of the equation. You must use only arithmetic operators. An error is returned if you use non-arithmetic operators such as AND, OR, or IF.

For example:

```
[UnitCost] := NONEMPTYTUPLE ([TotalExpense], [NetBalance]) ([TotalExpense],
[NetBalance]) / ([Units], [CostPool]);
```

This example says the following:

1. Look at the tuple `([TotalExpense], [NetBalance])`.
2. If that tuple, or intersection, is not empty (that is, it contains a real value), then perform the following operation:

   Take the tuple `([TotalExpense], [NetBalance])` and divide it by the tuple `([Units], [CostPool])` to yield `UnitCost`.
3. If the tuple is empty, skip it and evaluate the next instance.

Rules for Use

A tuple is a combination of members from some set of different dimensions, for example:

```
([product2], [account5], customer3])
```

```
([myactivity], [yourdepartment])
```

The requirements for adding NONEMPTYTUPLE to the formula of Enterprise Profitability and Cost Management custom rules are as follows, where A, B, and C represent tuples:

- You can use NONEMPTYTUPLE only when a tuple has some value. Otherwise, the result could be unexpected. Suppose the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - A=B+C -- You can't use NONEMPTYTUPLE on either B or C. If B or C is missing, the result will be None, which is incorrect.

    > **Note**
    >
    > To calculate A=B+C using NONEMPTYTUPLE, use two rules:
    >
    > * Rule 1: A=A+B with NONEMPTYTUPLE on B
    > * Rule 2: A=A+C (or A=A-C) with NONEMPTYTUPLE on C
    >
    > In this case, whenever the value for B is *not* missing, it will be added to A; and whenever the value for C is *not* missing, it will be added to A.

  - A=B-C -- You can't use NONEMPTYTUPLE on either B or C. If B or C is missing, the result will be None, which is incorrect (unless you use two rules as described previously).

- You can use NONEMPTYTUPLE when the result is the same whether the tuple is missing or not. Suppose the following:
  - A=B -- You can use NONEMPTYTUPLE on B.
  - A=B*C -- You can use NONEMPTYTUPLE on either B or C.
  - A=B/C -- You can use NONEMPTYTUPLE on either B or C.

To summarize, you can safely use NONEMPTYTUPLE in multiplication or division operations. For addition or subtraction, you must evaluate its use for each separate case to avoid unexpected results.

> **Note**
>
> For information on writing custom rules, see Formula Syntax for Custom Rules. For information on enabling non-empty tuples, see "How do you enable Non-Empty Tuples (NET) in Enterprise Profitability and Cost Management?" in Frequently Asked Questions (FAQ) about Enterprise Profitability and Cost Management.

Validating Custom Rules

Click **Validate** to validate your custom rule.

The **Validation** dialog box displays any errors or warnings in your custom rules. The validation checks each rule for these conditions:

- The rule is fully defined

  This means that the source and destination definitions for each rule must include members for every dimension.

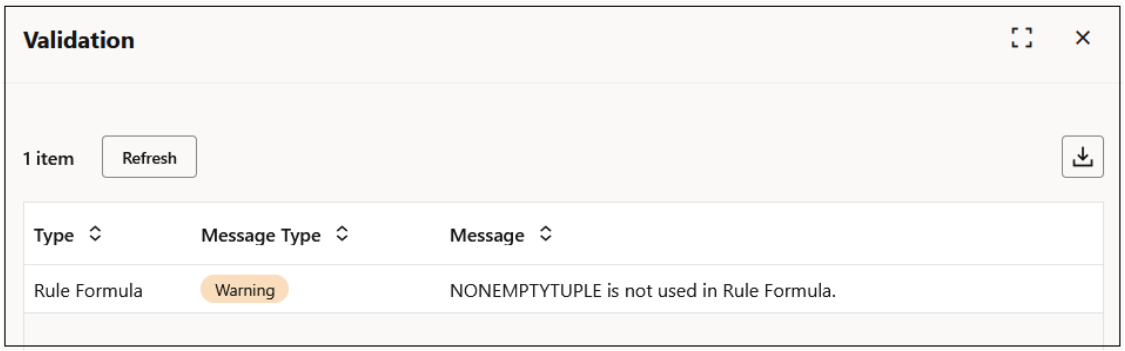
- Dimension members referenced in your rule definitions exist in the database

Copyright © 2022, 2026, Oracle and/or its affiliates.

If you delete members from dimensions that are referenced in existing rules, the rules can't run.

If you have several validation errors or warnings, you can click (**Export**), to export the information to Excel. You can then use the Excel spreadsheet as a checklist as you go back and fix the errors and warnings.

The following rule has one warning.



Continue fixing any errors in your rules until there are no errors listed in the **Validation** dialog box.

> **Note**
>
> See Validation Errors and Warnings for details on the errors and warnings that may occur when validating your custom rules.

Using Ad Hoc to Analyze Custom Rule Data

You can create an ad hoc grid to analyze a preconfigured data slice targeted for a specific rule's data elements.

To perform ad hoc analysis for a specific custom rule:

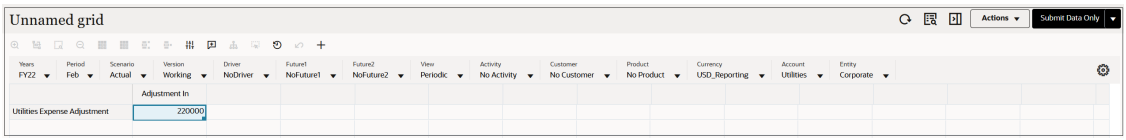
1. From the Home page, select **Modeling**, and then **Designer**.
2. From the **Waterfall Setup** tab, select a custom rule.
3. From the **Actions** menu, select **View Rule Data**, and then select **Target**.

   Note: You can only select **Target** as a data element for Custom rules. The other options on the drop-down menu are for Allocation rules.
4. The ad hoc grid opens in a new tab. See Using Ad Hoc for Data Entry and Analysis for details on how to work in the grid.

The following is an ad hoc grid displaying the target data for Utilities Expense Adjustment custom rule in the BKSML50 sample application that is provided with Enterprise Profitability and Cost Management. (See Creating the Sample Application for information on how to access the sample application.)

Ad Hoc Grid Showing the Target Data for a Sample Utilites Expense Adjustement Custom Rule

Copyright © 2022, 2026, Oracle and/or its affiliates.



> **Note**
>
> Before performing ad hoc analysis, the rule must be calculated and a POV defined. The current POV selected on the Rule Balancing page is the POV that is used to show the Custom rule data. See Calculating Models and Viewing Rule Balancing Reports.

Creating Rule Sets

Related Topics

- About Rule Sets
- Rule Set Design Best Practices
- Creating a Rule Set
- Creating a Rule Set Context
- Duplicating a Rule Set

About Rule Sets

Rule sets enable you to group related rules together to better organize calculation logic definitions, to calculate similar rules together, and to simplify the definition of rules that share common dimension members.

Rule sets have a set order, determined by the rule set sequence number, and may also contain options specific to the execution of rules within the rule set.

You must create a rule set before creating rules.

The following are some examples of rule sets in the BksML50 sample application provided with Enterprise Profitability and Cost Management:

- Occupancy Expense Allocations
- Manufacturing COGs Related Expense Assignment
- Activity Costing
- Customer Product Region Profitability Calculation

Rule Set Design Best Practices

Calculation options at the rule set level are Serial, Parallel, and Interative.

Best practices for Parallel rule sets:

- Designing rules that are independent of each others' source and destination targets allows you to use parallel calculation.
- Because parallel calculation has diminishing returns, more than five concurrent threads generally does not improve performance.

Best practices for Interative rule sets:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Interative rule sets are only useful for solving reciprocal allocation systems.
- Ensure that each rule has a portion of the destination range that exits the reciprocal system.
- Experiment with the number of iterations.
- Create a no reciprocal sweep rule for each rule in the reciprocal system to sweep out any remainders.

Creating a Rule Set

To create a rule set:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click the **Model** drop-down, and select a model.
3. Click +, and select **Rule Set**.
4. In the **Create Rule Set** panel, enter information about the rule set:
   - **Name**: Enter a name for the rule set.

     For example, the BksML50 sample application provided with Enterprise Profitability and Cost Management has a rule set called "Occupancy Expense Allocations".
   - **Description**: Enter a description for the rule set.

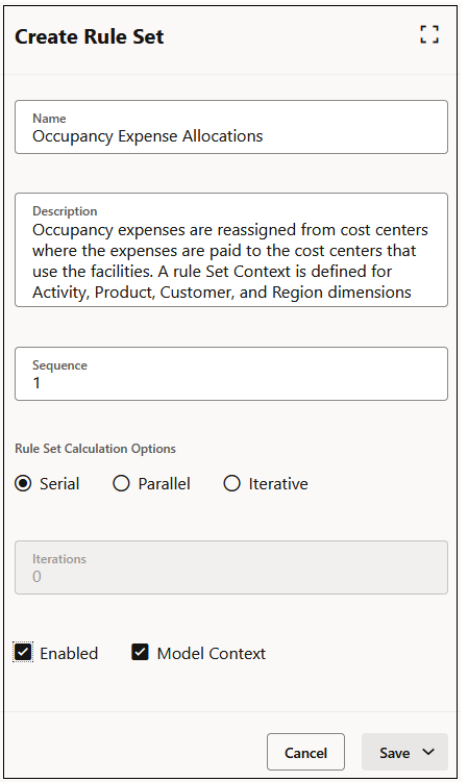
     The description you enter here will appear in the Model Documentation report. Enter a description that will make the information about the rule set informative for anyone reviewing the model logic in the future. See Generating a Model Documentation Report.

     For example, a description for an Occupancy Expense Allocations rule set could be: "Occupancy expenses are reassigned from cost centers where the expenses are paid to the cost centers that use the facilities. A Rule Set Context is defined for Activity, Product, Customer, and Region dimensions to select the No<dimname> members as the dimensions are not used in these rules."
   - **Sequence**: Enter a number to determine the order in which the rule set will run. The sequence also determines the order in which the rule set is displayed on the **Waterfall Setup** tab. The sequence can be any whole number from 1 to 9999.
   - Select a **Rule Set Calculation** options:
     - **Serial**: Runs all rules in the rule set sequentially, depending on their sequence number.
     - **Parallel**: Runs rules with the same sequence number at the same time. The number of rules that can be executed in parallel is defined in the **Calculation Threads** setting in **Application Settings**. See About Managing Application and System Settings.
     - **Iteratiave**: Runs the rule set multiple times in sequence. If you select this option, enter the number of iterations to run. Iterative Calculations are used to resolve the impact of reciprocal allocation relationships in a model.
   - **Enabled**: If selected, the rule set will be active when the calculation is performed.
   - **Model Context**: If selected, the member selections done during model creation will apply to all the rules in the rule set. When you use a model context, you avoid having to select the same members for every rule, which saves time and ensures consistency. See Understanding Model and Rule Set Context.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. Click **Save**, and then select either:
   - **Save and Close** to return to the **Waterfall Setup** tab, or
   - **Save and Next** to add additional rule sets.

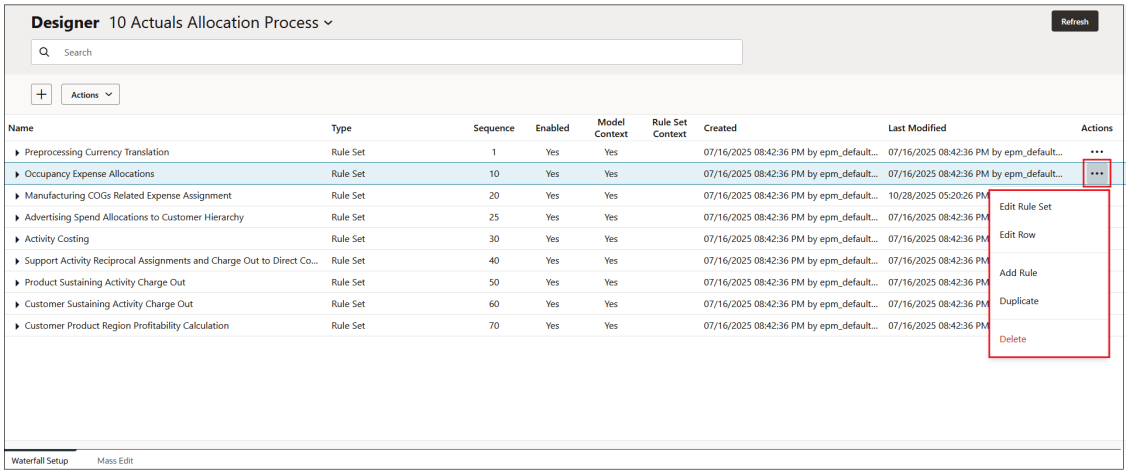
In the following example, the Occupancy Expense Allocations rule set will be the first rule set to run. It will run all rules in the rule set sequentially, be enabled by default, and use a previously-defined Model Context.



The rule sets defined in the **Create Rule Set** panel are displayed in the **Waterfall Setup** tab. Click ••• next to a rule set to complete the following tasks:

- Edit the rule set to create a rule set context that defines member selections for dimensions that will use the same member for all rules in the rule set (see Creating a Rule Set Context)
- Edit the information on the row. (If you change any information on the row click ☑; otherwise, click ☒.)
- Add a rule to the rule set (see Creating Allocation Rules and Creating Custom Rules)
- Duplicate the rule set (see Duplicating a Rule Set)
- Delete the rule set

Copyright © 2022, 2026, Oracle and/or its affiliates.

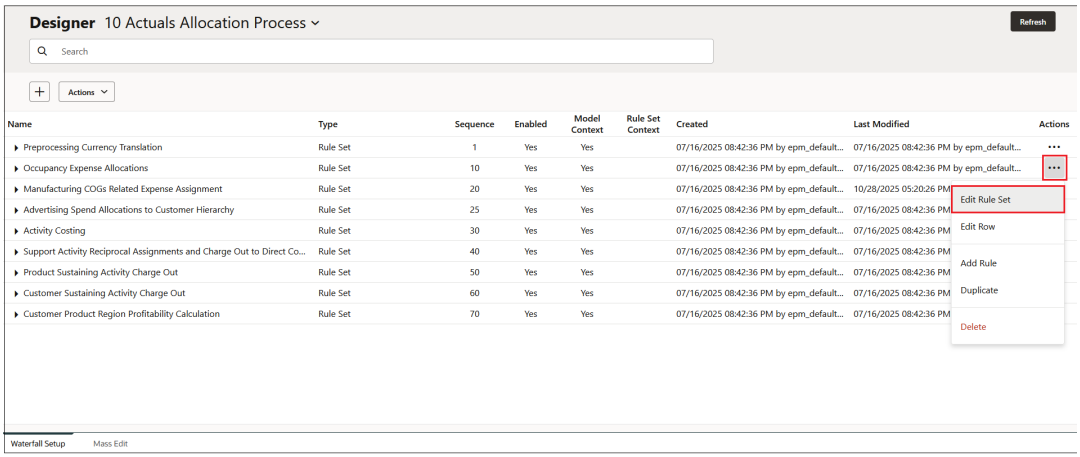


Creating a Rule Set Context

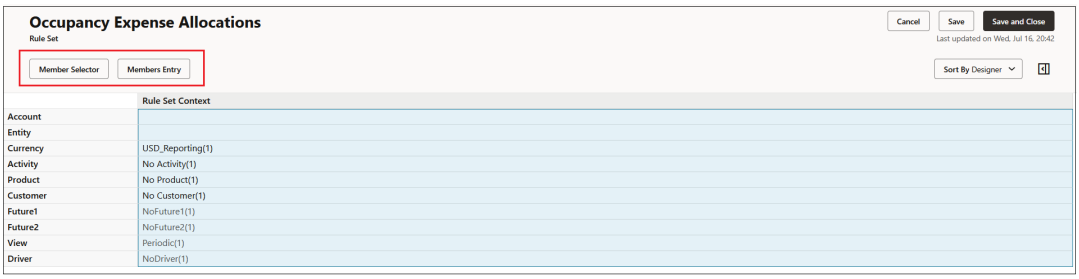
You can create a Rule Set Context to define member selections for dimensions that will use the same member for all rules in the rule set. Defining default member selections saves you from having to select the members for a dimension each time the dimension is used in a rule. You can make default member selections for dimensions that are used in defining the source and destination in allocation rules or the target in custom rules. See Understanding Model and Rule Set Context.

To create a rule set context that defines default member selections for the dimensions in a rule set:

1. In the **Waterfall Setup** tab. Click ••• next to a rule set, and select **Edit Rule Set** to optional define a rule set context.



2. Click in the **Rule Set Context** column next to a dimension to enable **Member Selector** and **Members Entry**.



Copyright © 2022, 2026, Oracle and/or its affiliates.

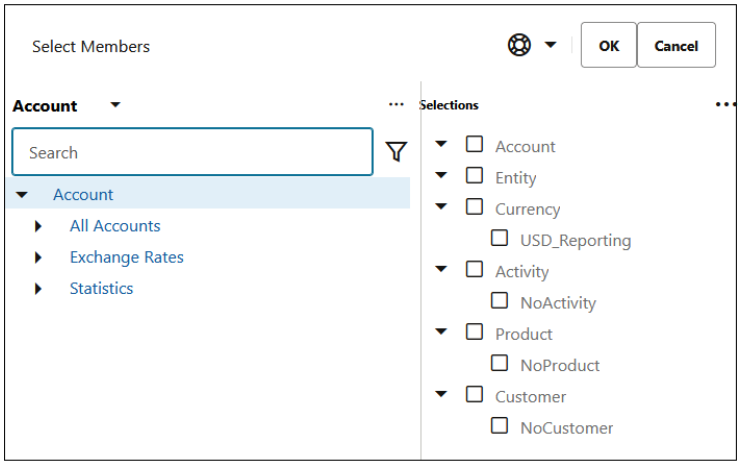
3. Click an option to define member selections for dimensions that will use the same member for all rules in the rule set.

   - **Member Selector**:

     Click **Member Selector** to open the **Select Members** dialog box, where you can select the members that you want to assign to the dimension,. See Using the Member Selector.

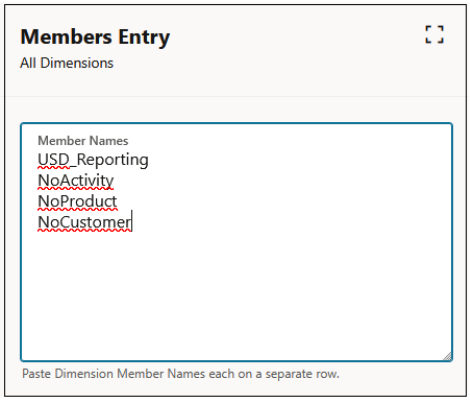
     When making member selections for a Rule Set Context, you can select only level 0 members.

     This example shows the member selected for the rule set context defined for the Occupance Expense Allocations rule set.



   - **Members Entry**:

     You can also select the members for the rule set context by clicking Members Entry and entering the members in the Members Entry dialog box.



> **Tip**
>
> To add a rule set context to all applicable dimensions in the rule set, click on the **Rule Set Context** row, and then click **Members Entry**. To add a rule set context to a specific dimension, click on the dimension row, and then click **Members Entry**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Duplicating a Rule Set

When you duplicate a rule set, all of the information in the source rule set is copied to the new rule set. You can select whether to duplicate all the rules in the source rule set into the new rule set.

To duplicate a rule set:

1. From the Home page, select **Modeling**, and then **Designer**.
2. On the **Waterfall Setup** tab, click ••• next to a rule set, and select **Duplicate**.
3. In the **Duplicate Rule Set** dialog box, specify the following information:
   - **New Rule Set Name**: Enter a name for the new rule set.

     The name for the duplicated rule set must be unique. You cannot have two rule sets with the same name in a model.
   - **Duplicate Rules**: Select to duplicate all the rules in the source rule set into the new rule set.
   - **Prefix for Rule Names**: If you selected to duplicate rules, enter a prefix to use for the new rule names that will be created as part of the copy operation.

     Since you cannot have rules with the same name in a single model, the prefix is to ensure that each copied rule has a unique name.
4. Click **Duplicate**.

   The duplicated rule set is displayed under the rule set that was duplicated. The new rule set is initially created with the same sequence number as the source rule set. To change the sequence (the order in which the rule set will run), click ••• next to the new rule set, and select **Edit Row**.

Renaming Rules

If you decide to rename a rule, keep in mind the following points:

- The default behavior is to keep existing data under the original rule name. Any new calculations will be writen to the new rule name.

  Rules can exist in multiple models, and the data calculated by the rule can exist in many POVs. Because you may want to retain rule data previously calculated under an old rule name, Enterprise Profitability and Cost Management does not automatically delete or move data from an old rule name to new rule name.
- If you want to move existing data to a new rule name:
  1. Rename the rule member.

     Double-click the member name on the **Edit Member Properites** page, enter the new member name, and click **Save**. See Editing Member Properties.
  2. Refresh the database.

     On the **Application** page, select **Actions,** and then **Refresh Database**. See Refreshing the Application Database.
  3. Rename the rule in all the models where it is used.

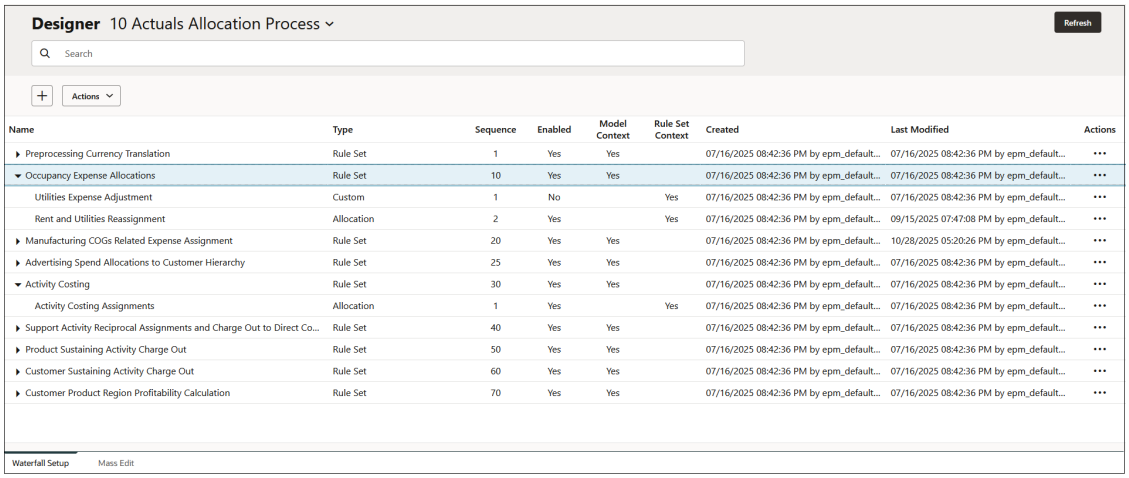
     See Editing a Rule or Rule Set.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Tip**
>
> Review the note under the "Clear Calculated Data" processing option in Calculating a Model 1.0 for information on how data is calculated if a rule name has changed.

Using the Designer 2.0 Waterfall Setup Tab

The **Waterfall Setup** tab in the Rule Designer shows the full sequence of rule sets and rules for the selected model. The rule definition for each rule set and rule is shown. This makes it easy to see all of the settings for your rule sets and rules in one place. You can complete additional tasks by clicking ••• next to a rule set or rule.



Tasks that you can complete on the Waterfall Setup tab:

- Click ••• next to a rule set to:
  - **Edit Rule Set**: Create a rule set context to define member selections for dimensions that will use the same member for all rules in the rule set (see Creating a Rule Set Context)
  - **Edit Row**: Edit the rule definition for the selected rule set. If you change any information, click ☑; otherwise, click ☒.
  - **Add Rule**: Add a rule to the rule set (see Creating an Allocation Rule Definition and Creating a Custom Rule Definition)
  - **Duplicate**: Duplicate the rule set (see Duplicating a Rule Set)
  - **Delete**: Delete the rule set
- Click ••• next to a rule to:
  - **Edit Rule**: Enter detailed information about the rule
  - **Edit Row**: Edit the rule definition for the selected rule. If you change any information, click ☑; otherwise, click ☒.
  - **Duplicate Rule**: Duplicate the rule. Enter a new rule name and the number of duplicates. The name for the duplicated rule must be unique. You cannot have two rules with the same name in a model.
  - **Delete**: Delete the rule

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> * When you delete a rule from the Waterfall Setup tab in the Rule Designer, the rule member assigned to that rule is not also deleted. You delete rule members on the Edit Member Properties page accessed from the Application, Dimensions tab.
> * Deleting a rule does not delete the associated rule member in Oracle Essbase.

- Click to add a rule set or rule (see Creating Rule Sets, Creating Allocation Rules, Creating Custom Rules)
- Click and select an option from the drop-down to:
  - **Generate a Model Documentation Report** (see Generating a Model Documentation Report)
  - **Run a Rule Data Validation Report for Allocation Rules** (Running a Rule Data Validation Report for Allocation Rules)
  - **View Rule Data** (see Using Ad Hoc to Analyze Allocation Rule Data)

Using the Designer 2.0 Mass Edit Tab

Related Topics

- About the Designer 2.0 Mass Edit Tab
- Working in the Designer 2.0 Mass Edit Tab
- Defining the Columns that Display on the Mass Edit Tab
- Filtering Which Rules Are Displayed
- Inpecting Rule Details
- Editing Multiple Rules from the Mass Edit Tab
- Editing a Single Rule from the Mass Edit Tab
- Copying Rules to a Rule Set
- Coying Rules to a Model
- Enabling and Disabling Rules

About the Designer 2.0 Mass Edit Tab

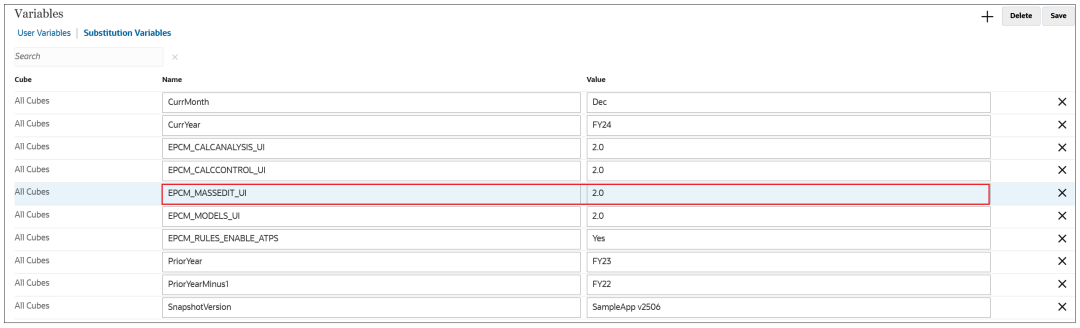
The Designer 2.0 Mass Edit tab has the same functionality as the original 1.0 Mass Edit tab, but it provides a more modern and updated user interface with more streamlined actions. In addition, the 2.0 Mass Edit tab provides:

- Improved search
- Full edit capability on a single rule
- Ability to validate models without having to switch to a different tab
- Improved rule filtering using the PCM Agent List Rules command

Copyright © 2022, 2026, Oracle and/or its affiliates.

In the April 2026 release (26.04), Mass Edit 1.0 is the default. You can preview and start using the new Mass Edit 2.0 tab by entering an EPCM_MASSEDIT_UI substitution variable to specify 2.0.

1. From the Home page, select **Tools**, and then **Variables**.
2. On the **Variables** tab, click **Substitution Variables**, and then click the plus sign to define a new variable.
3. Leave the **Cube** field set to **All Cubes**, and enter the EPCM_MASSEDIT_UI substitution variable for the Mass Edit 2.0 tab as follows:



Timeline going forward:

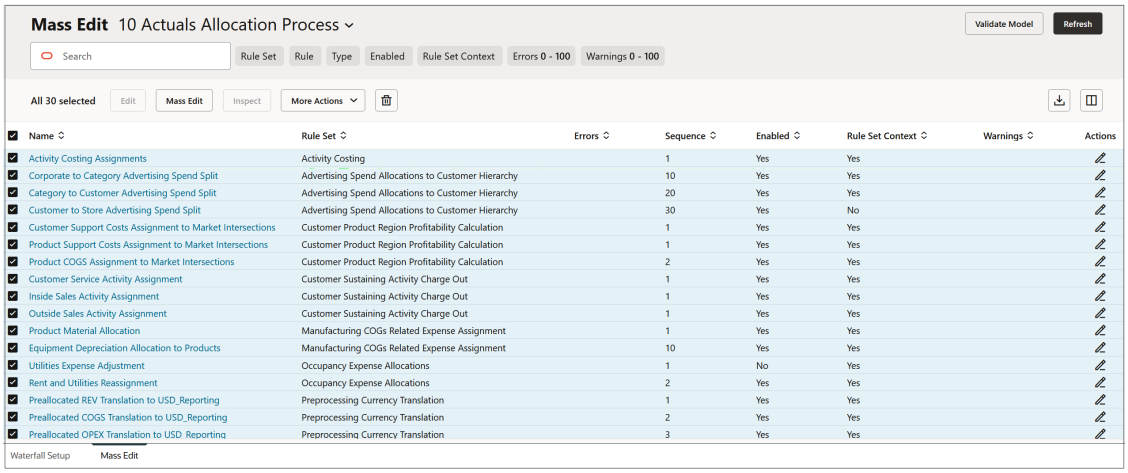
Starting in in the May 2026 release (26.05), Mass Edit 2.0 will be the default when you open your application. If desired, you can temporarily revert to the original Mass Edit 1.0 tab by setting the substitution variable value to 1.0.

Starting in release 26.07, the original Mass Edit 1.0 tab will no longer be available.

Working in the Designer 2.0 Mass Edit Tab

Use the **Mass Edit** tab to make edits to multiple rules at once. This is useful if you have a large number of rules and you know that a change you are making will impact many of your rules.

For example, assume that you have a model that has a large number of rules, and you want to add a member to all the rules in all the rule sets in the model. Instead of editing each rule individually on the **Waterfall Setup** tab, you can filter and select rules on the **Mass Edit** tab, and then add the member to all the selected rules at once.



Tasks that you can perform on the **Mass Edit** tab include:

- Defining the Columns that Display on the Mass Edit Tab

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Filtering Which Rules Are Displayed
- Inpecting Rule Details
- Editing Multiple Rules from the Mass Edit Tab
- Editing a Single Rule from the Mass Edit Tab
- Copying Rules to a Rule Set
- Coying Rules to a Model
- Enabling and Disabling Rules
- Running Model Validation

> **Tip**
>
> Edits that you make to your rules on the **Mass Edit** tab are displayed as jobs in the **Jobs** console. See Viewing Rules Jobs.

> **Tip**
>
> Edits made on the **Mass Edit** tab cannot be undone. Use the migration tools for backups if necessary. To access the migration tools, from the Home page, select **Tools**, and then **Migration**. See Using Migration.

Defining the Columns that Display on the Mass Edit Tab

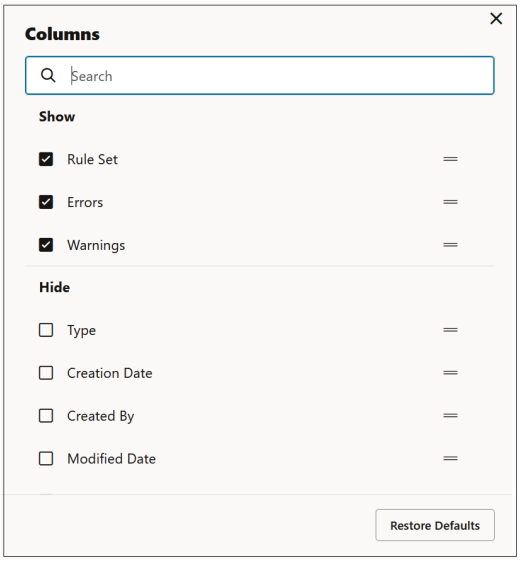
In addition to the default columns of Name, Rule Set, Errors, Sequence, Enabled, Rule Set Context, and Warnings, you can select additional columns to display on the **Mass Edit** tab, and you can define the order in which the columns display.

To define the column display:

1. From the **Mass Edit** tab, click the (Columns button).

2. Select or de-select the desired columns to show or hide the columns.

Copyright © 2022, 2026, Oracle and/or its affiliates.



3. To change the order in which the columns will display, click and drag ═ to the right of a column to move the column up or down. To restore the columns to their default display, click **Restore Defaults**.
4. When you have finished defining the columns that will display and the order in which they will display, click ✕ (Close) to close the **Columns** dialog box.

> **Note**
>
> Name, Sequence, Enabled, and Rule Set Context are always displayed and cannot be removed.

Filtering Which Rules Are Displayed

Use filter and sort options to specify which rules are displayed and the order in which they are displayed. These options allow you manipulate the display so that you can isolate the rules that you want to focus on.

- Defining Specific Filter Parameters
- Defining the Sort Order

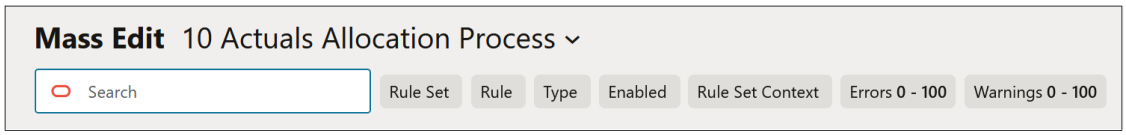
Defining Specific Filter Parameters

You can filter the rules displayed on the **Mass Edit** tab by:

- Rule Set
- Rule
- Type
- Enabled
- Rule Set Context
- Errors
- Warnings

Copyright © 2022, 2026, Oracle and/or its affiliates.

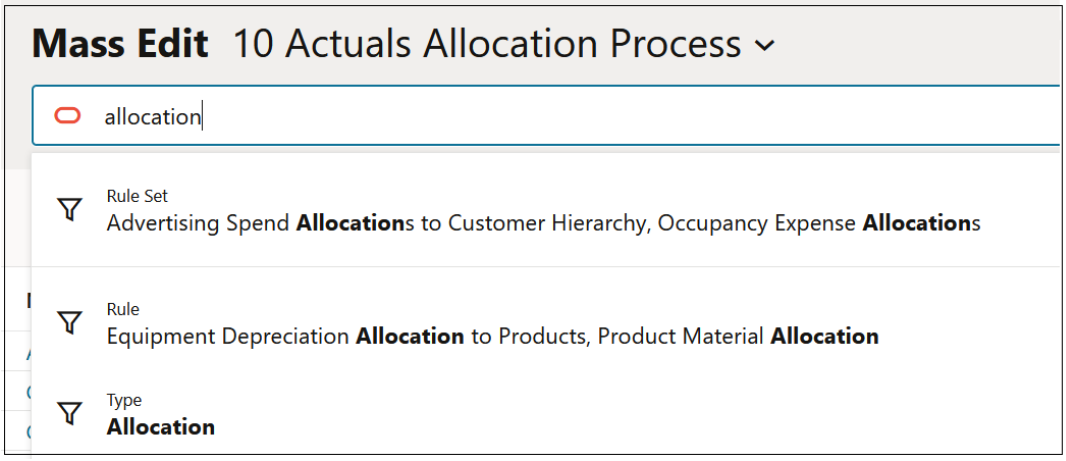
Each filter parameter is represented by a tile:



To define specific filter parameters, you can either:

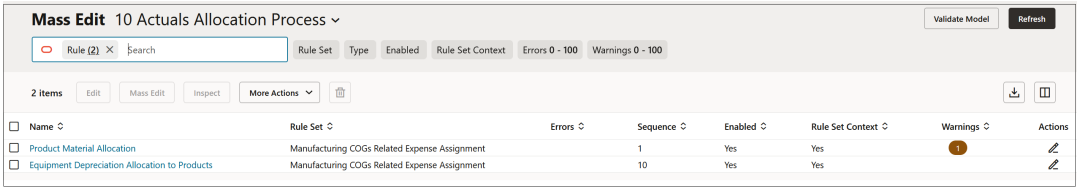
- Enter a value in the **Search** field.

  For example, entering "allocation" in the **Search** field displays all the rule sets, rules, and type of rules with "allocation" somewhere in the rule name or description.

  Click one of filters results to display the results on the **Mass Edit** tab.

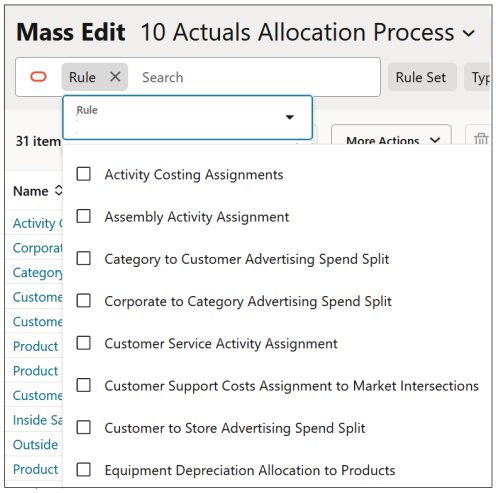
  In this example, clicking the filter results under "Rule" displays two allocation rules:

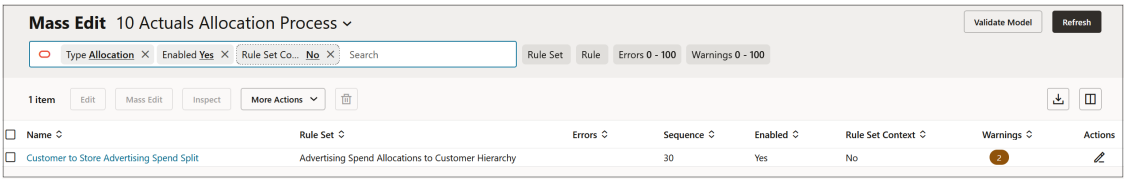
- Click a tile, or drag and drop a tile into **Search**.

  For example, you could move the **Rule** tile into **Search**, and then select an option from the resulting drop-down.

Copyright © 2022, 2026, Oracle and/or its affiliates.



You can filter by more than one parameter by moving the tiles corresponding to the parameters into **Search**. For example, you could display all the Allocation rules that have been enabled but that do not have a rule set context defined.



To remove a filter, click the **X** on the tile to once again display all the rules on the page.

> **Note**
>
> When you select an upper level member, all level-0 descendants of that member are included in the filter.

Defining the Sort Order

To define the sort order for the information on the **Mass Edit** tab, click the up arrow/down arrow to the right of the columns to sort in ascending or descending order.

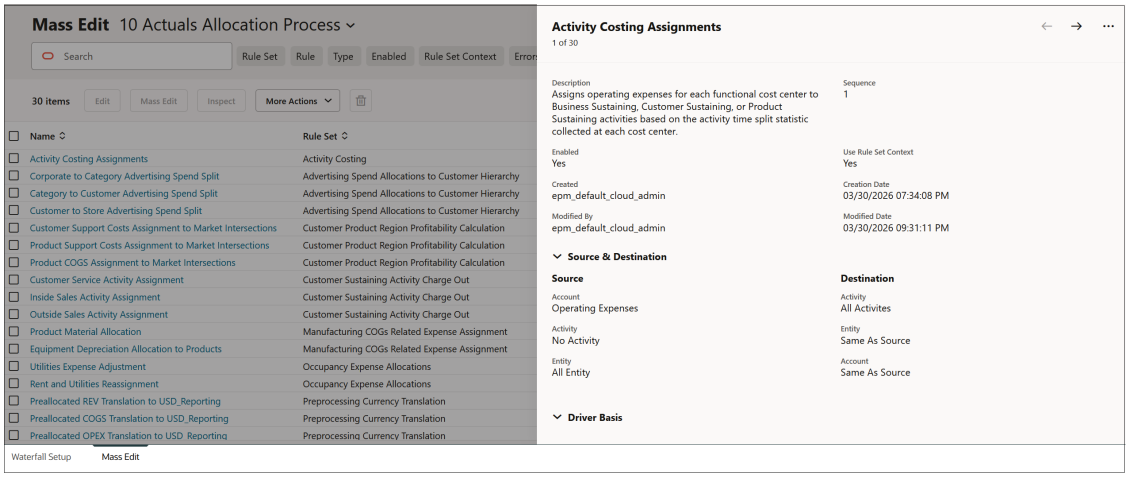
To refresh the information on the **Mass Edit** tab to its original sort order, click **Refresh**.

Inpecting Rule Details

To display detailed information about a rule, select the rule and click **Inspect**. The details are dislayed in a pop-up window on the **Mass Edit** tab.

For example, the details about the Activity Costing Assignments rule in the BksML50 sample application provided with Enterprise Profitability and Cost Management are displayed as follows:

Copyright © 2022, 2026, Oracle and/or its affiliates.



Click → and ← at the top of the pop-up window to scroll forward and backward through the rules on the **Mass Edit** tab.

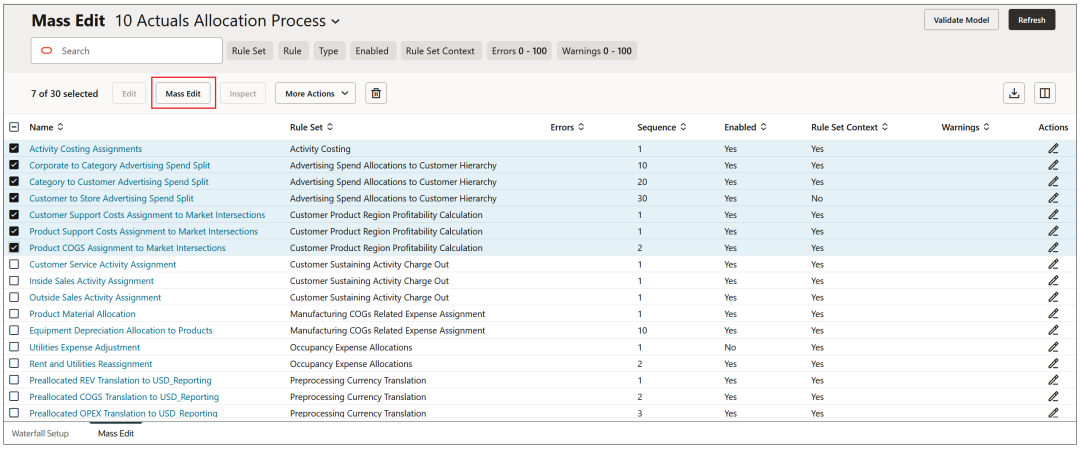
Click ⋯, and select **Close** or **Maximize** to either close or maximum the pop-up windows.

Editing Multiple Rules from the Mass Edit Tab

You can use the **Mass Edit** tab to make edits to multiple rules at once. This is useful if you have a large number of rules and you know that a change you are making will impact many of your rules.

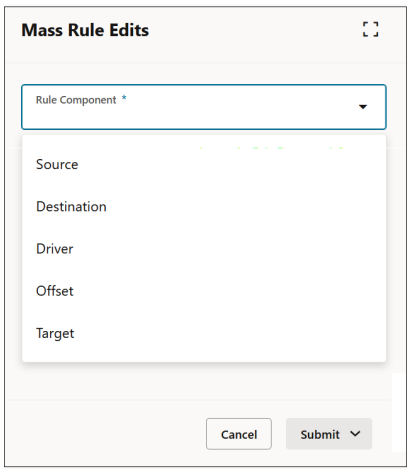
To edit multiple rules from the **Mass Edit** tab:

1. Click the checkbox next to the desired rules, or click the checkbox next to **Name** to select all the rules, and then click **Mass Edit**.



2. In the **Mass Rule Edits** dialog box, click the drop-down and select the Rule Component to edit.

Copyright © 2022, 2026, Oracle and/or its affiliates.



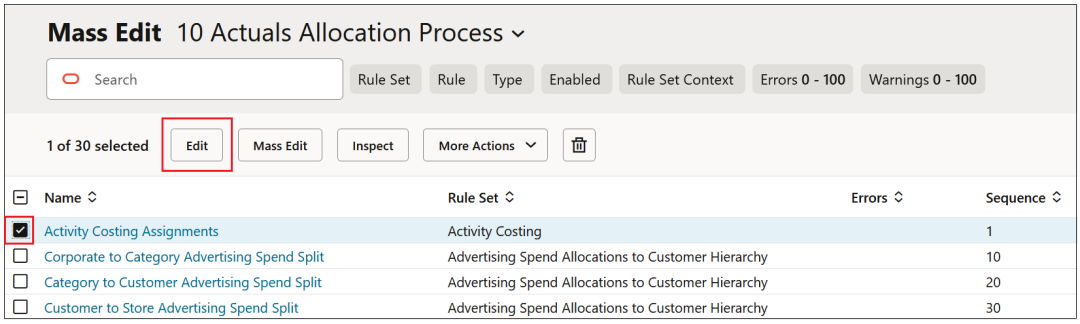
3. Based on the rule component that you select, enter the requested information.
4. Click **Submit and Next** to make more edits, or **Submit and Close** to save your edits and close the **Mass Rule Edits** dialog box.

Editing a Single Rule from the Mass Edit Tab

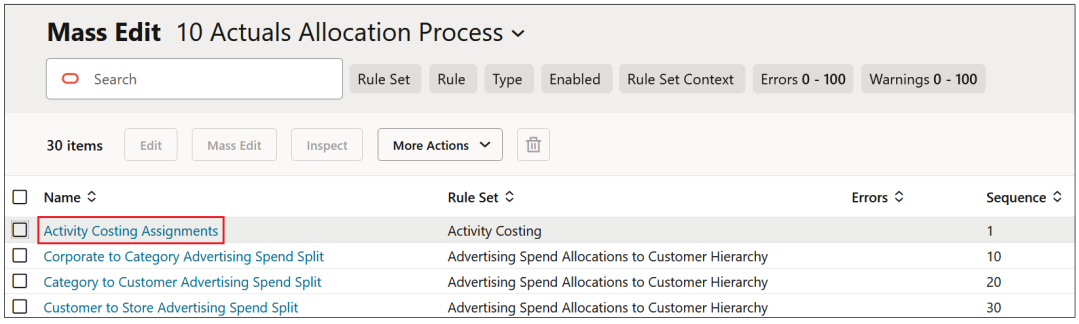
From the **Mass Edit** tab, you have full edit capability on a single rule.

To edit a single rule from the **Mass Edit** tab, do one of the following:

- Click the checkbox next to a rule, and click **Edit**.

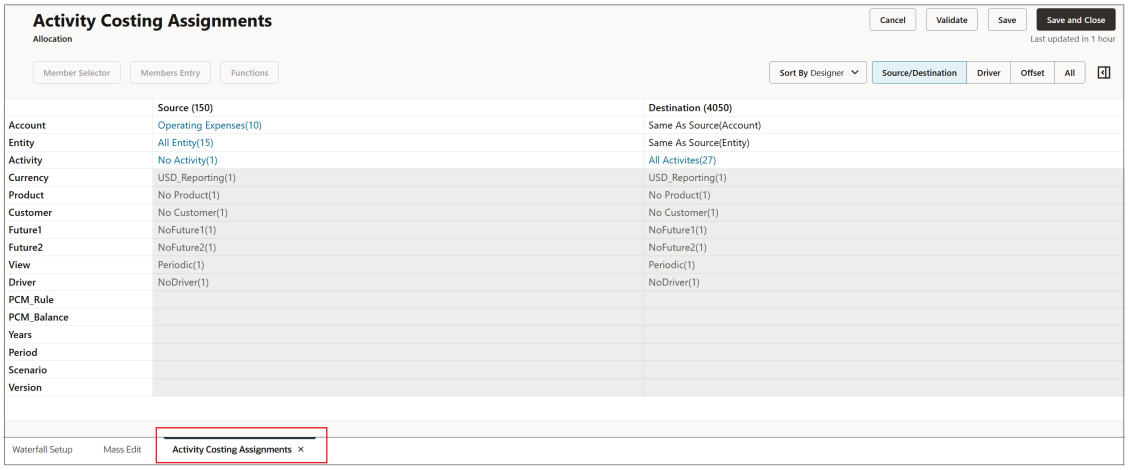


- Click the hyperlink for a rule.



The rule is opened in a separate tab, where you can make the desired edits. (See Working in Rule Designer 2.0.)

Copyright © 2022, 2026, Oracle and/or its affiliates.



Copying Rules to a Rule Set

This feature is useful if you need to include identical or similar rules in several rule sets. You can copy the rule with a slightly different name and leave it unchanged or modify it. You can select multiple rules to copy to a rule set.

> **Note**
>
> If a rule uses a Rule Set Context and the rule has dimension members that conflict with members in the target rule set, the rule is not copied, and an error is displayed in the Job Details log.

To copy rules to a rule set:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Select the **Mass Edit** tab.
3. **Optional:** Refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed
4. Select the desired rules, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
5. Click **More Actions**, and then select **Copy**.
6. In the **Copy Rules** dialog box, select **Rule Set**, and enter the following information:
   - **Rule Set**: Select the rule set to which you want to copy the rules.
   - **Comment**: Enter a note or comment about the job that will be displayed in the **Job Details** accessed from the **Jobs** console.

   > **Note**
   >
   > To keep rule names unique in the model, a number is added to the end of rule names as they are copied.

7. Click **Copy**.
8. **Optional**: Go to the **Jobs** console and verify that the rules were successfully copied.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Coying Rules to a Model

This feature is useful if you are creating a new model and want to include identical or similar rules from an existing model in the new model. You can select multiple rules to copy to a model.

> **Note**
>
> If a rule uses a Model Context and the rule has dimension members that conflict with members in the target model, the rule is not copied, and an error displays in the Job Details log.

To copy rules to a model:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Select the **Mass Edit** tab.
3. **Optional:** Refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed.
4. Select the desired rules, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
5. Click **More Actions**, and then select **Copy**.
6. In the **Copy Rules** dialog box, select **Model**, and then enter the following information:
   - **Model**: Select the model to which you want to copy the rules.
   - **Target Rule Set**: **Optional**: If you want the rule in the new model to be assigned to a rule set that is different than the rule set in the original model, select the desired target rule set from the drop-down. If you do not select a target rule set, the rule will be assigned to the same rule set as in the original model.
   - **Overwrite**: Select to indicate that if a rule with the same name is already in the target model, then it will be overwritten by the rule being copied using its definition.
   - **Comment**: Enter a note or comment that will be displayed in the **Job Details** accessed from the **Jobs** console.
7. Click **Copy**.
8. **Optional**: Go to the **Jobs** console and verify that the rules were successfully copied.

   The job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Enabling and Disabling Rules

You can enable or disable multiple rules at one time. This feature is useful if you need to enable a number of rules at once, or make other changes that will affect the validity of enabled rules.

To enable or disable rules:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. From the Home page, select **Modeling**, and then **Designer**.
2. Click the **Mass Edit** tab.
3. **Optional:** Refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed.
4. Select the rules that you want to enable or disable, or select the checkbox by **Name** to select all the rules displayed on the **Mass Edit** tab after any filters have been applied.
5. Click **More Actions**, and then select either **Enable** or **Disable**.
6. **Optional**: Go to the **Jobs** console and verify that the rules were successfully enabled or disabled.

   The job you is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Rules Jobs.

Copyright © 2022, 2026, Oracle and/or its affiliates.

10

Running Model Validation

Related Topics

- About Model Validation
- Validating Models 1.0
- Validating Models 2.0
- Validation Errors and Warnings

Video

Your Goal	Watch This Video
Learn how validate rules, calculate models by running all rules or selected rules only, and clear calculated data.	Validating and Calculating Models in Enterprise Profitability and Cost Management

About Model Validation

It is a best practice to validate your rules before you calculate them against a data POV. Model valiadation helps maintain the integrity of rules that may have been impacted by things like changes in dimensions definitions or incomplete rules.

Errors can be introduced when members directly referenced in your rules are renamed or deleted during a dimension change. If you delete members from dimensions that are referenced in existing rules, the rules can't run.

In addition, rules must be fully defined. This means that the source, destination, and target definitions for each rule must include members from every dimension.

Validating Models 1.0

To validate your models:

1. From the Home page, select **Modeling**, and then **Model Validation**.
2. Make selections for **Model**, **Rule Set**, and **Rule Status**.

   You can validate all rule sets in the model, or just focus on a single rule set. You can also filter the validation by rule status to check just enabled or disabled rules.

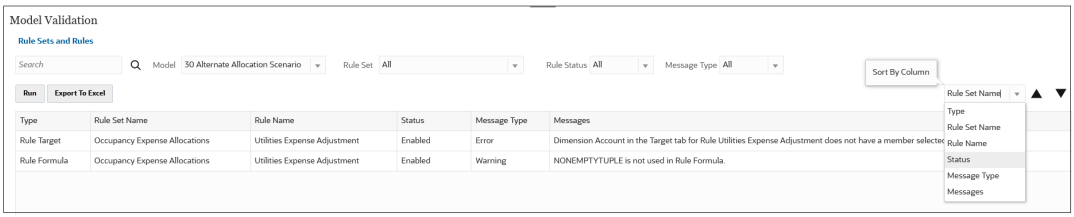
> **Tip**
>
> If you have rules that are not yet complete, leave them disabled in the rule definition. You can then select **Enabled** as the **Rule Status** to include only the enabled rules in the model validation. (See Creating an Allocation Rule Definition and Creating a Custom Rule Definition for information on enabling and disabling rules.)

Copyright © 2022, 2026, Oracle and/or its affiliates.

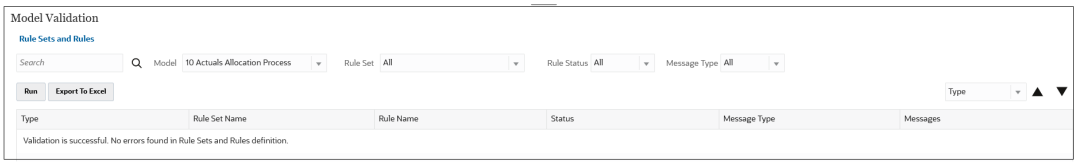
3. **Optional:** To search for a rule or rule set, enter all or part of a rule or rule set name in the **Search** field and click 🔍.
4. Click **Run**.

   When you run the validation, the system checks all rules in the selected rule set. Any errors and warnings in your rules or rule sets are displayed. If you have several errors and warnings, you can sort the order in which the errors and warnings are displayed. To do this, click the **Sort By Column** drop-down, and select an option. You can then click ▲ or ▼ to sort the errors in ascending or descending order. You can sort by any column heading.

   For example, you could sort the errors and warnings by Rule Set Name in ascending alphabetical order. See Validation Errors and Warnings for information about the errors and warnings that may be displayed.



5. **Optional:** If you have several errors and warnings, click **Export to Excel**. You can use the Excel spreadsheet as a checklist as you go back to the Rule Designer to fix the errors. See .Working in Rule Designer 1.0 and Working in Rule Designer 2.0.
6. Continue fixing any errors and warnings in your rules and rule sets, and then click **Run** until you get a message that the validation is successful.



> **Note**
>
> You can also use the "Validate Model" REST API or the "validateModel" EPM Automate command to validate a model. See Validate Model in *REST APIs for Oracle Fusion Cloud EPM* and validateModel in *Working with EPM Automate*.

Validating Models 2.0

Validate your models from the Designer **Mass Edit** tab.

To validate your models:

1. From the Home page, select **Modeling**, and then **Designer**.
2. Click the **Mass Edit** tab.
3. **Optional:** Refine the rules displayed by searching for and filtering rules. See Filtering Which Rules Are Displayed

Copyright © 2022, 2026, Oracle and/or its affiliates.

You can validate all rule sets in the model, or just focus on a single rule set. You can also filter the validation by rule status to check just enabled or disabled rules.

> **Tip**
>
> If you have rules that are not yet complete, leave them disabled in the rule definition. You can then select those rules on the **Mass Edit** tab, click **More Actions**, and select **Enabled** to include only the enabled rules in the model validation. (See Creating an Allocation Rule Definition and Creating a Custom Rule Definition for information on enabling and disabling rules.)

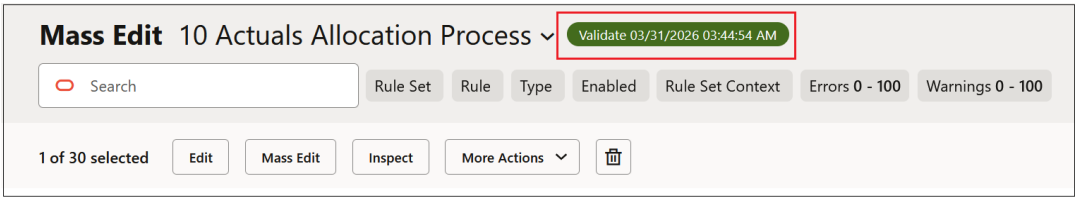
4. Click **Validate Model**.

   Any errors or warning are displayed in the **Errors** and **Warnings** columns on the **Mass Edit** tab.

   To view details about the errors and warnings, click **More Actions**, and then select **View Validation Messages**.

5. **Optional**: If you have several errors and warnings, click , or click **More Actions** and select **View Validation Messages** to export the errors and warnings to an Excel spreadsheet You can use the Excel spreadsheet as a checklist as you go back to the Rule Designer to fix the errors. See and Working in Rule Designer 2.0 and Using the Designer 2.0 Mass Edit Tab.

6. Continue fixing any errors and warnings in your rules and rule sets, until a message is displayed on the **Mass Edit** tab that the model was validated.



> **Note**
>
> You can also use the "Validate Model" REST API or the "validateModel" EPM Automate command to validate a model. See Validate Model in *REST APIs for Oracle Fusion Cloud EPM* and validateModel in *Working with EPM Automate*.

Validation Errors and Warnings

The errors and warnings in the following table are related to validating the use of best practices. For detailed best practice information, see Best Practices.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 10-1 Validation Errors and Warnings

Message	Message Type	Explanation
Dimension <*Dimension Name*> in the <*Rule Element*> tab for Rule <*Rule Name*> does not have a member selected.	Error	The rule is not fully defined and cannot be executed. The rule will be disabled at runtime, and you must provide the missing information and re-enable the rule.
NONEMPTYTUPLE is not used in Rule Formula	Warning	The formula in a custom rule does not contain a NONEMPTYTUPLE statement. A NONEMPTYTUPLE statement helps custom rules calculate significantly faster.
Upper level member 'Product.AllProducts' is used in Driver	Warning	The use of upper level members in drivers can significantly increase allocation rule calculation times.
Calculated member 'Product.<*Account.AverageShippingWeight*>' is used in Driver (where <*Account.AverageShippingWeight*> is a level-0 member with a formula)	Warning	The use of calculated members in drivers can significantly increase allocation rule calculation times.
High destination count for Allocate Evenly Driver	Warning	The use of the Allocate Evenly driver forces allocations to every potential destination, and can result in a very high number of very small allocation amounts. You should verify that this meets your design goals.
Same parent member 'Product.AllProducts' is selected in both Source and Destination	Warning	The use of the same upper level member in both the source and destination results in an indexed allocation from every level 0 source to every level 0 destination under the parent member. You should verify that this is the intended logic.

Copyright © 2022, 2026, Oracle and/or its affiliates.

11

Calculating Models

Related Topics

- About Calculating Models
- Understanding Points of View
- Calculating Models 1.0
- Calculating Models 2.0
- Viewing Run Calculation Jobs
- Cancelling a Calculation Job
- Preferences Related to Calculation Performance

Video

Your Goal	Watch This Video
Learn how validate rules, calculate models by running all rules or selected rules only, and clear calculated data.	Validating and Calculating Models in Enterprise Profitability and Cost Management

About Calculating Models

You can calculate models for one or more points of view. For example, you could run a Forecasting model against 12 periods of data.

When you run a model against a point of view, Enterprise Profitability and Cost Management layers your results on top of your source data without changing it. This makes is easy to undo or redo running a single rule, a rule set, or all of your rules at once for an unlimited number of times. You can easily examine each calculation layer rule-by-rule, which provides transparency, credibility, and traceability to your allocations.

Unlike in the General Ledger where reversing allocations and adjustments requires reverse adjustment or restoring data back to a point before the calculations took place, in Enterprise Profitability and Cost Management you can simply clear calculated data.

To calculate a model:

1. From the Home page, selecting **Modeling**, and then **Calculation Control**.
2. Use the **Calculation Control** page to create, edit, and filter points of view and run calculations.

> **Note**
>
> You can also use the calculateModel EPM Automate command or the Calculate Model REST API to calculate a model.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Understanding Points of View

A Point of View (POV) is used to present a specific version or perspective of an application. Enterprise Profitability and Cost Management comes with the following POV dimensions. You use these dimensions to create the POVs used to calculate your models.

- **Years**: Identifies the calendar years in which the data has been gathered.
- **Period**: Enables you to analyze strategies and changes over time.
- **Scenario**: Identifies a version of the application for a specific time period and set of conditions. You can run calculations for Actual, Plan, and Forecast scenarios.
- **Version**: Maintains separate versions of the same POV to monitor the impact of changes to the application, or to track different versions of the same application. Use the Version dimension to model possible outcomes based on assumptions, or "What If" scenarios to determine best or worst case scenarios. You can run calculations for a Final version, a Working version, and up to two "What If" scenarios.

You must create a POV before you can use it to calculate models or analyze calculations. For example the dimension members for "2022", "January", "Forecast", and "Working" may exist in an application, but until you create a POV with these dimension members, you cannot calculate models or analyze calculation details against the data residing in that POV combination.

> **Note**
>
> Only POVs with a status of "Draft" can have calculation control actions performed on them. See Editing a Point of View for information on how to change the POV status.

Calculating Models 1.0

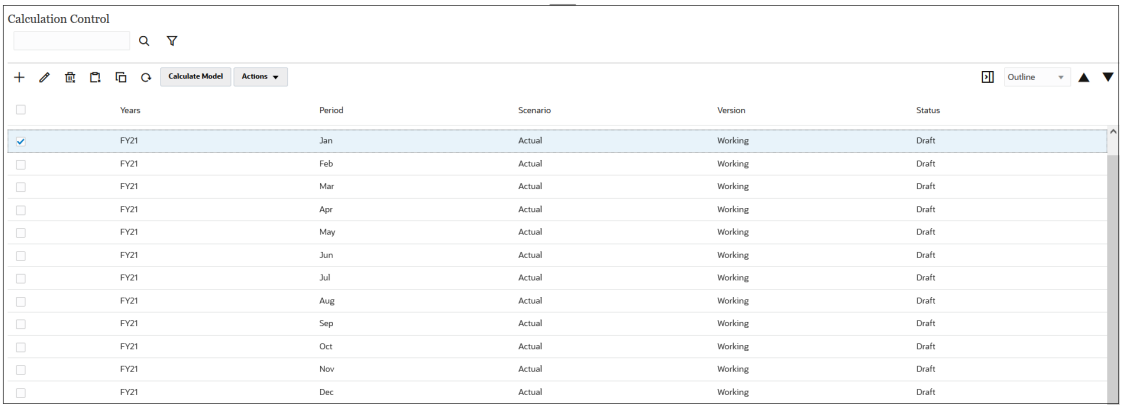
Related Topics

- Using the Calculation Control Page 1.0
- Calculating a Model 1.0

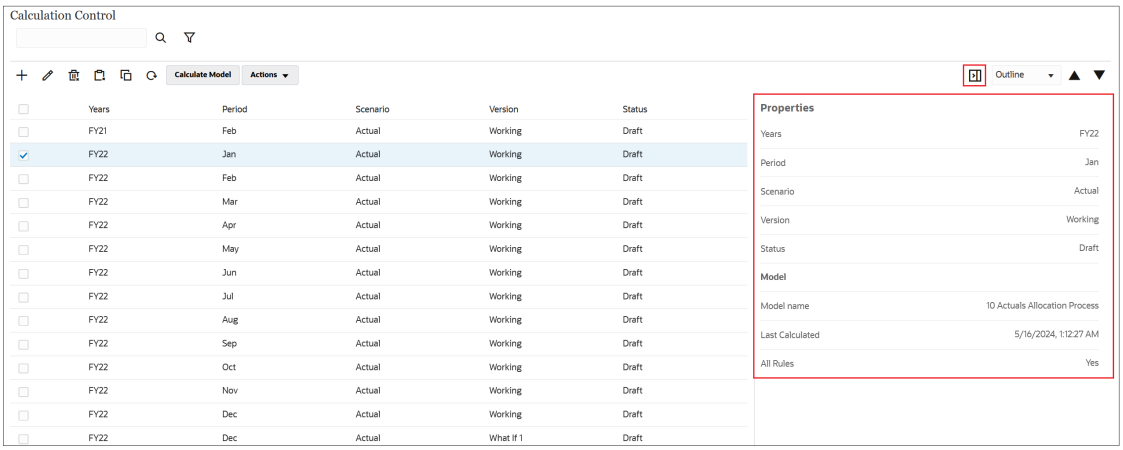
Using the Calculation Control Page 1.0

The **Calculation Control** page shows all the points of view you have created. Selections are shown for the **Years**, **Period**, **Scenario**, and **Version** POV dimensions.

Copyright © 2022, 2026, Oracle and/or its affiliates.



To display the properties for a specific point of view, select the point of view and click . In addition to the selections for the POV dimensions, the properties will show the name of the model used for the calculation, and the date and time the model was last calculated.



Tasks that you can complete on the **Calculation Control** page include:

- Filtering Which Points of View Are Displayed
- Creating a Point of View
- Editing a Point of View
- Deleting a Point of View
- Clearing a Point of View
- Copying a Point of View
- Calculating a Model 1.0
- Generating a Model Snapshot Documentation Report

Filtering Which Points of View Are Displayed

You can use the following filter and sort options to specify which points of view are displayed and the order in which they are displayed:

- Search for specific points of view
- Define a custom filter
- Sort the order in which the points of view are displayed

Copyright © 2022, 2026, Oracle and/or its affiliates.

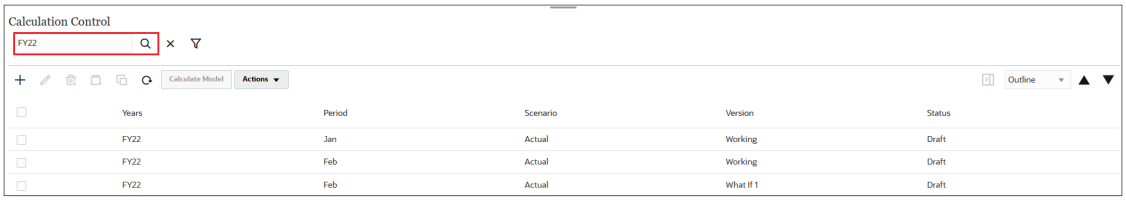
- Refresh the points of view that are displayed

These filter options allow you manipulate the display so that you can isolate the points of view that you want to focus on.

Searching for Specific Points of View

To search for specific points of view, enter all or part of the POV name in the Search field, and click .

For example, entering "FY22" in the Search field displays all the POVs with "FY22" in the **Years** dimension.



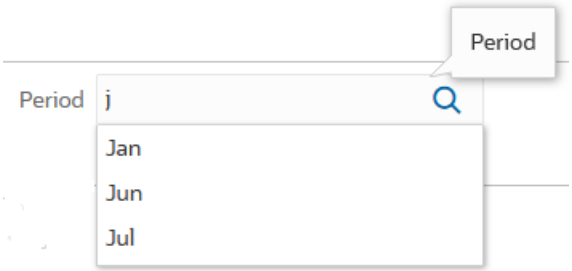
Defining a Custom Filter

To further refine the POVs displayed, click and define filters for **Years**, **Period**, **Scenario**, **Version**, and/or **Status**.

Do one of the following to define the desired filters:

- Begin typing next to a POV dimension. The field will auto-populate with the available options.

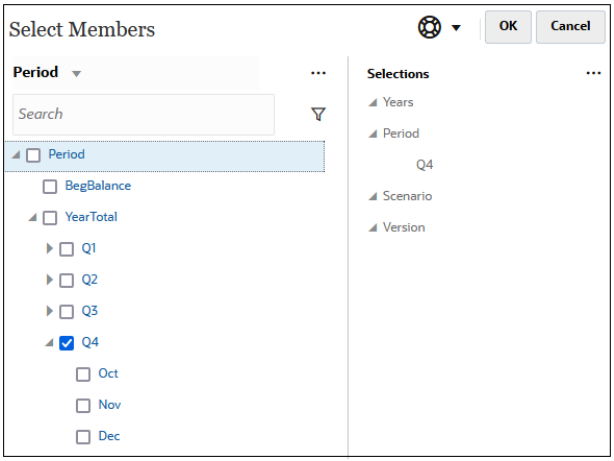
  For example, if you type "j" next to **Period**, "Jan", "Jun", and "Jul" are displayed in the drop-down.



  Select an option to filter the results.

- Click next to a POV dimension, and select a member from the **Select Members** dialog box. (See Using the Member Selector.)

Copyright © 2022, 2026, Oracle and/or its affiliates.

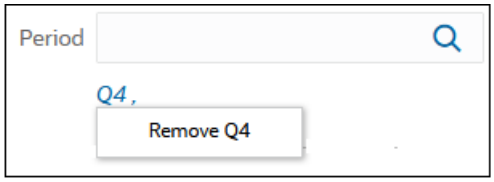


Note that when you select an upper level member, all level-0 descendants of that member are included in the filter.

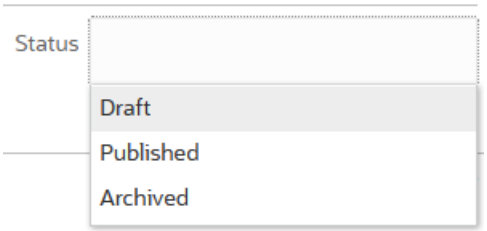
When you select a member to use as a filter, it is displayed below the POV dimension on the **Calculation Control** page. For example, if you select **Q4** to filter the results displayed to "Oct", "Nov", and "Dec", then Q4 is displayed below the **Period** dimension on the **Calculation Control** page.

To remove a filter, click the filter, and then and click **Remove**.

For example, to remove the "Q4" filter, click **Q4** and then click **Remove Q4**.



- To filter the status of the POVs that are displayed, click in the **Status** field and select an option:

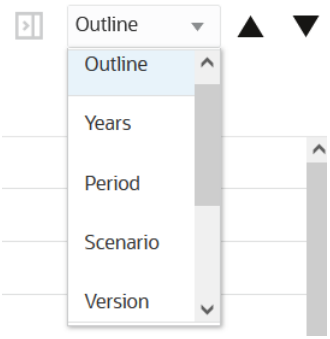


To hide the filter options, click again.

Defining the Sort Order

To sort the order in which the POVs are displayed, click the drop-down on the top right of the page, and select an option. You can sort by any POV dimension. If you select **Outline** as the sort option, the POVs are sorted in the order in which all the dimensions appear in the Oracle Essbase outline. **Outline** is the default sort order. After you select an option in the drop-down, you can click or to sort the POVs displayed in ascending or descending order.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Refreshing the Points of View Displayed

To refresh the points of view displayed on the page, click .

Creating a Point of View

To create a point of view:

1. On the **Calculation Control** page, click , or select **Actions**, and then **Create**.
2. In the **Create Point of View** dialog box, select members for the **Years**, **Period**, **Scenario**, and **Version** dimensions.
3. Click **OK**.

   The point of view you create is displayed on the **Calculation Control** page.

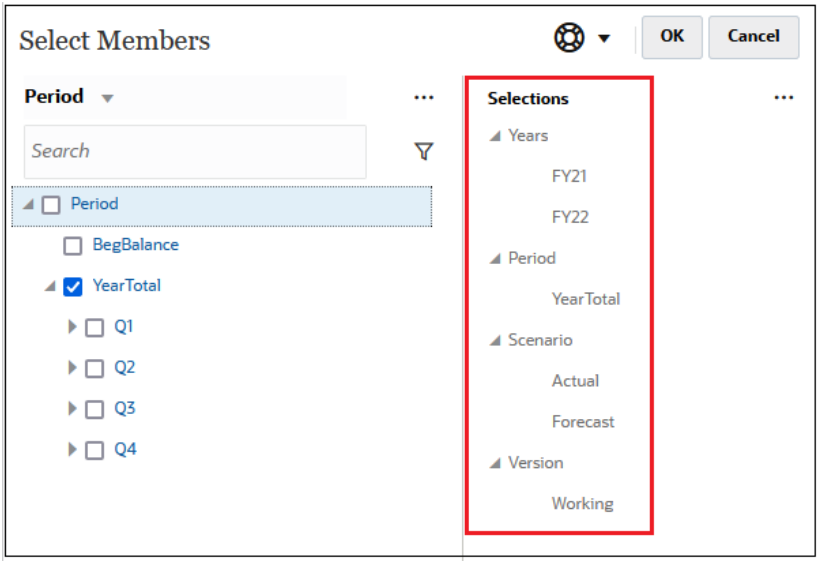
> **Note**
>
> When you create a point of view, the **Status** is intially set to *Draft*. Later on, you can edit the point of view and change the status to *Published* or *Archived*. You cannot run calculations on a *published* or *archived* point of view.

Creating Multiple Points of View

You can create multiple points of view at one time. To do this, select multiple members for one or more POV dimensions. This creates a POV for each intersection.

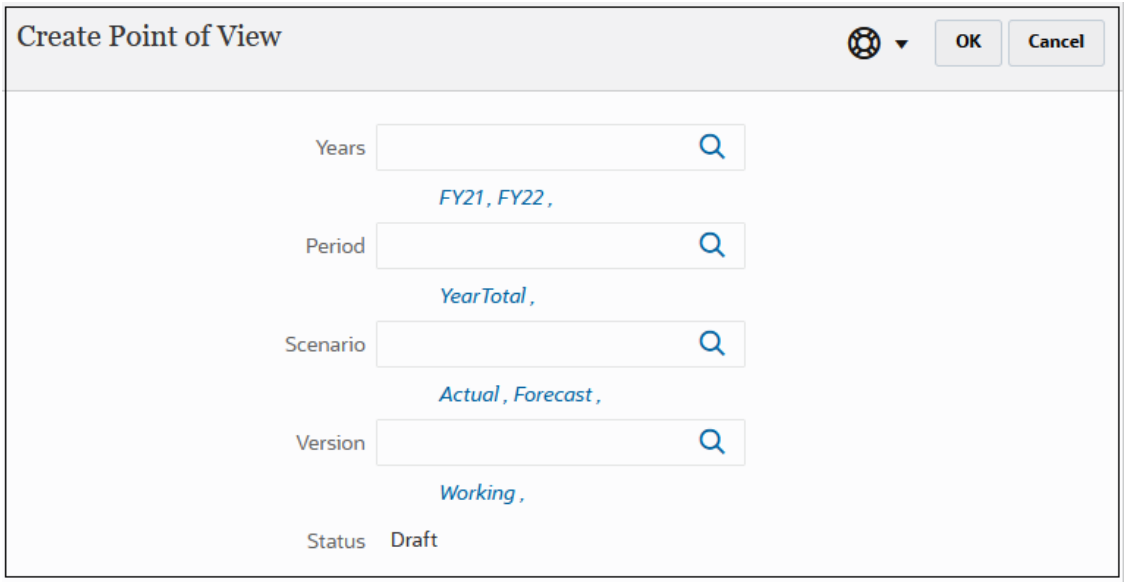
For example, you could create all the points of view needed for modeling the actual and forecasted data for 2021 and 2022. To do this, you would click next to each POV dimension and make the following selections in the **Select Members** dialog box:

Copyright © 2022, 2026, Oracle and/or its affiliates.



> **Note**
>
> When you select an upper level member, POVs are created for all the level 0 descendants of that member. In this example, selecting "YearTotal" in the "Period" dimension will create POVs for all 12 months.

The selections you make for each dimension are displayed in the **Create Point of View** dialog box.



In this example, 48 points of view would be created to model the actual and forecasted data for 2021 and 2022.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If any of the POVs overlap with existing POVs, the existing POVs are skipped, and the remaining new POVs are created. The number of POVs that will be created and the number of POVs that overlap with existing POVs is displayed when you click **OK** in the **Create POV** dialog box.

> **Note**
>
> For more information on selecting members, see Using the Member Selector.

Editing a Point of View

When you edit a point of view, the only thing you can change is the POV *status.*

To edit a point of view:

1. On the **Calculation Control** page, select the point of view you want to edit.
2. Click , or select **Actions**, and then **Edit**.
3. The **Edit Point of View** dialog box shows the members selected for the **Years**, **Period**, **Scenario**, and **Version** dimensions. You cannot edit these selections; however, you can change the selection for the point of view **Status**.
   - **Draft**: This is the default selection.
   - **Published**: Select this option if the POV has already been published. (You cannot run calculations on a published POV.)
   - **Archived**: Select this option if the POV is archived. (You cannot run calculations on an archived POV.)
4. Click **OK**.

Deleting a Point of View

> **Caution**
>
> You can delete a point of view; however, be aware that all of the data associated with the point of view will be deleted, and the calculation history for the deleted point of view will no longer be available on the **Calculation Analysis** page.

To delete a point of view:

1. On the **Calculation Control** page, select the point of view you want to delete.

   You can select multiple points of view to delete if desired. For example, at the end of a fiscal year you may want to clear out the previous year's 12 periods of actuals and forecast.
2. Click , or select **Actions**, and then **Delete**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Click **OK** in the **Confirmation** dialog box to confirm that you want to proceed with the deletion.
4. **Optional**: Go to the **Jobs** console and verify that the point of view was deleted successfully.

   The **Delete Point of View** job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Point of View Jobs. If you deleted more than one POV, a separate job is created for each deleted POV.

> **Note**
>
> You can also use the "Delete Point of View" REST API or the "deletePointOfView" EPM Automate command to delete a point of view. See Delete Point of View in *REST APIs for Oracle Fusion Cloud EPM* and deletePointOfView in *Working with EPM Automate*.

Clearing a Point of View

Clearing a point of view allows you to remove data without removing the point of view. You can clear some or all of the data and start over with new or different rules.

To clear a point of view:

1. On the **Calculation Control** page, select the point of view you want to clear.
2. Click , or select **Actions**, and then **Clear**.
3. In the **Clear Point of View** dialog box, select a cube, and then select an option that relates to the level 0 members in the PCM_Balance and PCM_Rule regions.

Table 11-1 Data that is Cleared for the Selected Point of View

Clear POV Option	PCM_Balance Region Cleared	PCM_Rule Region Cleared	What this Means
Input Data	PCM_Balance.Input	Level 0 descendants of PCM_Rule	For all members in all business dimensions, clears the Input member in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 11-1 (Cont.) Data that is Cleared for the Selected Point of View

Clear POV Option	PCM_Balance Region Cleared	PCM_Rule Region Cleared	What this Means
Adjustment Values	PCM_Balance.AdjustmentIn PCM_Balance.AdjustmentOut	Level 0 descendants of PCM_Rule	For all members in all business dimensions, clears the Adjustment In and Adjustment Out members in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension.
Allocated Values	PCM_Balance.AllocationIn PCM_Balance.AllocationOut PCM_Balance.AllocationOffsetAmount	Level 0 descendants of PCM_Rule	For all members in all business dimensions, clears the Allocation In, Allocation Out, and Allocation Offset Amount members in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension.

4. Click **OK**.
5. **Optional:** Go to the **Jobs** console and verify that the data was successfully cleared from the point of view.

   The Clear Point of View job is displayed in the Jobs console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Point of View Jobs.

> **Note**
>
> You can also use the "Clear Data by Point of View" REST API or the "clearDataByPointOfView" EPM Automate command to clear data. See Clear Data by Point of View in *REST APIs for Oracle Fusion Cloud EPM* and clearDataByPointOfView in *Working with EPM Automate*.

Copying a Point of View

You can copy data from one point of view to another. For example, if you wanted to create a "what if" version of the point of view, you could start with data that was already included in an existing point of view, copy it to a new point of view, and then do some additional edits and calculations.

To copy a point of view:

1. On the **Calculation Control** page, select the point of view you want to copy.
2. Click , or select **Actions**, and then **Copy**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. In the **Copy Point of View** dialog box, select a **Source** cube and a **Destination** cube.
4. Select the members for the **Years**, **Period**, **Scenario**, and **Version** dimensions that will be used in the copied point of view.
5. Under **Data**, select an option that relates to the level 0 members in the PCM_Balance and PCM_Rule regions.

Table 11-2 Data that is Copied for the Selected Point of View

Copy POV Option	PCM_Balance Region Copied	PCM_Rule Region Copied	What this Means
All Input Data	Level 0 descendants of PCM_Balance	PCM_Rule.NoRule	For all members in all business dimensions, copies all level 0 descendants in the PCM_Balance dimension, intersecting with the NoRule member in the PCM_Rule dimension.
All Data	Level 0 descendants of PCM_Balance	Level 0 descendants of PCM_Rule	For all members in all business dimensions, copies all level 0 descendants in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension. This results in all of the data in the POV being copied.

6. Click **OK**.

> **Note**
>
> If you select options for **Years**, **Period**, **Scenario**, and **Version** to define a point of view that doesn't exist in the calculation control list yet, a dialog box is displayed letting you know that the destination point of view doesn't exist. Click **OK** to confirm that you want to create the destination point of view.

7. **Optional:** Go to the **Jobs** console and verify that the point of view was copied successfully.

   The **Copy Point of View** job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status.. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Point of View Jobs.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> You can also use the "Copy Data by Point of View" REST API or the "copyDataByPointOfView" EPM Automate command to copy data. See Copy Data by Point of View in *REST APIs for Oracle Fusion Cloud EPM* and copyDataByPointOfView in *Working with EPM Automate*.

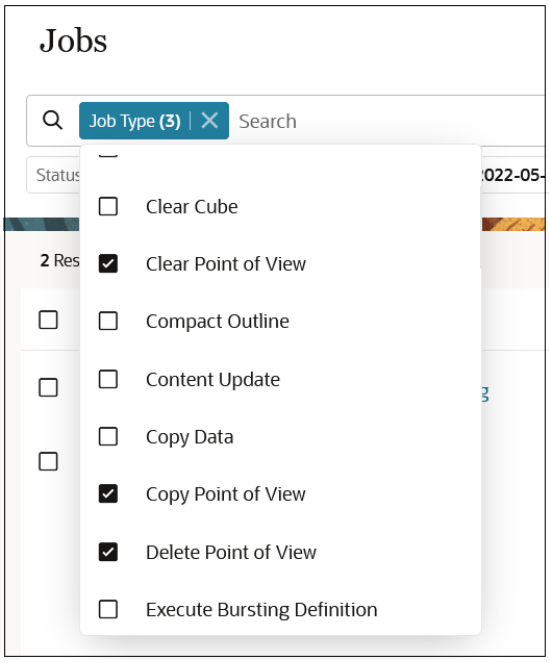
Viewing Point of View Jobs

You can view the Point of View jobs you created on the **Calculation Control** page from the **Jobs** console.

To access the **Jobs** console and view your Point of View jobs:

1. Complete a step:
   - If you are currently calculating models, select the **Jobs** card above the **Calculation Control** page.
   - From the Home page, select **Modeling**, and then **Jobs**.

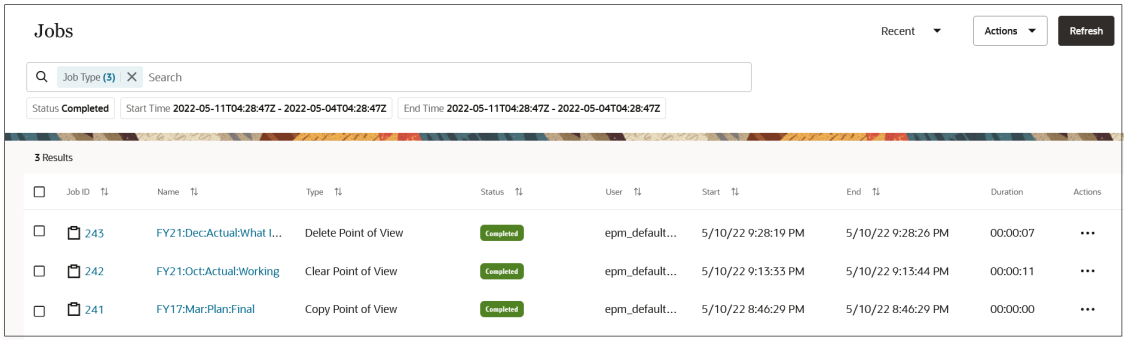
   When you first access the **Jobs** console, the Point of View jobs that have been submitted are displayed along with all of the other jobs that have been submitted.
2. To limit the jobs displayed to just Point of View jobs, click the **Job Type** tile to move it to the **Search** field. Once it is in the **Search** field, click the tile again and scroll down to select the desired Point of View job(s).



Note: By default, the last three days' jobs are displayed. Click the **Start Time** and **End Time** tiles to select a different date range.

Jobs are displayed with a "Completed" or "Completed with Errors" status. In the following example, one **Delete Point of view**, one **Clear Point of View**, and one **Copy Point of View** job has been submitted, and all of the jobs have successfully run without an errors.

Copyright © 2022, 2026, Oracle and/or its affiliates.



To display job details, click the job name, or click ••• next to a job, and select **Details**.

Calculating a Model 1.0

To calculate a model:

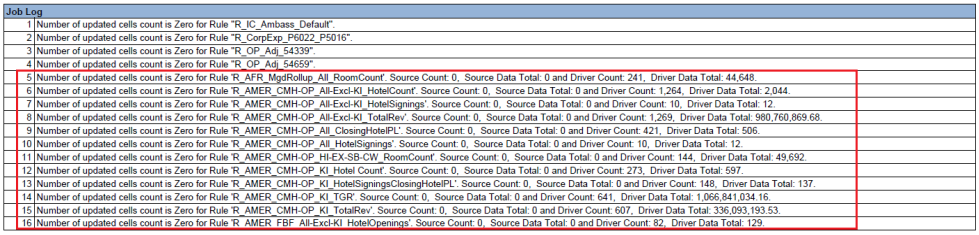
1. From the Home page, select **Modeling**, and then **Calculation Control**.
2. **Optional**: Filter the POVs displayed by entering all or part of the POV name or description in the Filter field, and clicking 🔍.
3. Select the desired POVs, or select the checkbox next to **Years** to select all the POVs.
4. Click **Calculate Model**.
5. In the **Calculate Model** dialog box, enter information about the model to calculate:
   - **Model:** Click the drop-down and select the model to calculate.
   - **Job Comment**: Enter a note or comment about the Run Calculation job that will be displayed in the **Job Details** accessed from the **Jobs** console.
   - **Processing Options**: Select one or more processing options. The processing options you select will be applied to every rule in the processing range defined for the model.
     - **Clear Calculated Data**: Clears past results and replaces them with the results from this calculation. This is the default. Unless this is the first time you are calculating a model, you almost always want to clear the calculated data from previous calculation.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> This option clears the calculated data *only* for the rules being executed. If a rule name has changed, then the data is *not* cleared from the old rule name. If you select to include "All Rules" in the calculation, this option clears the data for all rule members except "NoRule". This includes rule members from rules that have been renamed. See Renaming Rules.

- **Run Calculation**: Calculates the rules that you select in the **Processing Range**.
- **Capture Diagnostics Data**: Captures diagnostics data that is displayed in the Job Log section of "Calculation Statistics" and "Calculation Statistics Comparison" reports when an allocation rule successfully executes but no cells are updated if no source or driver data is found. (See Generating a Calculation Statistics Summary Report and Generating a Calculation Statistics Diagnostics Report.) This information can help you find the cause of a lack of allocation results.

  The following is an example of the diagnostics data in a "Calculation Statistics" report where no source or driver data was found:



Job Log	
1	Number of updated cells count is Zero for Rule "R_IC_Ambass_Default".
2	Number of updated cells count is Zero for Rule "R_CorpExp_P6022_P5016".
3	Number of updated cells count is Zero for Rule "R_OP_Adj_54339"
4	Number of updated cells count is Zero for Rule "R_OP_Adj_54659"
5	Number of updated cells count is Zero for Rule 'R_AFR_MgdRollup_All_RoomCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 241, Driver Data Total: 44,648.
6	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_HotelCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 1,264, Driver Data Total: 2,044.
7	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_HotelSignings'. Source Count: 0, Source Data Total: 0 and Driver Count: 10, Driver Data Total: 12.
8	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_TotalRev'. Source Count: 0, Source Data Total: 0 and Driver Count: 1,269, Driver Data Total: 980,760,869.68.
9	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All_ClosingHotelPL'. Source Count: 0, Source Data Total: 0 and Driver Count: 421, Driver Data Total: 506.
10	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All_HotelSignings'. Source Count: 0, Source Data Total: 0 and Driver Count: 10, Driver Data Total: 12.
11	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_HI-EX-SB-CW_RoomCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 144, Driver Data Total: 49,692.
12	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_Hotel Count'. Source Count: 0, Source Data Total: 0 and Driver Count: 273, Driver Data Total: 597.
13	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_HotelSigningsClosingHotelPL'. Source Count: 0, Source Data Total: 0 and Driver Count: 148, Driver Data Total: 137.
14	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_TGR'. Source Count: 0, Source Data Total: 0 and Driver Count: 641, Driver Data Total: 1,066,841,034.16.
15	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_TotalRev'. Source Count: 0, Source Data Total: 0 and Driver Count: 607, Driver Data Total: 336,093,193.53.
16	Number of updated cells count is Zero for Rule 'R_AMER_FBF_All-Excl-KI_HotelOpenings'. Source Count: 0, Source Data Total: 0 and Driver Count: 82, Driver Data Total: 129.

- **Capture Essbase Debug Scripts**: Captures a log of the specific instructions that Enterprise Profitability and Cost Management gave to Oracle Essbase in order to run this job.

  When you select this option, a zip file is created that contains a text file for each rule that is run. Each text file contains the instructions sent to Essbase for that rule. The zip file can be downloaded from the Inbox/Outbox Explorer. (See Uploading and Downloading Files Using the Inbox/Outbox Explorer.)

  You generally only capture Essbase debug scripts if Oracle support requests it.

- **Optimize for Reporting**: Creates aggregate views in the PCM_CLC cube to improve query speed.

- **Processing Range**: Click the drop-down and select the range of rules to include in the calculation.
  - **All Rules**: Calculates all the rules in the selected model.
  - **All Rules - Start From Selected Rule**: Runs the rules starting with the rule specified in the selected Rule Set. The rules are run to the end of the model, including any subsequent rule sets. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.
  - **All Rules - End After Selected Rule**: Runs all rules from the start and ends after the rule specified in the selected Rule Set. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.
  - **Rule Set Range**: Runs the rules between the sequence numbers specified. If you select this option, enter the First and Last Rule Set Sequence Numbers. Sequence numbers are specified when you create the rule set. See Creating a Rule Set.

Copyright © 2022, 2026, Oracle and/or its affiliates.

– **Single Rule**: Runs a single rule. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.

> **Note**
>
> Only *enabled* rules are included in the calculation. (You select whether to enable or disable rules on the Definition page for allocation or custom rules.)

6. Click **Run**.
7. Click **OK** in the **Information** window that is displayed letting you know that the **Run Calculation** job has been submitted successfuly.
8. **Optional**: Go to the **Jobs** console and verify that the job has completed successfully.

   The **Run Calculation** job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred.

> **Note**
>
> The number of **Run Calculation** jobs that display correspond to the number of POVs that you select. For example, if you select five POVs in your model calculation, then you will see five **Run Calculation** jobs in the **Jobs** console. If you selected more than one POV to calculate, a **Batch Calculation** job summarizes information about all the POVs selected to calculate. See Viewing Run Calculation Jobs.

> **Note**
>
> You can also use the Calculate Model REST API or the calculateModel EPM Automate command to calculate a model.

Calculating Models 2.0

Related Topics

- About Calculating Models 2.0
- Using the Calculation Control Page 2.0
- Defining the Columns that Display on the Calculation Control Page
- Working with Points of View on the Calculation Control Page
- Calculating a Model 2.0

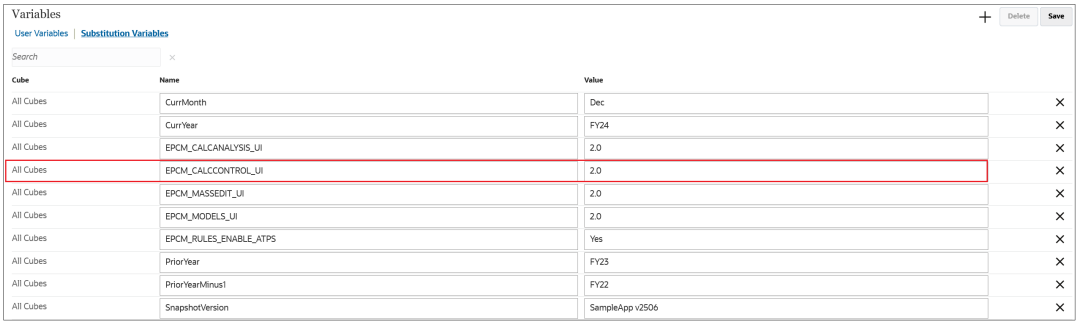
About Calculating Models 2.0

Calculating models using the 2.0 Calculation Control screens has the same functionality as the original 1.0 screens, but it provides a more modern and updated user interface with more streamlined actions. In addition, you are now able to copy multiple points of view at one time.

Copyright © 2022, 2026, Oracle and/or its affiliates.

In the April 2026 release (26.04), Calculation Control 1.0 is the default. You can preview and start using the new Calculation Control 2.0 screens by entering an EPCM_CALCCONTROL_UI substitution variable to specify 2.0.

1. From the Home page, select **Tools**, and then **Variables**.
2. On the **Variables** tab, click **Substitution Variables**, and then click the plus sign to define a new variable.
3. Leave the **Cube** field set to **All Cubes**, and enter the EPCM_CALCCONTROL_UI substitution variable for the Calculation Control 2.0 screens as follows:



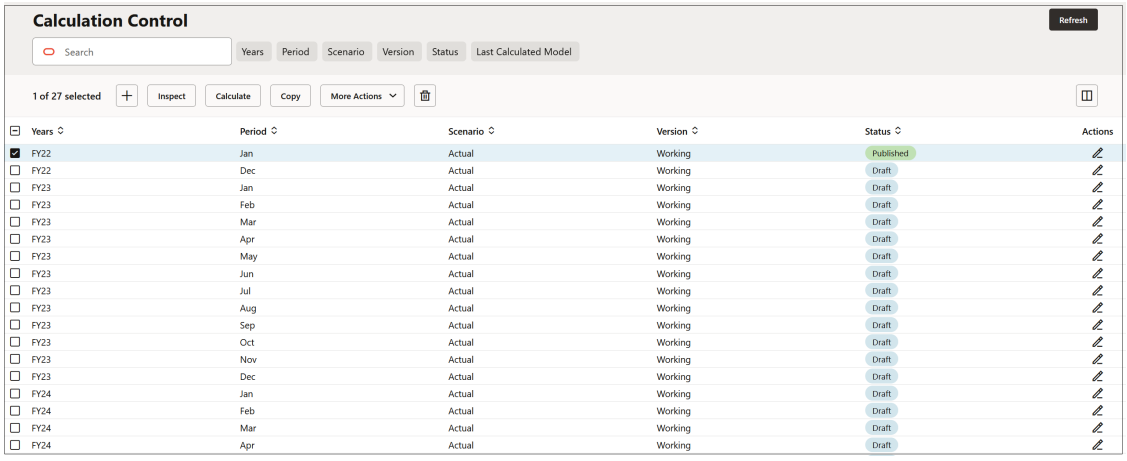
Timeline going forward:

Starting in in the May 2026 release (26.05), Calculation Control 2.0 will be the default when you open your application. If desired, you can temporarily revert to the original Calculation Control 1.0 screens by setting the substitution variable value to 1.0.

Starting in release 26.07, the original Calculation Control 1.0 screens will no longer be available.

Using the Calculation Control Page 2.0

The **Calculation Control** page shows all the points of view you have created. Selections are shown for the **Years**, **Period**, **Scenario**, and **Version** POV dimensions. The POV status (Draft, Published, or Archived) is also displayed. In addition to the default columns of Years, Period, Scenario, Version, and Status, you can select additional columns to display, and you can define the order in which the additional columns display.



Review the following topics for information on:

- Defining the Columns that Display on the Calculation Control Page

Copyright © 2022, 2026, Oracle and/or its affiliates.

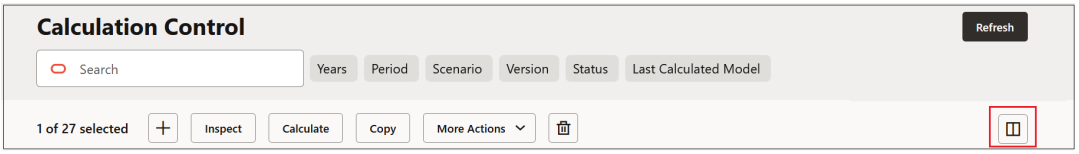
- Working with Points of View on the Calculation Control Page
- Calculating a Model 2.0

Defining the Columns that Display on the Calculation Control Page

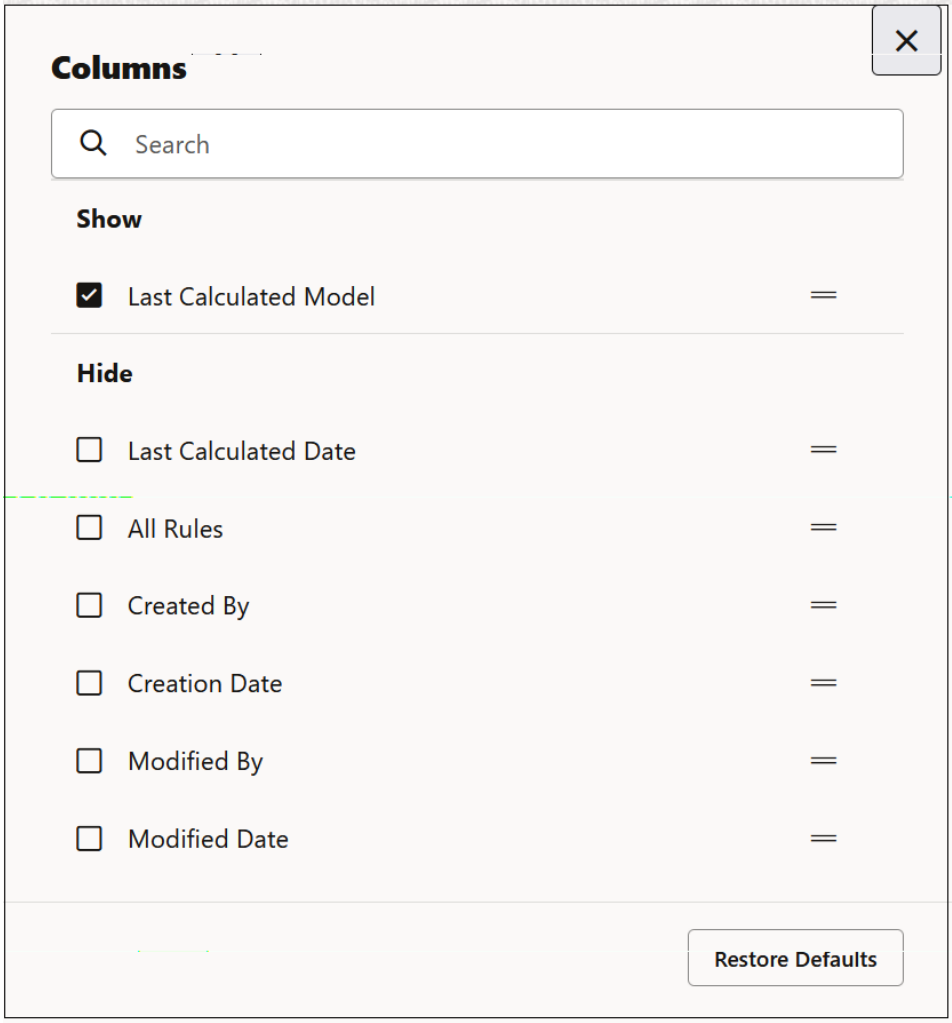
In addition to the default columns of Years, Period, Scenario, Version, and Status, you can select additional columns to display on the **Calculation Control** page, and you can define the order in which the columns display.

To define the column display:

1. From the **Calculation Control** page, click the (Columns button).



2. Select or de-select the desired columns to show or hide the columns.



Copyright © 2022, 2026, Oracle and/or its affiliates.

3. To change the order in which the columns will display, click and drag to the right of a column to move the column up or down. To restore the columns to their default display, click **Restore Defaults**.
4. When you have finished defining the columns that will display and the order in which they will display, click (Close) to close the **Columns** dialog box.

Working with Points of View on the Calculation Control Page

Working with points of view on the Calculation Control page involves:

- Creating a Point of View
- Filtering Which Points of View Are Displayed
- Viewing Point of View Properties
- Copying a Point of View
- Clearing a Point of View
- Changing a Point of View Status
- Deleting a Point of View

Creating a Point of View

To create a point of view:

1. On the **Calculation Control** page, click .
2. In the **Create Points of View** dialog box, select members for the **Years**, **Period**, **Scenario**, and **Version** dimensions.
3. Click **Create**.

   The point of view you create is displayed on the **Calculation Control** page.

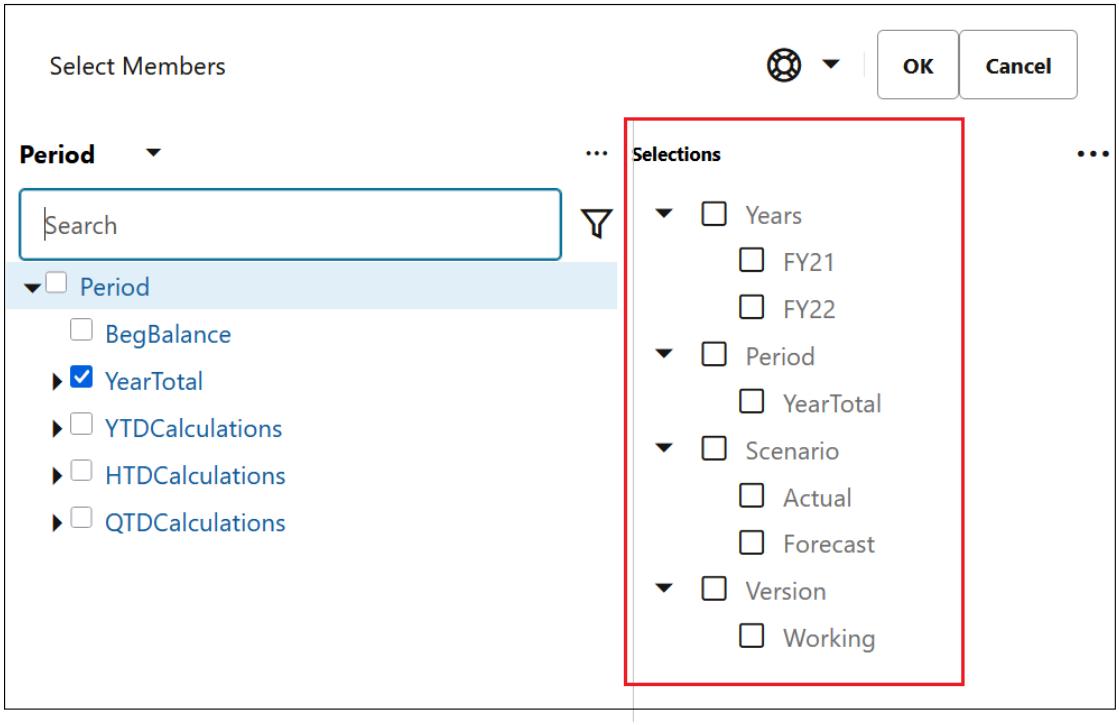
> **Note**
>
> When you create a point of view, the **Status** is intially set to *Draft*. Later on, you can edit the point of view and change the status to *Published* or *Archived*. You cannot run calculations on a *published* or *archived* point of view.

Creating Multiple Points of View

You can create multiple points of view at one time. To do this, select multiple members for one or more POV dimensions. This creates a POV for each intersection.

For example, you could create all the points of view needed for modeling a working version of the actual and forecasted data for 2021 and 2022. To do this, you would click next to each POV dimension and make the following selections in the **Select Members** dialog box:

Copyright © 2022, 2026, Oracle and/or its affiliates.

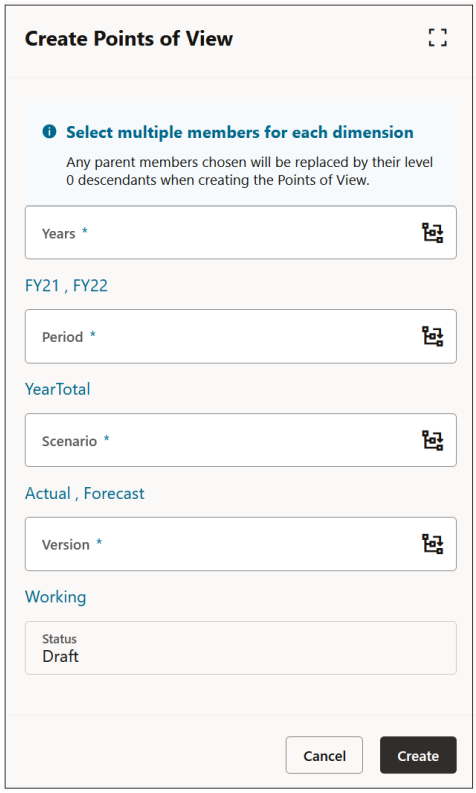


Note

When you select an upper level member, POVs are created for all the level 0 descendants of that member. In this example, selecting "YearTotal" in the "Period" dimension will create POVs for all 12 months.

The selections you make for each dimension are displayed in the **Create Points of View** dialog box.

Copyright © 2022, 2026, Oracle and/or its affiliates.



In this example, 48 points of view would be created to model the actual and forecasted data for 2021 and 2022.

> **Note**
>
> If any of the POVs overlap with existing POVs, the existing POVs are skipped, and the remaining new POVs are created. The number of POVs that will be created and the number of POVs that overlap with existing POVs is displayed when you click **Create** in the **Create Points of View** dialog box.

> **Note**
>
> For more information on selecting members, see Using the Member Selector.

Filtering Which Points of View Are Displayed

Use filter and sort options to specify which points of view are displayed and the order in which they are displayed. These options allow you manipulate the display so that you can isolate the points of view that you want to focus on.

- Searching for Specific Points of View
- Defining the Point of View Sort Order

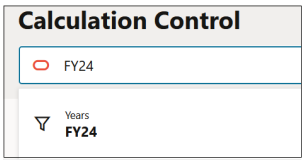
Searching for Specific Points of View

To search for specific points of view, you can either:

Copyright © 2022, 2026, Oracle and/or its affiliates.

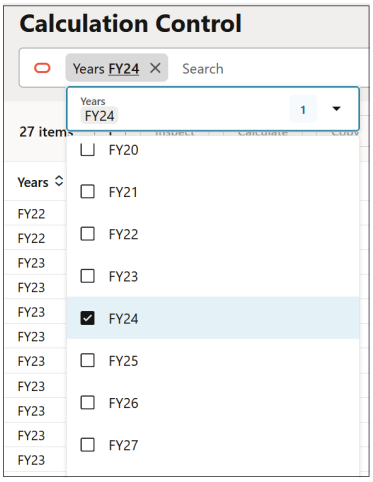
- Enter the POV name in the **Search** field.

  For example, you could enter in **FY24** in **Search**, and then click **FY24** under the Years POV.

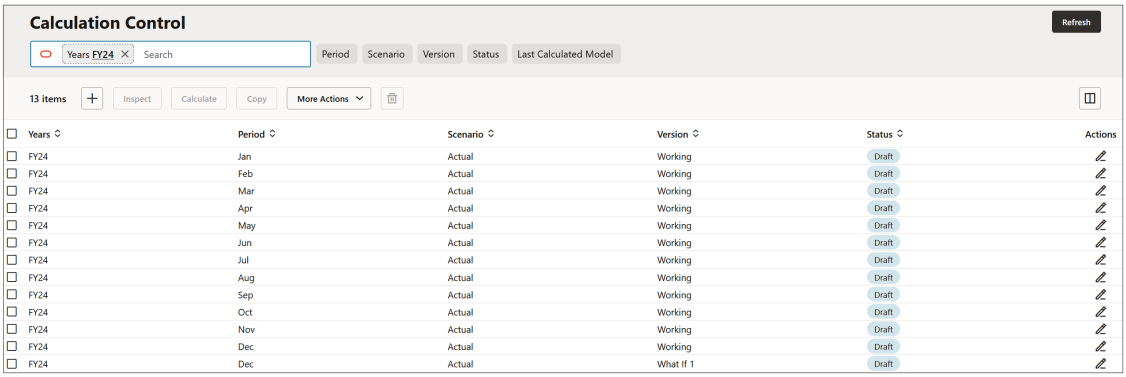


- Click a tile, or drag and drop a tile into **Search**.

  For example, you could move the **Years** tile into **Search**, and then select **FY24** from the resulting drop-down.

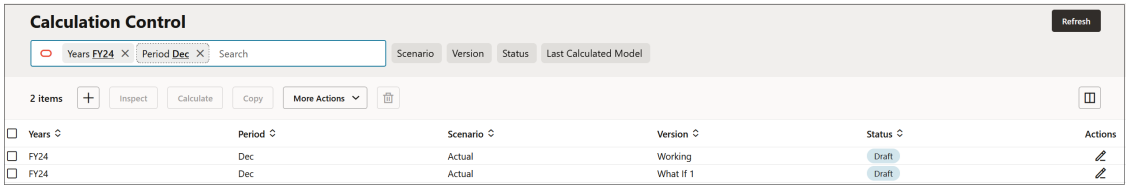


In this example, the **Calculation Contol** page limits the POVs displayed to **FY24**.



To remove a filter, click the **X** on the tile to once again display all the POVs on the page.

You can filter by more than one dimension by moving the tiles corresponding to the dimension into **Search**. For example, you could display all the POVs in December of FY24.



Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> When you select an upper level member, all level-0 descendants of that member are included in the filter.

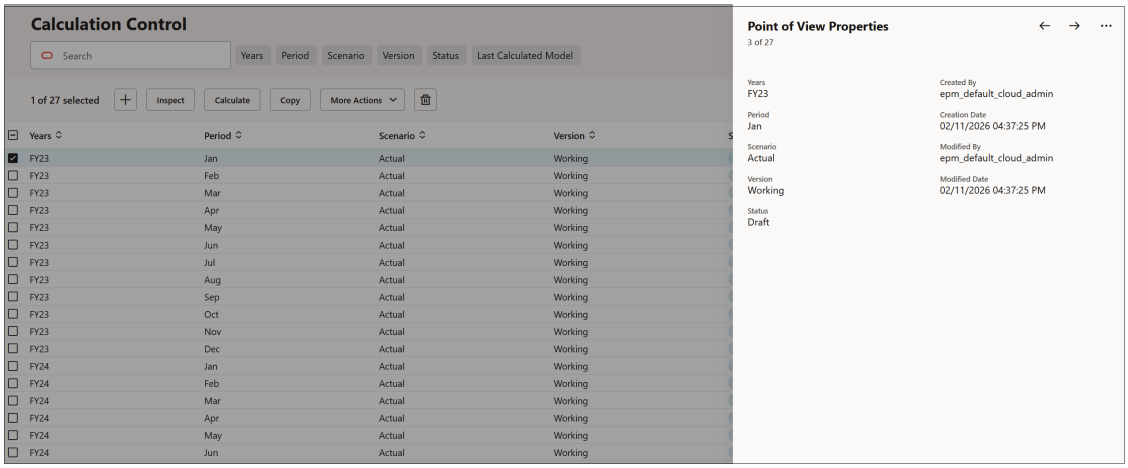
Defining the Point of View Sort Order

To sort the order in which the POVs are displayed, click the up arrow/down arrow to the right of the POV to sort in ascending or descending order.

To refresh the points of view displayed on the page to their original sort order, click **Refresh**.

Viewing Point of View Properties

To display the properties for a specific point of view, select the point of view and click **Inspect**. In addition to the selections for the POV dimensions and the POV status, the properties will show who created the POV and the date it was created, whether the POV was modified and the date it was modified, and calculation details for the point of view.



Copying a Point of View

You can copy data from one point of view to another. For example, if you wanted to create a "what if" version of a point of view, you could start with data that was already included in an existing point of view, copy it to a new point of view, and then do some additional edits and calculations.

> **Tip**
>
> You can copy more than one point of view at time. For example, you could copy 12 periods of data from the calculation cube (PCM_CLC) to the reporting cube (PCM_REP), and you could copy 6 periods of data from *Actual* to *Forecast* in the same cube. See Copying Multiple Points of View Examples.

To copy one or more points of view:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. On the **Calculation Control** page, select the point(s) of view you want to copy, and then click **Copy**.
2. In the **Configure** dialog box, select a **Source** cube and a **Destination** cube.
3. Select the members for the **Years**, **Period**, **Scenario**, and **Version** dimensions that will be used in the copied point of view.
4. Under **Data**, select an option that relates to the level 0 members in the PCM_Balance and PCM_Rule regions.

Table 11-3 Data that is Copied for the Selected Point of View

Copy POV Option	PCM_Balance Region Copied	PCM_Rule Region Copied	What this Means
All Input Data	Level 0 descendants of PCM_Balance	PCM_Rule.NoRule	For all members in all business dimensions, copies all level 0 descendants in the PCM_Balance dimension, intersecting with the NoRule member in the PCM_Rule dimension.
All Data	Level 0 descendants of PCM_Balance	Level 0 descendants of PCM_Rule	For all members in all business dimensions, copies all level 0 descendants in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension. This results in all of the data in the POV being copied.

5. Click **Continue**.
6. Review the options you have selected, and click **Copy**.

> **Note**
>
> If you select options for **Years**, **Period**, **Scenario**, and **Version** to define a point of view that doesn't exist in the calculation control list yet, a dialog box is displayed letting you know that the destination point of view doesn't exist. Click **OK** to confirm that you want to create the destination point of view.

7. **Optional:** Go to the **Jobs** console and verify that the point of view was copied successfully.

   The **Copy Point of View** job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status.. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Point of View Jobs.

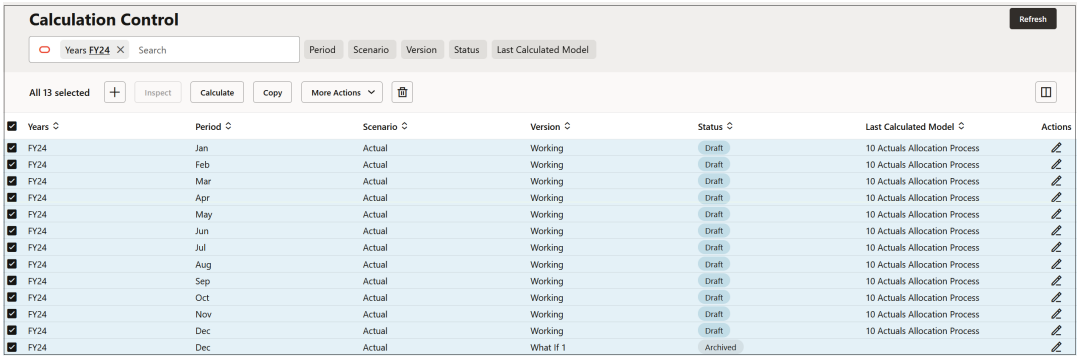
Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> You can also use the "Copy Data by Point of View" REST API or the "copyDataByPointOfView" EPM Automate command to copy data. See Copy Data by Point of View in *REST APIs for Oracle Fusion Cloud EPM* and copyDataByPointOfView in *Working with EPM Automate*.

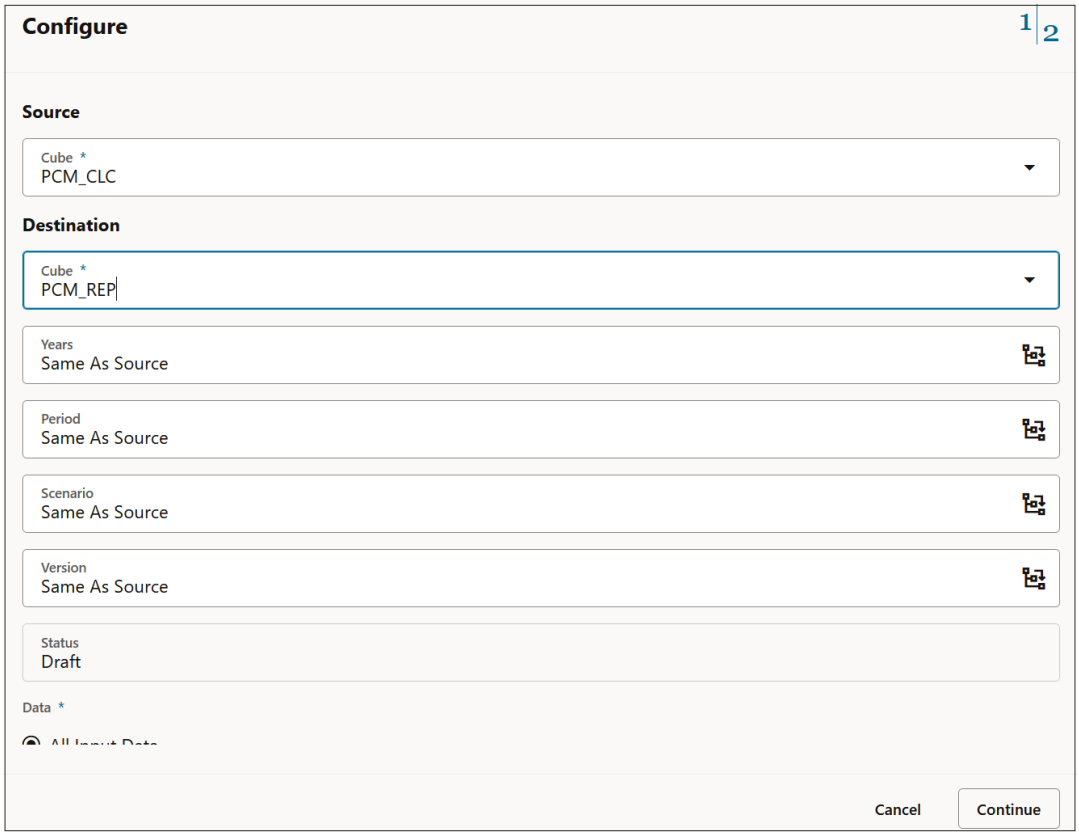
Copying Multiple Points of View Examples

Example 1: Copy all the months in FY24 from the calculation cube (PCM_CLC) to the reporting cube (PCM_REP)

1. On the **Calculation Control** page, filter the years to **FY24**, click the checkbox next to **Years** to select all the years in FY24, and click **Copy**.

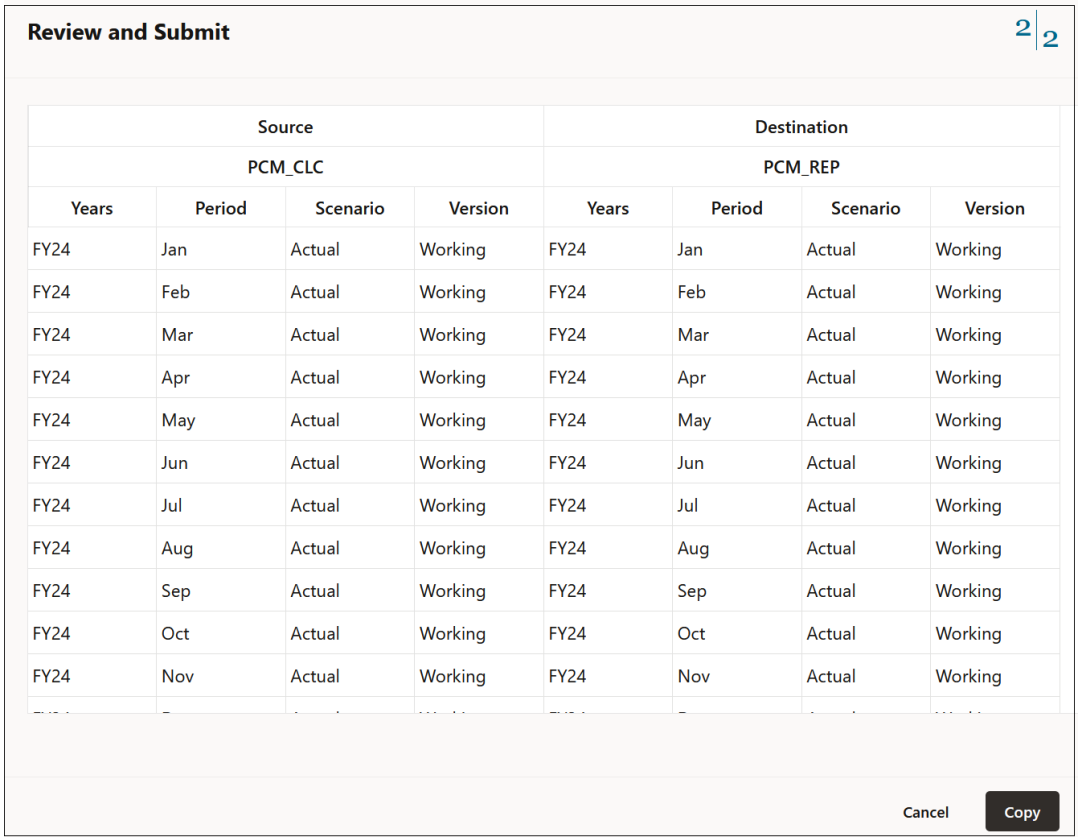


2. In **Configure**, change the **Destination** cube to **PCM_REP**, and then click **Continue**.



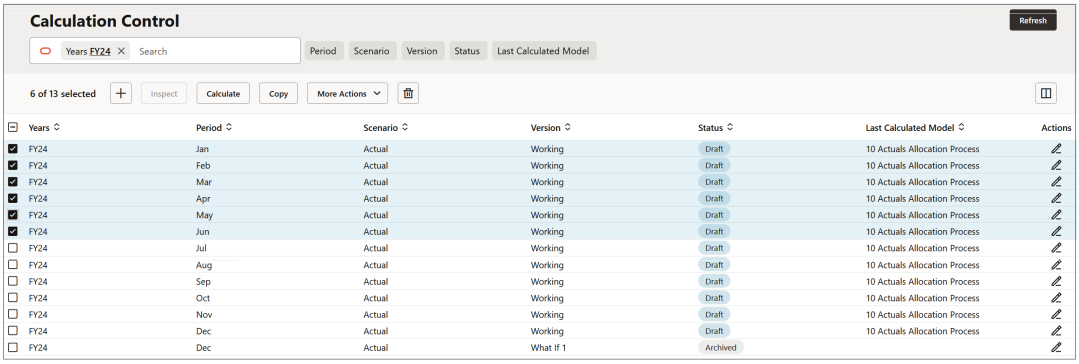
Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Review the information in **Review and Submit**, and then click **Copy**.



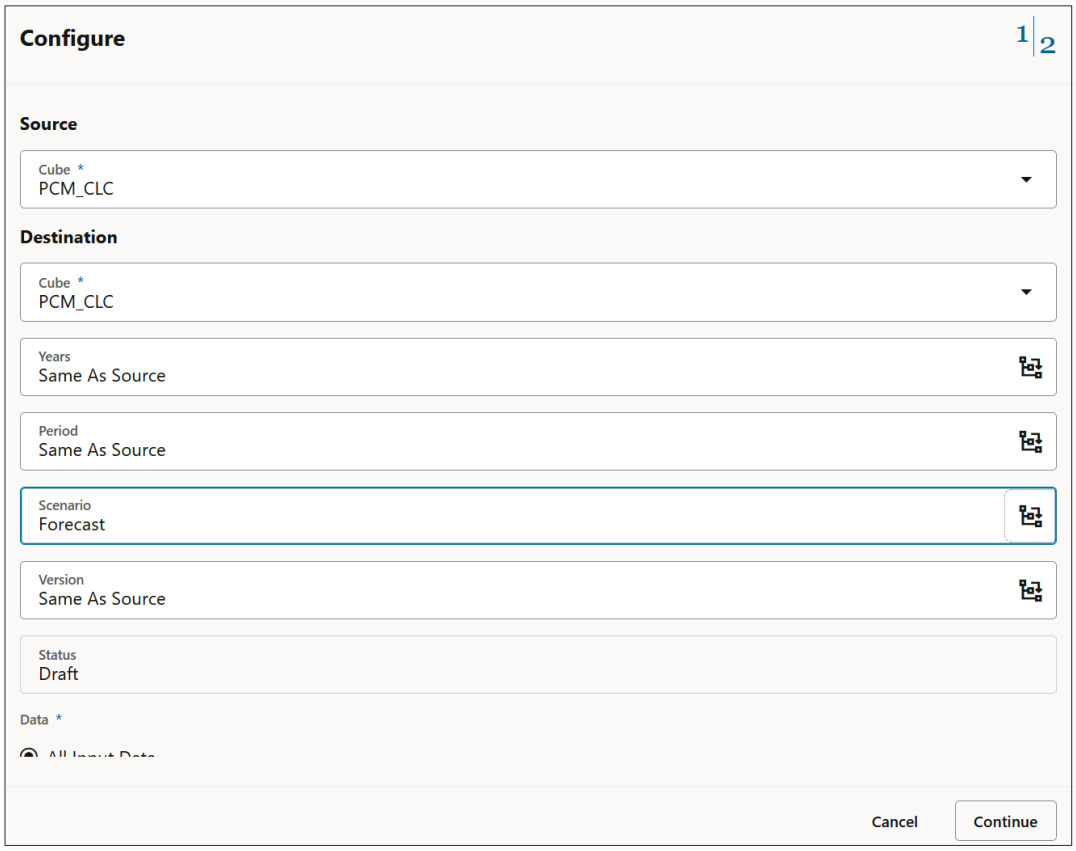
Example 2: In the calculation cube (PCM_CLC), copy the first six months of data in FY24 from *Actual* to *Forecast*

1. On the **Calculation Control** page, filter the years to **FY24**, select the POVs from January - June, and click **Copy**.

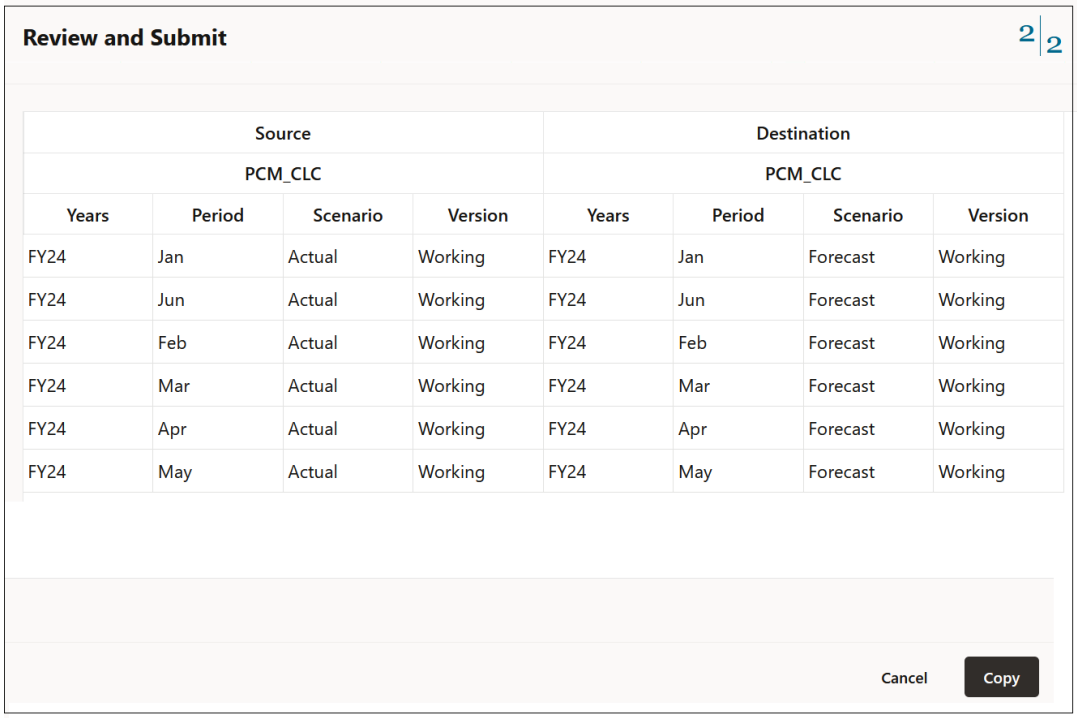


2. In **Configure**, change the **Scenario** cube to **Forecast**, and then click **Continue**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



3. Review the information in **Review and Submit**, and then click **Copy**.



Copyright © 2022, 2026, Oracle and/or its affiliates.

Clearing a Point of View

Clearing a point of view allows you to remove data without removing the point of view. You can clear some or all of the data and start over with new or different rules.

To clear one or more points of view:

1. On the **Calculation Control** page, select the points of view you want to clear.
2. Click the **More Actions** drop-down, and select **Clear**.
3. In the **Clear Point of View** dialog box, select a cube, and then select an option that relates to the level 0 members in the PCM_Balance and PCM_Rule regions.

Table 11-4 Data that is Cleared for the Selected Point of View

Clear POV Option	PCM_Balance Region Cleared	PCM_Rule Region Cleared	What this Means
Input Data	PCM_Balance.Input	Level 0 descendants of PCM_Rule	For all members in all business dimensions, clears the Input member in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension.
Adjustment Values	PCM_Balance.AdjustmentIn PCM_Balance.AdjustmentOut	Level 0 descendants of PCM_Rule	For all members in all business dimensions, clears the Adjustment In and Adjustment Out members in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension.
Allocated Values	PCM_Balance.AllocationIn PCM_Balance.AllocationOut PCM_Balance.AllocationOffsetAmount	Level 0 descendants of PCM_Rule	For all members in all business dimensions, clears the Allocation In, Allocation Out, and Allocation Offset Amount members in the PCM_Balance dimension, intersecting with all of the level 0 descendants in the PCM_Rule dimension.

4. Click **Clear**.
5. **Optional:** Go to the **Jobs** console and verify that the data was successfully cleared from the point of view.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The **Clear Point of View** job is displayed in the Jobs console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Point of View Jobs.

> **Note**
>
> You can also use the "Clear Data by Point of View" REST API or the "clearDataByPointOfView" EPM Automate command to clear data. See Clear Data by Point of View in *REST APIs for Oracle Fusion Cloud EPM* and clearDataByPointOfView in *Working with EPM Automate*.

Changing a Point of View Status

To change the status of a single point of view:

1. On the **Calculation Control** page, select a point of view, and click in the **Actions** column.
2. Click the drop-down in the **Status** column and select an option:
   - **Draft**: This is the default selection.
   - **Published**: Select this option if the POV has already been published. (You cannot run calculations on a published POV.)
   - **Archived**: Select this option if the POV is archived. (You cannot run calculations on an archived POV.)

To change the status of one or more points of view:

1. On the **Calculation Control** page, select one or more points of view.
2. Click the **More Actions** drop-down, and select **Change Status**.
3. In the **Change Item(s)** dialog box, select a new status from the drop-down, and then click **Submit**.

Deleting a Point of View

> **Caution**
>
> You can delete a point of view; however, be aware that all of the data associated with the point of view will be deleted, and the calculation history for the deleted point of view will no longer be available on the **Calculation Analysis** page.

To delete a point of view:

1. On the **Calculation Control** page, select the point of view you want to delete.

   You can select multiple points of view to delete if desired. For example, at the end of a fiscal year you may want to clear out the previous year's 12 periods of actuals and forecast.

2. Click .

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Click **Delete** in the **Delete Point of View** dialog box to confirm that you want to proceed with the deletion.
4. **Optional**: Go to the **Jobs** console and verify that the point of view was deleted successfully.

   The **Delete Point of View** job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. See Viewing Point of View Jobs. If you deleted more than one POV, a separate job is created for each deleted POV.

> **Note**
>
> You can also use the "Delete Point of View" REST API or the "deletePointOfView" EPM Automate command to delete a point of view. See Delete Point of View in *REST APIs for Oracle Fusion Cloud EPM* and deletePointOfView in *Working with EPM Automate*.

Calculating a Model 2.0

To calculate a model:

1. From the Home page, select **Modeling**, and then **Calculation Control**.
2. **Optional**: Filter the POVs displayed. (See Filtering Which Points of View Are Displayed).
3. Select the desired POVs, or select the checkbox next to **Years** to select all the POVs.
4. Click **Calculate**.
5. In the **Calculate Model** dialog box, enter information about the model to calculate:
   - **Model:** Click the drop-down and select the model to calculate.
   - **Comment**: Enter a note or comment about the Run Calculation job that will be displayed in the **Job Details** accessed from the **Jobs** console.
   - **Processing Options**: Select one or more processing options. The processing options you select will be applied to every rule in the processing range defined for the model.
     - **Clear Calculated Data**: Clears past results and replaces them with the results from this calculation. This is the default. Unless this is the first time you are calculating a model, you almost always want to clear the calculated data from previous calculation.

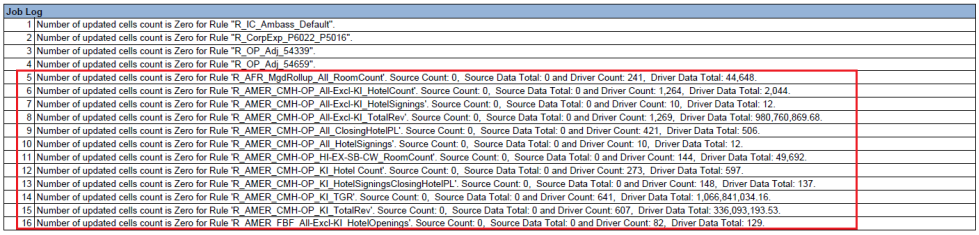
       > **Note**
       >
       > This option clears the calculated data *only* for the rules being executed. If a rule name has changed, then the data is *not* cleared from the old rule name. If you select to include "All Rules" in the calculation, this option clears the data for all rule members except "NoRule". This includes rule members from rules that have been renamed. See Renaming Rules.

     - **Run Calculation**: Calculates the rules that you select in the **Processing Range**.
     - **Capture Diagnostics Data**: Captures diagnostics data that is displayed in the Job Log section of "Calculation Statistics" and "Calculation Statistics Comparison" reports when an allocation rule successfully executes but no cells are updated if

Copyright © 2022, 2026, Oracle and/or its affiliates.

no source or driver data is found. (See Generating a Calculation Statistics Summary Report and Generating a Calculation Statistics Diagnostics Report.) This information can help you find the cause of a lack of allocation results.

The following is an example of the diagnostics data in a "Calculation Statistics" report where no source or driver data was found:



Job Log	
1	Number of updated cells count is Zero for Rule "R_IC_Ambass_Default".
2	Number of updated cells count is Zero for Rule "R_CorpExp_P6022_P5016".
3	Number of updated cells count is Zero for Rule "R_OP_Adj_54339".
4	Number of updated cells count is Zero for Rule "R_OP_Adj_54659".
5	Number of updated cells count is Zero for Rule 'R_AFR_MgdRollup_All_RoomCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 241, Driver Data Total: 44,648.
6	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_HotelCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 1,264, Driver Data Total: 2,044.
7	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_HotelSignings'. Source Count: 0, Source Data Total: 0 and Driver Count: 10, Driver Data Total: 12.
8	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_TotalRev'. Source Count: 0, Source Data Total: 0 and Driver Count: 1,269, Driver Data Total: 980,760,869.68.
9	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All_ClosingHotelPL'. Source Count: 0, Source Data Total: 0 and Driver Count: 421, Driver Data Total: 506.
10	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All_HotelSignings'. Source Count: 0, Source Data Total: 0 and Driver Count: 10, Driver Data Total: 12.
11	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_HI-EX-SB-CW_RoomCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 144, Driver Data Total: 49,692.
12	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_Hotel Count'. Source Count: 0, Source Data Total: 0 and Driver Count: 273, Driver Data Total: 597.
13	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_HotelSigningsClosingHotelPL'. Source Count: 0, Source Data Total: 0 and Driver Count: 148, Driver Data Total: 137.
14	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_TGR'. Source Count: 0, Source Data Total: 0 and Driver Count: 641, Driver Data Total: 1,066,841,034.16.
15	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_TotalRev'. Source Count: 0, Source Data Total: 0 and Driver Count: 607, Driver Data Total: 336,093,193.53.
16	Number of updated cells count is Zero for Rule 'R_AMER_FBF_All-Excl-KI_HotelOpenings'. Source Count: 0, Source Data Total: 0 and Driver Count: 82, Driver Data Total: 129.

  - **Capture Debug Scripts**: Captures a log of the specific instructions that Enterprise Profitability and Cost Management gave to Oracle Essbase in order to run this job.

    When you select this option, a zip file is created that contains a text file for each rule that is run. Each text file contains the instructions sent to Essbase for that rule. The zip file can be downloaded from the Inbox/Outbox Explorer. (See Uploading and Downloading Files Using the Inbox/Outbox Explorer.)

    You generally only capture Essbase debug scripts if Oracle support requests it.

  - **Optimize for Reporting**: Creates aggregate views in the PCM_CLC cube to improve query speed.

- **Processing Range**: Click the drop-down and select the range of rules to include in the calculation.
  - **All Rules**: Calculates all the rules in the selected model.
  - **All Rules - Start From Selected Rule**: Runs the rules starting with the rule specified in the selected Rule Set. The rules are run to the end of the model, including any subsequent rule sets. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.
  - **All Rules - End After Selected Rule**: Runs all rules from the start and ends after the rule specified in the selected Rule Set. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.
  - **Rule Set Range**: Runs the rules between the sequence numbers specified. If you select this option, enter the First and Last Rule Set Sequence Numbers. Sequence numbers are specified when you create the rule set. See Creating a Rule Set.
  - **Single Rule**: Runs a single rule. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.

> **Note**
>
> Only *enabled* rules are included in the calculation. (You select whether to enable or disable rules on the Definition page for allocation or custom rules.)

6. Click **Run**.
7. **Optional**: Go to the **Jobs** console and verify that the job has completed successfully.

   The **Run Calculation** job is displayed in the **Jobs** console with a "Completed", "Complete with Warnings", or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The number of **Run Calculation** jobs that display correspond to the number of POVs that you select. For example, if you select five POVs in your model calculation, then you will see five **Run Calculation** jobs in the **Jobs** console. If you selected more than one POV to calculate, a **Batch Calculation** job summarizes information about all the POVs selected to calculate. See Viewing Run Calculation Jobs.

> **Note**
>
> You can also use the Calculate Model REST API or the calculateModel EPM Automate command to calculate a model.

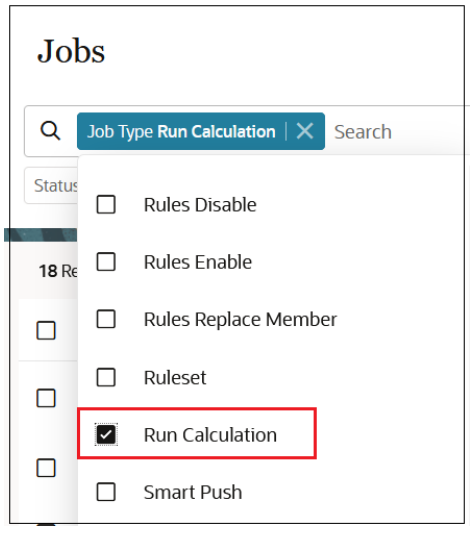
Viewing Run Calculation Jobs

You can view the jobs you created from the **Calculation Control** page from the **Jobs** console.

To access the **Jobs** console and view your **Run Calculation** jobs:

1. Complete a step:
   - If you are currently running calculations, select the **Jobs** card above the **Calculation Contol** page.
   - From the Home page, select **Modeling**, and then **Jobs**.

   When you first access the **Jobs** console, the **Run Calculation** jobs that have been submitted are displayed along with all of the other jobs that have been submitted.
2. To limit the jobs displayed to just **Run Calculation** jobs, click the **Job Type** tile to move it to the **Search** field. Once it is in the **Search** field, click the tile again and scroll down to select **Run Calculation.**

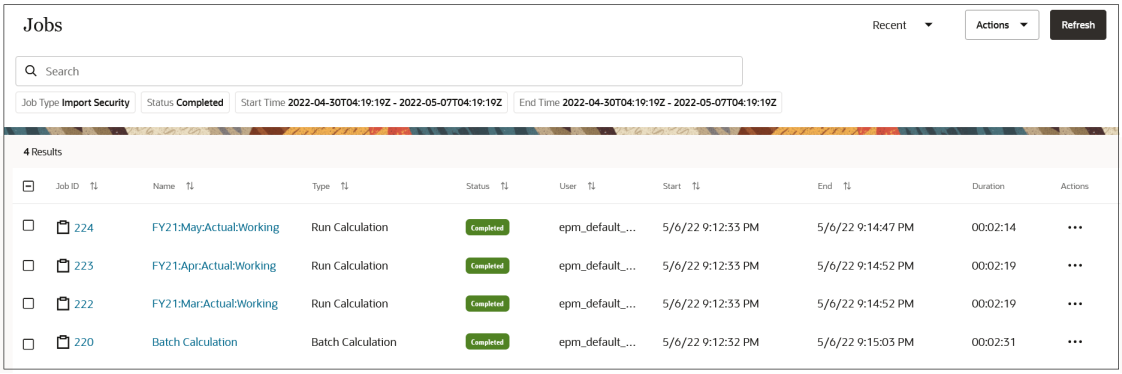


If you ran calculations for more than one POV, a **Batch Calculation** job is also created that summarizes information about all the POVs selected to calculate.

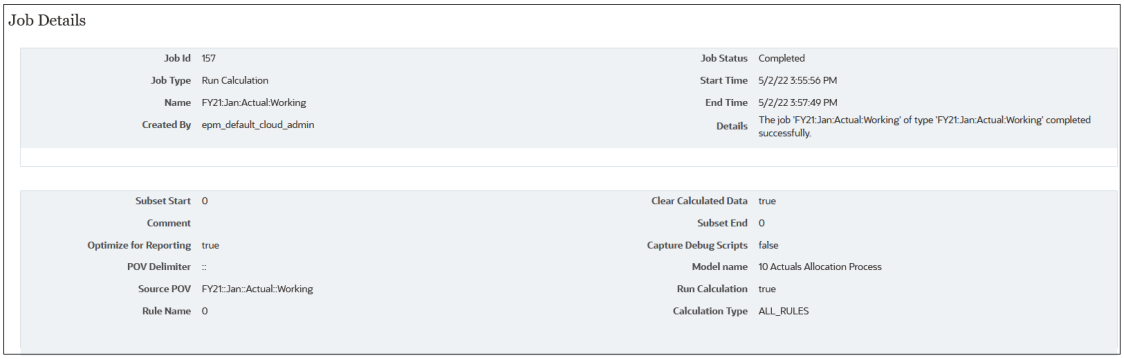
Copyright © 2022, 2026, Oracle and/or its affiliates.

Jobs are displayed with a "Completed" or "Completed with Errors" status. In the following example, three **Run Calculation** jobs have been submitted and have successfully completed without any errors. Notice the summary **Batch Calculation** job has also completed.

> **Tip**
>
> To help you identify jobs that were run in the same batch, the **Job ID** of the **Batch Calclulation** job shows as the **Batch ID** on the **Calculation Analysis** page for each job in the batch. See About Calculation Analysis.



To display job details, click the job name, or click ••• next to a job, and select **Details**.

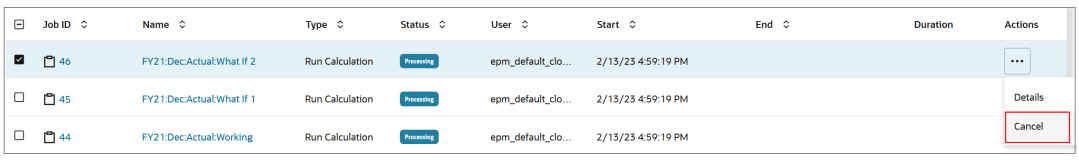


Cancelling a Calculation Job

You can cancel a calculation job once it has been submitted. As an example, you may wish to cancel a job if it is locked in an iterative process or if it is an exceptionally long calculation and you wish to make changes and then resubmit the job.

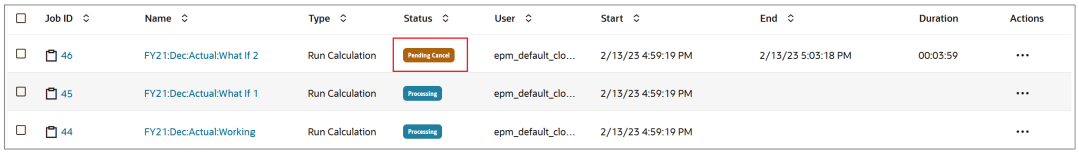
To cancel a calculation job after you have submitted it:

1. In the **Jobs** console, select a job that has a status of **Processing**.
2. Click •••, and select **Cancel**.

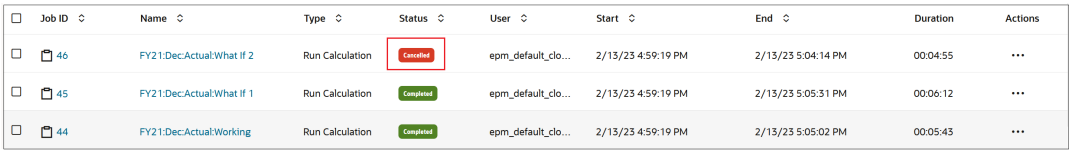


Copyright © 2022, 2026, Oracle and/or its affiliates.

The job status changes to **Pending Cancel**.



When the cancellation is complete, the status changes to **Cancelled**.



Tip

- If the status seems to be stuck at *Pending Cancel*, click **Refresh** to refresh the job statuses.
- If the job you are trying to cancel has a status of *Processing*, but you get a message that says "Cannot cancel selected Business Rule because it is not in a processing state", the job may have some formula syntax errors. In this case, return to the **Calculation Control** page to troublehsoot the errors and re-run the job.

Preferences Related to Calculation Performance

There are three calculation performance related preferences in Enterprise Profitability and Cost Management that can be used to alter calculation performance characteristics and behavior in certain special cases. Each preference can be set or changed by creating a substitution variable. When creating the substitution variable, be sure to create it for"All Cubes".

The default values shown in the table do not require the creation of a substitution variable.

Table 11-5 Preferences Related to Calculation Performance

Variable Name	Default Value	Description / When to Use	Behavior
EPCM_CALC_NET_ENABLE	No	"NET" is for "nonempty tuple" Allocation rules on sparse cubes may perform better by setting this preference to "Yes". Not all Enterprise Profitability and Cost Management applications will see a performance benefit from enabling this preference. **Note:** This affects Allocation Rules only, Custom rules are not impacted by this setting.	**No (default):** All applicable cells in rule ranges are considered during the calculation. **Yes:** Cells with no values are ignored/skipped during the calculations.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 11-5 (Cont.) Preferences Related to Calculation Performance

Variable Name	Default Value	Description / When to Use	Behavior
EPCM_CALC_USE_SCRATCH_CELLS	Yes	An enhancement in the calculation algorithm generally improves performance for certain types of Allocation rules. In rare cases, Allocation rules can be out of balance due to this enhancement. If you detect out-of-balance rules, use this variable to disable the enhancement, and report the issue to Oracle Support.	**Yes (default):** The calculation performance enhancement is enabled, which may offer better calculation performance. **No:** The calculation performance enhancement is disabled.
EPCM_ENABLE_JAPI_CONNECTION_POOL	Yes	This variable is for an enhancement that improves the management of Oracle Essbase connections during calculation. The enhancement generally improves stability and may improve performance during high-concurrency calculations. It is now enabled by default; you can use this variable to disable it if directed to do so by Oracle Support.	**Yes (default):** The Essbase connections enhancement is enabled. **No:** The Essbase connections enhancement is not enabled.

Copyright © 2022, 2026, Oracle and/or its affiliates.

12

Analyzing Calculations

Related Topics

- Analyzing Calculations 1.0
- Analyzing Calculations 2.0
- Analyzing Calculation Performance
- Generating Calculation Analysis Reports

Video

Your Goal	Watch This Video
Learn how to run reports to troubleshoot model calculations in the Calculation Analysis screen, and how to use the Rule Balancing screen to analyze model calculations.	Analyzing and Troubleshooting Model Calculations in Enterprise Profitability and Cost Management

Analyzing Calculations 1.0

Related Topics

- About Calculation Analysis
- Filtering Which Calculation Records Are Displayed
- Editing Comments
- Re-Running Calculations
- Providing Feedback

About Calculation Analysis

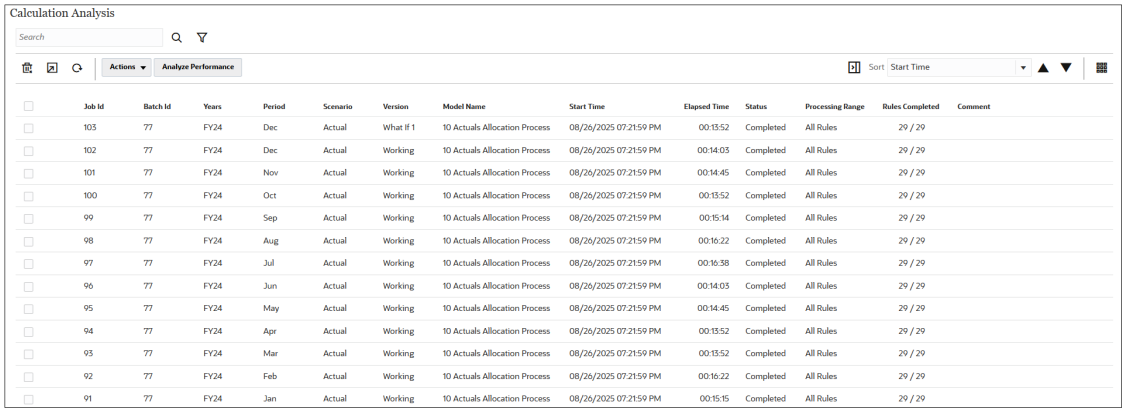
After calculating models, you can analyze the calculation details by generating reports based on the models that you have calculated.

To analyze calculation details:

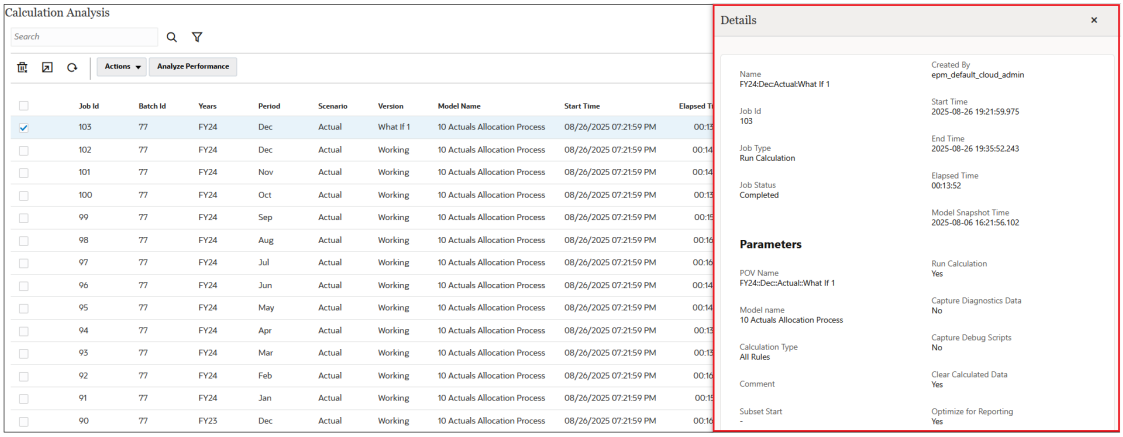
1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. On the **Calculation Analysis** page, review status information, analyze performance, and run reports.

The **Calculation Analysis** page shows details for each model point of view that was calculated on the **Calculation Control** page, using EPM Automate, or with the REST API automation tools. (See Calculating Models.) You can have multiple calculations for a single point of view.

Copyright © 2022, 2026, Oracle and/or its affiliates.



To display additional details about a specific calculation record, select the calculation record and click (**Inspect** icon). The details about the calculation record are displayed in a pop-up window on the **Calculation Analysis** page.



To delete a calculation record, select the calculation record, and then click . To export a calculation record to Excel, select the calculation record, and then click .

Each calculation record includes a snapshot of the model rules used, a model documentation report, and a calculation statistics report. Review the following topics for information on how to generate these reports and how to complete other tasks on the **Calculation Analysis** page:

- Analyzing Calculation Performance
- Generating a Calculation Statistics Summary Report
- Generating a Calculation Statistics Diagnostics Report
- Generating a Model Snapshot Documentation Report
- Generating a Compare Snapshot with Current Model Report
- Generating a Compare Model Snapshots Report
- Creating a Model from a Snapshot
- Editing Comments
- Re-Running Calculations

Copyright © 2022, 2026, Oracle and/or its affiliates.

Filtering Which Calculation Records Are Displayed

You can use the following filter and sort options to specify which calculation records are displayed and the order in which they are displayed:

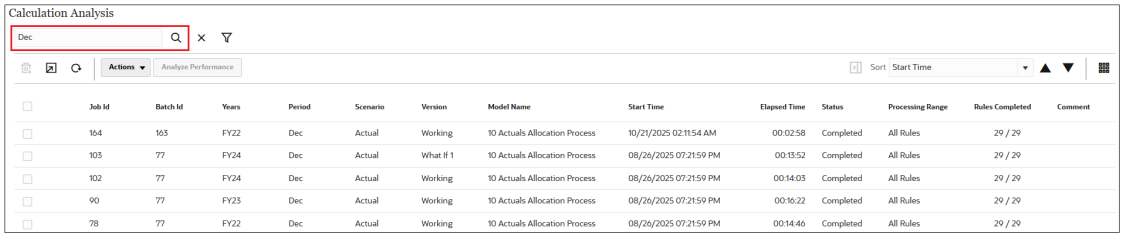
- Search for specific calculation records
- Define a custom filter
- Sort the order in which the calculations records are displayed
- Refresh the calculation records that are displayed

These filter options allow you manipulate the display so that you can isolate the calculation records that you want to focus on.

Searching for Specific Calculation Records

To search for specific calculation records, enter text in the Search field, and click .

For example, entering "Dec" in the Search field displays details about all the model points of view that were calculated in December.



To remove the search filter, delete the text out of the Search field, and then click to refresh the calculation records displayed.

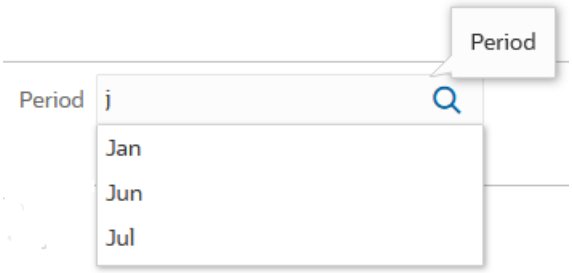
Defining a Custom Filter

To display all the possible filters options and further refine the results, click , and select the desired filters.

Do one of the following to define the desired filters:

- Begin typing next to a dimension. The field will auto-populate with the available options.

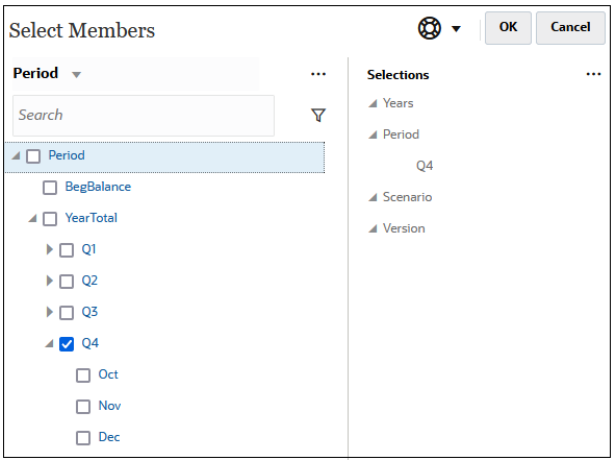
  For example, if you type "j" next to **Period**, "Jan", "Jun", and "Jul" are displayed in the drop-down.



  Select an option to filter the results.

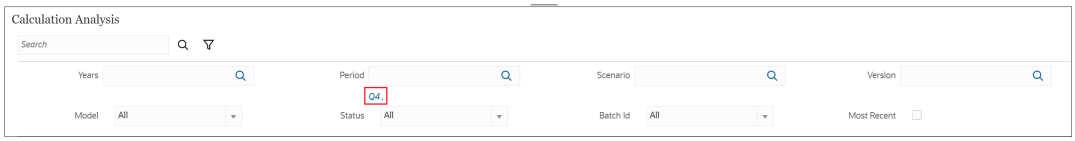
Copyright © 2022, 2026, Oracle and/or its affiliates.

- Click 🔍 next to the **Years**, **Period**, **Scenario**, or **Version** POV dimension, and select a member from the **Select Members** dialog box. (See Using the Member Selector.)



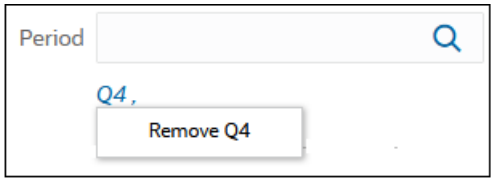
Note that when you select an upper level member, all level-0 descendants of that member are included in the filter.

When you select a member to use as a filter, it is displayed below the POV dimension on the **Calculation Analysis** page. For example, if you select **Q4** to filter the results displayed to "Oct", "Nov", and "Dec", then Q4 is displayed below the **Period** dimension on the **Calculation Analysis** page.

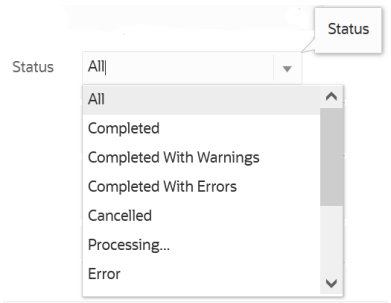


To remove a filter, click the filter, and then and click **Remove**.

For example, to remove the "Q4" filter, click **Q4** and then click **Remove Q4**.

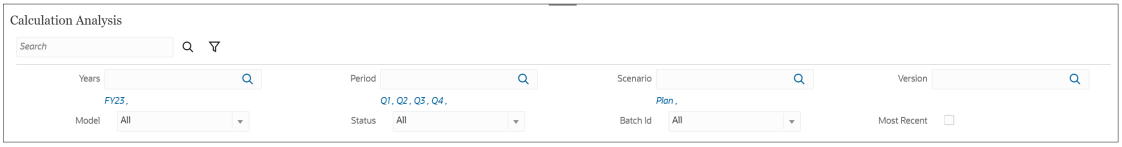


- To filter the status of the calculation records that are displayed, click in the **Status** field and select an option:



As an example, if you were creating forecast for Fiscal 23, you would most likely want to see the status for all 12 months in the year. In this case, you would select "FY23" for **Years**, select "Q1", "Q2", "Q3", and "Q4" for the **Period**, and select "Plan" for **Scenario**.

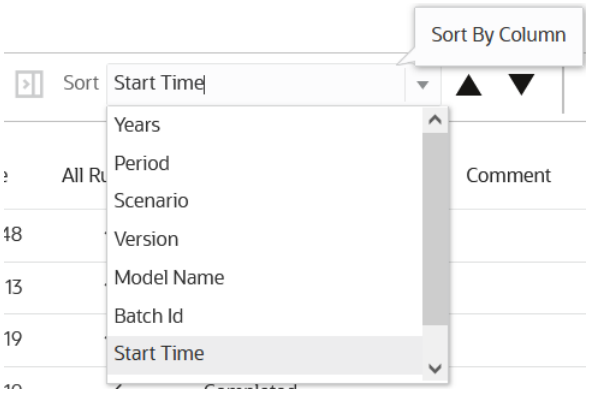
Copyright © 2022, 2026, Oracle and/or its affiliates.



To hide the filter options, click again.

Defining the Sort Order

To define the order in which the calculation records are displayed, click the drop-down on the top right of the page, and select the column by which to sort. After you select a column, you can click or to sort the calculation records in ascending or descending order.



Refreshing the Calculation Records Displayed

To refresh the calculation records displayed on the page, click .

Editing Comments

When you calculate a model, you have the option to enter a note or comment about the Run Calculation job. You can later edit this comment if desired.

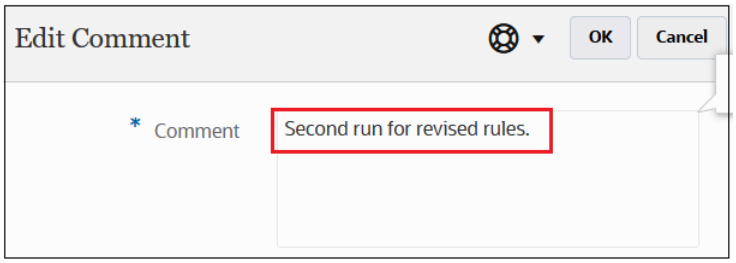
For example, your initial comment could have been something like "First run with revised rules for a balance check. " You could then edit that comment with additional information when you calculate the model again. This allows you to track your progress as you work with your calculations.

> **Note**
>
> You can edit comments for a single calculation run, or for multiple calculation runs at one time.

To edit a comment:

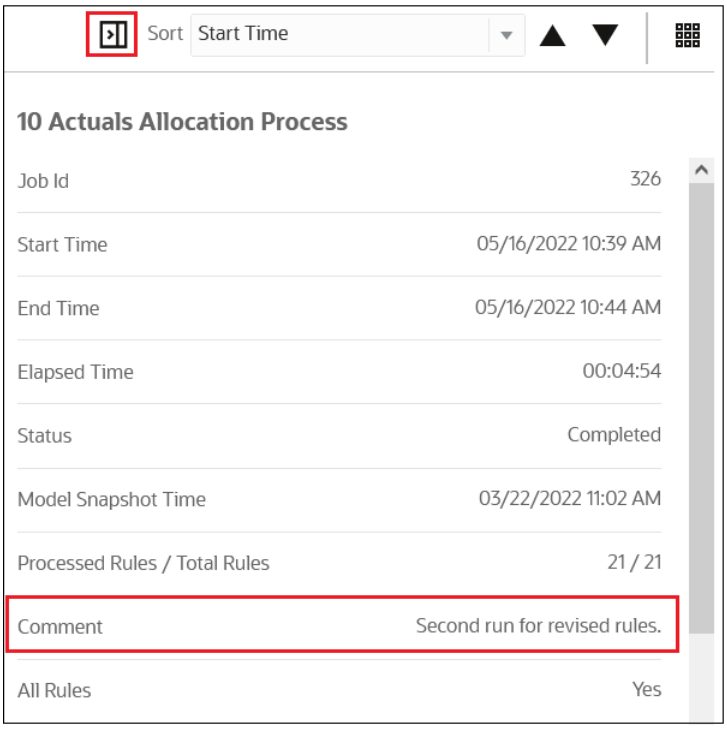
1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select the desired calculation record.
3. Click the **Actions** drop-down, and select **Edit Comment**.
4. In the **Edit Comment** dialog box, enter text for the comment, and click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



5. Click to refresh the display.

   Select the calculation record again, and then click to see the edited comment.



Re-Running Calculations

To re-run a calculation:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select the desired calculation record.
3. Click the **Actions** drop-down, and select **Rerun Calculation**.
4. In the **Rerun Calculation** dialog box, enter a comment to describe why you are re-running the calculation, and then click **OK**.

   This comment will be displayed in the **Job Details** accessed from the **Jobs** console.
5. **Optional**: Go to the **Jobs** console and verify that the job has completed successfully.

   The Run Calculation job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. (See Viewing Run Calculation Jobs).

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Re-running a calculation uses the *current model definition*, not the snapshot stored in the calculation record.

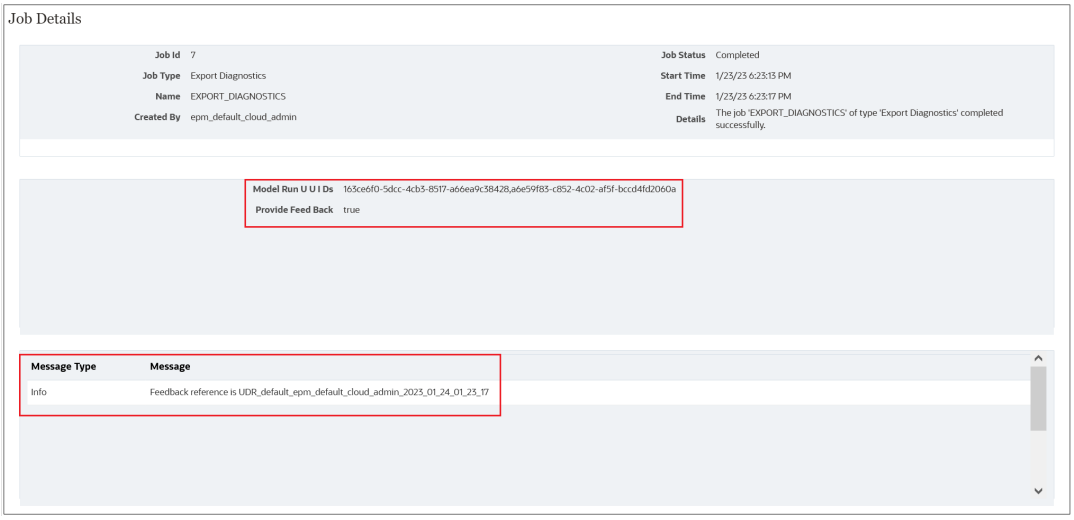
Providing Feedback

When you are analyzing calculations, you have the option to submit feedback for up to two calculation records in an **Export Diagnostics** job. The feedback includes the Calculation Statistics Report (see Generating a Calculation Statistics Summary Report) and the Model Snapshot Documentation Report (see Generating a Model Snapshot Documentation Report) for the selected job or jobs. This is helpful if you are troubleshooting problems with your calculation runs with Oracle support.

To select the **Provide Feedback** option:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select up to two calculation records.
3. Click the **Actions** drop-down, and select **Provide Feedback**.
4. Click **OK** in the **Confirmation** dialog box.
5. Click **OK** in the **Information** dialog box.
6. An **Export Diagnostics** job is created in the **Jobs** console. Click the **Export Diagnostics** job.

   The feedback information is provided on the **Job Details** screen for the **Export Diagnostics** job.



Analyzing Calculations 2.0

Related Topics

- About Analyzing Calculations 2.0
- Using the Calculation Analysis Page 2.0
- Defining the Columns that Display on the Calculation Analysis Page

Copyright © 2022, 2026, Oracle and/or its affiliates.

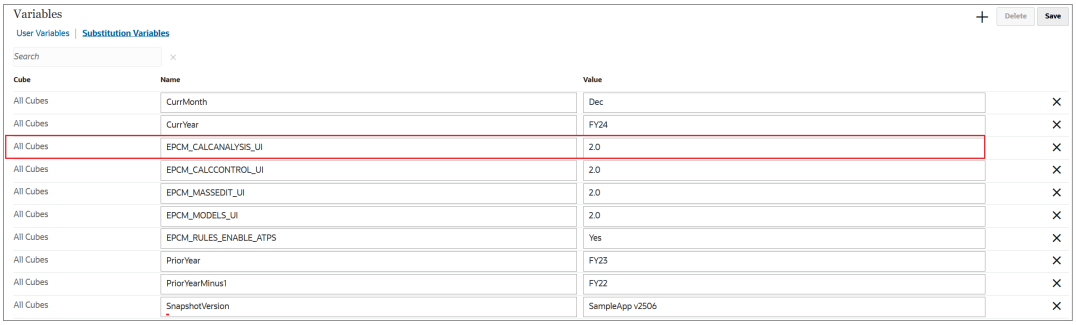
- Filtering Which Calculation Records are Displayed
- Inspecting Calculation Record Job Details and Parameters
- Editing Comments
- Rerunning Calculations
- Providing Feedback

About Analyzing Calculations 2.0

Analyzing calculations using the 2.0 Calculation Analysis screens has the same functionality as the original 1.0 screens, but it provides a more modern and updated user interface with more streamlined actions.

In the April 2026 release (26.04), Calculation Analysis 1.0 is the default. You can preview and start using the new Calculation Analysis 2.0 screens by entering an EPCM_CALCANALYSIS_UI substitution variable to specify 2.0.

1. From the Home page, select **Tools**, and then **Variables**.
2. On the **Variables** tab, click **Substitution Variables**, and then click the plus sign to define a new variable.
3. Leave the **Cube** field set to **All Cubes**, and enter the EPCM_CALCANALYSIS_UI substitution variable for Calculation Analysis 2.0 as follows:



Timeline going forward:

Starting in in the May 2026 release (26.05), Calculation Analysis 2.0 will be the default when you open your application. If desired, you can temporarily revert to the original Calculation Analysis 1.0 screens by setting the substitution variable value to 1.0.

Starting in release 26.07, the original Calculation Analysis 1.0 screens will no longer be available.

Using the Calculation Analysis Page 2.0

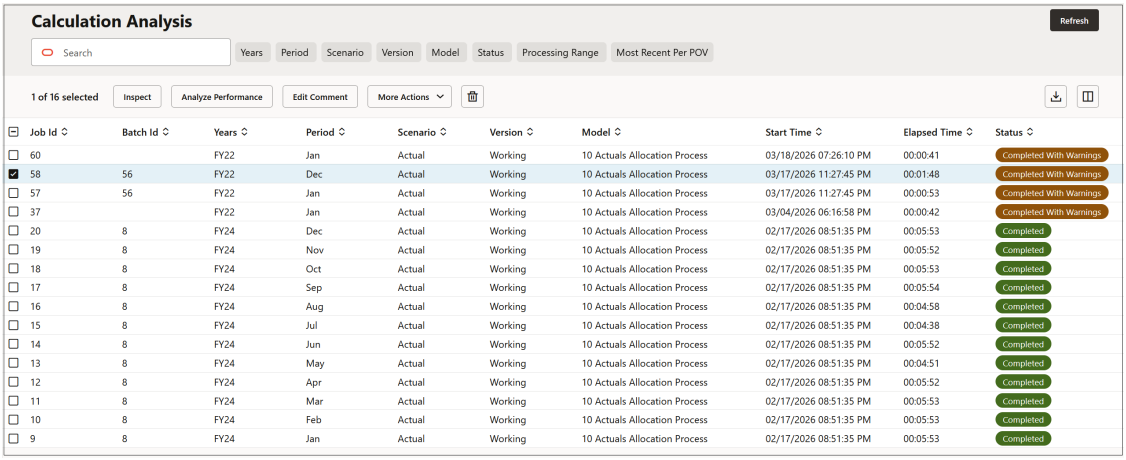
After calculating models, you can analyze calculation details by generating reports based on the models that you have calculated.

To analyze calculation details:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. On the **Calculation Analysis** page, review status information, analyze performance, and run reports.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The **Calculation Analysis** page shows details for each point of view that was calculated on the **Calculation Control** page, using EPM Automate, or with the REST API automation tools. (See Calculating a Model 2.0.) You can have multiple calculations for a single point of view.



Job Id	Batch Id	Years	Period	Scenario	Version	Model	Start Time	Elapsed Time	Status
60		FY22	Jan	Actual	Working	10 Actuals Allocation Process	03/18/2026 07:26:10 PM	00:00:41	Completed With Warnings
58	56	FY22	Dec	Actual	Working	10 Actuals Allocation Process	03/17/2026 11:27:45 PM	00:01:48	Completed With Warnings
57	56	FY22	Jan	Actual	Working	10 Actuals Allocation Process	03/17/2026 11:27:45 PM	00:00:53	Completed With Warnings
37		FY22	Jan	Actual	Working	10 Actuals Allocation Process	03/04/2026 06:16:58 PM	00:00:42	Completed With Warnings
20	8	FY24	Dec	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:53	Completed
19	8	FY24	Nov	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:52	Completed
18	8	FY24	Oct	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:53	Completed
17	8	FY24	Sep	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:54	Completed
16	8	FY24	Aug	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:04:58	Completed
15	8	FY24	Jul	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:04:38	Completed
14	8	FY24	Jun	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:52	Completed
13	8	FY24	May	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:04:51	Completed
12	8	FY24	Apr	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:52	Completed
11	8	FY24	Mar	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:53	Completed
10	8	FY24	Feb	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:53	Completed
9	8	FY24	Jan	Actual	Working	10 Actuals Allocation Process	02/17/2026 08:51:35 PM	00:05:53	Completed

To delete a calculation record, select the calculation record, and then click . To export a calculation record to Excel, select the calculation record, and then click .

Each calculation record includes a snapshot of the model rules used, a model documentation report, and a calculation statistics report. Review the following topics for information on how to generate these reports and how to complete other tasks on the **Calculation Analysis** page:

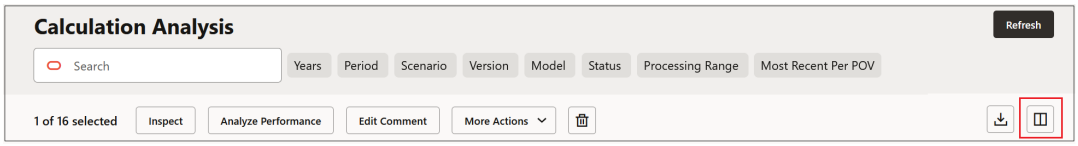
- Filtering Which Calculation Records Are Displayed
- Inspecting Calculation Record Job Details and Parameters
- Defining the Columns that Display on the Calculation Analysis Page
- Editing Comments
- Rerunning Calculations
- Providing Feedback
- Analyzing Calculation Performance
- Generating Calculation Analysis Reports

Defining the Columns that Display on the Calculation Analysis Page

In addition to the default columns of Batch ID, Years, Period, Scenario, Version, Model, Start Time, Elapsed Time, and Status, you can select additional columns to display on the **Calculation Analysis** page, and you can define the order in which the columns display.

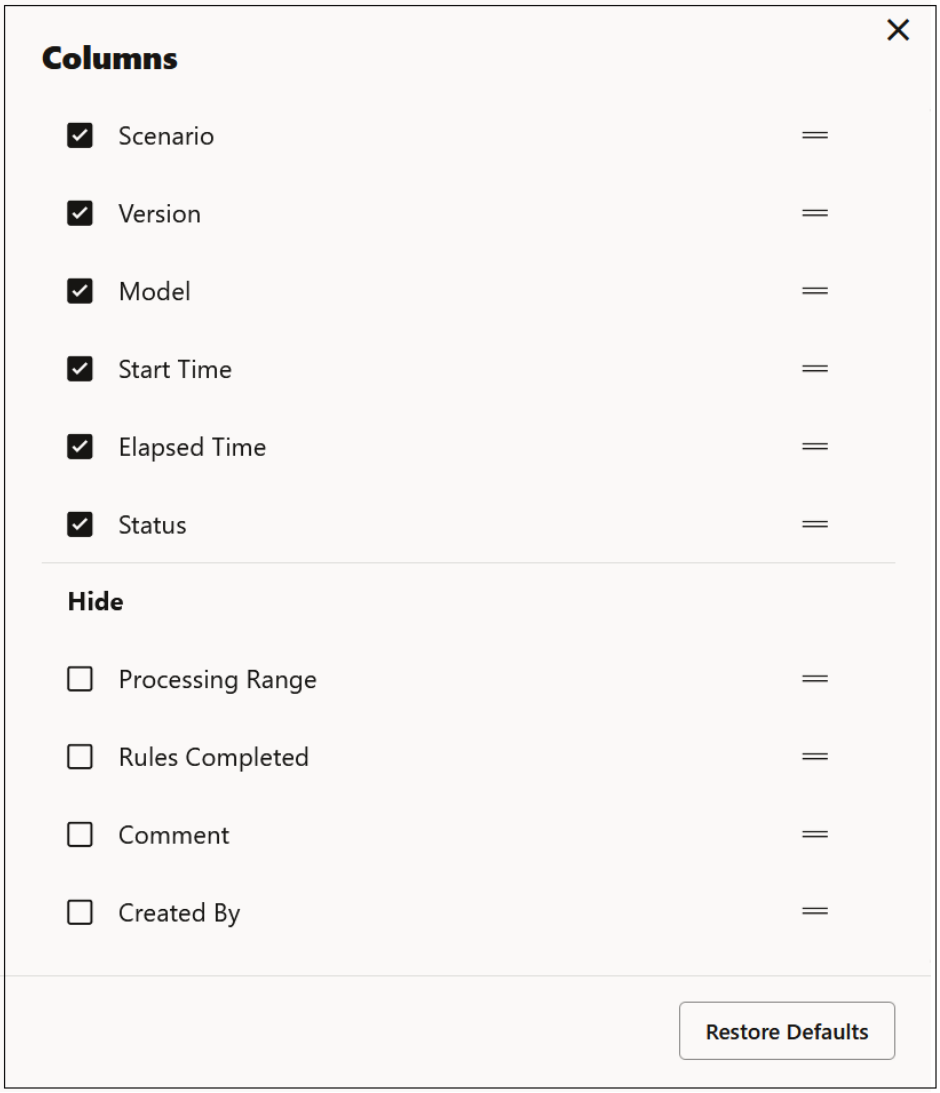
To define the column display:

1. From the **Calculation Analysis** page, click the (Columns button).



2. Select or de-select the desired columns to show or hide the columns.

Copyright © 2022, 2026, Oracle and/or its affiliates.



3. To change the order in which the columns will display, click and drag ═ to the right of a column to move the column up or down. To restore the columns to their default display, click **Restore Defaults**.
4. When you have finished defining the columns that will display and the order in which they will display, click × (Close) to close the **Columns** dialog box.

Filtering Which Calculation Records are Displayed

Use filter and sort options to specify which calculation records are displayed and the order in which they are displayed. These options allow you manipulate the display so that you can isolate the calculation records that you want to focus on.

- Searching for Specific Calculation Records
- Defining the Calculation Record Sort Order

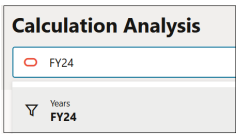
Searching for Specific Calculation Records

To search for specific calculation records, you can either:

Copyright © 2022, 2026, Oracle and/or its affiliates.

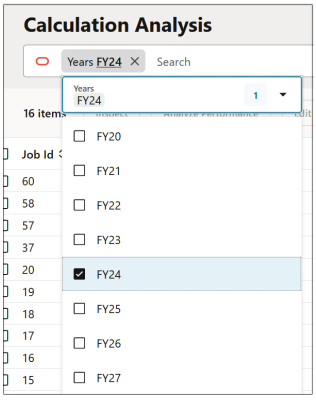
- Enter a value in the **Search** field.

  For example, you could enter in **FY24** in **Search**, and then click **FY24** under the Years dimension.

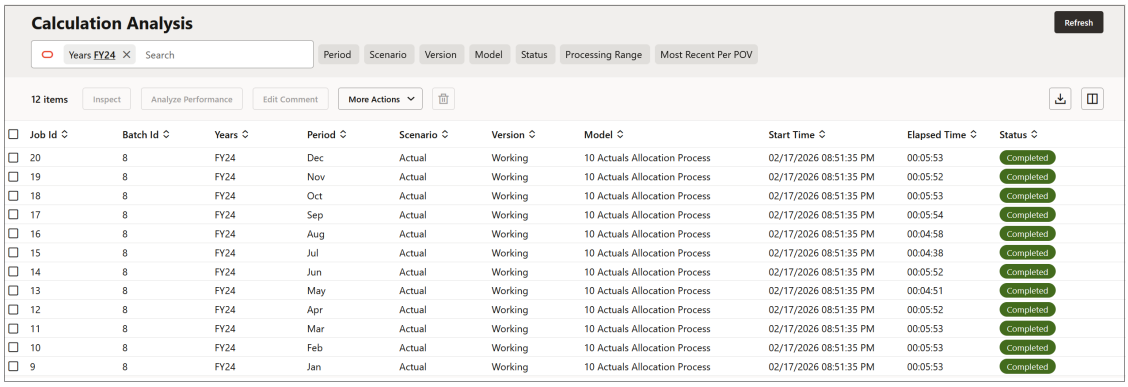


- Click a tile, or drag and drop a tile into **Search**.

  For example, you could move the **Years** tile into **Search**, and then select **FY24** from the resulting drop-down.

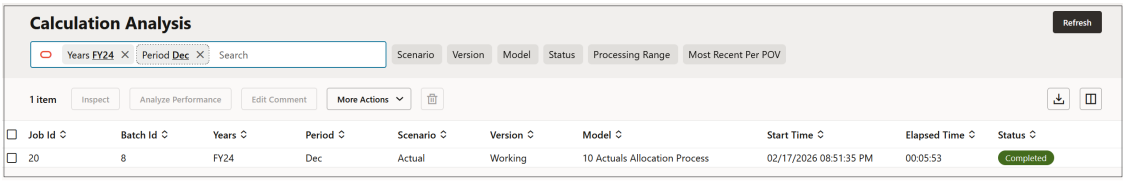


In this example, the **Calculation Analysis** page limits the calculation records displayed to **FY24**.



To remove a filter, click the **X** on the tile to once again display all the calculation records on the page.

You can filter by more than one dimension by moving the tiles corresponding to the dimension into **Search**. For example, you could display all the calculation records in December of FY24.



Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> When you select an upper level member, all level-0 descendants of that member are included in the filter.

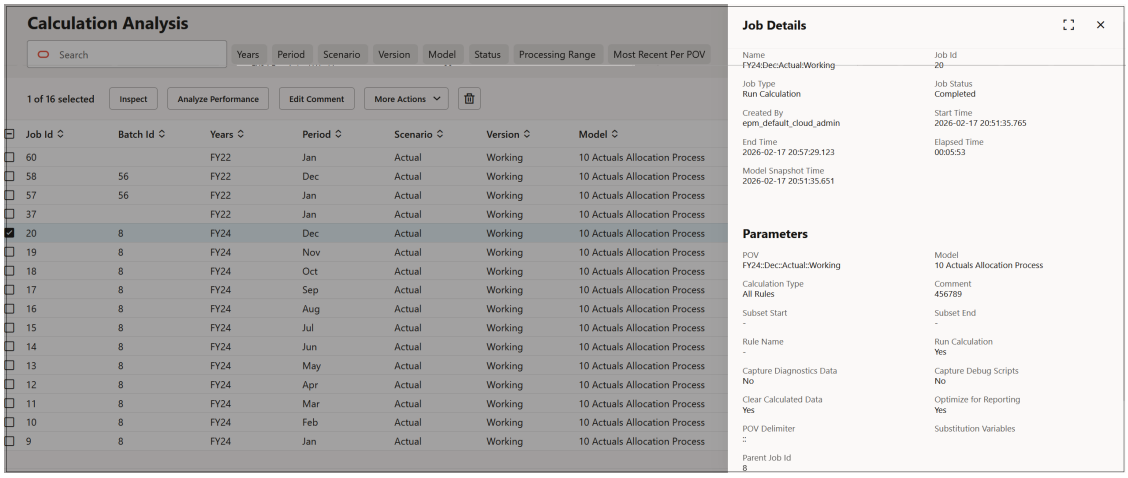
Defining the Calculation Record Sort Order

To sort the order in which the calculation records are displayed, click the up arrow/down arrow to the right of the calculation record to sort in ascending or descending order.

To refresh the calculation records displayed on the page to their original sort order, click **Refresh**.

Inspecting Calculation Record Job Details and Parameters

To display the job details and parameters for a specific calculation record, select the calculation record and click **Inspect**. The job details and parameters for the calculation record are displayed in a pop-up window on the **Calculation Analysis** page.



Editing Comments

When you calculate a model, you have the option to enter a note or comment about the **Run Calculation** job. You can later edit this comment if desired.

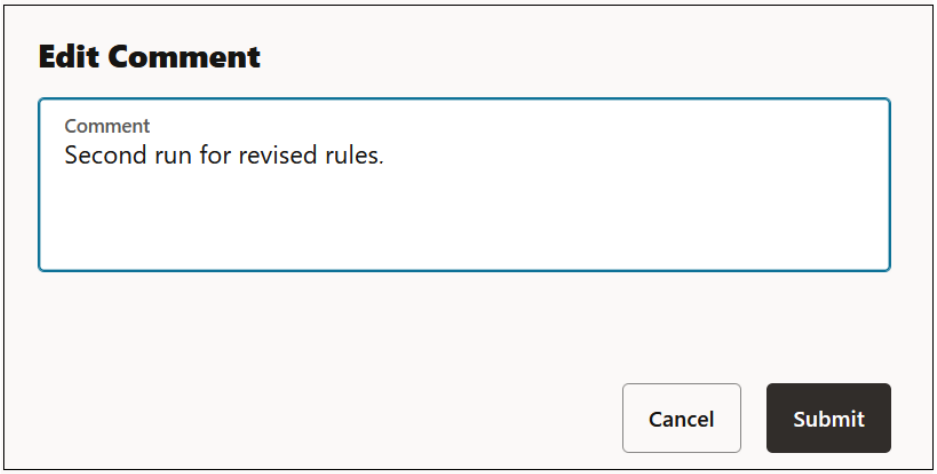
For example, your initial comment could be something like "First run with revised rules for a balance check. " You could then edit that comment with additional information when you calculate the model again. This allows you to track your progress as you work with your calculations.

> **Tip**
>
> You can edit comments for a single calculation run, or for multiple calculation runs at one time.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To edit a comment:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select a calculation record., and then click **Edit Comment.**
3. In the **Edit Comment** dialog box, enter text for the comment, and click **Submit**.



Tip

Comments display under the **Comment** column on the **Calculation Analysis** page. If you don't see the **Comment** column, ensure that you have selected it as a column to display. See Defining the Columns that Display on the Calculation Analysis Page,

Rerunning Calculations

To re-run a calculation:

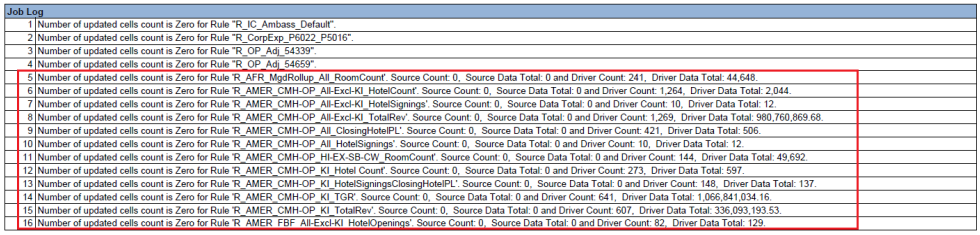
1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select the desired calculation record.
3. Click **More Actions**, and select **Rerun Calculation**.
4. In the **Rerun Calculation** dialog box, enter information about the calculation record:
   - **Model:** Click the drop-down and select a model.
   - **Comment**: Enter a note or comment about the **Run Calculation** job that will be displayed in the **Job Details** accessed from the **Jobs** console.
   - **Processing Options**: Select one or more processing options. The processing options you select will be applied to every rule in the processing range defined for the model.
     - **Clear Calculated Data**: Clears past results and replaces them with the results from this calculation. This is the default. Unless this is the first time you are calculating a model, you almost always want to clear the calculated data from previous calculation.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> This option clears the calculated data *only* for the rules being executed. If a rule name has changed, then the data is *not* cleared from the old rule name. If you select to include "All Rules" in the calculation, this option clears the data for all rule members except "NoRule". This includes rule members from rules that have been renamed. See Renaming Rules.

- **Run Calculation**: Calculates the rules that you select in the **Processing Range**.
- **Capture Diagnostics Data**: Captures diagnostics data that is displayed in the Job Log section of "Calculation Statistics" and "Calculation Statistics Comparison" reports when an allocation rule successfully executes but no cells are updated if no source or driver data is found. (See Generating a Calculation Statistics Summary Report and Generating a Calculation Statistics Diagnostics Report.) This information can help you find the cause of a lack of allocation results.

  The following is an example of the diagnostics data in a "Calculation Statistics" report where no source or driver data was found:



Job Log	
1	Number of updated cells count is Zero for Rule "R_IC_Ambass_Default".
2	Number of updated cells count is Zero for Rule "R_CorpExp_P6022_P5016".
3	Number of updated cells count is Zero for Rule "R_OP_Adj_54339".
4	Number of updated cells count is Zero for Rule "R_OP_Adj_54659".
5	Number of updated cells count is Zero for Rule 'R_AFR_MgdRollup_All_RoomCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 241, Driver Data Total: 44,648.
6	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_HotelCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 1,264, Driver Data Total: 2,044.
7	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_HotelSignings'. Source Count: 0, Source Data Total: 0 and Driver Count: 10, Driver Data Total: 12.
8	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All-Excl-KI_TotalRev'. Source Count: 0, Source Data Total: 0 and Driver Count: 1,269, Driver Data Total: 980,760,869.68.
9	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All_ClosingHotelPL'. Source Count: 0, Source Data Total: 0 and Driver Count: 421, Driver Data Total: 506.
10	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_All_HotelSignings'. Source Count: 0, Source Data Total: 0 and Driver Count: 10, Driver Data Total: 12.
11	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_HI-EX-SB-CW_RoomCount'. Source Count: 0, Source Data Total: 0 and Driver Count: 144, Driver Data Total: 49,692.
12	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_Hotel Count'. Source Count: 0, Source Data Total: 0 and Driver Count: 273, Driver Data Total: 597.
13	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_HotelSigningsClosingHotelPL'. Source Count: 0, Source Data Total: 0 and Driver Count: 148, Driver Data Total: 137.
14	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_TGR'. Source Count: 0, Source Data Total: 0 and Driver Count: 641, Driver Data Total: 1,066,841,034.16.
15	Number of updated cells count is Zero for Rule 'R_AMER_CMH-OP_KI_TotalRev'. Source Count: 0, Source Data Total: 0 and Driver Count: 607, Driver Data Total: 336,093,193.53.
16	Number of updated cells count is Zero for Rule 'R_AMER_FBF_All-Excl-KI_HotelOpenings'. Source Count: 0, Source Data Total: 0 and Driver Count: 82, Driver Data Total: 129.

- **Capture Debug Scripts**: Captures a log of the specific instructions that Enterprise Profitability and Cost Management gave to Oracle Essbase in order to run this job.

  When you select this option, a zip file is created that contains a text file for each rule that is run. Each text file contains the instructions sent to Essbase for that rule. The zip file can be downloaded from the Inbox/Outbox Explorer. (See Uploading and Downloading Files Using the Inbox/Outbox Explorer.)

  You generally only capture Essbase debug scripts if Oracle support requests it.

- **Optimize for Reporting**: Creates aggregate views in the PCM_CLC cube to improve query speed.

- **Processing Range**: Click the drop-down and select the range of rules to include in the calculation.
  - **All Rules**: Calculates all the rules in the selected model.
  - **All Rules - Start From Selected Rule**: Runs the rules starting with the rule specified in the selected Rule Set. The rules are run to the end of the model, including any subsequent rule sets. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.
  - **All Rules - End After Selected Rule**: Runs all rules from the start and ends after the rule specified in the selected Rule Set. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.
  - **Rule Set Range**: Runs the rules between the sequence numbers specified. If you select this option, enter the First and Last Rule Set Sequence Numbers. Sequence numbers are specified when you create the rule set. See Creating a Rule Set.
  - **Single Rule**: Runs a single rule. If you select this option, click the drop-downs to select a Rule Set Name and a Rule Name.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Only *enabled* rules are included in the calculation. (You select whether to enable or disable rules on the Definition page for allocation or custom rules.)

5. Click **Run**.
6. **Optional**: Go to the **Jobs** console and verify that the job has completed successfully.

   The **Run Calculation** job is displayed in the **Jobs** console with a "Completed" or "Completed with Errors" status. You can select the job to see details about the job and troubleshoot any errors that may have occurred. (See Viewing Run Calculation Jobs).

> **Note**
>
> Re-running a calculation uses the *current model definition*, not the snapshot stored in the calculation record.

Providing Feedback

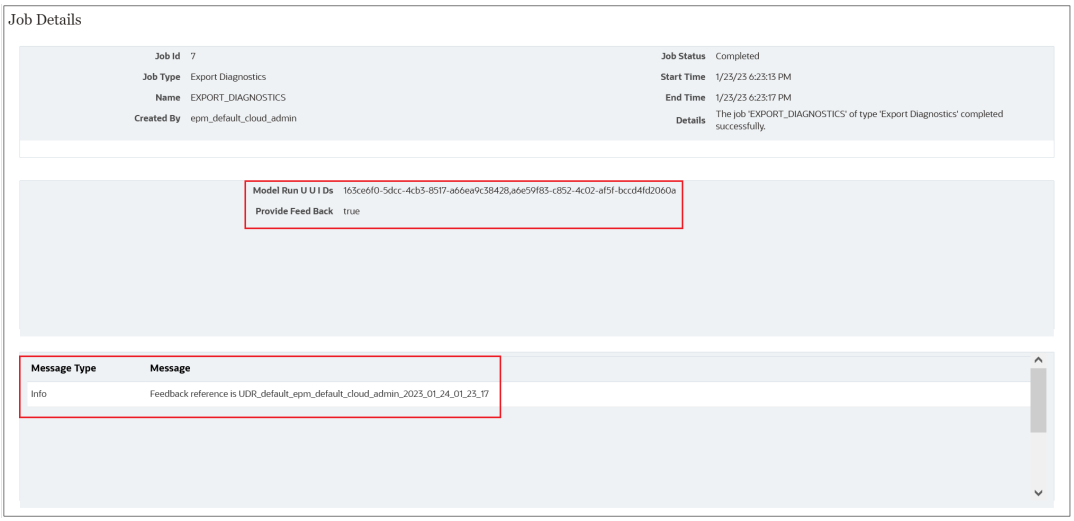
When you are analyzing calculations, you have the option to submit feedback for up to two calculation records in an **Export Diagnostics** job. The feedback includes the Calculation Statistics Report (see Generating a Calculation Statistics Summary Report) and the Model Snapshot Documentation Report (see Generating a Model Snapshot Documentation Report) for the selected job or jobs. This is helpful if you are troubleshooting problems with your calculation runs with Oracle support.

To select the **Provide Feedback** option:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select up to two calculation records.
3. Click **More Actions**, and select **Provide Feedback**.
4. In the **Provide Feedback** dialog box, click **Submit.**
5. An **Export Diagnostics** job is created in the **Jobs** console. Click the **Export Diagnostics** job.

   The feedback information is provided on the **Job Details** screen for the **Export Diagnostics** job.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Analyzing Calculation Performance

Performance analysis reports display the performance diagnostics for a single calculation record or for multiple calculation records. These reports allow you to quickly review performance diagnostics information and help you to understand what may be causing performance bottlenecks.

The following performance analysis reports are available:

- **Job Dashboard**: Displays the performance diagnostics for a single calculation record (see Analyzing Data for a Single Calculation Record)
- **Job Compairson Dashboard**: Displays comparative data for multiple calculation records see (Analyzing Data for Multiple Calculation Records)

> **Tip**
>
> From the Job Dashboard report, click to access the PCM Agent Health Check Advisor. This tool provides suggestions and recommendations to help you identify performance bottlenecks before reaching out to Oracle Support and Development (see Using the PCM Agent Performance Assistant to Help Idendity and Resolve Calculation Performane Issues).

Review the following topics for information on:

- Analyzing Data for a Single Calculation Record
- Analyzing Data for Multiple Calculation Records
- Using the PCM Agent Performance Assistant to Help Idendity and Resolve Calculation Performane Issues

Analyzing Data for a Single Calculation Record

The Job Dashboard displays the performance diagnostics for a single calculation record. The Performance Summary is listed on the left, and you can select whether to display the Time in Minutes it took to run the job or the Job Details next to the performance summary. Detailed

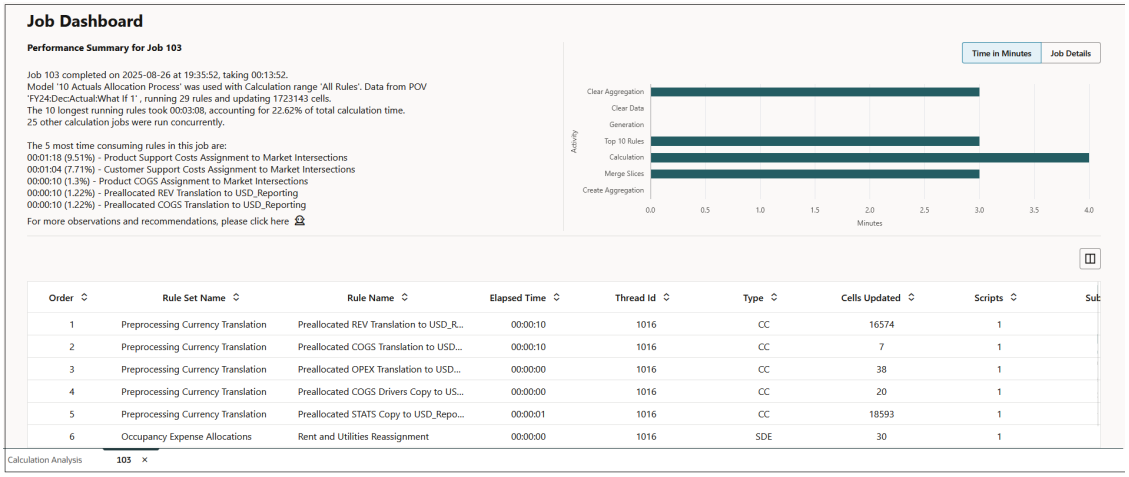
Copyright © 2022, 2026, Oracle and/or its affiliates.

information about each rule set and rule in the calculation record is displayed at the bottom of the page.

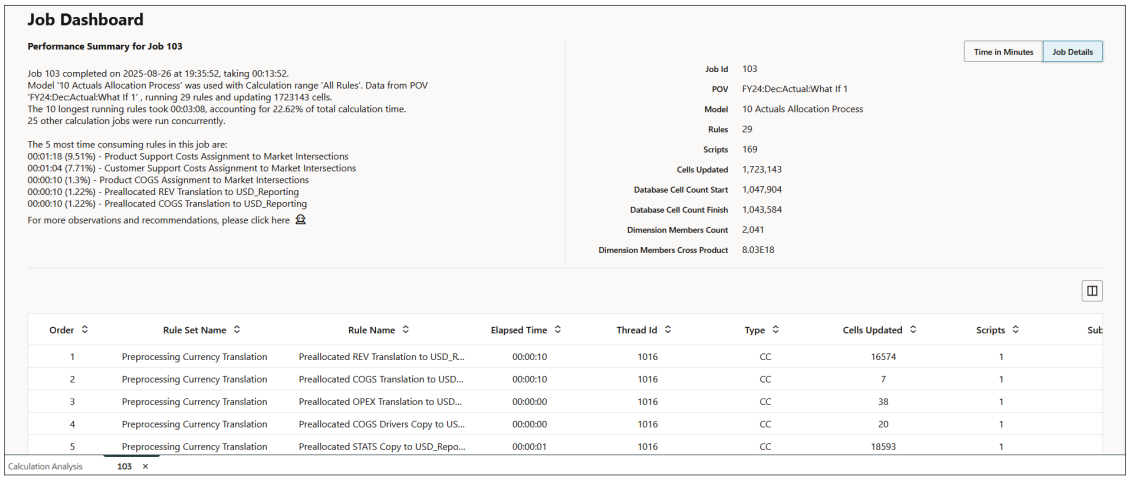
To access the Job Dashboard:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select a single calculation record.
3. Click **Analyze Performance**.
4. Click **Time in Minutes** or **Job Details** to select which information to view.

Sample Job Dashboard Report with Time in Minutes Selected

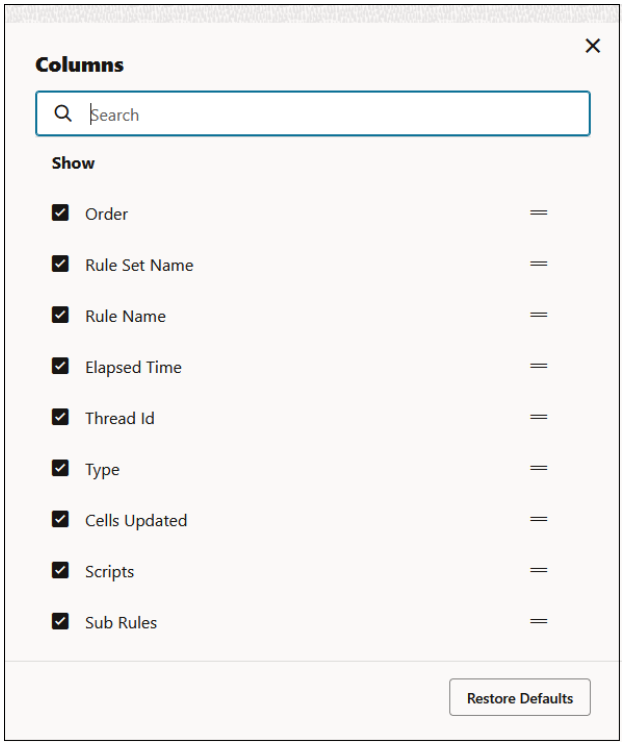


Sample Job Dashboard Report with Job Details Selected



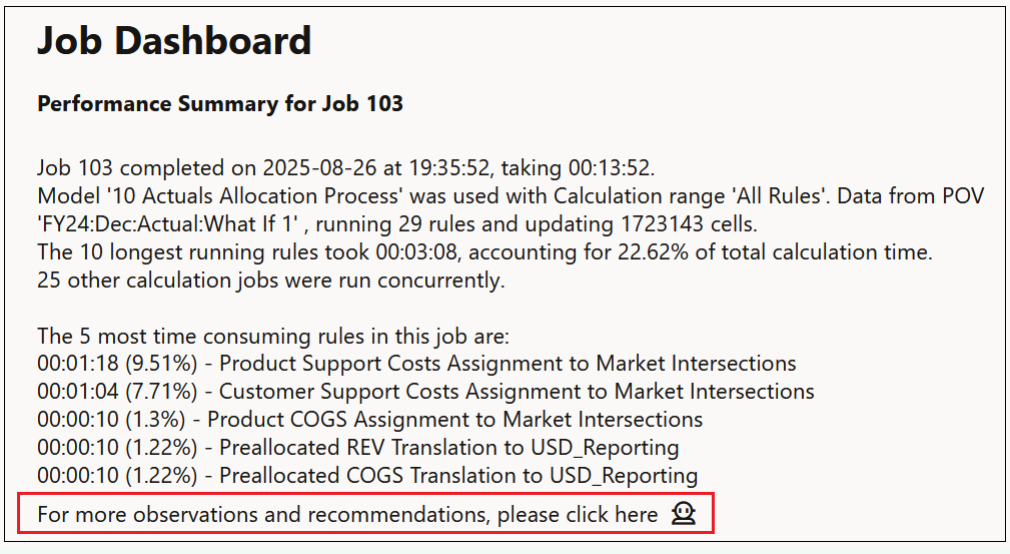
To change the columns displayed on the Job Dashboard report, click the drop-down next to **Columns** ( ) and select or de-select the desired columns.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Tip

Click to access the PCM Agent Health Check Advisor for suggestions and recommendations that provide you with valuable information to help you to identify performance bottlenecks (see Using the PCM Agent Performance Assistant to Help Idendity and Resolve Calculation Performane Issues).



Analyzing Data for Multiple Calculation Records

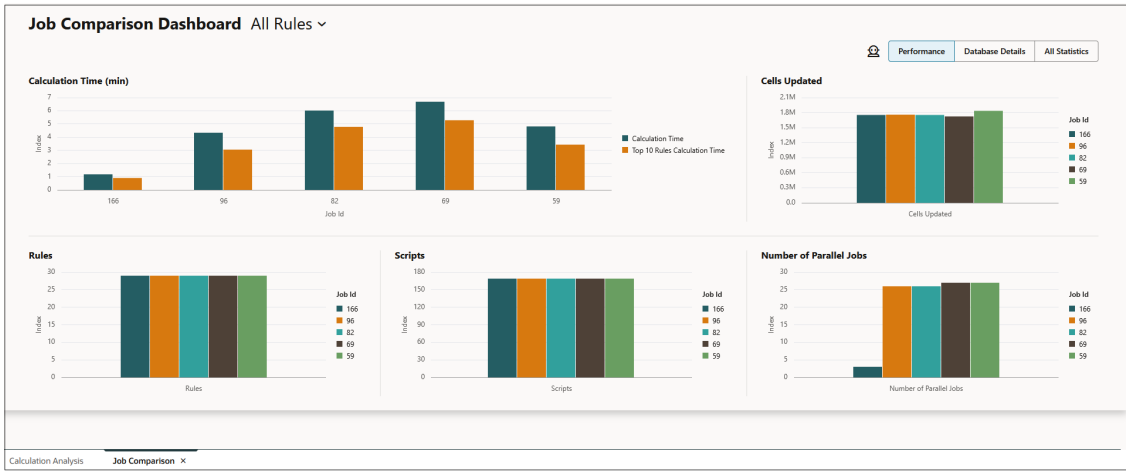
The Job Comparison Dashboard displays comparative data for multiple calculation records.

Copyright © 2022, 2026, Oracle and/or its affiliates.

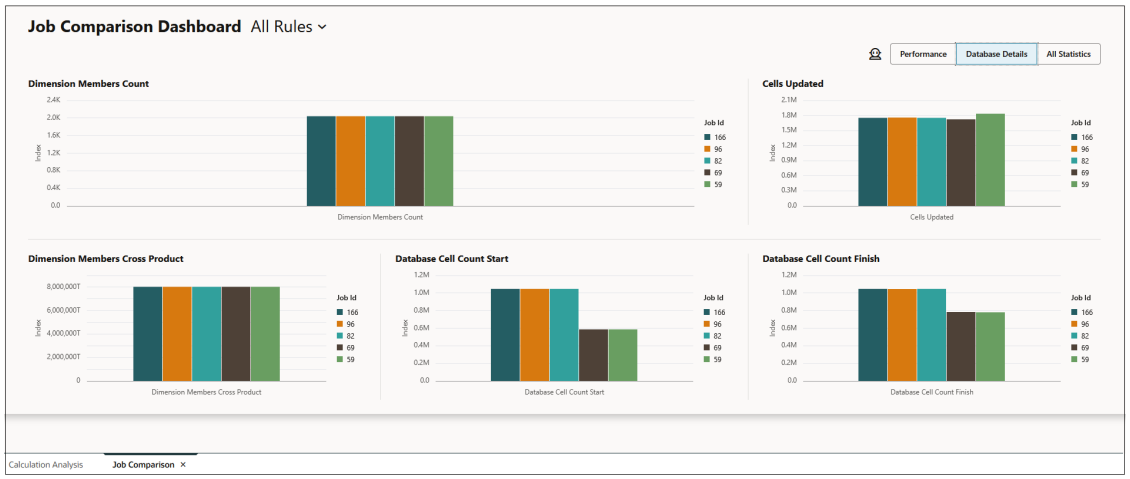
To access the Job Comparison Dashboard:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select up to five (5) calculation records.
3. Click **Analyze Performance**.
4. Click **Performance**, **Database Details**, or **All Statistics** to select which information to view.

Sample Job Comparison Dashboard Report Comparing the Performance of Five Jobs

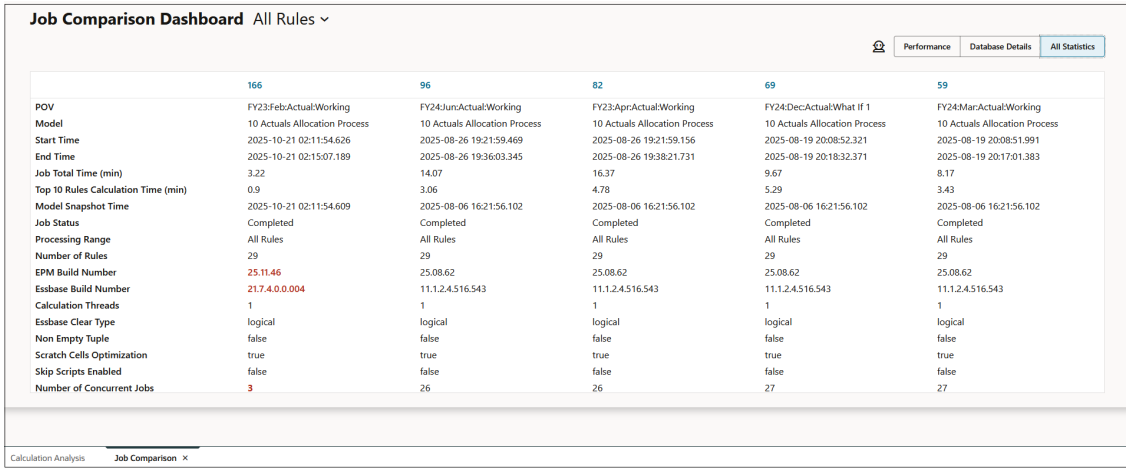


Sample Job Comparison Dashboard Report Comparing the Database Details of Five Jobs



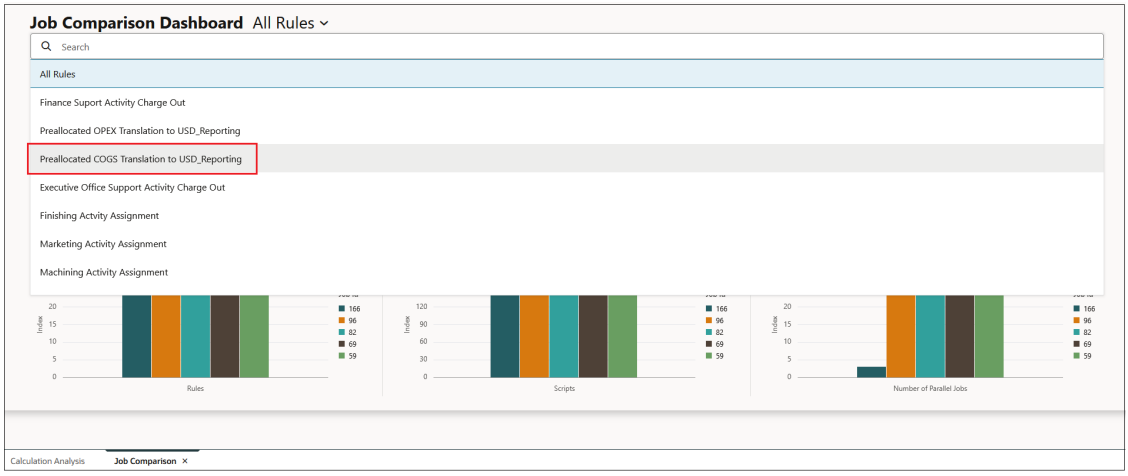
Sample Job Comparison Dashboard Report Comparing the Statistics of Five Jobs

Copyright © 2022, 2026, Oracle and/or its affiliates.

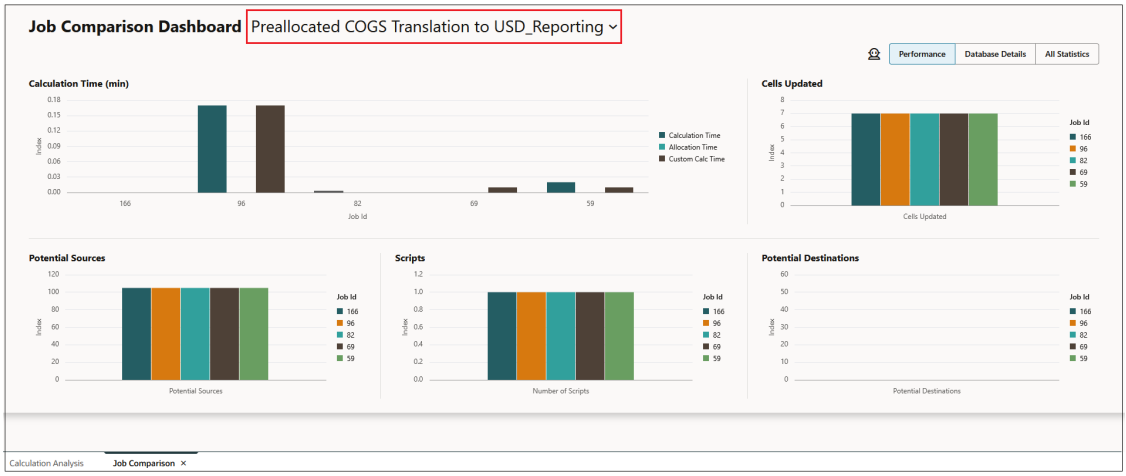


	166	96	82	69	59
POV	FY23:Feb:Actual:Working	FY24:Jun:Actual:Working	FY23:Apr:Actual:Working	FY24:Dec:Actual:What If 1	FY24:Mar:Actual:Working
Model	10 Actuals Allocation Process	10 Actuals Allocation Process	10 Actuals Allocation Process	10 Actuals Allocation Process	10 Actuals Allocation Process
Start Time	2025-10-21 02:11:54.626	2025-08-26 19:21:59.469	2025-08-26 19:21:59.156	2025-08-19 20:08:52.321	2025-08-19 20:08:51.991
End Time	2025-10-21 02:15:07.189	2025-08-26 19:36:03.345	2025-08-26 19:38:21.731	2025-08-19 20:18:32.371	2025-08-19 20:17:01.383
Job Total Time (min)	3.22	14.07	16.37	9.67	8.17
Top 10 Rules Calculation Time (min)	0.9	3.06	4.78	5.29	3.43
Model Snapshot Time	2025-10-21 02:11:54.609	2025-08-06 16:21:56.102	2025-08-06 16:21:56.102	2025-08-06 16:21:56.102	2025-08-06 16:21:56.102
Job Status	Completed	Completed	Completed	Completed	Completed
Processing Range	All Rules	All Rules	All Rules	All Rules	All Rules
Number of Rules	29	29	29	29	29
EPM Build Number	25.11.46	25.08.62	25.08.62	25.08.62	25.08.62
Essbase Build Number	21.7.4.0.0.004	11.1.2.4.516.543	11.1.2.4.516.543	11.1.2.4.516.543	11.1.2.4.516.543
Calculation Threads	1	1	1	1	1
Essbase Clear Type	logical	logical	logical	logical	logical
Non Empty Tuple	false	false	false	false	false
Scratch Cells Optimization	true	true	true	true	true
Skip Scripts Enabled	false	false	false	false	false
Number of Concurrent Jobs	3	26	26	27	27

The Job Comparison Dashboard intially displays with data for all rules. To narrow the results to the calculation records for a specific rule, click the drop-down next to **All Rules**, and the select the desired rule.



The selected rule appears at the top of the page, and the data narrows to be only for that rule.



Copyright © 2022, 2026, Oracle and/or its affiliates.

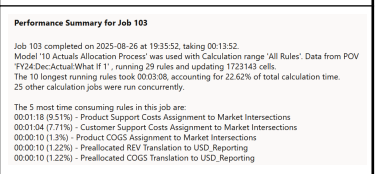
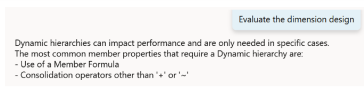
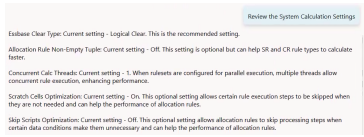
Using the PCM Agent Performance Assistant to Help Idendity and Resolve Calculation Performane Issues

To help identify and resolve performance issues when running calculations, you can use the PCM Agent Performance Assistant to summarize calculation performance bottlenecks and best practices. The Performance Assistant uses Generative AI (GenAI) to provide a detailed overview of the factors influencing the performance of calculation jobs, focusing on both individual assessments and comparative analyses. The AI examines various elements that contribute to performance issues, all of which can significantly affect processing efficiency. The insights provided aim to enhance the understanding of performance dynamics and inform the development of optimization strategies for calculations.

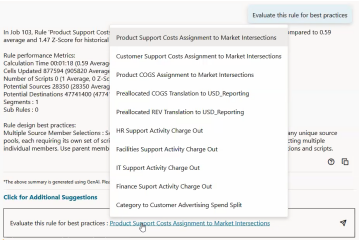
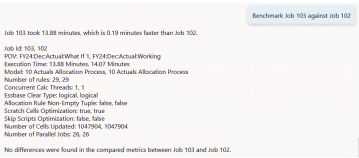
The recommendations and suggestions will provide you with valuable information that can help you to identify performance bottlenecks before reaching out to Oracle Support.

> **Note**
>
> The Performance Assistant uses generative AI (GenAI). Output from GenAI may not always be factual or accurate. You are responsible for reviewing and using GenAI output at your discretion.

Suggestions and recommendations to improve calculation performance are provided in the following areas:

Suggestion	What it Shows	Example Recommendation
Performance Summary for Job	Summarizes the key performance results of a job to help you identify potential problem areas that may be slowing down calculation performance.	
Evaluate the Dimension Design	Provides best practices on how to design the hierarchy type of your dimensions to improve calculation performance.	
Review the System Calculation Settings	Displays the current settings for "Essbase Clear Type", "Allocation Rule Non-Empty Tuple", "Concurrent Calc Threads", "Scratch Cells Optimization", and "Skips Scripts Optimization" so you can see what may need to be changed to improve calculation performance. For more information on these settings, see Managing Application and System Settings.	

Copyright © 2022, 2026, Oracle and/or its affiliates.

Suggestion	What it Shows	Example Recommendation
Show the Top 10 Time Consuming Rules	Shows the top 10 time consuming rules for the job. This allows you to focus on and fine-tune individual rules that are slowing down calculation performance.	
Compare Job with Similar Historical Jobs	Compares the execution performance of a specific job with other recently-run jobs with the same settings in the same model. Information compared includes the average and Z-Score for the execution time, rule count, and cells updated for the specific job with the values for jobs with similar settings. This helps you to see if something has changed to make the job run slower.	
Evaluate Rule for Best Practices	Evaluates the rule to see if it is following best practices. Follow the best practices recommendations to make the rule run faster. You can review the top 10 most time consuming rules from here. The link for the longest running rule is initially displayed. Click on this rule to display the top 10 time consuming rules. You can select any of these rules to review the details about those rules, and make changes to enable the rule to run faster.	
Benchmark Job	Compares two jobs. For example, if you have a job that used to be fast but now it is slow, you can benchmark the fast and slow jobs to see what changed. When comparing jobs, you must select a job to compare to the benchmark job. By default, all jobs with same processing type and model as the benchmark job are displayed. Select a comparison job by clicking on the hyperlink for the job.	

To use the Performance Assistant:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select a calculation record.

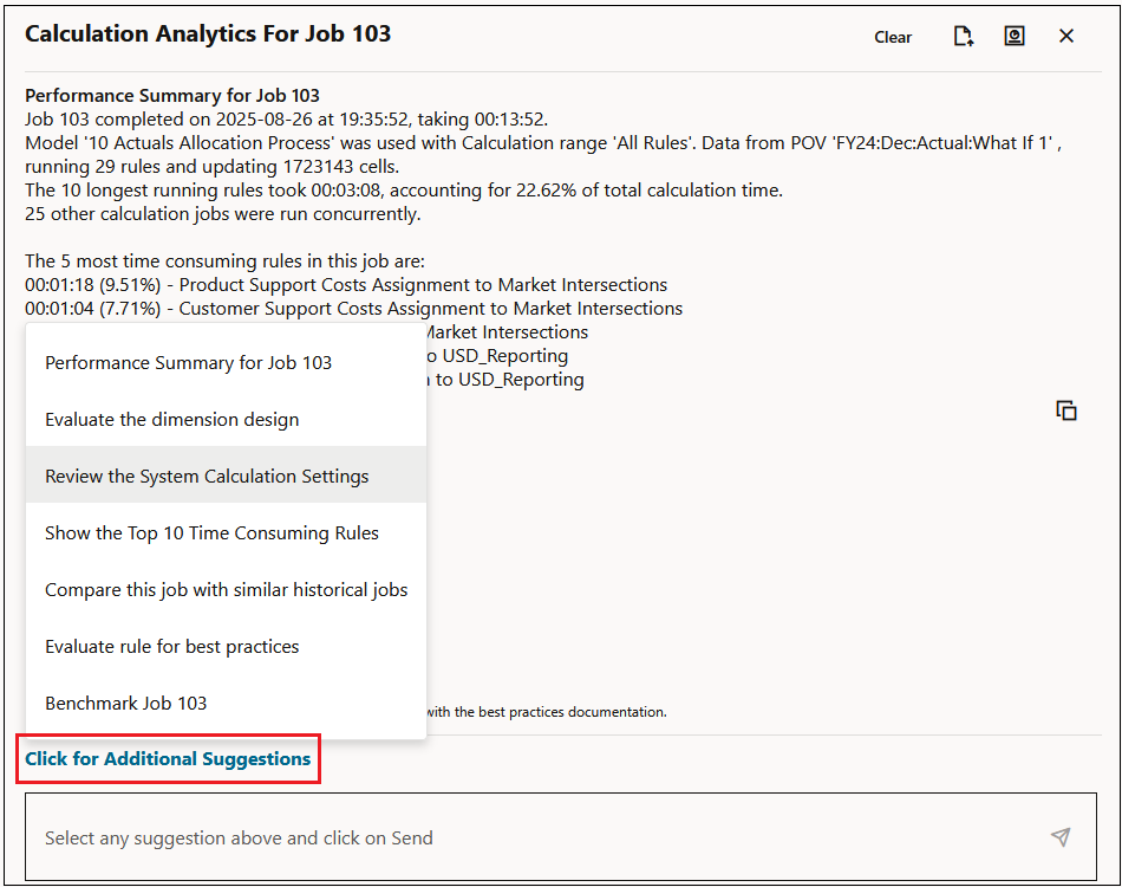
Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Click **Analyze Performance**.

4. Click to view the Performance Assistant suggestions.

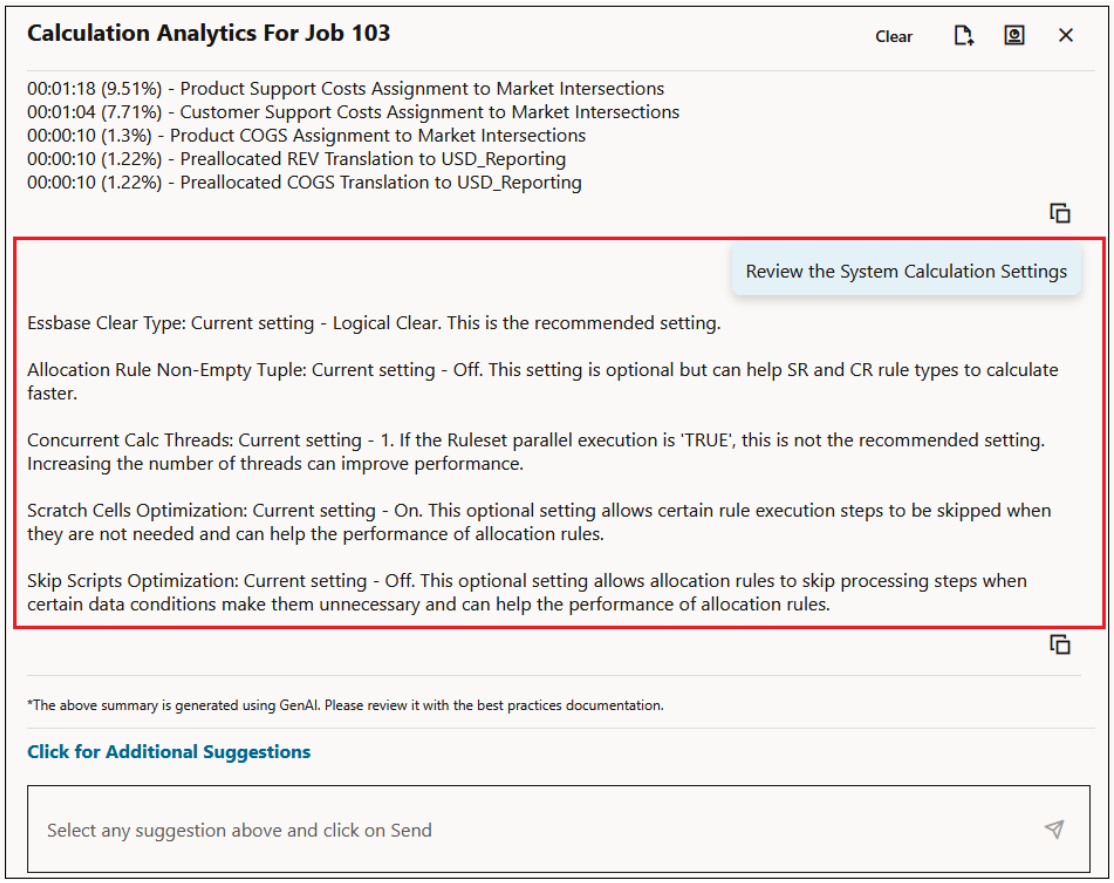
The initial information displayed is a performance summary for the selected job. Select **Click for Additional Suggestions** to display a drop-down where you can select additional suggestions.

Figure 12-1 Performance Assistant Suggestions



After you select a suggestion, click (**Send**) to display the Performance Assistant recommendation.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Tip

- To copy a specific recommendation, click next to the recommendation, and then paste the text in another program.
- To export all the recommendations for which you have selected a suggestion, click . The recommendations are exported to a .txt file titled *appName*_CalcAgent.txt.
- To create a Calculation Performance Analysis Summary, click . The summary provides the most useful details about your calculations. The recommendations are exported to a .txt file titled *appName*_Calc_Performance_Analysis_Summary_*jobId*.txt.

Tip

See the Analyzing Calculation Job Performance tutorial for detailed step-by-step instructions on using the Performance Assistant to help identify and troubleshoot calculation performance issues.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Generating Calculation Analysis Reports

Related Topics

- Generating a Calculation Statistics Summary Report
- Generating a Calculation Statistics Diagnostics Report
- Generating a Model Snapshot Documentation Report
- Generating a Compare Snapshot with Current Model Report
- Generating a Compare Model Snapshots Report
- Creating a Model from a Snapshot

Generating a Calculation Statistics Summary Report

The Calculation Statistics Summary report gives you all the details about a specific calculation record. The report has these sections:

- The top of the report shows summary information about the calculation.
- After the summary information, the Job Log displays any errors or warnings that occurred when the model was calculated. If there were no errors or warnings, the Job Log section does not display in the report.
- The next section displays the top 10 longest running rules. The rules are displayed in descending order based on the elapsed time to complete the calculation. (Note that rule sets are not included in this information.)
- The remainder of the report displays detailed information about the rule sets and rules that were executed. The report shows all the rules that were run and the order in which they were run along with statistical data about each rule.

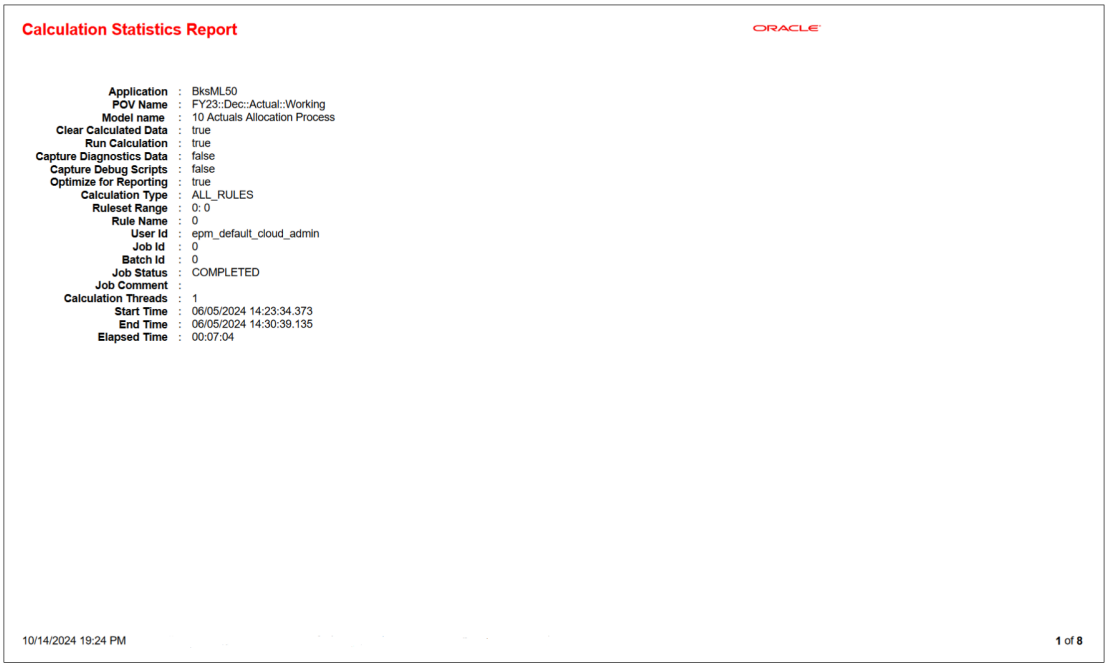
The Calculation Statistics Summary report can be used as a diagnostics tool. For example, you can use the report to troubleshoot performance issues by reviewing information about which rules are taking the longest to execute, the execution order of the rules, the size of the rules, how many scripts the rules are producing, and how many cells of data the rules are writing.

To generate a Calculation Statistics Summary report:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select a calculation record.
3. Click **More Actions**, and select **Calculation Statistics - Summary**.
4. Select a format:
   - PDF
   - Excel
   - Word
   - HTML
   - XML
5. Click **Run**.

Sample Calculation Statistics Summary Report

Copyright © 2022, 2026, Oracle and/or its affiliates.

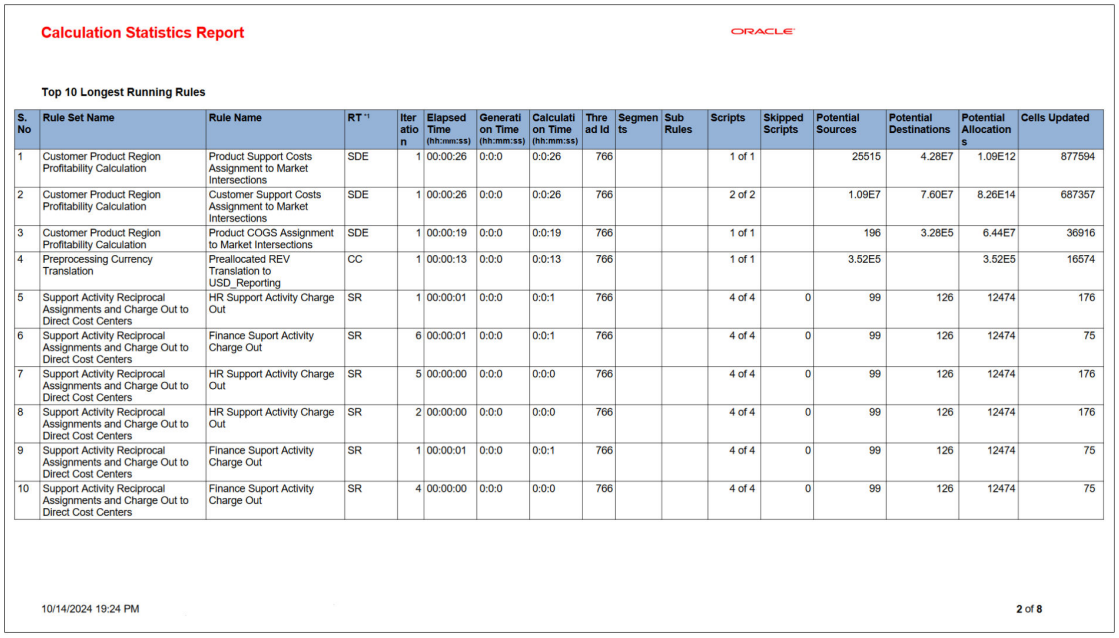


Calculation Statistics Report

ORACLE

Application	:	BksML50
POV Name	:	FY23::Dec::Actual::Working
Model name	:	10 Actuals Allocation Process
Clear Calculated Data	:	true
Run Calculation	:	true
Capture Diagnostics Data	:	false
Capture Debug Scripts	:	false
Optimize for Reporting	:	true
Calculation Type	:	ALL_RULES
Ruleset Range	:	0: 0
Rule Name	:	0
User Id	:	epm_default_cloud_admin
Job Id	:	0
Batch Id	:	0
Job Status	:	COMPLETED
Job Comment	:	
Calculation Threads	:	1
Start Time	:	06/05/2024 14:23:34.373
End Time	:	06/05/2024 14:30:39.135
Elapsed Time	:	00:07:04

10/14/2024 19:24 PM **1** of **8**



Calculation Statistics Report

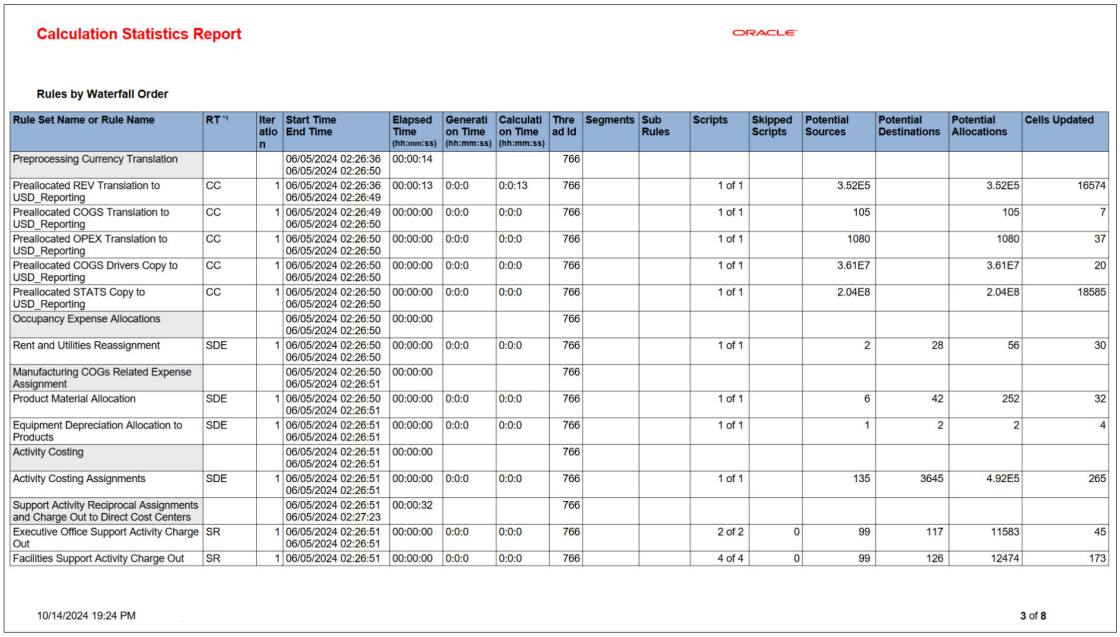
ORACLE

Top 10 Longest Running Rules

S. No	Rule Set Name	Rule Name	RT [1]	Iteration	Elapsed Time (hh:mm:ss)	Generation Time (hh:mm:ss)	Calculation Time (hh:mm:ss)	Thread Id	Segments	Sub Rules	Scripts	Skipped Scripts	Potential Sources	Potential Destinations	Potential Allocations	Cells Updated
1	Customer Product Region Profitability Calculation	Product Support Costs Assignment to Market Intersections	SDE	1	00:00:26	0:0:0	0:0:26	766			1 of 1		25515	4.28E7	1.09E12	877594
2	Customer Product Region Profitability Calculation	Customer Support Costs Assignment to Market Intersections	SDE	1	00:00:26	0:0:0	0:0:26	766			2 of 2		1.09E7	7.60E7	8.26E14	687357
3	Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections	SDE	1	00:00:19	0:0:0	0:0:19	766			1 of 1		196	3.28E5	6.44E7	36916
4	Preprocessing Currency Translation	Preallocated REV Translation to USD_Reporting	CC	1	00:00:13	0:0:0	0:0:13	766			1 of 1		3.52E5		3.52E5	16574
5	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	HR Support Activity Charge Out	SR	1	00:00:01	0:0:0	0:0:1	766			4 of 4	0	99	126	12474	176
6	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	Finance Suport Activity Charge Out	SR	6	00:00:01	0:0:0	0:0:1	766			4 of 4	0	99	126	12474	75
7	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	HR Support Activity Charge Out	SR	5	00:00:00	0:0:0	0:0:0	766			4 of 4	0	99	126	12474	176
8	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	HR Support Activity Charge Out	SR	2	00:00:00	0:0:0	0:0:0	766			4 of 4	0	99	126	12474	176
9	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	Finance Suport Activity Charge Out	SR	1	00:00:01	0:0:0	0:0:1	766			4 of 4	0	99	126	12474	75
10	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	Finance Suport Activity Charge Out	SR	4	00:00:00	0:0:0	0:0:0	766			4 of 4	0	99	126	12474	75

10/14/2024 19:24 PM **2** of **8**

Copyright © 2022, 2026, Oracle and/or its affiliates.



Calculation Statistics Report

Rules by Waterfall Order

Rule Set Name or Rule Name	RT [1]	Iteration	Start Time End Time	Elapsed Time (hh:mm:ss)	Generation Time (hh:mm:ss)	Calculation Time (hh:mm:ss)	Thread Id	Segments	Sub Rules	Scripts	Skipped Scripts	Potential Sources	Potential Destinations	Potential Allocations	Cells Updated
Preprocessing Currency Translation			06/05/2024 02:26:36 06/05/2024 02:26:50	00:00:14			766								
Preallocated REV Translation to USD_Reporting	CC	1	06/05/2024 02:26:36 06/05/2024 02:26:49	00:00:13	0:0:0	0:0:13	766			1 of 1		3.52E5		3.52E5	16574
Preallocated COGS Translation to USD_Reporting	CC	1	06/05/2024 02:26:49 06/05/2024 02:26:50	00:00:00	0:0:0	0:0:0	766			1 of 1		105		105	7
Preallocated OPEX Translation to USD_Reporting	CC	1	06/05/2024 02:26:50 06/05/2024 02:26:50	00:00:00	0:0:0	0:0:0	766			1 of 1		1080		1080	37
Preallocated COGS Drivers Copy to USD_Reporting	CC	1	06/05/2024 02:26:50 06/05/2024 02:26:50	00:00:00	0:0:0	0:0:0	766			1 of 1		3.61E7		3.61E7	20
Preallocated STATS Copy to USD_Reporting	CC	1	06/05/2024 02:26:50 06/05/2024 02:26:50	00:00:00	0:0:0	0:0:0	766			1 of 1		2.04E8		2.04E8	18585
Occupancy Expense Allocations			06/05/2024 02:26:50 06/05/2024 02:26:50	00:00:00			766								
Rent and Utilities Reassignment	SDE	1	06/05/2024 02:26:50 06/05/2024 02:26:50	00:00:00	0:0:0	0:0:0	766			1 of 1		2	28	56	30
Manufacturing COGs Related Expense Assignment			06/05/2024 02:26:50 06/05/2024 02:26:51	00:00:00			766								
Product Material Allocation	SDE	1	06/05/2024 02:26:50 06/05/2024 02:26:51	00:00:00	0:0:0	0:0:0	766			1 of 1		6	42	252	32
Equipment Depreciation Allocation to Products	SDE	1	06/05/2024 02:26:51 06/05/2024 02:26:51	00:00:00	0:0:0	0:0:0	766			1 of 1		1	2	2	4
Activity Costing			06/05/2024 02:26:51 06/05/2024 02:26:51	00:00:00			766								
Activity Costing Assignments	SDE	1	06/05/2024 02:26:51 06/05/2024 02:26:51	00:00:00	0:0:0	0:0:0	766			1 of 1		135	3645	4.92E5	265
Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers			06/05/2024 02:26:51 06/05/2024 02:27:23	00:00:32			766								
Executive Office Support Activity Charge Out	SR	1	06/05/2024 02:26:51 06/05/2024 02:26:51	00:00:00	0:0:0	0:0:0	766			2 of 2	0	99	117	11583	45
Facilities Support Activity Charge Out	SR	1	06/05/2024 02:26:51	00:00:00	0:0:0	0:0:0	766			4 of 4	0	99	126	12474	173

10/14/2024 19:24 PM

3 of 8

> **Note**
>
> Each calculation rule execution logs several statistics about its execution that are used to populate the Calculation Statistics Summary report. For models with many rules, the volume of these statistics can accumulate quickly. To maintain responsiveness on the Calculation Analysis page where calculation runs are viewed, Enterprise Profitability and Cost Management automatically purges old calculation run records and their associated statistics when the volume of runs or statistics grows to exceed certain thresholds. If you want to retain a longer history of calculation runs, a best practice is to frequently use the Export to Excel option on the Calculation Analysis page to archive calculation runs. See About Calculation Analysis.

Generating a Calculation Statistics Diagnostics Report

The Calculation Statistics Diagnostics report shows you diagnostics information for up to five calculation records. The report shows additional rule execution detail which can be useful in diagnosing rule performance issues.

The report prints in an Excel format and has two worksheets:

- Job Statistics
- Rule Statistics

To generate a Calculation Statistics Diagnostics report:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select up to five calculation records.
3. Click **More Actions**, and select **Calculation Statistics - Diagnostics**.
4. Open the downloaded `EngineStatisticsComparisonReport.xlsx` file.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Job Statistics

Job Statistics shows the calculation record-level statistics and provides a comparison on some of those statistics. Job Statistics include information such as:

- Job ID
- Batch ID
- Job Start Time
- Job End Time
- Job Total Time (min)
- POV Name
- Model Name
- Model Snapshot Time
- Job Status
- Total Number of POVs Run During Same Time
- Max Number of Rules Run During Same Time
- Comment
- POD_TYPE
- EPM Build Number
- Essbase Build Number
- Calculation Threads
- Essbase Clear Type
- Non Empty Tuple
- Scratch Cells Optimization
- Clear Calculation Data Time (min)
- Clear Aggregations Time (min)
- Rules Total Time (min)
- Clear Scratch Cells Time (min)
- Merge Slices Time (min)
- Create Aggeregations Time (min)
- Generation Time (min)
- Execution Time (min)
- Allocation Time (min)
- Custom Calc Time (min)
- Driver Query Time (min)
- Clear Partial Time (min)
- Cells Updated
- Number of Rules
- Rules Complete

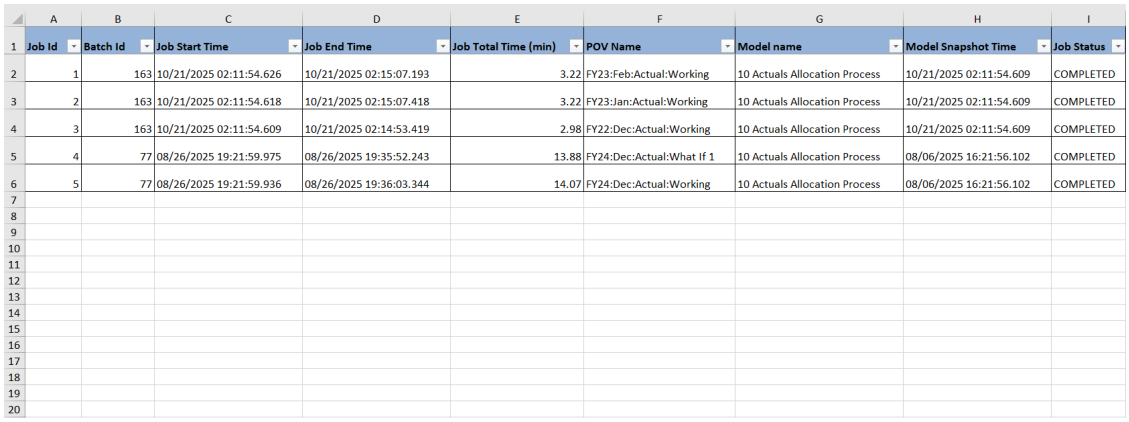
Copyright © 2022, 2026, Oracle and/or its affiliates.

- Sub Rules
- Sub Rules Complete
- SDE Rules
- CDE Rules
- SR Rules
- CR Rules
- CC Rules
- SASDD Rules
- ATPS Rules
- Number of Scripts
- Scripts Complete
- Skipped Scripts Count
- Allocation Scripts
- Custom Calc Scripts
- Driver Queries
- Clear Partial Scripts
- Attribute Dimensions
- Attribute Dimension Members
- Attribute Associations
- Dimensions
- Dimension Members
- Dimension Members Cross Product
- Essbase Sessions Pre
- Essbase Sessions Post
- Input Cells Start
- Incremental Input Cells Start
- Aggregate Cells Start
- Input Cells End
- Incremental Input Cells End
- Aggregate Cells End
- SDE Rules Total Time (min)
- CDE Rules Total Time (min)
- SR Rules Total Time (min)
- CR Rules Total Time (min)
- CC Rules Total Time (min)
- SASDD Rules Total Time (min)
- ATPS Rules Total Time (min)
- ASO Cache Concurrent Consuming Threads

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Auto Merge Maximum Slice Number
- Skip Scripts Enabled

Sample Job Statistics



Job Id	Batch Id	Job Start Time	Job End Time	Job Total Time (min)	POV Name	Model name	Model Snapshot Time	Job Status
1	163	10/21/2025 02:11:54.626	10/21/2025 02:15:07.193	3.22	FY23:Feb:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:11:54.609	COMPLETED
2	163	10/21/2025 02:11:54.618	10/21/2025 02:15:07.418	3.22	FY23:Jan:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:11:54.609	COMPLETED
3	163	10/21/2025 02:11:54.609	10/21/2025 02:14:53.419	2.98	FY22:Dec:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:11:54.609	COMPLETED
4	77	08/26/2025 19:21:59.975	08/26/2025 19:35:52.243	13.88	FY24:Dec:Actual:What If 1	10 Actuals Allocation Process	08/06/2025 16:21:56.102	COMPLETED
5	77	08/26/2025 19:21:59.936	08/26/2025 19:36:03.344	14.07	FY24:Dec:Actual:Working	10 Actuals Allocation Process	08/06/2025 16:21:56.102	COMPLETED

Tip

Use the scroll bar at the bottom of the Excel spreadhsheet to see additional Job Statistics.

Rule Statistics

Rule Statistics shows all the rules that were executed and the order in which they were executed along with statistical data about each rule. Rule Statistics include information such as:

- Job ID
- POV Name
- Model Name
- Start Time
- End Time
- Rule Set Name
- Rule Name
- Rule Type
- Top 10 Slowest Rules
- Total Time (min)
- Generation Time (min)
- Execution Time (min)
- Execution Time Percent
- Execution Time - Allocation Calc (min)
- Execution Time - Custom Calc (min)
- Execution Time - Driver Query (min)
- Execution Time - Clear Partial (min)

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Cells Updated
- Cells Updated Percent
- Potential Sources
- Potential Destinations
- Potential Allocations
- Segments
- Number of Scripts
- Scripts Complete
- Skipped Scripts Count
- Allocation Scripts
- Custom Calc Scripts
- Driver Queries
- Clear Partial Scripts
- Sub Rules
- Sub Rules Complete
- Total Number of Rules Run During Same Time
- Source Data Total
- Driver Data Total
- Execution Details
- Driver Upper Level Member Used
- Driver Dynamic Member Used
- Source Cherry Pick Member Count

Sample Rule Statistics

	A	B	C	D	E	F	G
1	Job Id	POV Name	Model name	Start Time	End Time	Rule Set Name	Rule Name
2	166	FY23:Feb:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:14:08.254	10/21/2025 02:14:25.656	Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections [1]
3	165	FY23:Jan:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:14:26.256	10/21/2025 02:14:41.417	Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections [1]
4	164	FY22:Dec:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:14:07.382	10/21/2025 02:14:07.526	Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections [1]
5	103	FY24:Dec:Actual:What If 1	10 Actuals Allocation Process	08/26/2025 19:31:45.445	08/26/2025 19:31:56.307	Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections [1]
6	102	FY24:Dec:Actual:Working	10 Actuals Allocation Process	08/26/2025 19:31:38.854	08/26/2025 19:31:55.738	Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections [1]
7	166	FY23:Feb:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:14:07.472	10/21/2025 02:14:08.203	Customer Product Region Profitability Calculation	Product Support Costs Assignment to Market Intersections
8	165	FY23:Jan:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:14:11.064	10/21/2025 02:14:26.203	Customer Product Region Profitability Calculation	Product Support Costs Assignment to Market Intersections
9	164	FY22:Dec:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:14:06.396	10/21/2025 02:14:07.327	Customer Product Region Profitability Calculation	Product Support Costs Assignment to Market Intersections
10	103	FY24:Dec:Actual:What If 1	10 Actuals Allocation Process	08/26/2025 19:30:26.972	08/26/2025 19:31:45.415	Customer Product Region Profitability Calculation	Product Support Costs Assignment to Market Intersections
11	102	FY24:Dec:Actual:Working	10 Actuals Allocation Process	08/26/2025 19:30:30.031	08/26/2025 19:31:38.819	Customer Product Region Profitability Calculation	Product Support Costs Assignment to Market Intersections
12	166	FY23:Feb:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:13:41.196	10/21/2025 02:14:07.421	Customer Product Region Profitability Calculation	Customer Support Costs Assignment to Market Intersectio
13	165	FY23:Jan:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:13:40.659	10/21/2025 02:14:11.018	Customer Product Region Profitability Calculation	Customer Support Costs Assignment to Market Intersectio
14	164	FY22:Dec:Actual:Working	10 Actuals Allocation Process	10/21/2025 02:13:41.111	10/21/2025 02:14:06.342	Customer Product Region Profitability Calculation	Customer Support Costs Assignment to Market Intersectio

Tip

Use the scroll bar at the bottom of the Excel spreadhsheet to see additional Rule Statistics.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Generating a Model Snapshot Documentation Report

Enterprise Profitability and Cost Management keeps snapshots of your models when you calculate them. If you make changes to a model later, you still have a compelete record of the rules that generated each calculation.

The Model Snapshot Documentation report gives you a historical printout of the rules in a model at the time the model was calculated. The report shows the name and sequence of the rules used in the model and gives an explanation of the purpose of each rule.

The top of the report displays the top 10 longest running rules. The rules are displayed in descending order based on the elapsed time to complete the calculation. (Note that rule sets are not included in this information.) This is followed by detailed information about the rule sets and rules that were executed.

If you click a hyperlink for a rule, it will show you detailed information about the rule and the actual rule definition. The hyperlinks enable you to easily navigate through the different areas in the report. For example, you can navigate from the overview of a rule and the sequence in which it occurs to the actual rule definition.

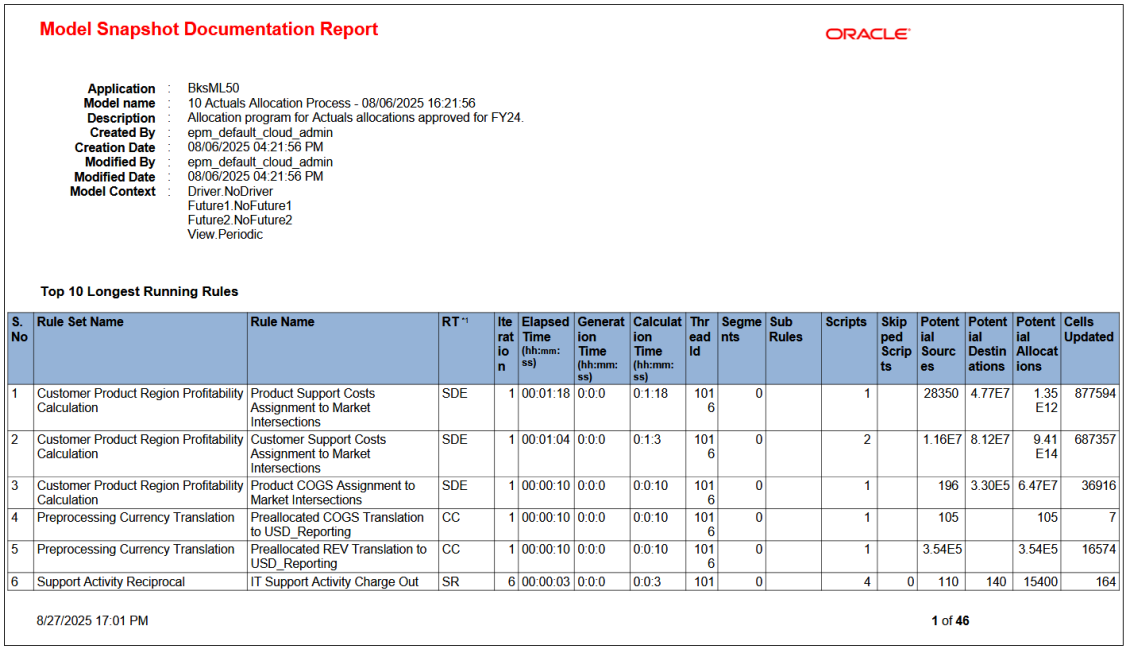
You can save the report locally and distribute it to others, or attach it to other reports to help explain the allocation process to internal or external reviewers and auditors.

To generate a Model Snapshot Documentation report:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select the desired calculation record.
3. Click **More Actions**, and select **Model Snapshot Documentation**.
4. Select a format:
   - PDF
   - Excel
   - Word
   - HTML
   - XML
5. Click **Run**.

Sample Model Snapshot Documentation Report

Copyright © 2022, 2026, Oracle and/or its affiliates.



Model Snapshot Documentation Report

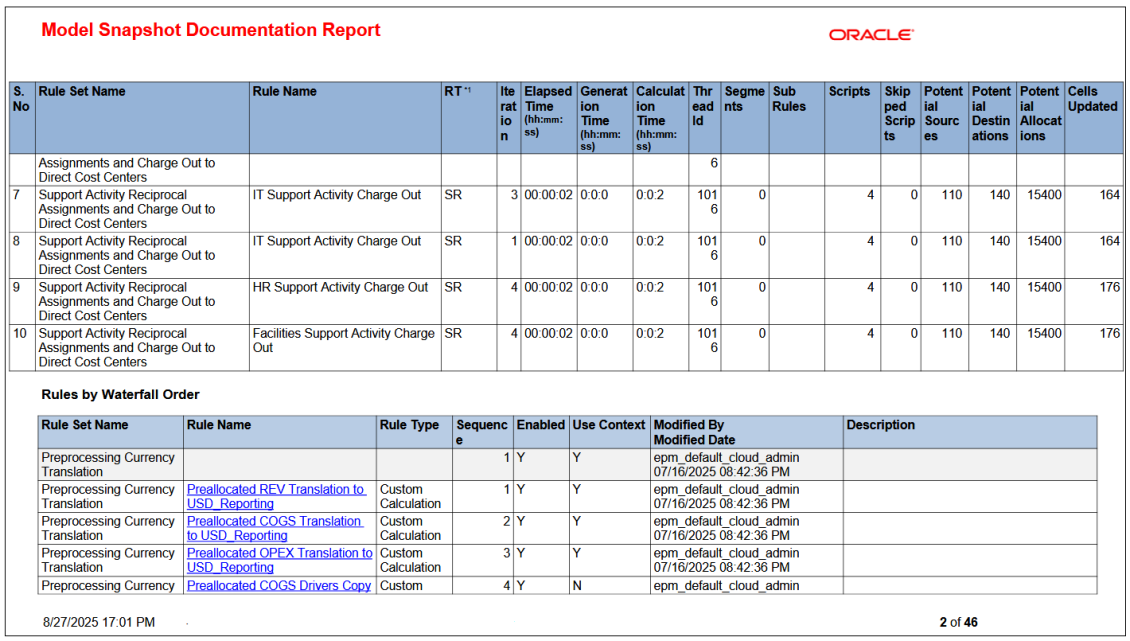
ORACLE

Application : BksML50
Model name : 10 Actuals Allocation Process - 08/06/2025 16:21:56
Description : Allocation program for Actuals allocations approved for FY24.
Created By : epm_default_cloud_admin
Creation Date : 08/06/2025 04:21:56 PM
Modified By : epm_default_cloud_admin
Modified Date : 08/06/2025 04:21:56 PM
Model Context : Driver.NoDriver
Future1.NoFuture1
Future2.NoFuture2
View.Periodic

Top 10 Longest Running Rules

S. No	Rule Set Name	Rule Name	RT *1	Iteration	Elapsed Time (hh:mm:ss)	Generation Time (hh:mm:ss)	Calculation Time (hh:mm:ss)	Thread Id	Segments	Sub Rules	Scripts	Skipped Scripts	Potential Sources	Potential Destinations	Potential Allocations	Cells Updated
1	Customer Product Region Profitability Calculation	Product Support Costs Assignment to Market Intersections	SDE	1	00:01:18	0:0:0	0:1:18	1016	0		1		28350	4.77E7	1.35 E12	877594
2	Customer Product Region Profitability Calculation	Customer Support Costs Assignment to Market Intersections	SDE	1	00:01:04	0:0:0	0:1:3	1016	0		2		1.16E7	8.12E7	9.41 E14	687357
3	Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections	SDE	1	00:00:10	0:0:0	0:0:10	1016	0		1		196	3.30E5	6.47E7	36916
4	Preprocessing Currency Translation	Preallocated COGS Translation to USD_Reporting	CC	1	00:00:10	0:0:0	0:0:10	1016	0		1		105		105	7
5	Preprocessing Currency Translation	Preallocated REV Translation to USD_Reporting	CC	1	00:00:10	0:0:0	0:0:10	1016	0		1		3.54E5		3.54E5	16574
6	Support Activity Reciprocal	IT Support Activity Charge Out	SR	6	00:00:03	0:0:0	0:0:3	101	0		4	0	110	140	15400	164

8/27/2025 17:01 PM **1** of **46**



Model Snapshot Documentation Report

ORACLE

S. No	Rule Set Name	Rule Name	RT *1	Iteration	Elapsed Time (hh:mm:ss)	Generation Time (hh:mm:ss)	Calculation Time (hh:mm:ss)	Thread Id	Segments	Sub Rules	Scripts	Skipped Scripts	Potential Sources	Potential Destinations	Potential Allocations	Cells Updated
	Assignments and Charge Out to Direct Cost Centers							6								
7	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	IT Support Activity Charge Out	SR	3	00:00:02	0:0:0	0:0:2	1016	0		4	0	110	140	15400	164
8	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	IT Support Activity Charge Out	SR	1	00:00:02	0:0:0	0:0:2	1016	0		4	0	110	140	15400	164
9	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	HR Support Activity Charge Out	SR	4	00:00:02	0:0:0	0:0:2	1016	0		4	0	110	140	15400	176
10	Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers	Facilities Support Activity Charge Out	SR	4	00:00:02	0:0:0	0:0:2	1016	0		4	0	110	140	15400	176

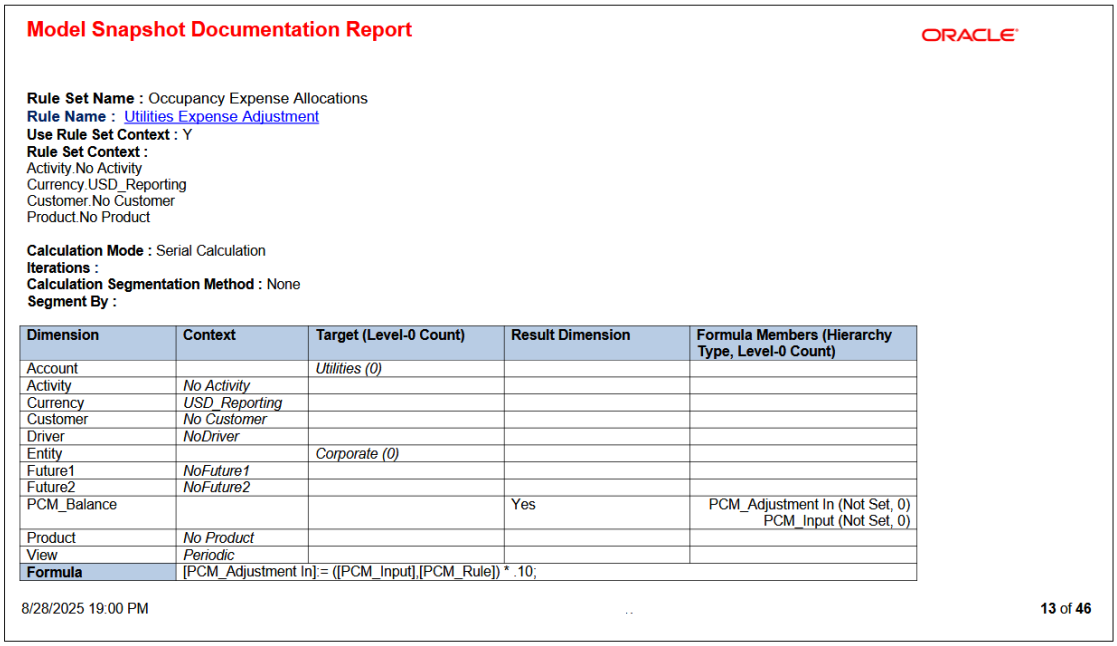
Rules by Waterfall Order

Rule Set Name	Rule Name	Rule Type	Sequence	Enabled	Use Context	Modified By Modified Date	Description
Preprocessing Currency Translation			1	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated REV Translation to USD_Reporting	Custom Calculation	1	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated COGS Translation to USD_Reporting	Custom Calculation	2	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency Translation	Preallocated OPEX Translation to USD_Reporting	Custom Calculation	3	Y	Y	epm_default_cloud_admin 07/16/2025 08:42:36 PM	
Preprocessing Currency	Preallocated COGS Drivers Copy	Custom	4	Y	N	epm_default_cloud_admin	

8/27/2025 17:01 PM **2** of **46**

Detailed Information about the "Utilities Expense Adjustment" Custom Rule in the Model

Copyright © 2022, 2026, Oracle and/or its affiliates.



Model Snapshot Documentation Report

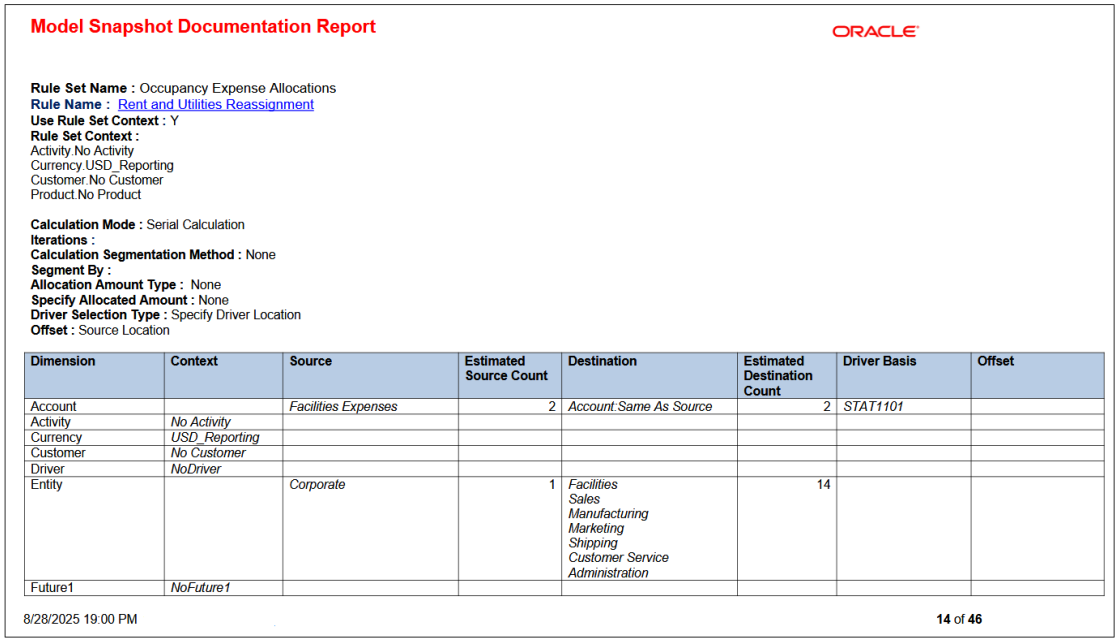
Rule Set Name : Occupancy Expense Allocations
Rule Name : Utilities Expense Adjustment
Use Rule Set Context : Y
Rule Set Context :
Activity.No Activity
Currency.USD_Reporting
Customer.No Customer
Product.No Product

Calculation Mode : Serial Calculation
Iterations :
Calculation Segmentation Method : None
Segment By :

Dimension	Context	Target (Level-0 Count)	Result Dimension	Formula Members (Hierarchy Type, Level-0 Count)
Account		*Utilities (0)*		
Activity	*No Activity*			
Currency	*USD_Reporting*			
Customer	*No Customer*			
Driver	*NoDriver*			
Entity		*Corporate (0)*		
Future1	*NoFuture1*			
Future2	*NoFuture2*			
PCM_Balance			Yes	PCM_Adjustment In (Not Set, 0) PCM_Input (Not Set, 0)
Product	*No Product*			
View	*Periodic*			
Formula	[PCM_Adjustment In]:= ([PCM_Input],[PCM_Rule]) * .10;			

8/28/2025 19:00 PM **13** of **46**

Detailed Information about the "Rent and Utilities Reassignment" Allocation Rule in the Model



Model Snapshot Documentation Report

Rule Set Name : Occupancy Expense Allocations
Rule Name : Rent and Utilities Reassignment
Use Rule Set Context : Y
Rule Set Context :
Activity.No Activity
Currency.USD_Reporting
Customer.No Customer
Product.No Product

Calculation Mode : Serial Calculation
Iterations :
Calculation Segmentation Method : None
Segment By :
Allocation Amount Type : None
Specify Allocated Amount : None
Driver Selection Type : Specify Driver Location
Offset : Source Location

Dimension	Context	Source	Estimated Source Count	Destination	Estimated Destination Count	Driver Basis	Offset
Account		*Facilities Expenses*	2	*Account:Same As Source*	2	*STAT1101*	
Activity	*No Activity*						
Currency	*USD_Reporting*						
Customer	*No Customer*						
Driver	*NoDriver*						
Entity		*Corporate*	1	*Facilities* *Sales* *Manufacturing* *Marketing* *Shipping* *Customer Service* *Administration*	14		
Future1	*NoFuture1*						

8/28/2025 19:00 PM **14** of **46**

Generating a Compare Snapshot with Current Model Report

The Compare Snapshot with Current Model report compares the definition of a model when it was calculated with the definition of the model today.

Click the hyperlink for a rule set or a rule to view detailed information about that rule set or rule. The hyperlinks enable you to easily navigate through the different areas in the report.

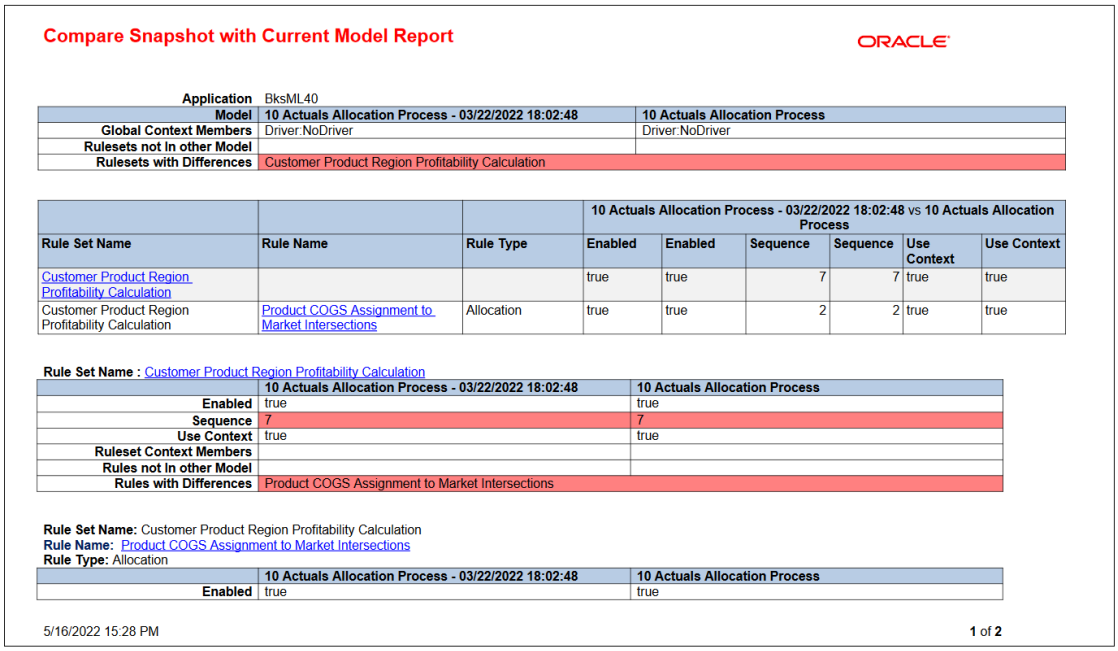
To generate a Compare Snapshot with Current Model report:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. From the **Calculation Analysis** page, select the desired calculation record.
3. Click **More Actions**, and select **Compare Snapshot with Current Model**.
4. Select a format:
   - PDF
   - Excel
   - Word
   - HTML
   - XML
5. Click **Run**.

Sample Compare Snapshot with Current Model Report



Compare Snapshot with Current Model Report

ORACLE

Application	BksML40

Model	**10 Actuals Allocation Process - 03/22/2022 18:02:48**	**10 Actuals Allocation Process**
Global Context Members	Driver:NoDriver	Driver:NoDriver
Rulesets not in other Model		
Rulesets with Differences	Customer Product Region Profitability Calculation	

			10 Actuals Allocation Process - 03/22/2022 18:02:48 vs **10 Actuals Allocation Process**					
Rule Set Name	**Rule Name**	**Rule Type**	**Enabled**	**Enabled**	**Sequence**	**Sequence**	**Use Context**	**Use Context**
Customer Product Region Profitability Calculation			true	true	7	7	true	true
Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections	Allocation	true	true	2	2	true	true

Rule Set Name : Customer Product Region Profitability Calculation

	10 Actuals Allocation Process - 03/22/2022 18:02:48	**10 Actuals Allocation Process**
Enabled	true	true
Sequence	7	7
Use Context	true	true
Ruleset Context Members		
Rules not in other Model		
Rules with Differences	Product COGS Assignment to Market Intersections	

Rule Set Name: Customer Product Region Profitability Calculation
Rule Name: Product COGS Assignment to Market Intersections
Rule Type: Allocation

	10 Actuals Allocation Process - 03/22/2022 18:02:48	**10 Actuals Allocation Process**
Enabled	true	true

5/16/2022 15:28 PM **1** of **2**

Generating a Compare Model Snapshots Report

The Compare Model Snapshots report compares the models that were calculated for two different calculation records.

The report provides a summary of the rule sets and rules with differences. Click the hyperlink for a rule set or rule to view detailed information about that rule set or rule. The hyperlinks enable you to easily navigate through the different areas in the report.

To generate a Compare Model Snapshot sreport:

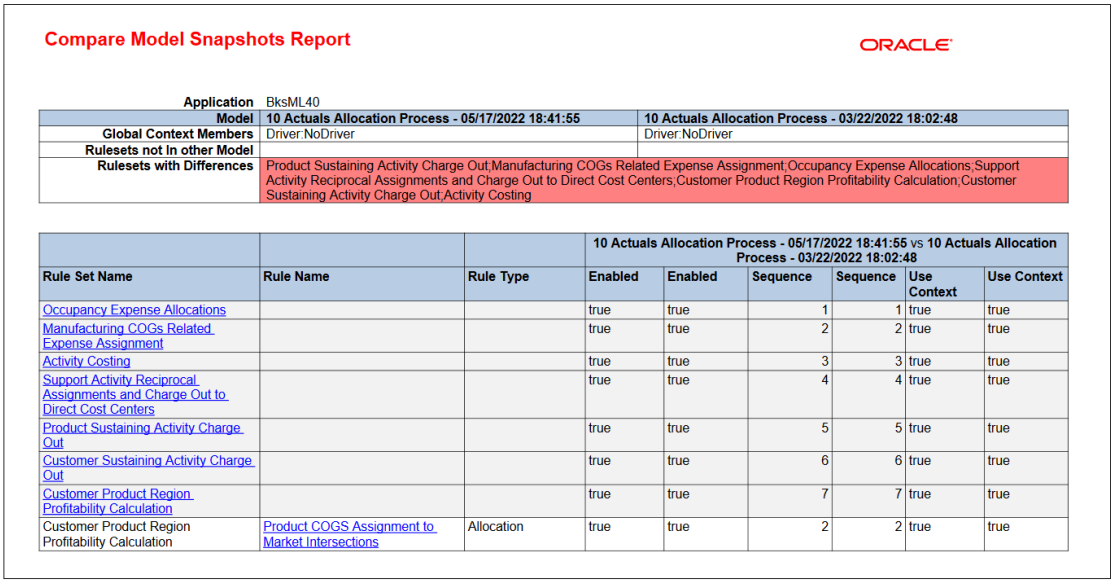
1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select the calculation records to compare.
3. Click **More Actions**, and select **Compare Model Snapshots**.
4. Select a format:
   - PDF
   - Excel

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Word
- HTML
- XML

5. Click **Run**.

Sample Compare Model Snapshots Report

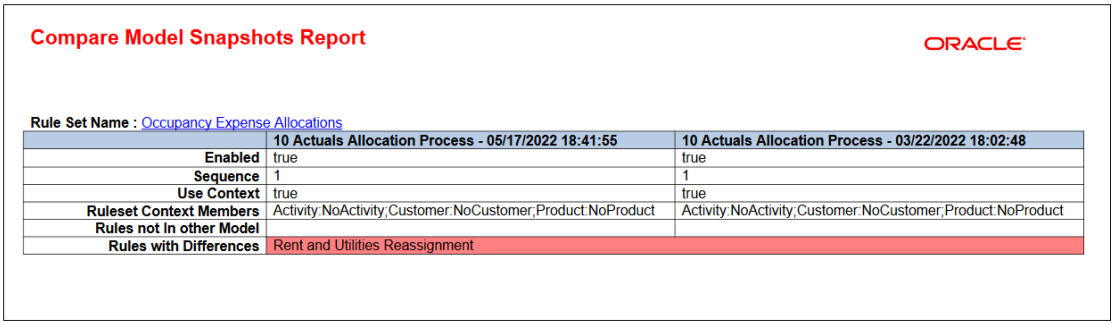


Compare Model Snapshots Report

Application	BksML40	
Model	**10 Actuals Allocation Process - 05/17/2022 18:41:55**	**10 Actuals Allocation Process - 03/22/2022 18:02:48**
Global Context Members	Driver:NoDriver	Driver:NoDriver
Rulesets not In other Model		
Rulesets with Differences	Product Sustaining Activity Charge Out;Manufacturing COGs Related Expense Assignment;Occupancy Expense Allocations;Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers;Customer Product Region Profitability Calculation;Customer Sustaining Activity Charge Out;Activity Costing	

			10 Actuals Allocation Process - 05/17/2022 18:41:55 vs 10 Actuals Allocation Process - 03/22/2022 18:02:48					
Rule Set Name	**Rule Name**	**Rule Type**	**Enabled**	**Enabled**	**Sequence**	**Sequence**	**Use Context**	**Use Context**
Occupancy Expense Allocations			true	true	1	1	true	true
Manufacturing COGs Related Expense Assignment			true	true	2	2	true	true
Activity Costing			true	true	3	3	true	true
Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers			true	true	4	4	true	true
Product Sustaining Activity Charge Out			true	true	5	5	true	true
Customer Sustaining Activity Charge Out			true	true	6	6	true	true
Customer Product Region Profitability Calculation			true	true	7	7	true	true
Customer Product Region Profitability Calculation	Product COGS Assignment to Market Intersections	Allocation	true	true	2	2	true	true

Detailed Information About the Occupancy Expense Allocations Rule Set



Compare Model Snapshots Report

Rule Set Name : Occupancy Expense Allocations

	10 Actuals Allocation Process - 05/17/2022 18:41:55	**10 Actuals Allocation Process - 03/22/2022 18:02:48**
Enabled	true	true
Sequence	1	1
Use Context	true	true
Ruleset Context Members	Activity:NoActivity;Customer:NoCustomer;Product:NoProduct	Activity:NoActivity;Customer:NoCustomer;Product:NoProduct
Rules not In other Model		
Rules with Differences	Rent and Utilities Reassignment	

Creating a Model from a Snapshot

Use this option to create a new model from an existing snapshot. For example, if you had a model from a few months ago, and in the intervening time several of the rules changed, you could create a new model and restore the rules to the state they were in when you initially calculated the model.

Other scenarios where creating a model from a snapshot would be useful are if you need to compare how your results would have looked today if you had calculated last year's rules, or if you need to restore the data and the rules from last year and make modifications.

To create a new model from a snapshot:

1. From the Home page, select **Modeling**, and then **Calculation Analysis**.
2. From the **Calculation Analysis** page, select the desired calculation record.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Click **More Actions**, and select **Create Model from Snapshot**.
4. In the **Create Model from Snapshot** dialog box, enter a name for the new model, and then click **Submit**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

13

Viewing Rule Balancing Reports

Related Topics

- About Rule Balancing
- Designing Data Forms for Rule Balancing
- Best Practices for Designing Rule Balancing Data Forms
- Generating a Rule Balancing Report

Video

Your Goal	Watch This Video
Learn how to run reports to troubleshoot model calculations in the Calculation Analysis screen, and how to use the Rule Balancing screen to analyze model calculations.	Analyzing and Troubleshooting Model Calculations in Enterprise Profitability and Cost Management

About Rule Balancing

You validate your results on the **Rule Balancing** page, where you can see each rule and its impact. Use this page to review your calculation results at a high level on a rule-by-rule basis. This top-down look at rule progression can help you identify where data may not have been allocated correctly so you can adjust your rule definitions accordingly. Rule balancing enables you to gain valuable insights for making business decisions.

Generating a Rule Balancing Report

To generate a Rule Balancing report:

1. From the Home page, select **Modeling**, and then **Rule Balancing**.
2. On the **Rule Balancing** page, click the drop-down and select a **Cube**.
3. Select the data form that will be used to generate the results displayed on the **Rule Balancing** page.

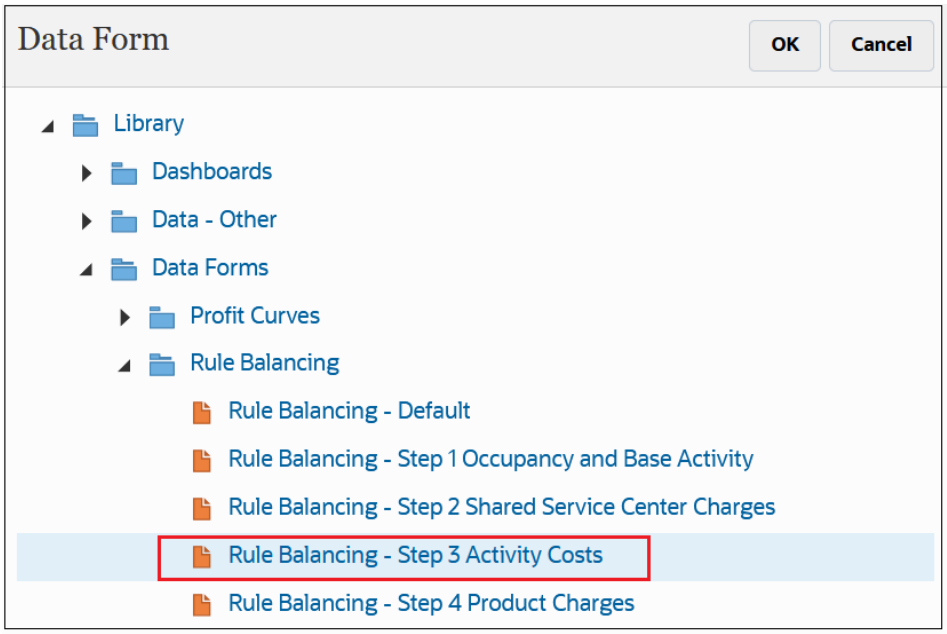
   The most recently-selected data form is displayed. To select a different data form, click the existing data form to open the **Data Form** dialog box, and navigate to the desired form.

   For example, assume you wanted to change the data form from the default form to "Balancing - Step 3 Activity Costs". To do this:

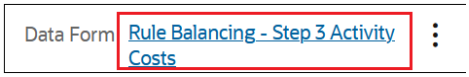
   - From the **Rule Balancing** page, click the link for the existing default form.

   - In the **Data Form** dialog box, navigate to the desired form, select the form, and then click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



The form you selected is displayed on the **Rule Balancing** page.

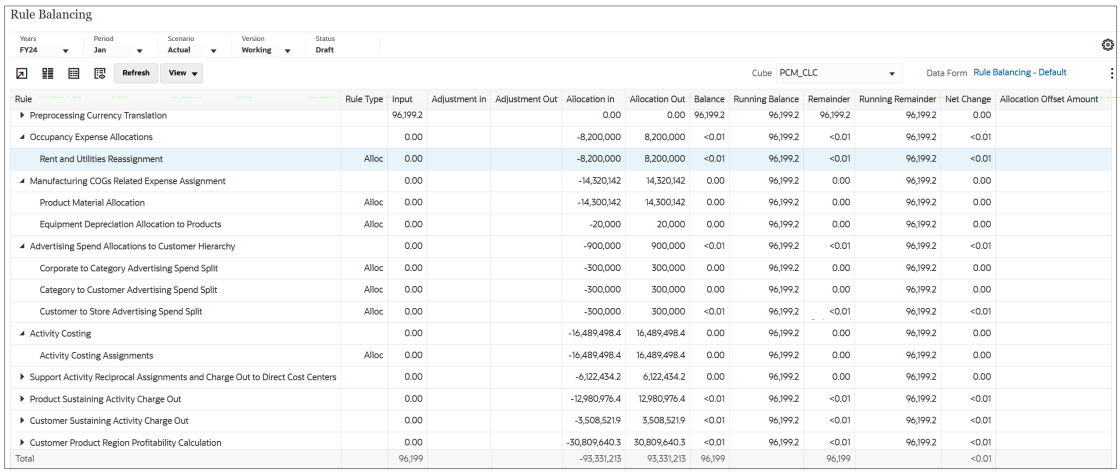


Note that you can click ⋮ next to the data form to analyze or edit the form.

See Using Data Forms with Rule Balancing for detailed information.

4. Specify a point of view to analyze by selecting options for the **Years**, **Period**, **Scenario**, and **Version** POV dimensions.
5. Click **Refresh** to generate rule balancing information.

The following is a sample Rule Balancing report generated using the data in the BksML50 sample application provided with Enterprise Profitability and Cost Management. (See Creating the Sample Application for information on how to access the sample application.)



Rule Balancing

Years: FY24 | Period: Jan | Scenario: Actual | Version: Working | Status: Draft

Refresh | View | Cube: PCM_CLC | Data Form: Rule Balancing - Default

Rule	Rule Type	Input	Adjustment in	Adjustment Out	Allocation in	Allocation Out	Balance	Running Balance	Remainder	Running Remainder	Net Change	Allocation Offset Amount
Preprocessing Currency Translation		96,199.2			0.00	0.00	96,199.2	96,199.2	96,199.2	96,199.2	0.00	
Occupancy Expense Allocations		0.00			-8,200,000	8,200,000	<0.01	96,199.2	<0.01	96,199.2	<0.01	
Rent and Utilities Reassignment	Alloc	0.00			-8,200,000	8,200,000	<0.01	96,199.2	<0.01	96,199.2	<0.01	
Manufacturing COGs Related Expense Assignment		0.00			-14,320,142	14,320,142	0.00	96,199.2	0.00	96,199.2	0.00	
Product Material Allocation	Alloc	0.00			-14,300,142	14,300,142	0.00	96,199.2	0.00	96,199.2	0.00	
Equipment Depreciation Allocation to Products	Alloc	0.00			-20,000	20,000	0.00	96,199.2	0.00	96,199.2	0.00	
Advertising Spend Allocations to Customer Hierarchy		0.00			-900,000	900,000	<0.01	96,199.2	<0.01	96,199.2	<0.01	
Corporate to Category Advertising Spend Split	Alloc	0.00			-300,000	300,000	0.00	96,199.2	0.00	96,199.2	0.00	
Category to Customer Advertising Spend Split	Alloc	0.00			-300,000	300,000	0.00	96,199.2	0.00	96,199.2	0.00	
Customer to Store Advertising Spend Split	Alloc	0.00			-300,000	300,000	<0.01	96,199.2	<0.01	96,199.2	<0.01	
Activity Costing		0.00			-16,489,498.4	16,489,498.4	0.00	96,199.2	0.00	96,199.2	0.00	
Activity Costing Assignments	Alloc	0.00			-16,489,498.4	16,489,498.4	0.00	96,199.2	0.00	96,199.2	0.00	
Support Activity Reciprocal Assignments and Charge Out to Direct Cost Centers		0.00			-6,122,434.2	6,122,434.2	0.00	96,199.2	0.00	96,199.2	0.00	
Product Sustaining Activity Charge Out		0.00			-12,980,976.4	12,980,976.4	<0.01	96,199.2	<0.01	96,199.2	<0.01	
Customer Sustaining Activity Charge Out		0.00			-3,508,521.9	3,508,521.9	<0.01	96,199.2	<0.01	96,199.2	<0.01	
Customer Product Region Profitability Calculation		0.00			-30,809,640.3	30,809,640.3	<0.01	96,199.2	<0.01	96,199.2	<0.01	
Total		96,199			-93,331,213	93,331,213	96,199		96,199		<0.01	

After generating a rule balancing report, you can:

- Click (**Export to Excel**) to export the Rule Balancing report to an Excel spreadsheet.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Select a rule, and then click (**View Rule Definition**) to view the complete rule definition for a rule. See Viewing Rule Definitions.
- Select a rule, and then click (**View Rule Data Ad-Hoc Grid**) to create an ad hoc grid where you can analyze a preconfigured data slice targeted for a specific rule's results. See Using Ad Hoc for Data Entry and Analysis.
- Select a rule, and then click (**View Rule Data Smart View**) to open a context-sensitive, ad-hoc report in Oracle Smart View for Office. For example, if you wanted to see what entities were affected by an allocation, you could open Smart View and add more context to your results, drill down for more detail, and pivot the data. See Downloading and Installing Smart View and Using Smart View to Import and Edit Application Metadata for information on how to download and use Smart View.

Using Data Forms with Rule Balancing

After you select a point of view and click **Refresh** on the **Rule Balancing** page, the default view displays the top level of all of the business dimensions. If your dimensions are not designed in such a way that aggregates data to the top of the dimensions, you can create a custom form and specify the appropriate member selections for each business dimension.

Related Topics:

- Designing Data Forms for Rule Balancing
- Best Practices for Designing Rule Balancing Data Forms
- Selecting a Data Form
- Analyzing or Editing a Data Form

Designing Data Forms for Rule Balancing

You can design rule balancing forms to control or filter the data that appears on the **Rule Balancing** page. For example, you may want to see the impact of rules on a certain portion of your model. A custom form allows you to filter the data that aggregates by rule to give you different ways to analyze the impacts of rules on different areas of your model.

> **Note**
>
> Enterprise Profitability and Cost Management includes a default data form, "Default", for rule balancing. You can use the default form as a template layout to customize as desired.

To design a custom data form for Rule Balancing:

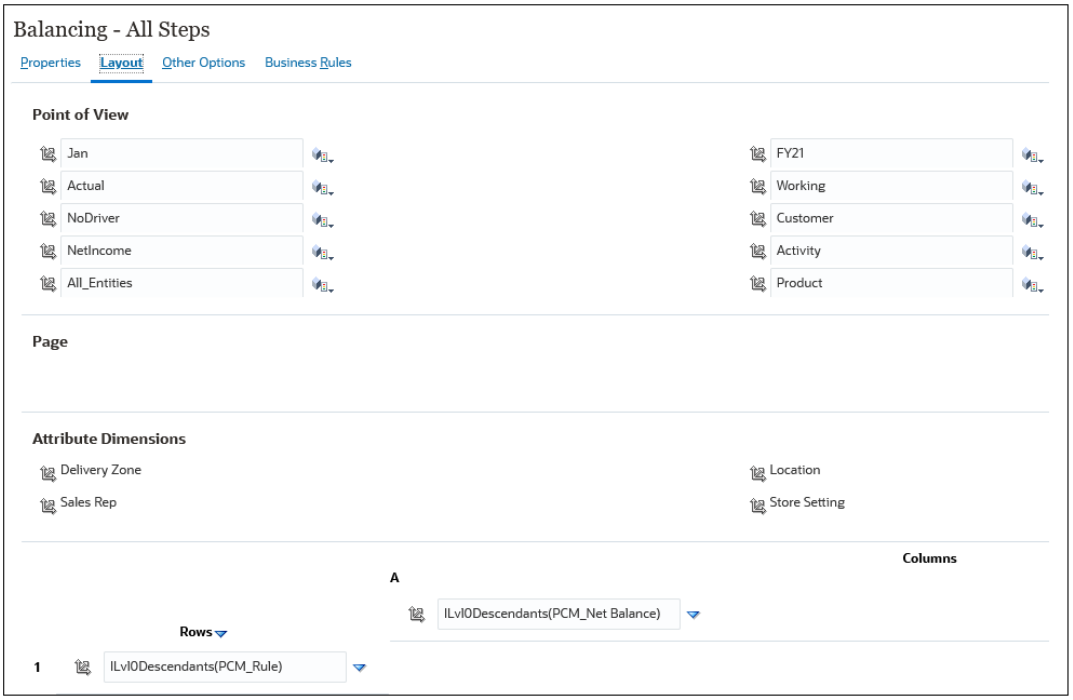
1. Click the **Navigator** icon , then under **Create and Manage**, click **Forms**.
2. Click (**Create**).
3. On the **Properties** tab, enter a name of up to 80 characters, and an optional description of up to 255 characters.
4. Select the **Cube** associated with the form.

Copyright © 2022, 2026, Oracle and/or its affiliates.

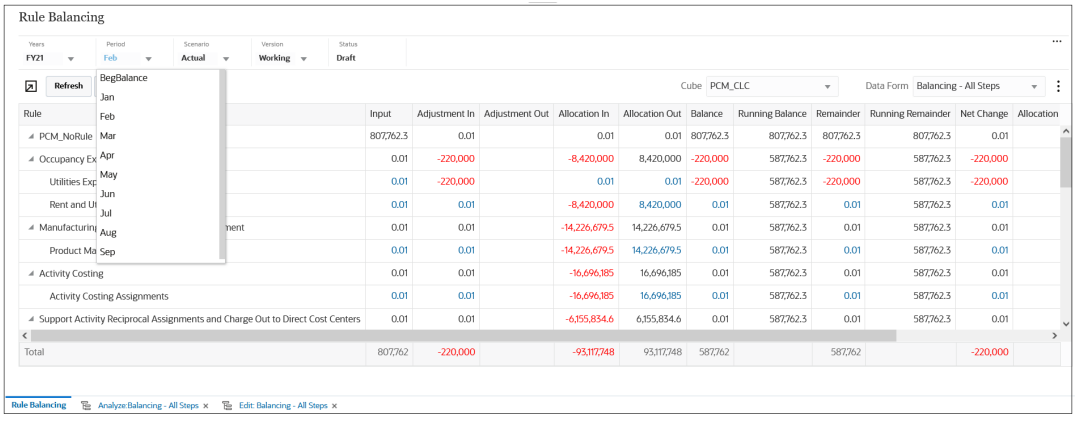
5. Define the form layout.

When you create data forms for rule balancing, you define specific values for point of view dimensions, business dimensions, attribute dimensions, and system dimensions. (See About Dimensions and Members in Enterprise Profitability and Cost Management.)

> **Note**
>
> Rule balancing does not support page-level dimensions in the form definition. As a result, any dimensions selected in the Page section of the form Layout tab are treated as POV dimensions, and any member selections for Page dimensions are ignored.

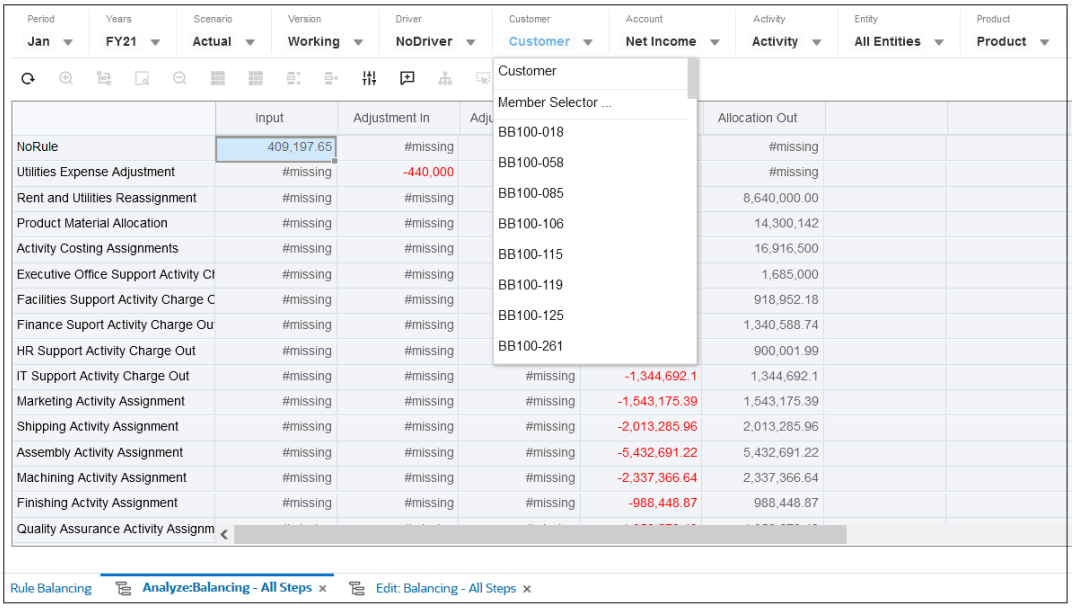


However, in the **Rule Balancing** grid, you can select different point of view values to dynamically override the values specified in the form design.



And on the **Analyze** page, you can select different values for all of the point of view and business dimensions.

Copyright © 2022, 2026, Oracle and/or its affiliates.

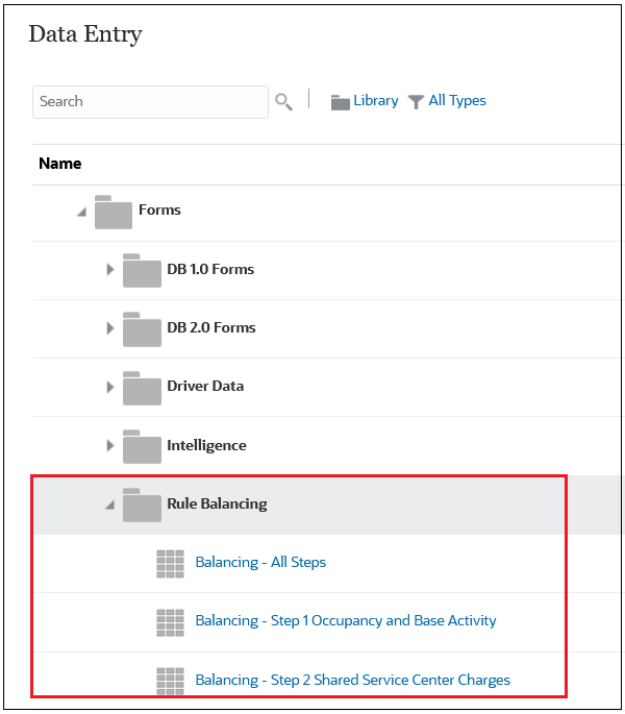


> **Note**
>
> For detailed information on creating data forms, see Creating Forms in *Administering Planning*.

Best Practices for Designing Rule Balancing Data Forms

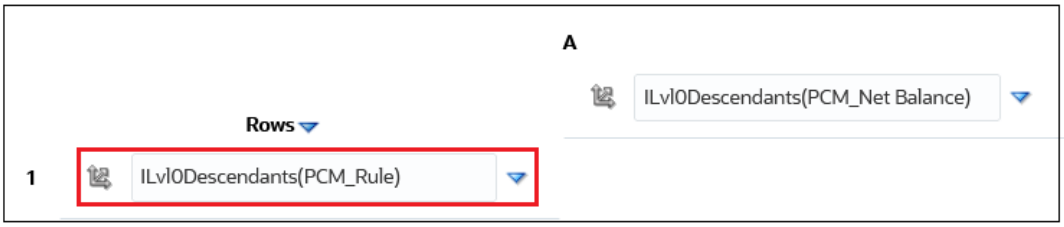
- On the **Data Entry** page, create a **Rule Balancing** folder under the **Forms** folder where you can store all your Rule Balancing forms. (To access the **Data Entry** page, click the **Data** card on the Home page.)
- Begin the names for all your Rule Balancing data forms with the word "Balancing" so they will be easier to find.

Copyright © 2022, 2026, Oracle and/or its affiliates.

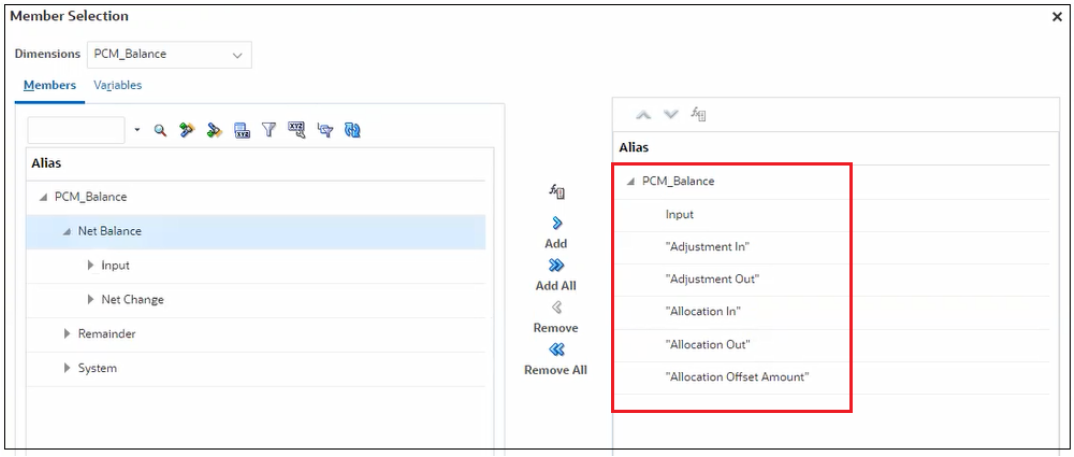


- Create a data form that includes all your rules and the following members as columns: Input, Adjustment In, Adjustment Out, Allocation In, Allocation Out, and Allocation Offset Amount. In this initial form, you want the rule balancing view to show as much data as possible.

  In a Rule Balancing grid, the rows are always rules. Define the data form *rows* by selecting the level 0 descendants of the PCM_Rule system dimension.



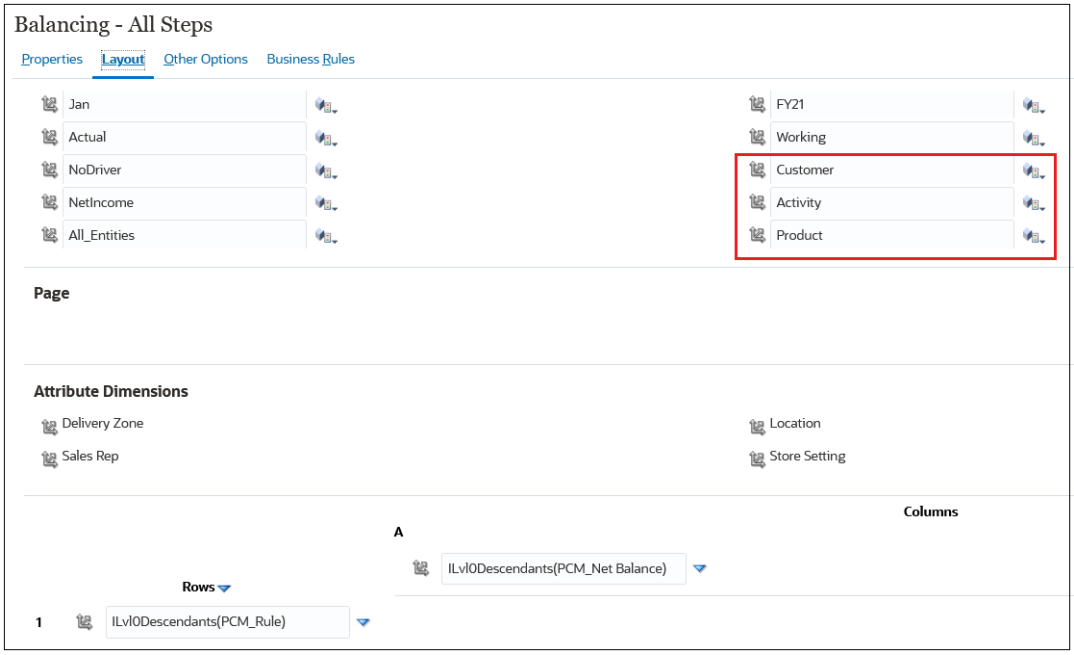
  In a Rule Balancing grid, the columns are always balance members. Define the data form *columns* by adding the following members to Net Balance in the the PCM_Balance dimension:



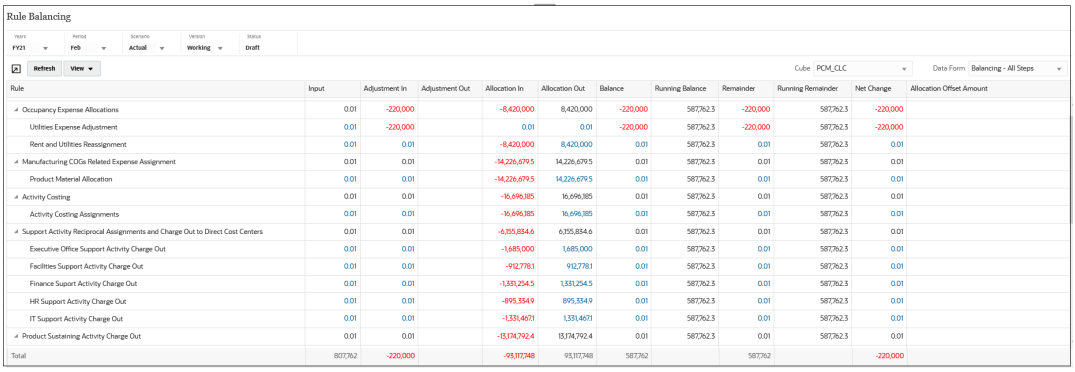
Copyright © 2022, 2026, Oracle and/or its affiliates.

Then select the level 0 descendants of the PCM_Net Balance members that you specified.

In the BksML50 sample application included with Enterprise Profitability and Cost Management, the data form called **Balancing - All Steps** is set up as follows. In this data form, we selected the top **Customer, Activity**, and **Product** dimensions so that the Rule Balancing report will display the data that rolls all the way up to the top of these dimensions.



The Rule Balancing report that is created as a result this data form appears as follows:

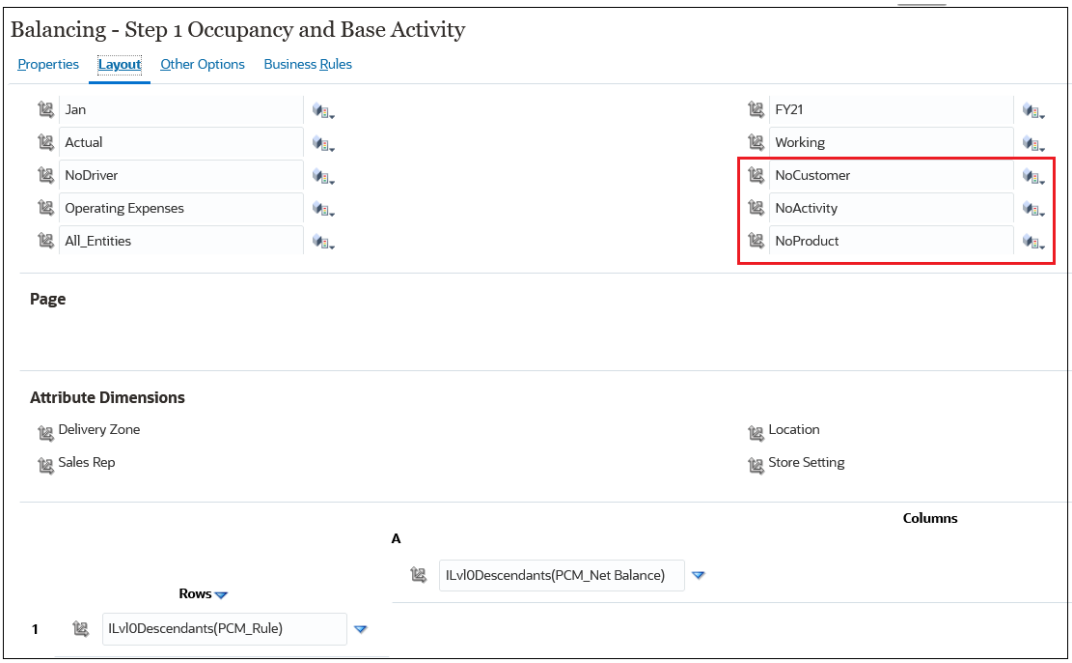


- Create additional data forms to limit the rules displayed in the Rule Balancing report so that you can focus on the rules that impact a specific part of your model.

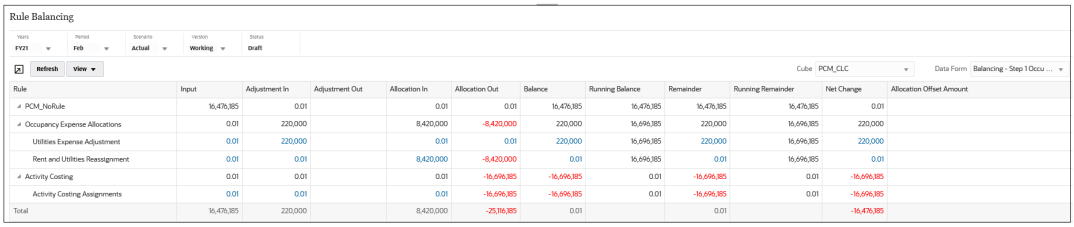
  In the BksML50 sample application, the **Balancing - Step 1 Occupancy and Base Activity** data form is set up to display only the rules related to occupancy expenses and base activity rules. In this data form, we limited the view to only those rules in the

Copyright © 2022, 2026, Oracle and/or its affiliates.

NoCustomer, **NoActivity**, and **NoProduct** members. You can limit your rule balancing view by changing the member selections to be more restrictive.



The Rule Balancing report that is created as a result this data form appears as follows:



Selecting a Data Form

If you have created one or more custom data forms to use with your Rule Balancing reports, you can select the desired data form and then click **Refresh** on the **Rule Balancing** page.

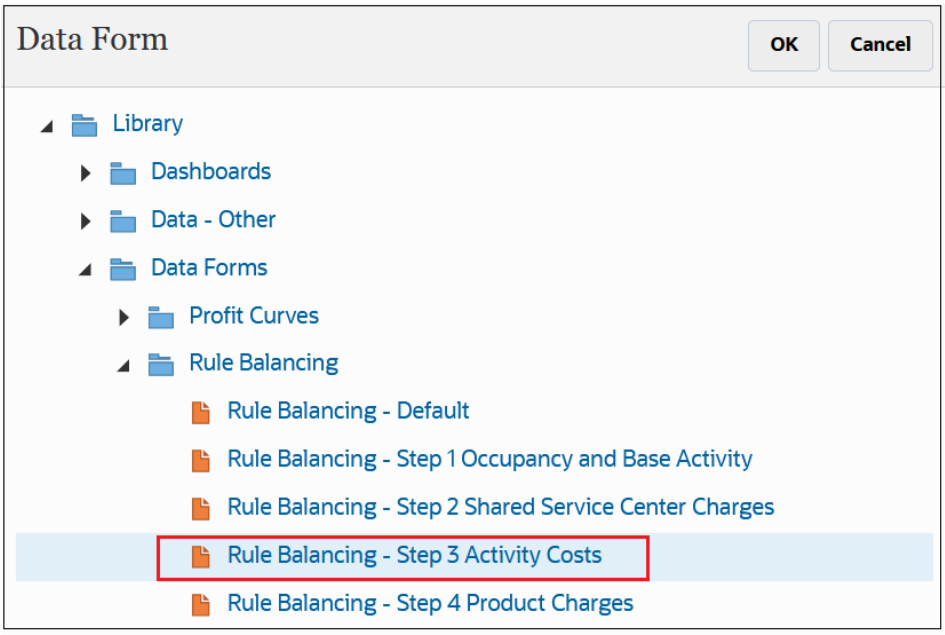
When you first access the **Rule Balancing** page, the most recently-selected data form is displayed. To select a different data form, click the existing data form to open the **Data Form** dialog box, and navigate to the desired form.

For example, assume you wanted to change the data form from "Balancing - All Steps" to "Balancing - Step 3 Activity Costs". To do this:

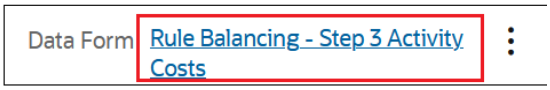
- From the **Rule Balancing** page, click the link for the existing "Balancing - All Steps" form.

- In the **Data Form** dialog box, navigate to the desired form, select the form, and then click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



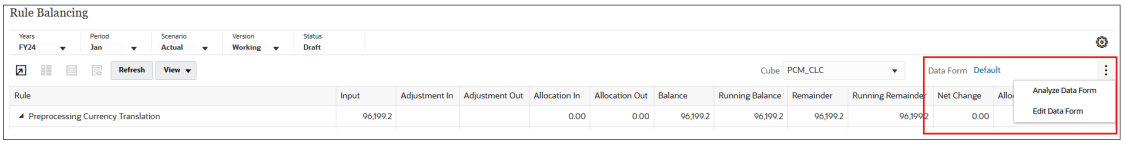
The form you selected is displayed on the **Rule Balancing** page.



Note that you can click ⋮ next to the data form to analyze or edit the form.

Analyzing or Editing a Data Form

To analyze or edit the data form used to generate the data on the **Rule Balancing** page, click ⋮ next to **Data Form** and select either **Analyze Data Form** or **Edit Data Form**.



Copyright © 2022, 2026, Oracle and/or its affiliates.

14

Using Profitability and Cost Management (PCM) Agent

Related Topics

- About Profitability and Cost Management (PCM) Agent
- Enabling Profitability and Cost Management (PCM) Agent
- Accessing Profitability and Cost Management (PCM) Agent
- Creating, Confirming, and Running Modeling and Analysis Commands
- Configuring PCM Agent for Specific Tasks

About Profitability and Cost Management (PCM) Agent

PCM Agent is a guided natural language tool that uses Generative AI (GenAI) to assist with workflow tasks by executing confirmed modeling commands.

You can use PCM Agent to:

- Create models
- Create rule sets
- Create rules
- Add members to multiple rules
- Replace members for multiple rules
- List rules
- Run analytic traces
- Copy a set of rules to a target rule set
- Copy rules to a model
- Enable and disable rules
- Calculate models
- List jobs
- Create jobs
- Delete jobs
- Copy a point of view
- Clear a point of view
- Delete a point of view

Copyright © 2022, 2026, Oracle and/or its affiliates.

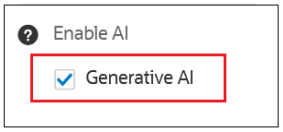
> **Note**
>
> - PCM Agent uses generative AI (GenAI). Output from GenAI may not always be factual, accurate, or appropriate for modeling commands. You are responsible for reviewing and using GenAI output at your discretion.
> - PCM Agent supports only the English language.
> - By choosing a model in the Designer screen and then selecting POV (Point of View) members in the Rule Balancing screen, you can set default values for both the model an the POV. This enhances confirmation response accuracy by minimizing the number of validation messages, thus providing a more efficient and streamlined process.
> - The GenAI feature is available only for OCI environments, and it is not yet available in all OCI regions. To view the regions where it is available, refer to Availability of Generative AI in the *Oracle Enterprise Performance Management Cloud Operations Guide*.

Enabling Profitability and Cost Management (PCM) Agent

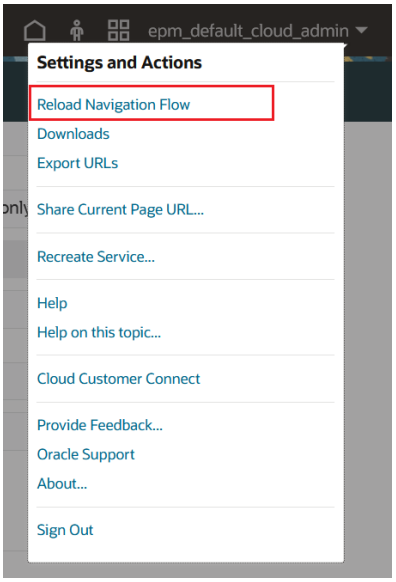
PCM Agent is disabled by default.

To enable PCM Agent:

1. From the Home page, select **Application**, and then **Settings**.
2. Under **Enable AI**, select **Generative AI**, and then click **Save**.

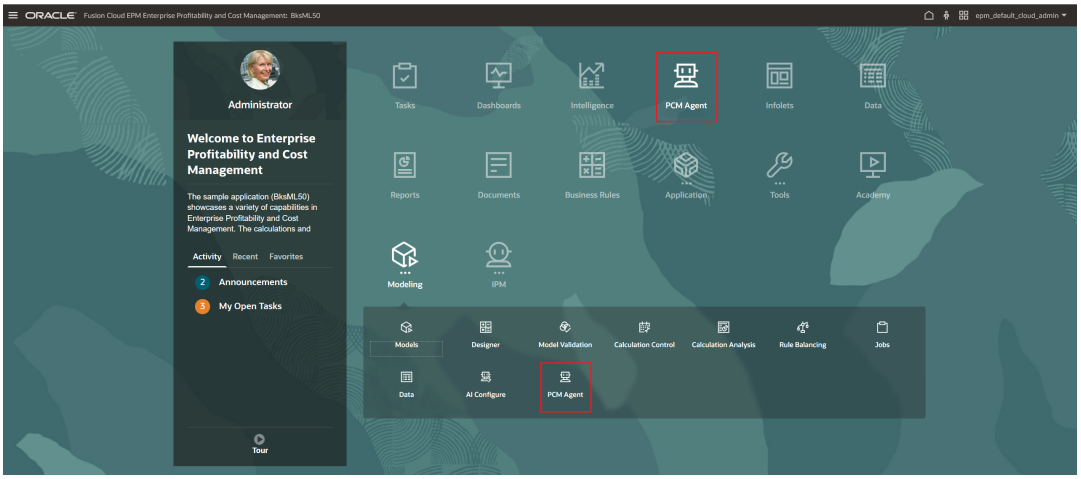


3. Click the drop-down menu at the top right of the screen, and select **Reload Navigation Flow**.



Copyright © 2022, 2026, Oracle and/or its affiliates.

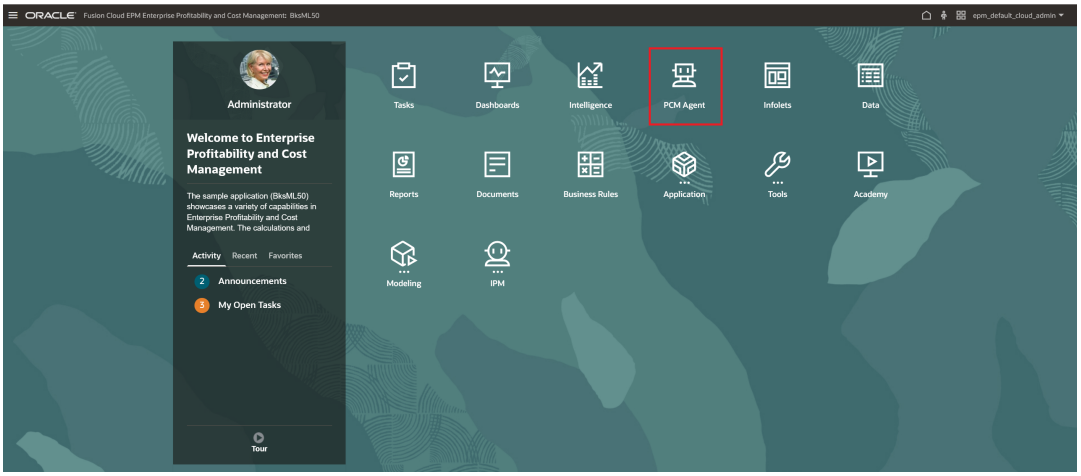
This enables the **PCM Agent** card on the Home page (and also in the Modeling cluster on the Home page).



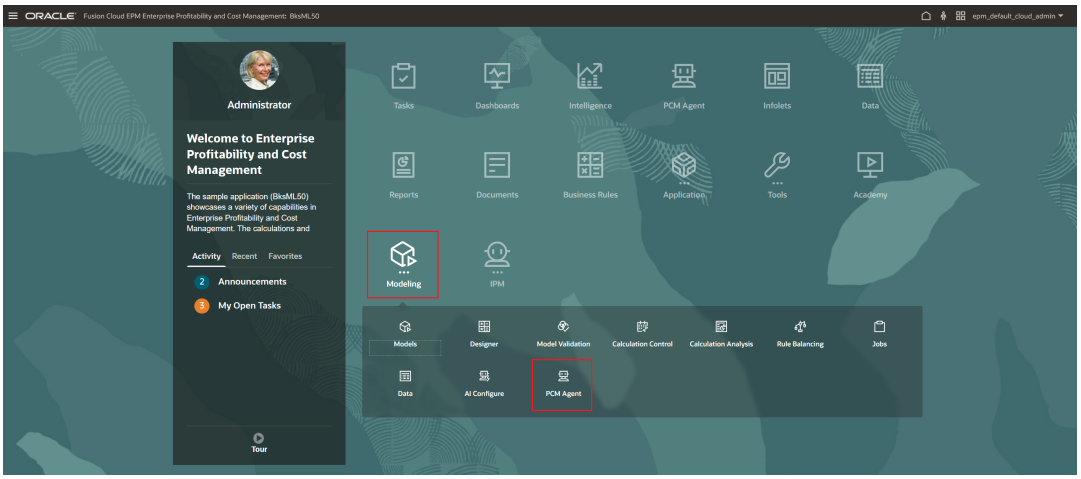
Accessing Profitability and Cost Management (PCM) Agent

You can access PCM Agent in the following ways:

- Click the **PCM Agent** card on the Home page.



- Click **Modeling** to open the Modeling cluster, and then click the **PCM Agent** card.



Copyright © 2022, 2026, Oracle and/or its affiliates.

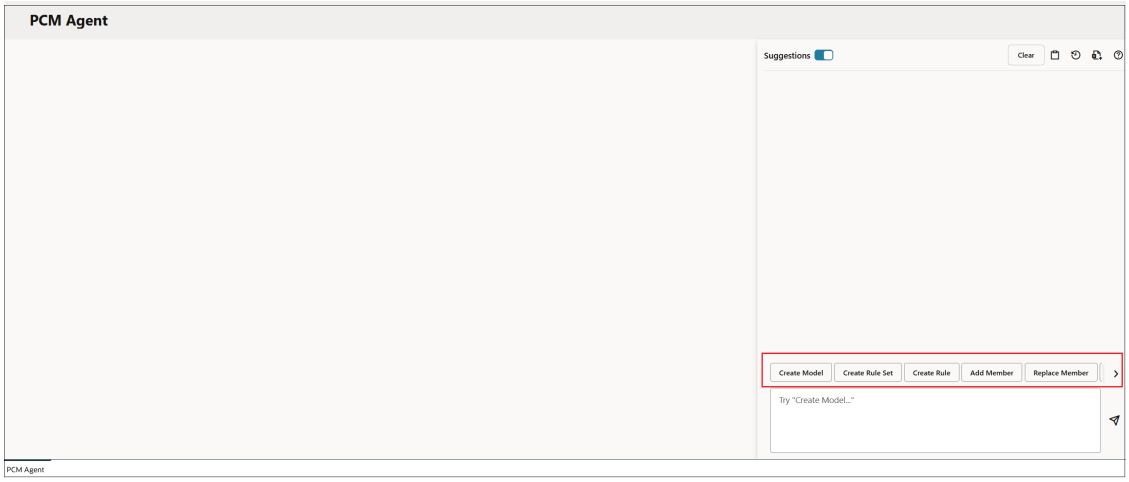
Creating, Confirming, and Running Modeling and Analysis Commands

Use the **PCM Agent** page to request assistance with workflow tasks by executing confirmed modeling commands.

When you first open the **PCM Agent** page, the supported actions are available as buttons on the bottom right of the page. Supported actions include:

- Create Model
- Create Rule Set
- Create Rule
- Add Member
- Replace Member
- List Rules
- Run Trace
- Copy Rules to Rule Set
- Copy Rules to Model
- Enable Rules
- Disable Rules
- Calculate Model

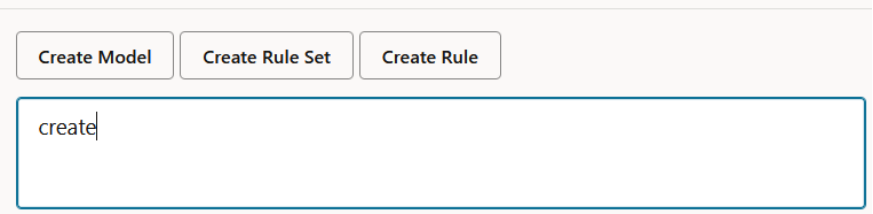
Figure 14-1 PCM Agent Page Showing the Actions Supported by PCM Agent



You can select an action by clicking the button corresponding to the action, or by typing text that describes the action. For example, to create a model, you can click Create Model, or you can type "'Create Model" in the text box.

You can narrow down the available actions by typing in the first word of the action. For example, if you type "create", only the buttons with "create" in the action are displayed:

Copyright © 2022, 2026, Oracle and/or its affiliates.



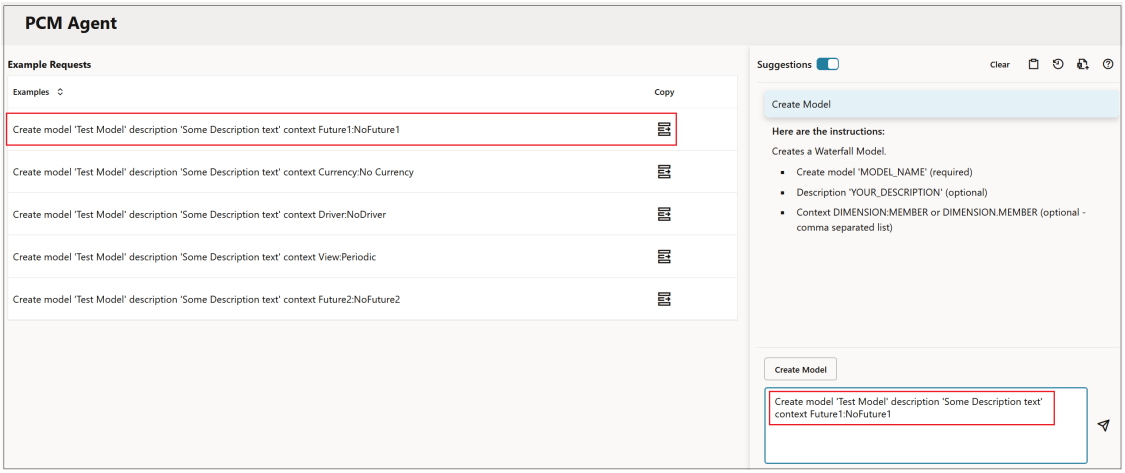
When you type text or click a button to select an action, the **PCM Agent** page displays the following information related to the action:

- **Suggestions**: Lists the required and optional parameters. (Move the slider next to Suggestions to enable or disable the display.)
- **Example Requests**: Provides examples of requests that you can make. The example requests include all of the required parameters and some or all of the optional parameters.

When you enter a request to complete an action, you can either type in the request or click (**Copy to Request**) next to one of the example requests to copy the request into the text box.

In the following example, the first example request to create a model is copied to the text box at the bottom of the screeen.

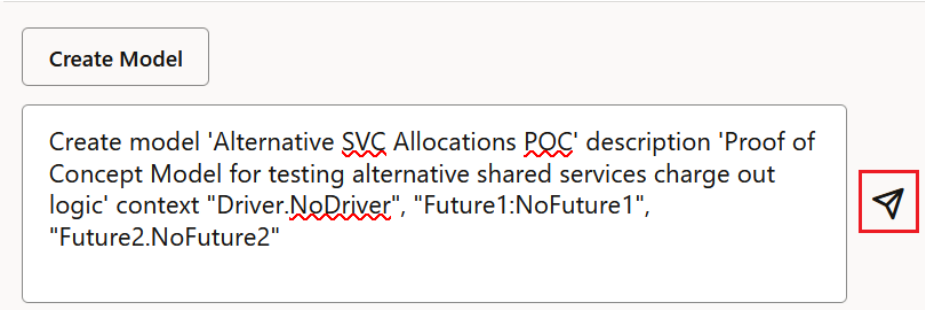
Figure 14-2 PCM Agent Page Displaying Example Requests and Suggestions for Creating a Model



If you copy an example request, replace the text in the quotation marks with actual parameter values.

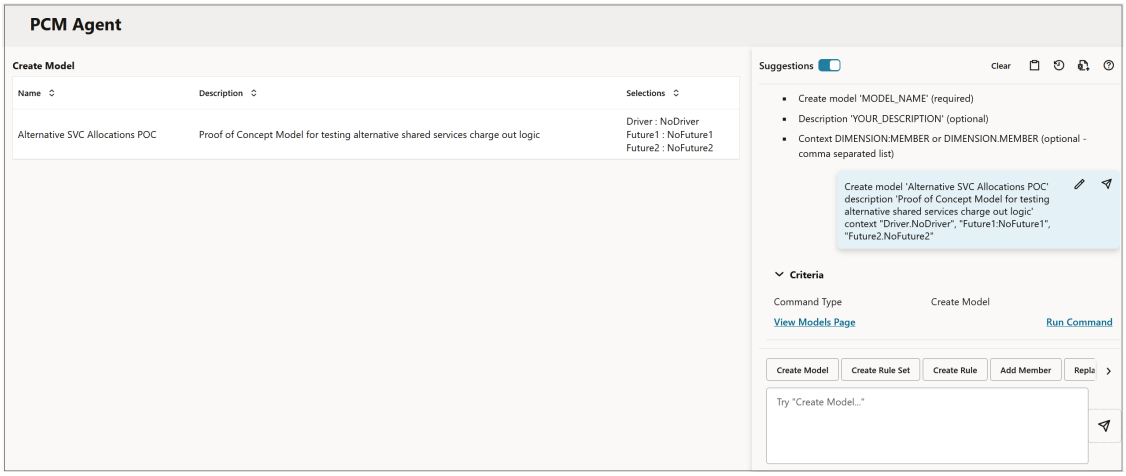
When you are satisfied with the request, click (**Send**).

Copyright © 2022, 2026, Oracle and/or its affiliates.

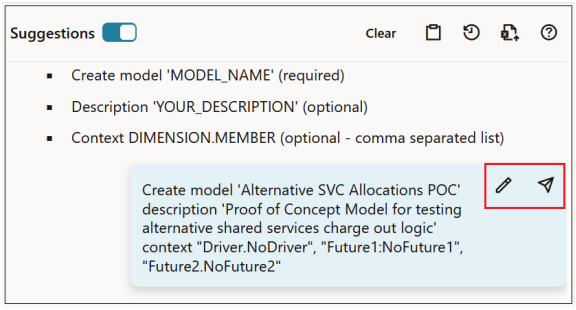


After you click (**Send**), the **PCM Agent** page is updated with the request information.

Figure 14-3 PCM Agent Page Displaying Request Information for Creating a Model

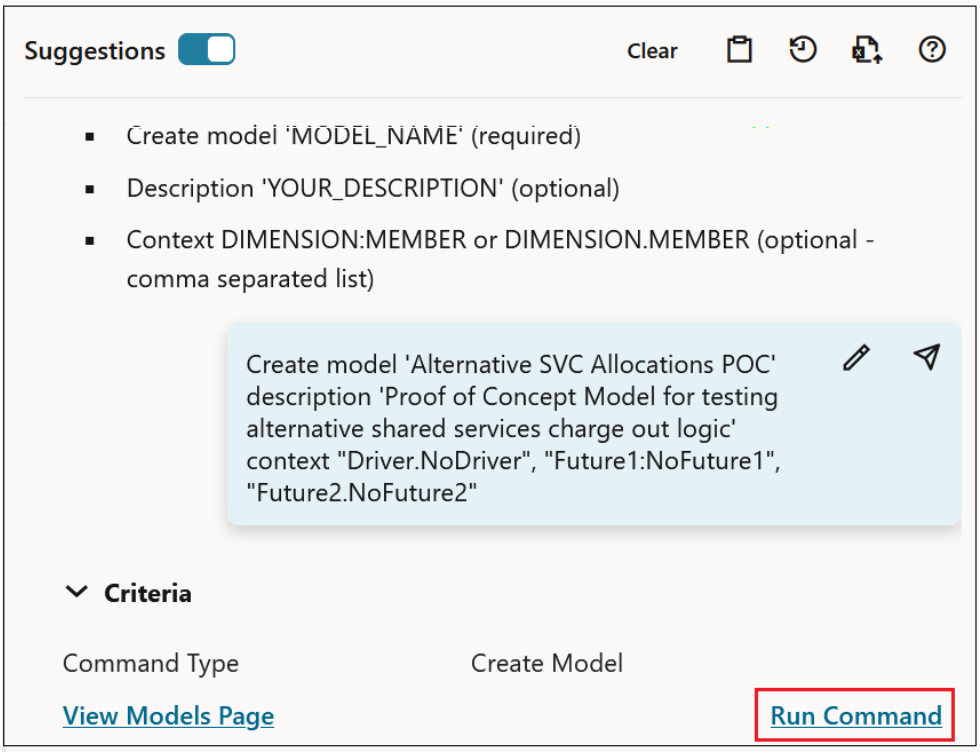


At this point, you can review the request. If you need to make any changes, click (**Refine**), and then click (**Resend**).



When you are satisfied with the request, click **Run Command**.

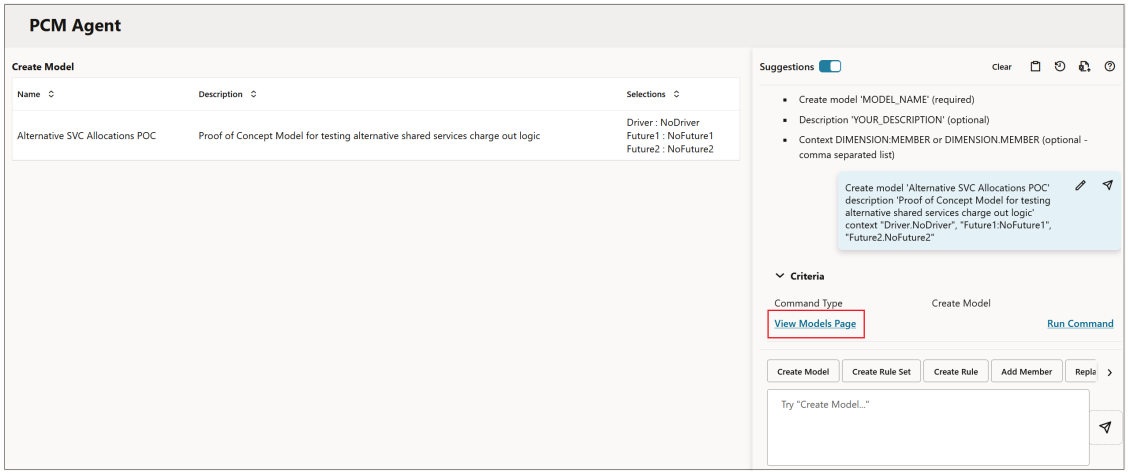
Copyright © 2022, 2026, Oracle and/or its affiliates.



You will get a message that the command ran successfully, or it will display any errors. You can then click the hyperlink corresponding to the action for which your request was designed.

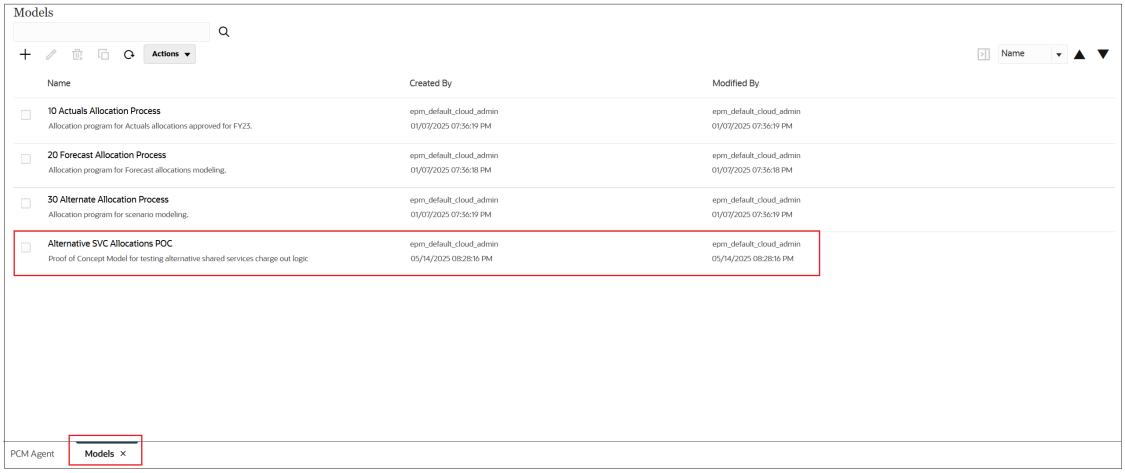
For example, if you enter a request to create a model, you can click the **View Models Page** hyperlink to view the model on the **Models** page.

Figure 14-4 Clicking View Models Page Opens the Models Page in a New Tab



Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 14-5 Models Page Opened in a New Tab Showing the Model Created with PCM Agent



To go back to the **PCM Agent** page, click the **PCM Agent** tab at the bottom of the page.

Other actions that you can perform on the **PCM Agent** page include:

- Click **Clear** to clear the request information under **Suggestions**.
- Click (**View Jobs)** to display the jobs created for the request.
- Click (**Examples**) to display additional example requests.
- Click (**Export to Excel**) to export a prompt history CSV file to Excel, where you can review all the requests you have created.

User Request Best Practices

The key point of failure in PCM Agent is a poorly formed user request. Requests in PCM Agent are more successful if these best practices are followed:

- Start the request with Action Verb + Artifact Type

  For example, Create Model, Run Calculation, List Rules
- Use single quotes around artifact names to avoid confusing AI with similar names of actions or artifact types
- Use the artifact type before the artifact name

  For example, Model ‘Alternative Svc Allocations POC’
- Separate POV members by a colon ':'

Many commands have default options you can rely on:

- Default properties are shown in the instructions in the PCM Agent interaction panel
- The POV defaults to latest used POV in the Rule Balancing page
- The model defaults to latest used model on the Designer page

Copyright © 2022, 2026, Oracle and/or its affiliates.

Using Smart Lookup When Creating a User Request

Using Smart Lookup when creating user requests improves productivity by removing the need to navigate to other screens to identify the names of artifacts to include within the request.

To use Smart Lookup, type in an artifact name followed by space, and then type in the @ symbol, optionally followed by one or more characters contained in the value you are looking for. This triggers a list of values for the artifact.

Results are returned with search criteria containing "Starts With" followed by "Contains". For example, assuming the following members for a "Product" dimension within a manufacturing client where the search is "all", the members would be returned as follows:

```
"All Packaging Products"
"All Products"
"All Tool Products"
"Ball-pen Hammer"
"Halligan Bar"
"Metallized Pouches"
"Pallet Wrap"
"Wallboard Saw"
```

When you select a value, it is placed at the location of the cursor surrounded by quotes.

The following table lists the searchable artifacts that you can enter in a user request.

Table 14-1 Searchable Artifacts in a User Request

Artifact	Keyword Trigger	Example Input	Example Choice	Example Result
Component	component	@S	Source	component Source
Dimension	dimension	@P	Product	dimension 'Product'
Member 1st Step	member	@P	Product	member 'Product.
Member 2nd Step	member	'Product.B	Bikes	member 'Product.Bikes'
Mode	mode or execution mode	@S	Serial	mode Serial
Model	model	@10	10 Actuals Allocation Process	model '10 Actuals Allocation Process'
Rule	rule	@act	Assembly Activity Assignment	rule 'Assembly Activity Assignment'
Rule Set	ruleset or rule set	@b	Customer Product Region Profitability Calculation	ruleset 'Customer Product Region Profitability Calculation'
Type of Rule	ruletype or rule type	@a	Allocation	ruletype Allocation

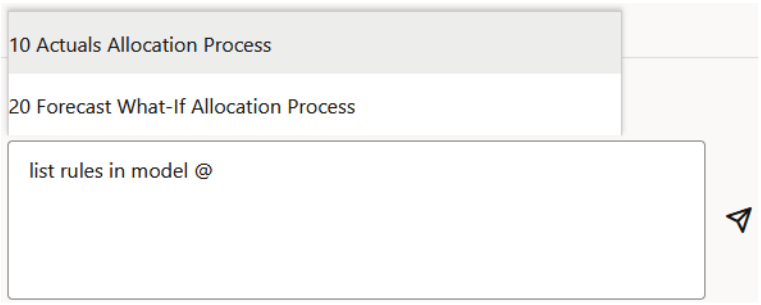
Copyright © 2022, 2026, Oracle and/or its affiliates.

Smart Lookup Examples

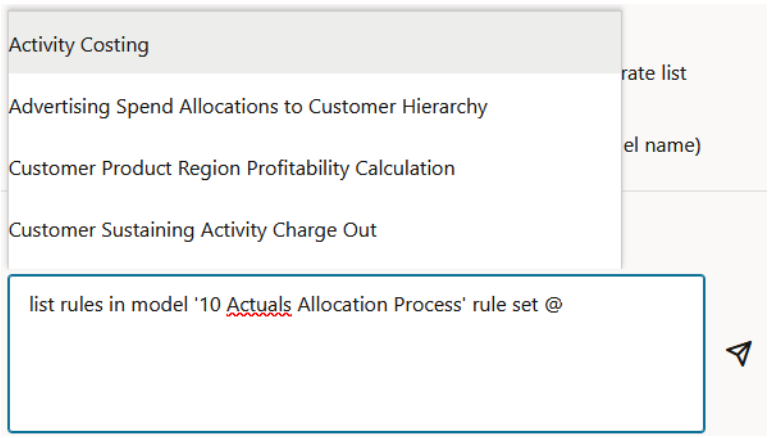
Example 1

The following example illustrates using Smart Lookup when creating a user request to list the rules in the "10 Actuals Allocation Process" model in the "Activity Costing" rule set with dimension/member "Entity.Machining" in component "Source".

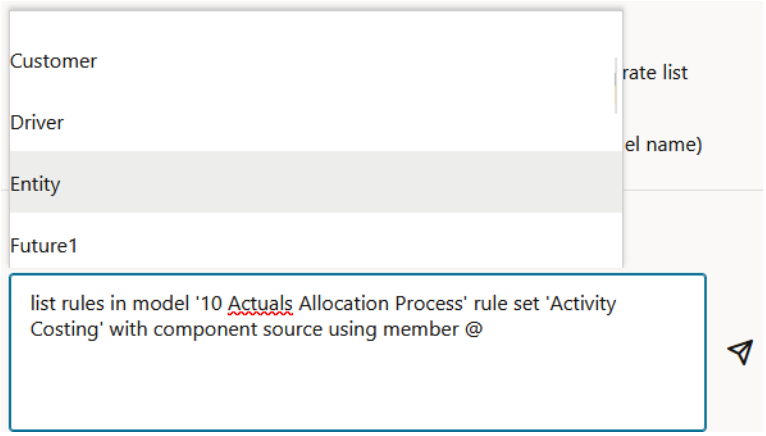
1. Begin by typing **list rules in model** @, and then select the **10 Actuals Allocation Process** model from the pop-up list of available models.



2. With the cursor at the end of the request, enter a space, type **rule set** @, and then select **Activity Costing** from the pop-up list of available rule sets.

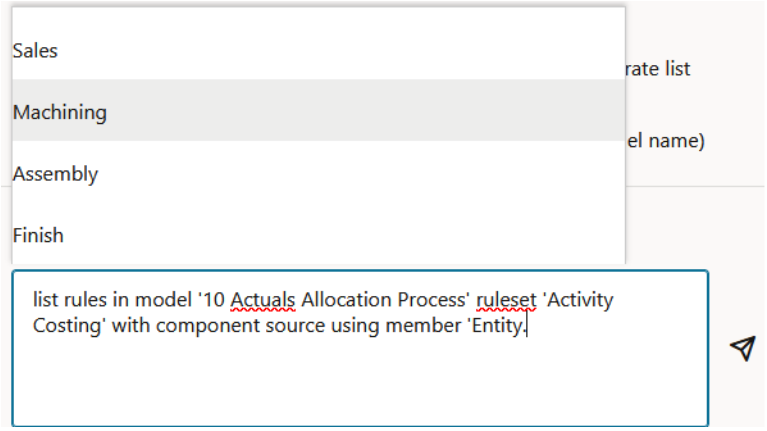


3. With the cursor at the end of the request, enter a space, type **with component source using member** @, and select **Entity**.



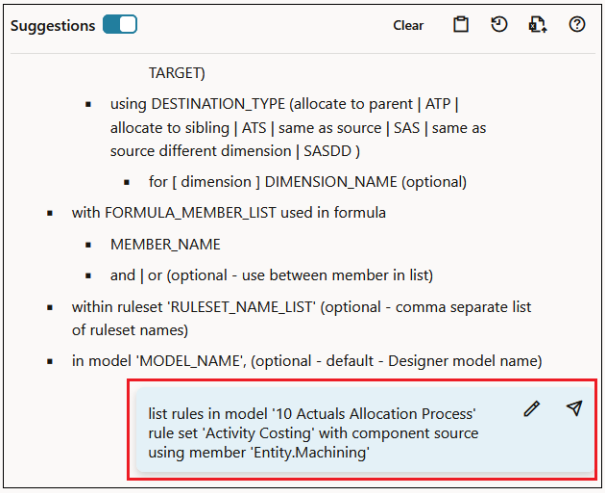
4. With the cursor after **Entity.**, select **Machining** from the list of available members.

Copyright © 2022, 2026, Oracle and/or its affiliates.



5. Click to submit the user request.

   The request displayed in the PCM Agent page as follows:



Example 2

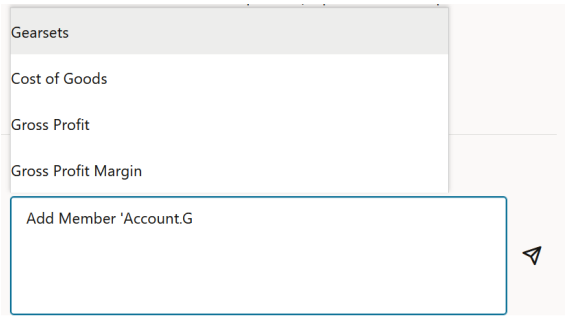
The following example illustrates using Smart Lookup when creating a user request to add the member "Account.Gearsets" in the "'Manufacturing COGs Related Expense Assignment" rule set.

1. Begin by typing **Add Member** @, and then select **Account** from the pop-up list.

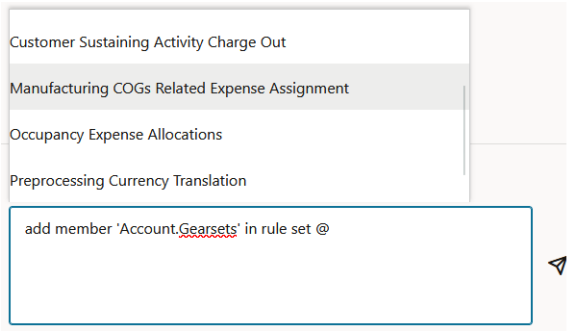
2. With cursor after **Account.**, type **G**.

   This brings up a list of all the members that have **G** in the name. Select **Gearsets** from the pop-up list.

Copyright © 2022, 2026, Oracle and/or its affiliates.

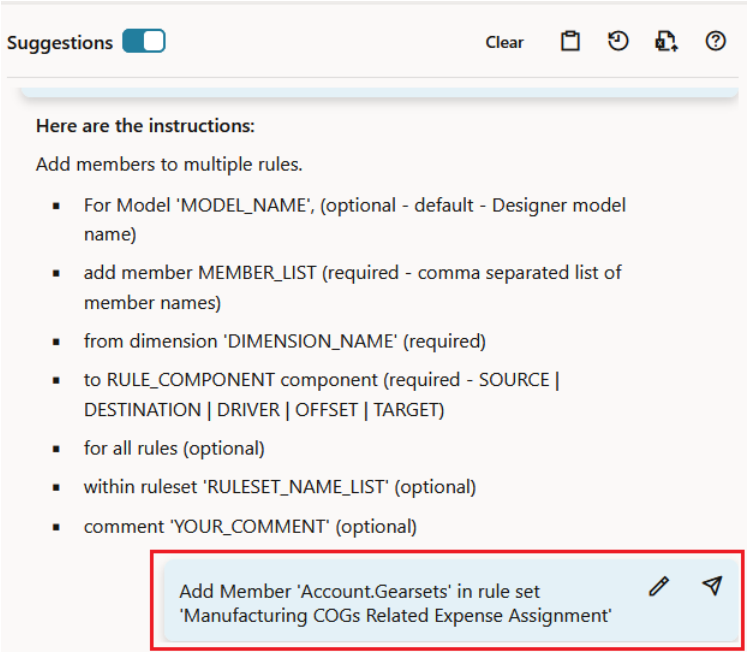


3. With the cursor at the end of the request, enter a space, and type **in rule set** @, and select **Manufacturing COGs Related Expense Assignment** from the pop-up list.



4. Click (**Send**), to submit the user request.

   The request is displayed in PCM Agent page as follows:



Filtering Rules When Creating a User Request

The following filtering options are available to help you narrow down the available rules when creating a user request:

- **Name Filter**: Match rule name with "Starts With", "Ends With", or "Contains" operators

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Member Filter**: Member matching within rule components
- **Formula Filter**: Match custom rules based on whether a member is present in the formula

You can also join filter clauses using AND/OR within the same filter type, and join compound phrases of multiple filter types using AND.

Filter Examples

Compound Name Filter

```
List rules with names starting with 'Utility' and ending with 'Allocation' within current model
```

Complex Member Filter

```
List rules with member 'AllProducts' for 'Product' dimension with filter 'Bikes' and 'Sales Rep' as 'Allison Jackson' in 'Destination' component
```

Compound Formula Filter

```
List rules with member 'member101' and 'member102' used in formula
```

Compound Name Filter with Member Filter

```
List all rules with names starting with 'Rent' and containing 'Utilities' and have same as source enabled on 'Account' dimension
```

Using Substitution Variables in User Requests

Enterprise Profitability and Cost Management supports substitution variables in following PCM Agent commands:

- Clear POV
- Copy POV
- Delete POV
- Calculate Model

When you use substitution variables, you can save the user request containing the substitution variable as a job to use later. These substitution variables are resolved for the POV at runtime, and the job executes accordingly.

For example, if you wanted to run a calculation job every month, you could use a substitution variable like &currPeriod and configure its value in the user interface. In subsequent months, you would not need to update the saved job's POV parameters, or any automation processes, as long as you update the substitution variable.

When using substitution variables, keep in mind the following:

- The substitution variable should start with &.
- If it does not start with &, it will be treated as a regular parameter.
- If the substitution variable does not exist or an invalid name is passed, the job fails with an error.

Sample user requests with substitution variables:

```
Calculate Model &Model povs &CurrYear::&CurrMonth::Actual::Working
```


Copyright © 2022, 2026, Oracle and/or its affiliates.

```
Copy pov source pov '&CurrYear::&SourceMonth::Actual::Working' destination pov
'&DestYear::&DestMonth::Actual::Working' pov delimiter '::' copy type 'INPUT'
create destination pov 'true' source cube 'PCM_CLC' destination cube 'PCM_REP'

clear point of view &DestYear:&DestMonth:Actual:Working cube PCM_CLC clear input
true clear allocated true clear adjustment true and save job as 'Clear FY16 Mar
POV'

Delete POV &CurrYear::&DelPovMonth::Actual::Working pov delimiter '::'
```

Note

To define substitution variables:

- From the Home page, select **Tools**, and then **Variables**.
- On the **Variables** page, click **Substitution Variables**.

Saving User Requests As a Job

You can create and save jobs in PCM Agent that store the selections made for the following:

- Calculate Model
- Copy POV
- Clear POV
- Delete POV

You can view, copy, delete, and migrate a saved job. The saved job has a unique name and can be selected in the Job Scheduler and Data Exchange Pipelines.

When you enter a Save Job command in the user request and click **Send**, a **Save as Job** link is displayed on the PCM Agent page.

Note

See the following topics for examples:

- User Request to Create a Job
- User Request to Copy a POV
- User Request to Clear a POV
- User Request to Delete a POV

User Request Examples

User requests fall into these main categories:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Create:** Create commands are ideal for quickly creating a model framework that illustrates the allocation waterfall within a model.

  See User Request to Create Rule Sets and User Request to Create Rules for examples.

- **Edit:** Edit commands assist in doing common bulk edits. For example:
  - Adding a common member to many rules (see User Request to a Add Member)
  - Replacing a member that has been deleted in many rules
  - Generating a filtered list of rules that can then be edited using mass edit functions (see User Request to List Rules)
  - Enabling/Disabling many rules
- **Run:** Run commands assist in running calculations or performing trace analysis

  See User Request to Calculate a Model and Configuring PCM Agent for Specific Tasks for examples.

- **Working with POVs:** Command to clear, copy, and delete POVs

  See User Request to Clear a POV, User Request to Copy a POV, and User Request to Delete a POV for examples.

User Request to Create Rule Sets

The following is an example of a user request to create six rule sets and add them to a model called "Alternative SVC Allocations". The request includes a comma-separated list of the rule sets to create.

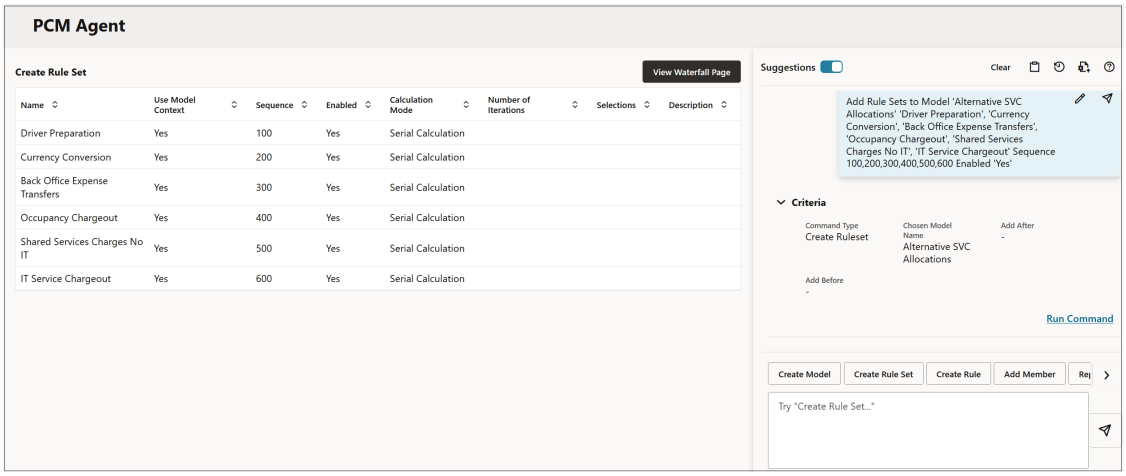
```
Add Rule Sets to Model 'Alternative SVC Allocations'
'Driver Preparation', 'Currency Conversion', 'Back Office Expense Transfers',
'Occupancy Chargeout', 'Shared Services Charges No
IT', 'IT Service Chargeout'
Sequence 100,200,300,400,500,600
Enabled 'Yes'
```

As this example illustrates, you can use PCM Agent to create multiple rule sets at one time, and to set the properties for the rule sets. You can either enter the properties in-line (for example, "Driver Preparation, Sequence 100", "Currency Conversion, Sequence 200, and so on)"; or, as shown here, you can put the properties on a separate row. The first property is assigned to the first rule set, the second property is assigned to the second rule set, and so on. Even though you are creating six rule sets, you only need to set "Enabled" to "Yes" one time.

After you enter the user request and click (**Send**), the **PCM Agent** page is updated with the request information.

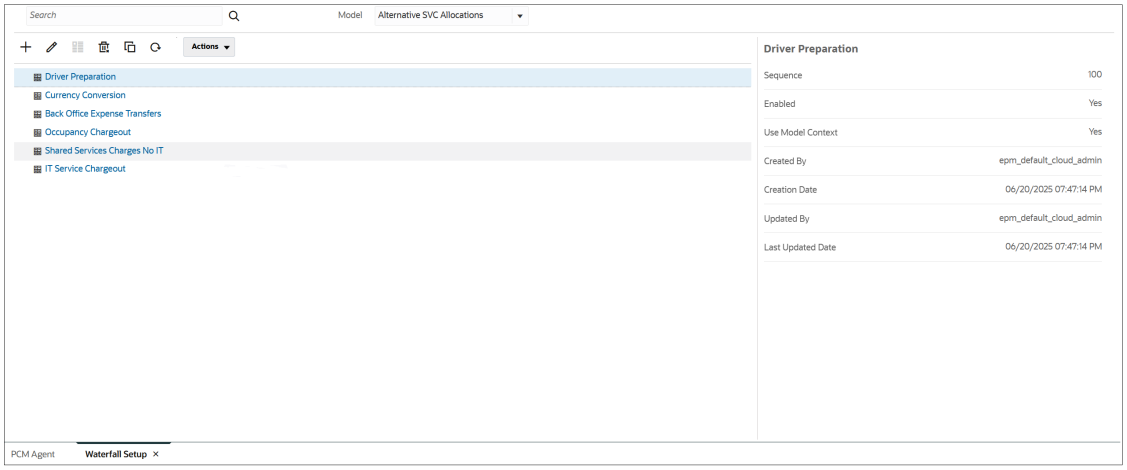
Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 14-6 Rule Sets Preview



Click **Run Command**, and then click **View Waterfall Page** to see the new rule sets in the "Alternative SVC Allocations" model.

Figure 14-7 Rule Sets Results



User Request to Create Rules

The following is an example of a user request to create 10 rules and add them to a model called "Alternative SVC Allocations" and a rule set called "IT Service Chargeout". The "Sequence" for the rules is set on one line, and "Enabled" is specified once.

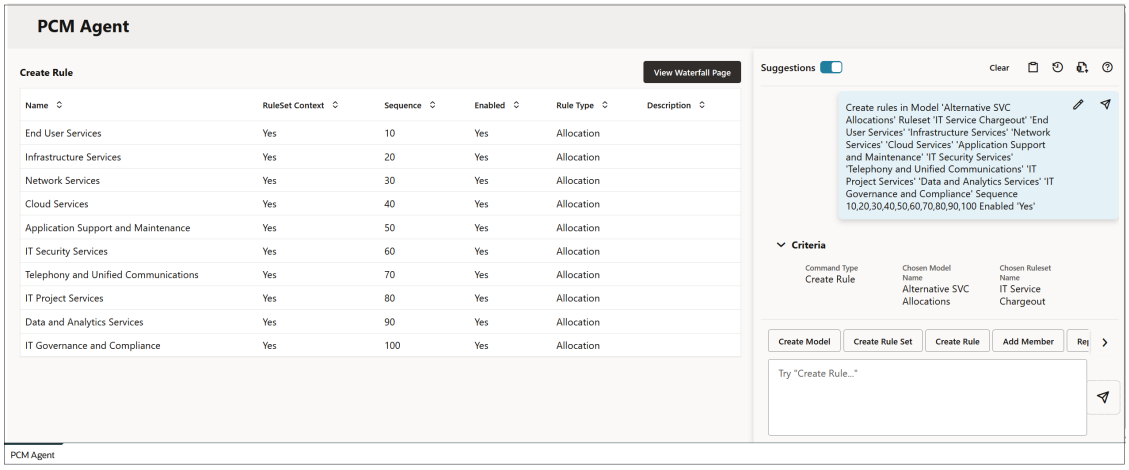
```
Create rules in Model 'Alternative SVC Allocations' Ruleset 'IT Service
Chargeout'
'End User Services'
'Infrastructure Services'
'Network Services'
'Cloud Services'
'Application Support and Maintenance'
'IT Security Services'
'Telephony and Unified Communications'
```


Copyright © 2022, 2026, Oracle and/or its affiliates.

```
'IT Project Services'
'Data and Analytics Services'
'IT Governance and Compliance'
Sequence 10,20,30,40,50,60,70,80,90,100
Enabled 'Yes'
```

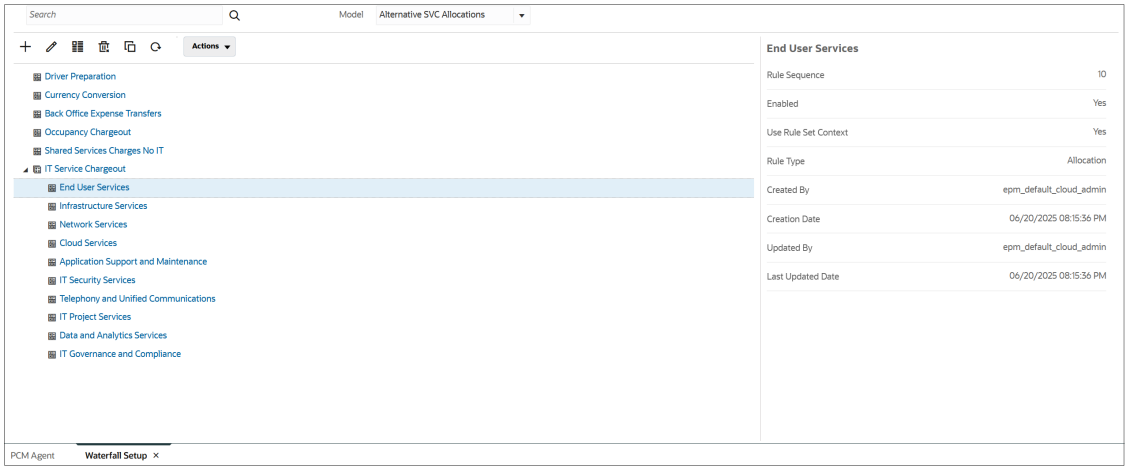
After you enter the user request and click (**Send**), the **PCM Agent** page is updated with the request information.

Figure 14-8 Rules Preview



Click **Run Command**, and then click **View Waterfall Page** to see the new rules,

Figure 14-9 Rules Result



User Request to Calculate a Model

The following are some examples of user requests to calculate a model. The first example accepts all the default calcuation options. The second example identifies specific calculation options. The third example specifies a POV range.

Copyright © 2022, 2026, Oracle and/or its affiliates.

User Request to Accept All Default Calculation Options

```
Calculate Model '10 Actuals Allocation Process' POV FY23:Jan:Actual:Working
```

User Request Identifying Specific Calculation Options

```
Calculate Model '10 Actuals Allocation Process' POV FY23:Jan:Actual:Working
Clear Calculated Data Execute Calculation Optimize for
Reporting false
```

User Requests Specifying a POV Range

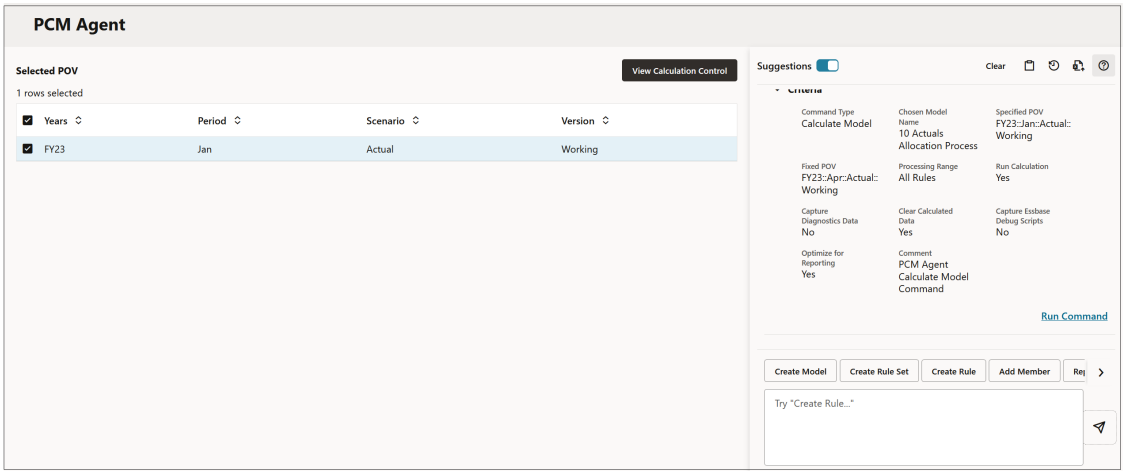
```
Calculate Model '10 Actuals Allocation Process' Fixed POV FY23:Actual:Working
POV Range Jan through Aug


Calculate Model '10 Actuals Allocation Process' Fixed POV Actual:Working POV
Range FY23:Jan through FY24:Dec
```

When creating a user request that specifies a POV range:

- `Fixed POV` and `POV Range` are required in the request
- Only the Year and Period POV dimensions can be used in a range
- POV members must be separated by a **:** (colon)
- Ranges must be in ascending order (prior fiscal years/months must be used before later fiscal years/months)
- You can only specify one range in a request

After you enter the user request and click (**Send**), the **PCM Agent** page is updated with the request information.

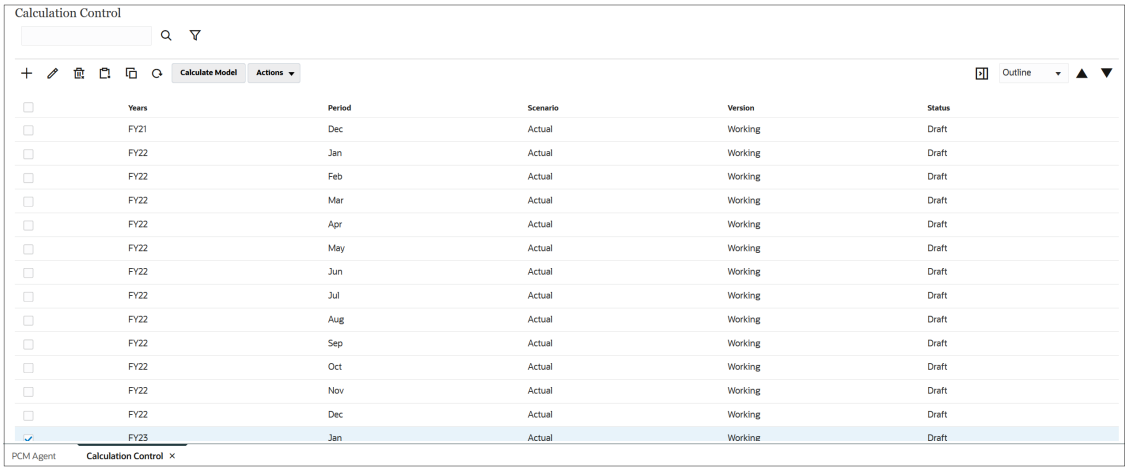
Figure 14-10 Calculate Preview



Click **Run Command**, and then click **View Calculation Control** to see the results of the calculation.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 14-11 Calculate Result



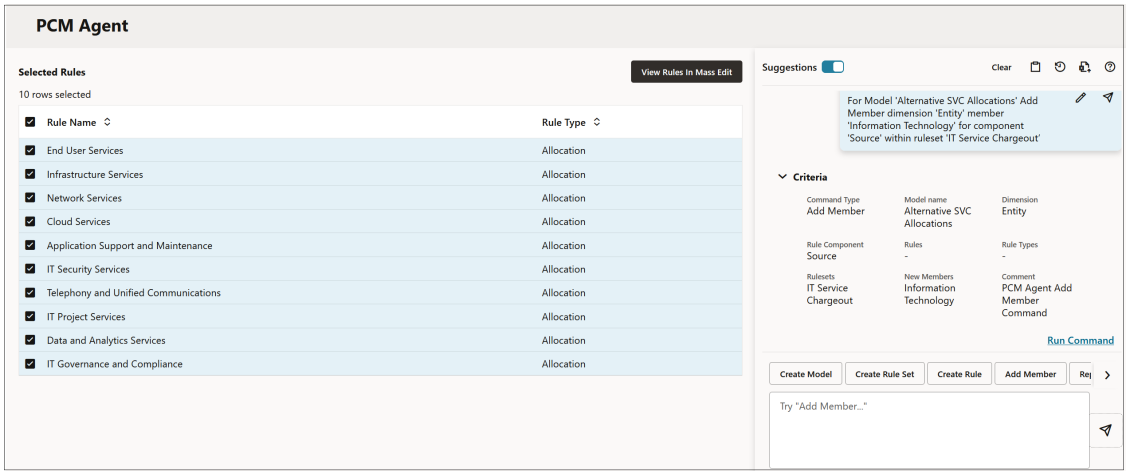
User Request to a Add Member

The following is an example of a user request to add a common member to several rules.

```
For Model 'Alternative SVC Allocations' Add Member dimension 'Entity' member
'Information Technology' for component 'Source'
within ruleset 'IT Service Chargeout'
```

After you enter the user request and click (**Send**), the **PCM Agent** page is updated with the request information.

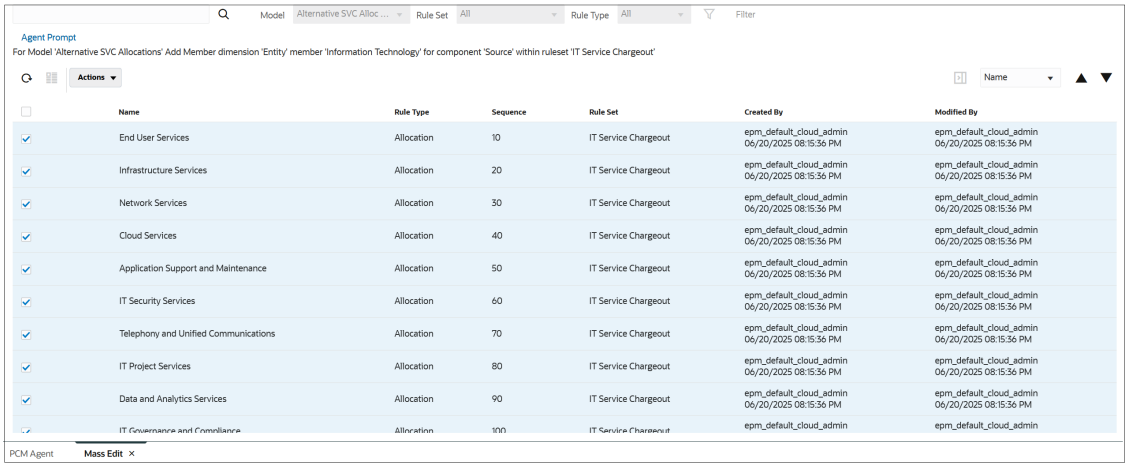
Figure 14-12 Add Member Preview



Click **Run Command**, and then click **View Rules in Mass Edit** to see the result of the request to add a member.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 14-13 Add Member Result



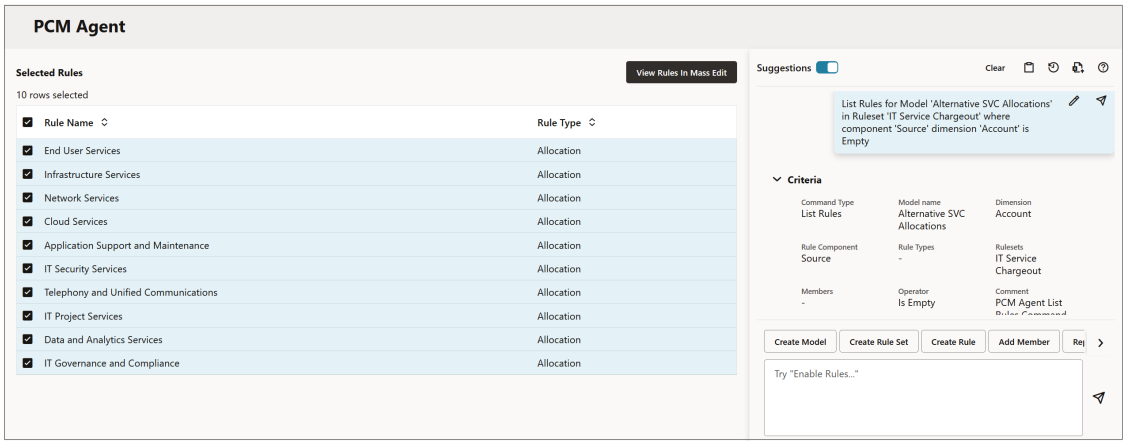
User Request to List Rules

The following is an example of a user request to generate a filtered list of rules that can then be edited using mass edit.

```
List Rules for Model 'Alternative SVC Allocations' in Ruleset 'IT Service
Chargeout' where component 'Source' dimension 'Account'
is Empty
```

After you enter the user request and click (**Send**), the **PCM Agent** page is updated with the request information.

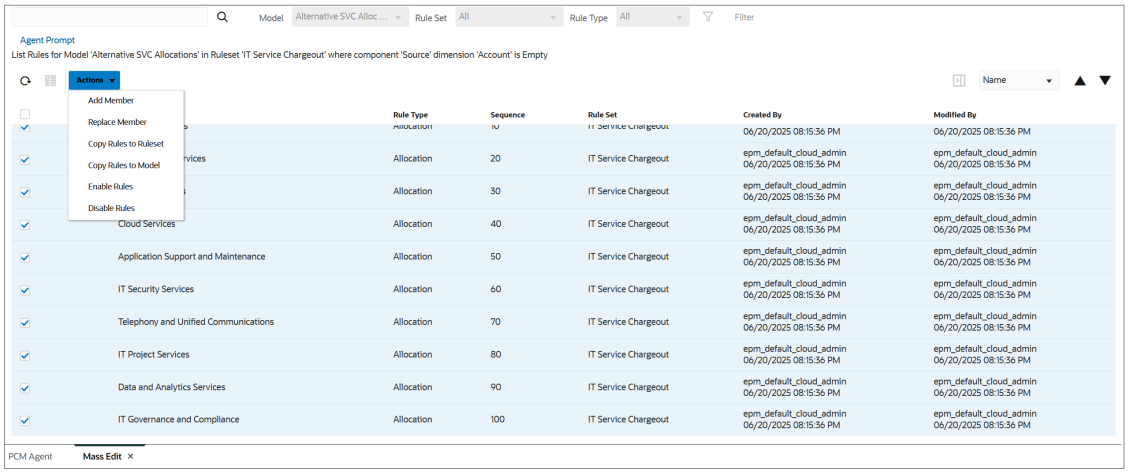
Figure 14-14 List Rules Preview



Click **View Rules in Mass Edit** to open the **Mass Edit** tab, and then click **Actions** to edit the rules.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 14-15 List Rules Result



User Request to Create a Job

The following are some examples of users requests to create a job.

```
Create job config 'April 2025 budget' for calculate model '20 Actuals
Allocation Process' povs FY25:Apr:Budget:Working pov delimiter ':' comment
'Calculating April 2025 budget'
```

```
Create job config 'My Allocation Job' for calculate model '10 Actuals
Allocation Process' povs FY25:Apr:Budget:Working pov delimiter ':' clear
Calculated data true execute calculations true capture debug scripts true
capture diagnostic data false optimize for reporting true
```

User Request to Copy a POV

The following are some examples of users requests to clear a POV. The first user request copies a POV using a job. The other user requests identify specific options to copy a POV.

User Request to Copy a POV Using a Job

```
Copy Pov Using Job 'Copy Input Job 1'
```

User Requests to Copy a POV Identifying Specific Options

```
copy input data from pov FY24:Jan:Actual:Working to FY24:Feb:Actual:Working
```

```
copy all the data from FY24:Jan:Actual:Working to a new pov
FY24::Feb::Actual::Working save job as 'Clear Input for FY24 Jan POV'
```

User Request to Clear a POV

The following are some examples of users requests to clear a POV. The first user request clears a POV using a job. The other user requests identify specific options to clear a POV.

Copyright © 2022, 2026, Oracle and/or its affiliates.

User Request to Clear a POV Using a Job

```
Clear Pov Using Job 'Clear FY24 Jan POV'
```

User Requests to Clear a POV Identifying Specific Options

```
clear pov FY24:Jan:Actual:Working clear allocated data


clear point of view FY24:Jan:Actual:Working cube PCM_CLC clear input true
clear allocated true clear adjustment true and save job as 'Clear FY24 Jan
POV'
```

User Request to Delete a POV

The following are some examples of users requests to delete a POV. The first user request deletes a POV using a job. The second user request identifies specific options to delete a POV.

User Request to Delete a POV Using a Job

```
Delete Pov Using Job 'Current POV Delete'
```

User Request to Delete a POV Identifying Specific Options

```
Delete point of view FY24:Jan:Actual:Working save job as 'Delete FY24 Jan POV'
```

Configuring PCM Agent for Specific Tasks

You can configure PCM Agent to help with specific workflow tasks. In this release, you can set up terms associated with existing trace data forms that PCM Agent will recognize when used in conjunction with a trace request.

One of the actions that you can perform with PCM Agent is to run a trace allocation. When you run a trace allocation, you must have a data form that contains the dimension values that you want to trace. Associating a term with a trace data form makes it so you do not need to know the precise form name when creating a trace request.

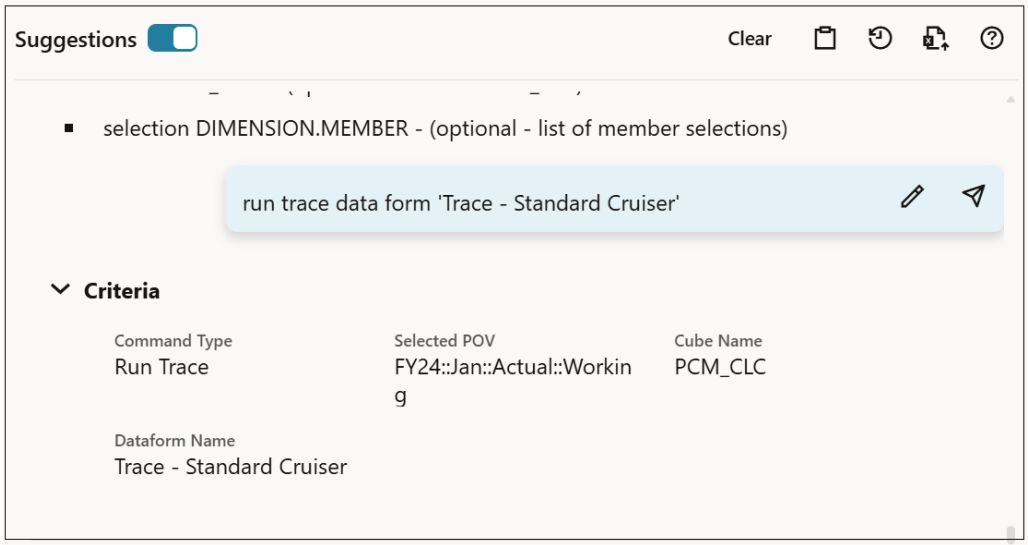
To create a term to associate with an existing trace data form:

1. From the Home page, select **Modeling**, and then **AI Configure**.
2. On the **PCM Agent - Configure** page, click + (**Create**).
3. Enter the following information:
   - **Term**: Enter a term to use in the PCM Agent request that will be associated with an existing trace data form.
   - **Type**: Select **Forms**.
   - **Form Name**: Enter the name of an existing trace data form.
   - **Selections**: Enter any overrides for the members selected in the form that defines the trace visualization.

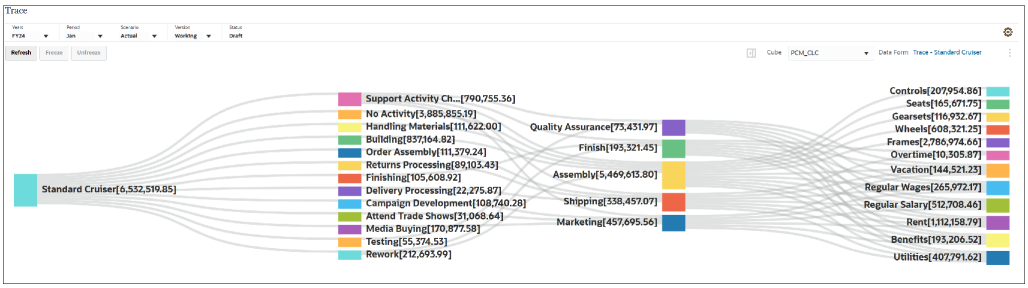
Copyright © 2022, 2026, Oracle and/or its affiliates.

A trace defines the paths of expense into a single product. Overriding a product member with another one allows one trace definition to be used for hundreds of products.

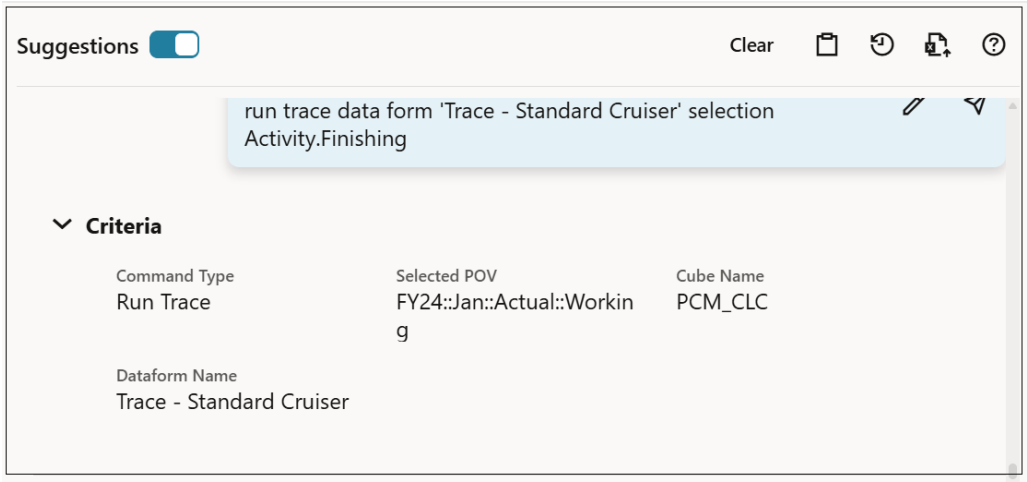
For example, using the data in the BksML50 sample application that is provided with Enterprise Profitability and Cost Management, assume you create a request to run a trace for a Standard Cruiser.



The resulting trace would display as:

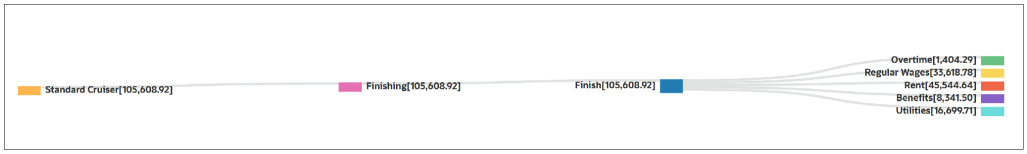


If you add a selection for "Activity.Finishing" in the request:



Then the trace is narrowed down to just the allocation in values related to the Finishing activity for the Standard Cruiser.

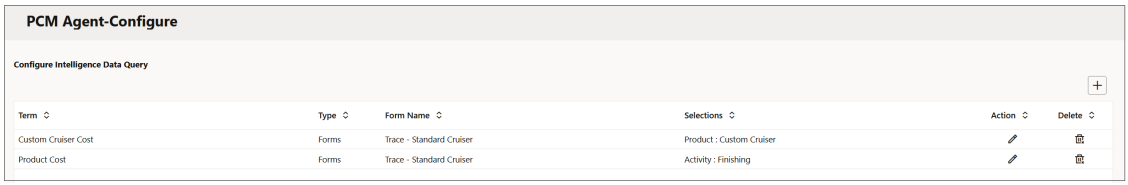
Copyright © 2022, 2026, Oracle and/or its affiliates.



4. Under **Action**, click ☑ (**Save**).

   A message is displayed that the configuration has been updated succesfully.

In the following example, two terms ("Custom Cruise Cost" and "Product Cost)" have been created that are associated with a data form called "Trace - Standard Cruiser". If either of these terms are used in a PCM Agent request, the request will associate that term with the existing "Trace - Standard Cruiser" data form.



> **Note**
>
> For information on tracing allocations, see About Trace, Designing Data Forms for Trace, and Viewing Allocation Trace Results. For information how how to access the sample application., see Creating the Sample Application

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part IV
Analyzing Data

Related Topics

- Working with Data in Forms
- Working with Reports
- Designing and Working with Dashboards
- Viewing Key Information with Infolets
- Configuring and Working with IPM
- Using Ad Hoc for Data Entry and Analysis
- Working with Profit Curves
- Tracing Allocations
- Using Smart View to Import and Edit Application Metadata

Video

Your Goal	Watch This Video
Get an introduction to all the ways you can analyze data from Enterprise Profitability and Cost Management.	Analyzing Data in Enterprise Profitability and Cost Management

Copyright © 2022, 2026, Oracle and/or its affiliates.

15

Working with Data in Forms

Related Topics:

- You Enter Data in Forms
- About Forms Versions
- Viewing Forms
- Exporting Data to Microsoft Excel
- Working in Forms 1.0
- Working in Forms 2.0
- Managing Data Validation and Format Rules in Forms

You Enter Data in Forms

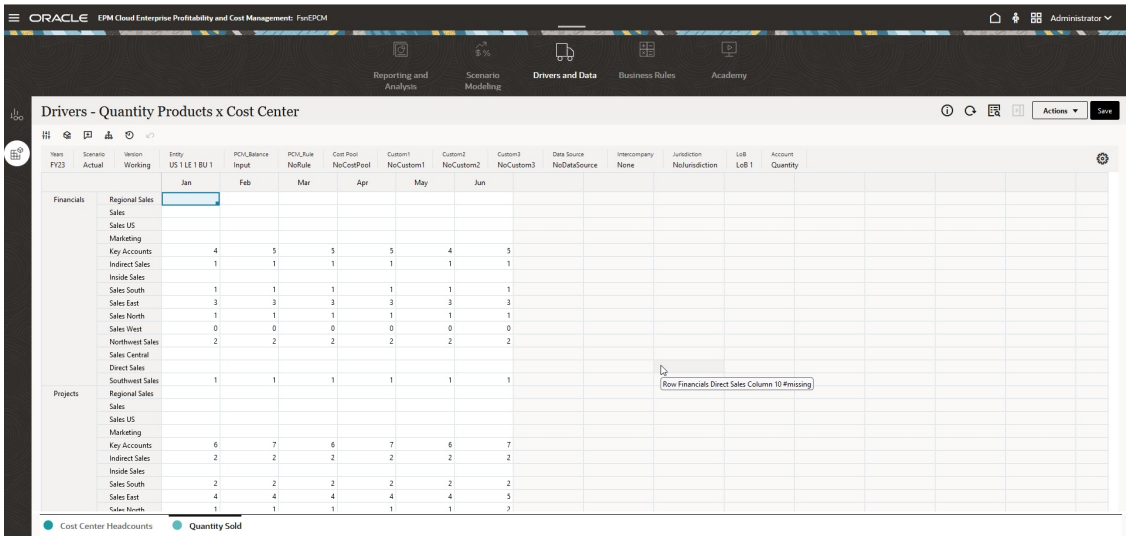
Administrators design *forms* as containers in which you enter, update, analyze, print, and report on data.

You enter data into the cells in structured forms, and each form has a special purpose. For example, the administrator may design a form solely for creating a revenue plan for your product line or for comparing last year's actual expenses against this year's projected expenses.

With the forms' objective in mind, the administrator sets up the form with certain dimensions and members, reflected in the row and column headings. An example of a dimension is Year, and its members may include FY21, FY22, and FY23. Cells display data for the selected members.

Forms 2.0 Enterprise Profitability and Cost Management Example

The following example shows a 2.0 version of a Enterprise Profitability and Cost Management form:



Copyright © 2022, 2026, Oracle and/or its affiliates.

About Forms Versions

Forms are currently available in two versions:

- **Forms 1.0**: Uses Slick Grid with Oracle ADF Fuse components
- **Forms 2.0**: Uses Slick Grid with Oracle JET components

Both forms versions currently coexist in the same business process at the same time. Forms 1.0 is the default version for existing applications. Forms 1.0 behavior remains unchanged. You can still create and update these forms in your business process as you did before. All newly created and recreated applications will default to Forms 2.0.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Forms 1.0. Users on new environments created on or after October 3, 2025 will see all their forms rendered exclusively in Forms 2.0, with no option in application settings to switch the **Forms Version** to Forms 1.0. Existing environment users will also see their forms rendered in Forms 2.0 by default. However, users on environments created before October 3, 2025 will have the option to switch back to Forms 1.0 using the **Forms Version** application setting, if needed.

Forms 2.0 Features

Forms 2.0 uses the existing Forms 1.0 runtime functionality and enhances it using Slick Grid with Oracle JET components for faster rendering, sophistication, ease of use, and consistency.

Forms 2.0 features include:

- Major improvements in usability and ease of use
- Better scalability and enhanced performance
- Runtime updates only; only runtime forms have adopted the new technology and user interface
- Standardized **Actions** menu for form actions
- New **POV Settings** menu
- New quick toolbar for performing certain common form grid actions
- Performance improvements for grids
- Improved comments updates, including multi-cell selection and comments entry
- Comments and Attachments can be added using a single option
- Seamless vertical or horizontal scrolling
- Better screen space utilization
- Faster cell to cell navigation
- Quick scrolling across data grids
- Forms and POV drop downs use a new sophisticated, hierarchical member selector with the ability to search

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Reduced popups
- Clean new icons and dialogs
- Built in sophisticated line item detail (replacing supporting detail)
- Wizard-based business rule runtime prompts; runtime prompts display as drawer from the right side
- Calc on the fly on the grid
- Stateless protocol for data retrieval
- Quicker refresh time on large grids
- Improved consistency between Web forms and Oracle Smart View for Office
- Improvements in web ad hoc
- Ability to **Save As** with a new form name
- Edit opens the Forms Designer in a new dynamic tab

Setting the Forms Version

If you've been using Forms 1.0, there's no migration needed to use Forms 2.0. You can easily switch between the two versions using an application setting. The forms will be rendered in the runtime environment to whichever version you specify. No form redesign is necessary.

To specify a forms version:

1. Click **Application**, and then click **Settings**.
2. Under **Other Options**, find the **Forms Version** setting.
3. Select a forms version. The default **Forms Version** for existing applications is **Forms 1.0**. All newly created and recreated applications will default to Forms 2.0.

Considerations for Forms 2.0

- Forms 2.0 is not available in Task Manager. Task Manager will default to Forms 1.0 even when the **Forms Version** application setting is set to Forms 2.0.
- The Autosave option is not supported in Forms 2.0. Instead, perform calc on the fly to see your changes without having to submit changes to the database and refresh.
- In Forms 2.0, when **Run After Save** is enabled in a business rule, if the rule prompt is canceled, data is not saved in the form. In Forms 1.0, when **Run After Save** is enabled in a business rule, saving the form first commits the data, and then the rule prompt appears. If the user cancels the prompt, the data remains saved in the form.
- Forms 2.0 runtime filtering supports column filtering. Runtime filtering on rows will be supported in a future update of Forms 2.0.
- Service Administrators can define format rules for forms at design time, then users can apply the format rules to Forms 2.0 forms at runtime using styles. See "Applying Format Rules to Forms at Runtime" in the Administering guide for your business process.
- The Planning Modules Configuration Wizard is not supported in Forms 2.0.
- All future web form enhancements will be in Forms 2.0.

Viewing Forms

Each form represents a subset of data in your business process.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To open a form:

1. On the Home page, click **Data**.
2. To filter forms by type, click the **Type** filter chip in the **Search** box. Depending on the type of form you want to use, click the appropriate option:
   - **Form**
   - **Ad Hoc**: Ad hoc grids aren't confined by the form's design.
   - **Smart Form**: A type of data form, created in Oracle Smart View for Office and based on ad hoc grids.
3. Toggle on the **Hide Empty Folders** option to hide folders that don't contain relevant artifacts for the current context. When the toggle is off, all folders are visible in the list region, including empty ones. When the toggle is on, only folders containing relevant artifacts for the **Data** artifact page are displayed.

   By default the **Hide Empty Folders** option is off, and will reset to off each time you start a new session. The state of the toggle is retained by the page during the session and is page-specific. Navigating away from the **Data** page and returning preserves the toggle state until the tab is closed or until you log out.

   > **Note**
   >
   > - If you perform a **Search** and the **Hide Empty Folders** toggle is off, all matching folders and artifacts are displayed. If the toggle is on, only folders containing matching artifacts are displayed. Empty folders are hidden.
   > - If you perform a **Move to** action for an artifact or a folder, all folders are displayed and are selectable in the **Move** interface, regardless of the toggle state.
   > - If you create a folder, keep in mind that newly created folders are empty and therefore will not display if the **Hide Empty Folders** toggle is on. New folders become visible after content is added to them, or if the toggle is switched off.

4. Click the name of a folder to expand the folder the form is in, then click the name of the form to open it.

To open a form in Smart View, see Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide*.

> **Note**
>
> A form might be prevented from opening if it includes undefined user variables. If you're prevented from opening a form, you'll see a message prompting you to select members for the user variables that were set up by your administrator:
>
> ```
> Before you can open this form, you must select a member for each User
> Variable. To select members for missing user variables: Click here
> ```
>
> When you click the link in the message, the **User Preferences** page opens in a new dynamic tab and the user variables with missing member values are displayed first. Select a member for each undefined user variable. After selecting an initial value, you can change it later in the form or in preferences.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Data Page Actions

There are three types of Actions you can perform on the **Data** page:

- Global Actions
- Folder Actions
- Form Actions

Global Actions

At the top of the **Data** page there is a global Actions menu. Clicking ••• (More Actions) at the top of the page displays the following actions:

- **Create Ad Hoc**: Creates an ad hoc grid.
- **Create Form**: Creates a new form and places it in the folder that is currently open. If no folder is open, new forms are placed in the Library folder.
- **Create Folder**: Creates a new folder in the currently open folder. If no folders are open, new folders are created in the Library folder.

> **Note**
>
> Keep in mind that newly created folders are empty and therefore will not display if the **Hide Empty Folders** toggle is on. New folders become visible after content is added to them, or if the toggle is switched off.

- **Assign Permission**: Assigns access permissions to the currently open folder. If no folders are open, permissions are assigned to the Library folder.
- **Move to**: (This option is only visible if one or more artifacts in the listing are selected.) Moves the selected artifacts to another location in the folder hierarchy.

Folder Actions

To the right of the **Data** listing there is an **Actions** column. Clicking ••• (Actions) next to a folder displays the following actions:

- **Delete**: Deletes a folder. The folder must be empty to delete it.
- **Rename**: Renames a folder. The folder cannot be renamed if it contains other folders.
- **Move to**: Moves the folder to another location in the folder hierarchy.

> **Note**
>
> All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

- **Assign Permission**: Assigns access permissions to the folder. Folder permissions apply to all items within that folder, even to items that may not be visible in the list.

Form Actions

To the right of the **Data** listing there is an **Actions** column. Clicking ••• (Actions) next to a dashboard displays the following actions:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Open**: Opens the form.
- **Edit**: Opens the form in the Form Designer.
- **Delete**: Deletes a form.
- **Rename**: Renames a form.
- **Copy As**: Copies a form with a new name. The form is copied to the listing directly under the original form.
- **Move to**: Moves a form to another folder.

> **Note**
>
> All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

- **Copy URL**: Enables you to copy and share the direct URL for a form.
- **Assign Permission**: Assigns access permissions to the form.

Exporting Data to Microsoft Excel

By exporting data from a form to Microsoft Excel, you can explore "what-if" scenarios in Excel before copying and pasting values back to your business process.

About exporting data:

- Your business process doesn't export these details to Excel: Supporting Detail, cell comments, numerical formatting, the application name, user, form folder, attributes, currency tags, or percentages.
- Full decimal places are exported for numerical values, but scaling isn’t applied to preserve accuracy. When you view the exported data in Oracle Smart View for Office, data displays like it does in the business process form.
- Member aliases display if your administrator sets the form to display them.
- Values pasted back to your business process from Excel must be unformatted data.

To export data from forms to Microsoft Excel:

1. Open a form.
2. Click **Actions**, then **Spreadsheet Export**, and then **Export**.
3. Either open or save the file.

   Use standard Excel procedures to make and save your changes.

Working in Forms 1.0

Administrators set who can view and change which data. You can enter or change data only in cells that you have Write permission to (cells with a white background).

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Forms 1.0. Users on new environments created on or after October 3, 2025 will see all their forms rendered exclusively in Forms 2.0, with no option in application settings to switch the **Forms Version** to Forms 1.0. Existing environment users will also see their forms rendered in Forms 2.0 by default. However, users on environments created before October 3, 2025 will have the option to switch back to Forms 1.0 using the **Forms Version** application setting, if needed.

Selecting Different Data to Work With

Under the form name, a bar displays boxes that show which member data you're working with. This top bar consists of the following parts:

- The POV axis is displayed as black text. Your administrator selects these members for the form; you can't select different members for this dimension.
- The Page axis is displayed as blue hyperlinks. Click the hyperlink to select different members to work with.
- Dynamic POVs are displayed as blue hyperlinks. Click the hyperlink to select different members to work with.
- The Global POV bar is displayed as a bar at the top of the dashboard, if it's enabled. If you change a page in the global POV bar and then click **GO**, the page changes for all objects that are based on forms.

When you make a change to the POV, the change is reflected within seconds in any of your parallel sessions without having to log out of the web interface. For example, if you change the POV in a form in the web interface, the change is reflected for your session in Oracle Smart View for Office, in a REST API call, or in Reports. This ensures that any changes you make to the POV are reflected in all of your open sessions.

- If you make a change to the POV in any session other than the web interface, you must re-open the form in the web interface to see the updated member in the POV.
- If you are using vertical tabs in the web interface, if you make a change to the POV in a form on one tab, the change is reflected right away in a form on another vertical tab.

Understanding Form Colors

Background colors in cells indicate the following states:

- White means that you can enter data in these cells.
- Yellow cells indicate that you have changed values but haven't yet saved them.
- Grayish blue cells indicate that you can see, but not change, their values. They are read-only.
- Tan cells are locked.
- Teal cells have Supporting Detail.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Server Status on Forms

A status indicator on forms displays icons to indicate "busy" and "idle" server activity. Any client-server action performed in a form grid (for example, clicking a button to fetch or save data, executing a rule, launching a popup, and so on) will cause the status to change.

> **Note**
>
> The status indicator doesn't display on forms that are embedded in a dashboard.

If the form's status is active, the "busy" icon is displayed, otherwise the "idle" icon is displayed.

- : Idle Status
- : Busy Status

Navigating Quickly in a Form

How you navigate depends on whether you just clicked into a cell or are editing cell data. For example, when you are editing data in a cell, you must click Tab to move to the next cell.

You can quickly move around a form with these shortcut keys:

Table 15-1 Keyboard Shortcuts

Key or Key Combination	Result
Tab	Moves to the next cell in the row. When focus is on the last cell of a row, Tab moves to the next row.
Enter	Moves to the next cell in the column.
Shift+Enter	Moves to the previous cell in the column.
Shift+Tab	Moves to the previous cell in the row.
Up Arrow, Down Arrow	Moves up or down to the previous or next row.
Right Arrow, Left Arrow	While editing in a cell, moves forward and backward in the cell data. If you are navigating the grid cells without editing, moves to the next cell or previous cell in the row.
Ctrl+Home	Moves to the first cell in the form.
Ctrl+End	Moves to the last cell in the form.
Ctrl+Left Arrow	Moves to the first cell in the current row.
Ctrl+Right Arrow	Moves to the last cell in the current row.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 15-1 (Cont.) Keyboard Shortcuts

Key or Key Combination	Result
Shift+End	Moves to the last cell of the first row.
Ctrl+A	Selects all cells.
Shift+Space	Selects the row.
Ctrl+Space	Selects the column.
Esc	Discards the current changes in the cell, restoring the previous state.

> **Note**
>
> These shortcuts are available only if you're accessing forms from the desktop.

Basics of Working With Data

Related Topics

- About Entering Data
  This topic gives you some tips on entering and saving data.
- Dynamically Setting User Variables
  If your administrator set up a form with at least one user variable and enabled dynamic user variables, then you can select and change user variable values directly in the form.
- Using Data with Forms
  When you're in a form, you can make the data more meaningful in many ways.
- More Ways to Manipulate Values
  Here are some easy ways to manipulate data:
- Entering Data for Suppressed or Excluded Members
  In forms, users can directly select a member from the drop-down list on the row dimension in the form, and then enter and save data for that member.
- Getting the Latest Data
- About Calculating Data
  Values are automatically totaled as you enter data. Here are other ways to calculate data:
- How Totals are Calculated
  Here's how values are subtotaled and totalled:
- Reviewing Data
  You can review and analyze data in many ways.
- Personalizing How Data Displays
  You can customize how data displays in a form, for example, with formatting and hiding rows and columns having no data.
- Printing Data
  You can print data in forms as PDF files and customize its format if Adobe Acrobat Reader 5.0 is installed on your computer.

Copyright © 2022, 2026, Oracle and/or its affiliates.

About Entering Data

This topic gives you some tips on entering and saving data.

- Your administrator can set up a form so that when you move out of a cell, your changes are automatically saved, with no prompt or message. Cell values are totaled and the affected cells are displayed with a green background.
- In forms with drop-down member selectors enabled on row dimensions, you can directly choose a member from the drop-down list and enter data for that member. Depending on how the drop-down member selector was configured, you may be able to add data to member rows that would have otherwise been suppressed.
- If the structure of the form hasn't changed since you started working in it, when you click **Save**, your changed or new data is instantly saved.
- To revert to the data on the form before you changed it, click **Refresh**.
- Right-clicking in forms displays more forms-specific options than the **Actions** menu.

> **Note**
>
> Use the business process interface to navigate instead of your browser's interface. Using Refresh, Forward, and Back in your browser can cause instability. If this happens, log off and then log back on.

Videos

Your Goal	Watch This Video
Learn how to enter data and save it.	Entering and Saving Data in Cloud EPM

Entering Different Kinds of Data

You can enter data in many ways, depending on how your administrator set up the form:

- Enter data directly in the cell.
- If a data cell displays the Down Arrow, you select a value from a list, called a *Smart List*. You can skip to a value by typing its first one or two letters. For example, in a list of months, skip to September by typing s.
- Members that are set up as percentages display with a percent sign (%) in the cell. You can enter a percentage value as a decimal or as a percentage, such as 60%.
- When you click into a cell that is set up for text data, a box displays. Enter your text into the box. When you enter text in cells, don’t use angle brackets (< >). The maximum length of text data you can enter is 4000 characters.
- When you save data, business rules are run that your administrator set up to launch when the form is saved.

Entering Data Quickly Using Commands

You can use these shortcuts in forms. Enter the keys or symbols, and then press Enter.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 15-2 Commands for Quickly Entering Data

Keys or Symbol	Result	Example
K	Enters the value in thousands.	Enter `5K` for 5,000.
M	Enters the value in millions.	Enter `5M` for 5,000,000.
Add or +	Adds a number to the cell value.	If the cell value is 100, entering `Add10` after 100 results in 110.
Sub or ~	Subtracts a number from the cell value.	If the cell value is 100, entering `Sub10` after 100 results in 90.
Percent or per	Multiplies the cell value by the percentage you enter.	If the cell value is 100, entering `per10` after 100 results in 10% of the current cell value, or 10.
Increase or inc	Increases the cell value by the percentage you enter.	If the cell value is 200, entering `inc10` after 200 increases the cell value by 10% of 200 (20), to 220.
Decrease or dec	Decreases the cell value by the percentage you enter.	If the cell value is 200, entering `dec10` after 200 decreases the cell value by 10% of 200 (20), to 180.
Power or pow	Changes the cell value to the number, added as an exponent.	If the cell value is 100, entering `pow2` after 100 multiplies the cell value by an exponent of 2, to 10,000.
gr	Grows a cell by a percentage.	If the cell value is 200, entering `gr50` after 200 increases the cell value by 100, to 300.

> **Note**
>
> These shortcuts are available only if you're accessing forms from the desktop.

Searching in Forms

In forms, you can easily locate a member name or data value in a form by using the **Find** icon . You can enter a partial name or value in the text box, and **Find** locates the first occurrence of the row, column, or data value. Click the forward or backward arrows to navigate to successive occurrences.

Selecting Cell Ranges

You can select and work with multiple cells if the selection is rectangular and contiguous. To select a cell range in an ad hoc grid, click in the range's upper-left cell, click Shift, and then click in the range's lower-right cell. To select a cell range in a form, hover over the cell until the icon changes; then you can extend the range.

To select a row or column, click its heading. After you select a group of cells, you can copy and paste them or adjust the data values.

Copying and Pasting Data

You can copy data within a form, from one form to another, or from another product, such as Microsoft Excel.

When you're in a form, copy and paste data by selecting the data, and then clicking **Data**, and then an icon under **Edit**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

About copying and pasting data:

- When you copy within or among forms, the business process copies and pastes the cells' stored values, not the values that display based on the precision setting.
- When pasting data to time periods, your business process applies the spreading rules for each cell in succession, starting from left to right and from top to bottom. The resulting data from a paste operation may not match the original copied data. Understand how values are spread before you paste them into time periods.
- Copying and pasting data from a text editor (for example, TextPad, Notepad, or WordPad) fails if the data is space-delimited. Use tab-delimited values instead.

Dynamically Setting User Variables

If your administrator set up a form with at least one user variable and enabled dynamic user variables, then you can select and change user variable values directly in the form.

For example, for a variable called Department, you can select Sales members to plan sales expenses and then select Marketing members to plan marketing expenses. You can also set values for user variables in user preferences.

If the form was defined with the **Use Context** option, then user variables can be used in the POV. With this setting, the value of the user variable changes dynamically based on the context of the form.

> **Note**
>
> For Forms 2.0, Oracle Smart View for Office client, and dashboards, the system automatically sets default values for dynamic and context-sensitive user variables based on the highest level of the users access the first time the form is opened. You won't need to select values for dynamic and context-sensitive user variables before working in a form. For Forms 1.0, you must select values for all user variables, including dynamic and context-sensitive user variables, before working in the form.

To dynamically change values for user variables:

1. Click the text that displays the user variable.

   The variable and its currently selected value display under the POV.
2. Select the members that you want, and then click **OK**.

   The form displays the selected members.

Using Data with Forms

When you're in a form, you can make the data more meaningful in many ways.

- Explore Form Functionality
- View Form Properties
- Focus the Data
- Enter Data for Suppressed or Excluded Members
- Emphasize Data with Formatting
- Adjust and Spread Data

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Add Comments and Attachments and View History
- Sort and Filter Data
- View Supporting Detail

Explore Form Functionality

Explore ways to access, calculate, manipulate, create, analyze, or comment on data. Click **Actions**, and then select from the following options:

- **Analyze**: Perform ad hoc analysis on a form.
- **New Ad Hoc Grid**: Create an ad hoc grid.
- **Show Reasons for Read-Only Cells**: Learn why you can't change data in some cells.
- **Business Rules**: View the business rules that are used in a form and launch them.
- **Smart Push Details**: Analyze data coming from different cubes.
- **Grid Validation Messages**: Check how the data conforms to rules that an administrator set up.
- **Clear Formatting**: Clear the formatting that you set.
- **Spreadsheet Export**: To explore "what-if" scenarios in Excel before copying and pasting values back to your business process, click **Actions**, and then select **Spreadsheet Export**.
- **Open in Smart View**: Work with a form in Oracle Smart View for Office. See Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide 23.100*.

View Form Properties

View the properties of a form by clicking (Property Panel).

Focus the Data

Explore what you can do with ad hoc grids. In a form, click (Property Panel), and then click (Adhoc Options).

Enter Data for Suppressed or Excluded Members

Enter data for members that are not included in or not immediately visible on the form.

Emphasize Data with Formatting

Improve the presentation quality of the data. Click (Property Panel), and then click (Format) to explore options for setting the font, font size, font color, underscore, and background color.

Adjust and Spread Data

Change values by a specific amount. Select the cell or cells. Click (Property Panel), then (Data), and then click any of the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Adjust** to increase or decrease the cell data by a value or percentage.
- **Spread** to specify an amount or percentage by which to increase or decrease values across multiple dimensions, based on the existing values in the target cells. You can select a **Proportional**, **Evenly Split**, or **Fill** spread pattern.

  To use **Spread**, your administrator must enable **Grid Spread** as a form property.
- **Allocate**. Only administrators who are assigned the Allocate role can use this powerful feature. Also, **Allocate** must be enabled as a form property.
- **Lock** to temporarily lock cells while you calculate and fill in other values. To unlock the cells, click **Lock** again.

Add Comments and Attachments and View History

Explain assumptions behind the data or, if enabled, view change history. Click a cell, then (Property Panel), and then (Data). Under **Details**, click:

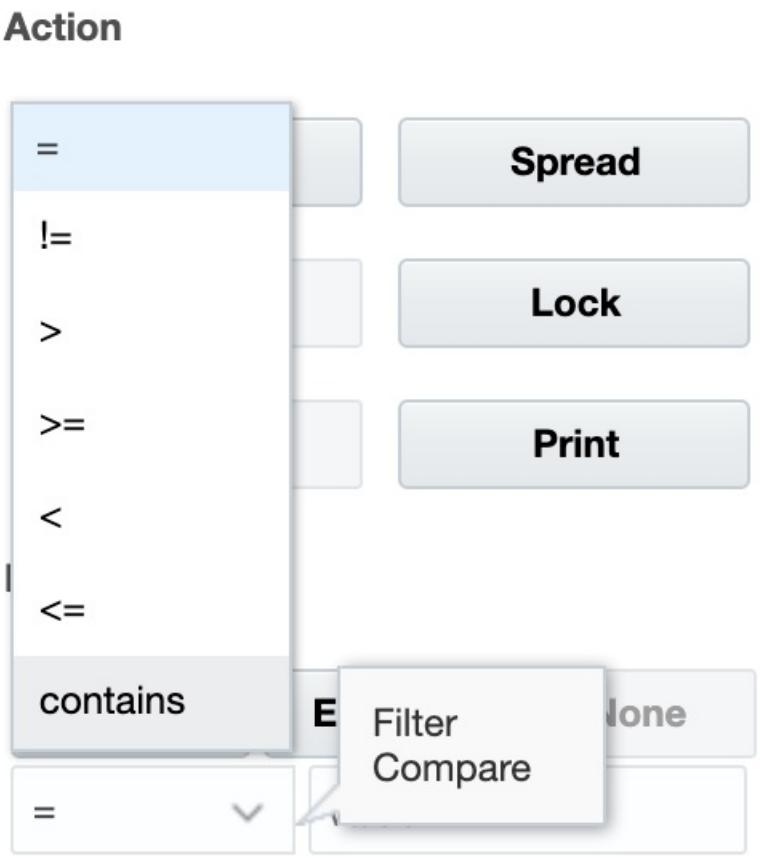
- (Attachment) to attach an external file.
- (Comment) to add a comment.
-
  (Show Change History) if your administrator enabled auditing for Data, see who changed cell values and when they did so.

Sort and Filter Data

Simplify the data presentation. Control which rows or columns are displayed (or hidden) by clicking (Property Panel), then (Data), and then **Keep** or **Exclude** under **Filter**.

To limit the view to certain comparison results, click the **Filter Compare** menu to choose an operator and then specify a value for comparison in the **value** field.

Copyright © 2022, 2026, Oracle and/or its affiliates.



You can also sort the values in a row or column by ascending or descending order by selecting the row or column, and then clicking an arrow under **Sort**.

View Supporting Detail

Build logic into a data value. Click a cell, then (Property Panel), and then (Data), and then **Supporting Detail**.

More Ways to Manipulate Values

Here are some easy ways to manipulate data:

- Spread values from a parent cell to its children. For example, you can enter "300" in Q1 (the parent), and 300 is spread to its children: Jan, Feb, and March, automatically filling "100" into each of those months.
- Enter an operator (+, –, *, /, or %) and then a number. For example, if a cell's initial value is 100, you can enter *5, which changes the value to 500.

Entering Data for Suppressed or Excluded Members

In forms, users can directly select a member from the drop-down list on the row dimension in the form, and then enter and save data for that member.

Depending on how your Service Administrator or Form Designer configured the drop-down member selectors, you may add data to member rows that would have otherwise been suppressed or excluded.

Copyright © 2022, 2026, Oracle and/or its affiliates.

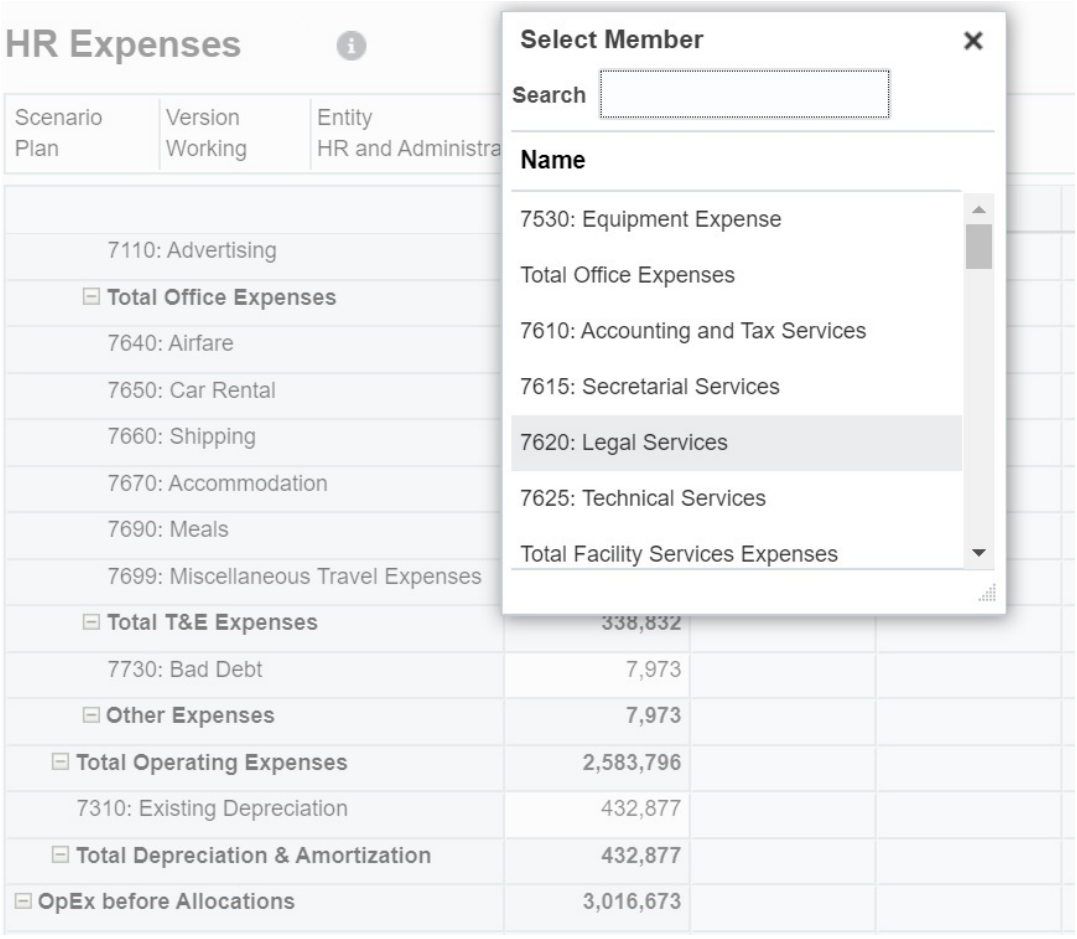
To access a drop-down member selector in a form and add members and data:

1. Open a form and locate a drop-down member selector by hovering over the row dimensions.

   If a dimension member contains a drop-down member selector, an arrow appears in the cell; for example:

2. Click the down arrow in the cell to launch the member selector, then scroll or search for the member to add.

   Here's an example of the member selector after clicking the down arrow in the `7645: Airfare` cell. You can enter a member name in the **Search** box or scroll through the list to locate the member to add. For this example, we'll choose `7620: Legal Services`.



   Click in editable cells to add or change data. For example, the `7620: Legal Services` data cell shown here can be edited:

Copyright © 2022, 2026, Oracle and/or its affiliates.

⊟ **Total Office Expenses**	2,236,991
7620: Legal Services	7,972.08
7650: Car Rental	879

3. In the row you have just added, modify or add data in the editable cells, as you require, and then click **Save**.

   The row member you selected and the data you entered are added to the form.

   In this example, the `7620: Legal Servics` member and the data that was entered (5,000) is added to the form.

Scenario	Version	Entity	Year
Plan	Working	HR and Administration Management	FY17

	⊞ YearTotal
7110: Advertising	2,236,991
⊟ **Total Office Expenses**	**2,236,991**
7620: Legal Services	5,000
⊟ **Total Facility Services Expenses**	**5,000**
7640: Airfare	7,972
7650: Car Rental	879
7660: Shipping	326,660
7670: Accommodation	2,335
7690: Meals	521
7699: Miscellaneous Travel Expenses	466
⊟ **Total T&E Expenses**	**338,832**
⊟ **Total Operating Expenses**	**2,580,823**
7310: Existing Depreciation	432,877
⊟ **Total Depreciation & Amortization**	**432,877**
⊟ **OpEx before Allocations**	**3,013,700**

4. Repeat this procedure to add other members and data to the form.

Guidelines for Entering Data for Suppressed or Excluded Members

When using the drop-down member selector, keep in mind the following:

- The drop-down content (list of members) is controlled by the form definition for the corresponding segment.
- Selections are not retained. If you perform a Refresh after selecting a member from the drop-down but before saving, the selection is lost and the form returns to its original state.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- The drop-down selection will be lost on saving data. Modifying data cells and saving data will not retain modified drop-down selections.

The drop-down member selector on row dimensions requires configuration in the Form Designer in the web interface. The Service Administrator or form designer specifies the drop-down selectors as segment properties for particular row dimensions. For example, suppose there are two dimensions placed on row axes, Entities and Line item; the member selector drop-down may be enabled for the Entity dimension members, for the Line item dimension members, or for both. Configuration is described in the administration guides for your business process.

Getting the Latest Data

To ensure that you are working with the latest data, refresh the data by clicking **Refresh**.

About Calculating Data

Values are automatically totaled as you enter data. Here are other ways to calculate data:

- Launch a business rule.
- Use a formula that was created in your business process.
- Use a formula that you created in Oracle Smart View for Office.
- Use the **Adjust** or **Spread** feature.
- Use Supporting Detail.

How Totals are Calculated

Here's how values are subtotaled and totalled:

- Subtotals are calculated based on factors that your administrator set, such as the member hierarchies, member properties, and the logic of the hierarchy.
- To recalculate subtotals, click **Save**. If the Calculate Form rule is selected to launch during **Save**, all subtotals are recalculated based on their members' aggregation properties and the form's design.
- Saving data calculates members that are set to dynamically calculate, excluding the bottom-most (level-0) members.
- Calculations are based on the stored (not the displayed) values. Displayed values might be based on scaling or precision settings.
- Only displayed members are calculated. If you have read but not write permission to some members, then subtotals correctly include their values even if they are read-only.

Reviewing Data

You can review and analyze data in many ways.

For example:

- In ad hoc grids.
- In dashboards.
- In reports.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Personalizing How Data Displays

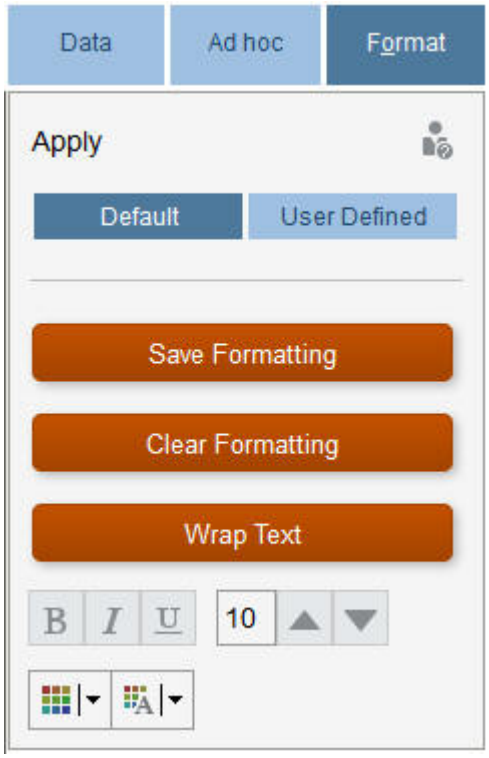
You can customize how data displays in a form, for example, with formatting and hiding rows and columns having no data.

See the next topics.

Emphasizing Data with Formatting

In forms and ad hoc grids, a variety of formatting options help you emphasize certain data.

For example, you can increase or decrease the font size and set the font color and background. You can even select a custom color. You can save or clear the formatting that you set. And in text cells, you can wrap the text.



About formatting:

- **Default**: Formatting that your business process applies to indicate a state (for example, that the cell has **Supporting Detail**).
- **User Defined**: Formatting that you've applied.

> **Note**
>
> Where formatting styles conflict, the default formatting takes precedence. For example, you might format a cell and then change its value. The default formatting for a changed but not-yet-saved value overrides the formatting that you applied to that cell.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Hiding Rows or Columns That Have No Data or Zeros

To simplify the data in a form, you can hide rows that have no data or contain zeros.

To hide rows that have no data or contain zeros:

1. Click **Actions**, and then **Filter**.
2. Click an option:
   - **Hide rows with no data**: To toggle between hiding and showing rows that have no data (displayed as #MISSING or blank, depending on how your administrator set this property). This option is not displayed if your administrator has set the form's property to Suppress Missing Data.
   - **Hide rows with zeros**: To toggle between hiding and showing rows that have zeros for values.
   - **Hide rows with zeros and no data**: To toggle between hiding and showing rows that have either no data or zeros, or both.

To hide columns that have no data or contain zeros, follow these steps, but select columns instead of rows.

About Cells That Have No Data

#MISSING in a cell indicates that the cell contains no data, whereas zero in a cell is a data value.

#MISSING decreases the database size and improves performance. To improve performance, your administrator can set cells having no data as `#MISSING`.

Printing Data

You can print data in forms as PDF files and customize its format if Adobe Acrobat Reader 5.0 is installed on your computer.

You can also export formatted reports to Oracle Smart View for Office.

To print a form's data to a PDF file:

1. With a form open, click the **Data** tab, and then **Print**.
2. Select the print options that you want.
3. Click **Print Preview**.
4. Click **Open with** to open the file in Adobe Acrobat Reader or click **Save** and name the file.

To revert to the printing options that you set in preferences, click **Restore Form Settings**.

More About Working With Data

Related Topics

- Viewing Member Formulas
  Your administrator can set up member formulas to perform calculations on members.
- Working with Business Process Data in Excel
  If you're familiar with working in Microsoft Excel, you may want to work with your business process data in Oracle Smart View for Office.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Drilling Through to Source Data
  Your administrator can load data from a source using Data Integration or the business process import and export functionality. You can drill through to view details of the data source.
- Cell Icons
  Icons in a form's cell provide information. Here's what they mean.
- Resolving Data Validation Errors
  Your administrator can set up data validation rules to ensure that data meets company guidelines.
- Pushing Data for Reporting
  For meaningful and complete reporting, your administrator can set up forms so that you can analyze data coming from different cubes using **Smart Push Details**.
- About Cell Comments
  To explain data or provide background, you can add comments to a cell or to a range of cells across multiple dimensions.
- Working with Attachments
  You can provide background information on data by attaching a file to a cell.
- Searching for Forms, Dashboards, and Infolets
  Easily search for specific forms, dashboards, and infolets within each artifact's list page.
- Why Cells May Be Read-Only
  Learn why you can't change data in some cells.
- Seeing What's Changed
  If your administrator has enabled audit trails for certain items, you can see their history of changes.

Viewing Member Formulas

Your administrator can set up member formulas to perform calculations on members.

To view a member's formula, click the formula icon .

Working with Business Process Data in Excel

If you're familiar with working in Microsoft Excel, you may want to work with your business process data in Oracle Smart View for Office.

Smart View provides a common Microsoft Office interface for your business process. Using Smart View, you can view, import, manipulate, distribute, and share data in Microsoft Word and PowerPoint.

To learn more, see *Oracle Smart View for Office User's Guide*.

To install Smart View:

1. Click the arrow icon next to the username on the top right of the Home page.
2. Under **Settings and Actions**, click **Downloads**.
3. Under **Smart View**, click **Download from Oracle Technology Network**, and then follow the prompts.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Using Your Own Excel Formulas in the Business Process

In Oracle Smart View for Office ad hoc analysis, you can create your own Excel formulas and members that calculate instantly without affecting other data. You can then open this *Smart Form* in your business process and execute the calculations that you created in Smart View.

For example, say you're analyzing business process data in Smart View, which is the Microsoft Office interface to your business process. You want to calculate the average profit margin for four products. You can add a row called "Average Profit Margin" to the grid, and then create a formula on the four rows listing the products' profit margins. Select the four rows. Then, in the new "Average Profit Margin" row, add the Excel formula `=AVERAGE(D5:D8)`. The average profit margin is instantly displayed in the new row, but the new row is saved only in this Smart Form, and not the rest of the business process.

To make this customized ad hoc grid available in your business process, when you save it, select the option **Save as a Smart Form**. Then you can open and use this customized Smart Form, including the rows, columns, and calculations that you added, in your business process.

To learn more, see *Oracle Smart View for Office User's Guide*.

Videos

Your Goal	Watch This Video
Learn about calculating data using Smart Forms.	Adding Excel Formulas in Cloud EPM

About Smart View Formatting in Web Forms

Depending on how your administrator set up the form, a form may display the cell formatting that you saved in Oracle Smart View for Office.

Microsoft Excel formatting is supported in Smart View and your business process except for:

- Your business process supports Excel's font styles except for underline and alignment.
- Your business process supports Excel's borders except for solid borders.
- Smart View supports Excel's cell formatting, including many of Excel's number and date formatting. Your business process doesn't support Excel's numbers and dates formatting.
- Your business process supports Excel's row formatting except for Excel's read-only, column width, or row height formatting.

See also, Saving Excel Formatting on a Form in *Smart View for Office User's Guide*.

Copying and Pasting Data Between Microsoft Excel and Your Business Process Forms

If you're accessing your business process from a desktop, you can copy and paste data between Microsoft Excel and forms.

> **Note**
>
> This functionality is available on desktops only, not on mobile devices.

To copy and paste data from Microsoft Excel to your business process forms:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. In Microsoft Excel, highlight the data in a single cell or a range of cells, and then press **Ctrl+C** to copy the data to the clipboard.
2. Select the target cell or cells in the business process form, and then press **Ctrl+V**.
3. When the Clipboard helper displays, press **Ctrl+V** again. The data is pasted to the Clipboard helper.
4. Click **Paste** to paste the data into the business process form.

> **Note**
>
> Data that you copy and paste from Microsoft Excel to your business process reflects the formatting that's set up in Microsoft Excel. For example, if you set the number of decimal places in Microsoft Excel to zero, when you enter the value 459.123 in Microsoft Excel, the value displays as 459. If you copy this value into a business process form, then the value 459 is pasted.

Drilling Through to Source Data

Your administrator can load data from a source using Data Integration or the business process import and export functionality. You can drill through to view details of the data source.

To drill through to source data:

1. Open a form containing loaded source data.

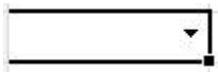
   The icon

in the right top corner of a cell indicates that it has drill-through data.
2. From a cell that contains drill-down data, click **Actions**, and then **Drill Through**.
3. Click the link in the top left corner **Drill Through to Source**.
4. From the **Drill Through Summary**, you can drill through to the source.

Cell Icons

Icons in a form's cell provide information. Here's what they mean.

- (Attachment): The cell has an attachment.
- (Formula): The cell has a member formula.
- (Comment): The cell has comments.
-

(Drill Through): You can drill down on this cell.
-  (Smart List): Select a value from a Smart List.
-

(Down Arrow): Click the Down Arrow by the member name to select and enter data for other members that are currently suppressed from displaying (either because they have no data and the administrator set the **Suppress Missing Data -**

Copyright © 2022, 2026, Oracle and/or its affiliates.

Rows option in form layout, or the administrator specifically excluded the other members during form definition).

Resolving Data Validation Errors

Your administrator can set up data validation rules to ensure that data meets company guidelines.

For example, your administrator can set:

- Criteria for the data you enter, called *data validation rules*
- Background colors to call your attention to data validation errors
- Messages that tell you what the criteria is

If the data in a form doesn't meet the criteria in data validation rules, follow these steps to fix the errors.

To resolve data validation errors:

1. In a form with errors, hover your cursor over the cell (or on mobile devices, tap into) having a non-default colored background.
   Your administrator typically calls your attention to cells having data validation rules by displaying them with a colored background. Pop-up text displays the cell intersection and the text `This cell contains Data Validation Messages`.
2. Click **Actions**, and then **Data Validation Messages**.
3. If there's more than one message, expand the list, and then click each hyperlink to go to the cell to be corrected.
4. Resolve each error based on the instructions in the data validation message.
5. When you've resolved all errors, save the form.
   The cells' colored backgrounds and Data Validation Messages no longer display.

> **Tip**
>
> If your Page/POV doesn't include valid members, in the member selector you can clear the current members by clicking
>
>
>
> (POV Settings) and then **Clear Page Selections**. You can then select members from other dimensions that are included in the valid intersection definition.

Pushing Data for Reporting

For meaningful and complete reporting, your administrator can set up forms so that you can analyze data coming from different cubes using **Smart Push Details**.

For example, say you have expense data in one cube and revenue planning in another cube. Using **Smart Push Details**, you can quickly push the data from both cubes to a reporting cube. You can then analyze the consolidated data in the reporting cube. Smart Push includes data, comments, attachments, and Supporting Detail.

Your administrator can set up forms to automatically push data when you save the data in the form. Or, the administrator can set up the form so that you can initiate the Smart Push. If so,

Copyright © 2022, 2026, Oracle and/or its affiliates.

click **Actions**, then **Smart Push Details**, and then click the link in the Smart Push dialog box. If Smart Push is set to run on save, it doesn't display in Smart Push Details.

> **Note**
>
> - Smart Push always clears data in the reporting cube before it pushes data.
> - In Forms 1.0, a message displays indicating Smart Push was executed on Save. No such message will display in Forms 2.0.

About Cell Comments

To explain data or provide background, you can add comments to a cell or to a range of cells across multiple dimensions.

To add and view comments in Forms 1.0, click a cell (or select a cell range), then the **Data** tab, and then **Comments** . A small triangle in the upper right of a cell indicates that it has a comment.

You can also view comments in a PDF file or a printed report.

To add and view comments in Forms 2.0, see Working with the Quick Toolbar in Forms 2.0.

> **Note**
>
> Forms 2.0 does not support adding comments to formula cells.

Working with Attachments

You can provide background information on data by attaching a file to a cell.

If your administrator selects the **Enable Cell-Level Document** property for the form, you can add attachments to cells.

Valid attachment file types are as follows:

- Image types permitted: `.jpg`, `.gif`, `.png`, `.7z`
- Non-image file types permitted: `.csv`, `.xls`, `.xlsx`, `.txt`, `.zip`, `.jlf`, `.doc`, `.docx`, `.ppt`, `.pptx`, `.rtf`, `.pdf`, `.gdoc`, `.gsheet`, `.gslides`, `.msg`

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - There are restrictions on which characters are allowed in filenames for file attachments. Filenames can only contain letters, digits, underscores (_), hyphens (-), periods (.), and spaces.
> - When adding a URL attachment using Oracle Smart View for Office client, Oracle requires a valid URL using either the HTTP (`http://`) protocol or the secure HTTPS protocol (`https://`).

You could attach several documents to a cell, each with updated assumptions behind the cell's sales data. You cannot attach the same attachment to more than one cell. The Attachment icon indicates that a cell has an attachment.

To add an attachment using Forms 1.0:

1. In the form, select the cell.
2. Click **Actions**, and then **Attachments** .
3. Browse to the file, and then click **Upload**.

   To view the attachment, click its hyperlink.

To add an attachment using Forms 2.0, see Working with the Quick Toolbar in Forms 2.0.

> **Note**
>
> In Forms 2.0, you can attach files with file sizes of up to a maximum of 20 MB to formula cells.

Searching for Forms, Dashboards, and Infolets

Easily search for specific forms, dashboards, and infolets within each artifact's list page.

From the Home page, open the **Forms**, **Dashboards**, or **Infolets** page.

You can search for forms, dashboards, and infolets using the **Search** box. Enter search criteria and the search results will display in a drop-down under the **Search** box. Click **Enter** to view the search results in the list region. Search results list all instances of artifacts that include the search criteria (including folder names). Each search result displays the complete folder path. Searching inside a folder narrows the search to that folder and its subfolders.

> **Note**
>
> - The search considers the **Name**, **Description**, and **Folder** columns, wherever applicable, in the search.
> - If you perform a **Search** and the **Hide Empty Folders** toggle is off, all matching folders and artifacts are displayed. If the toggle is on, only folders containing matching artifacts are displayed. Empty folders are hidden.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To search using new search criteria, delete the search criteria previously entered by clicking **Remove** on the filter chip in the **Search** box. Then enter different search criteria.

Why Cells May Be Read-Only

Learn why you can't change data in some cells.

Grayish blue cells in a data form indicate that you can see, but not change, their values. They are read-only.

To find out why a cell is read-only:

1. Refresh the grid to load the reasons why cells are read-only by clicking **Actions**, and then **Show Reasons for Read-Only Cells**.
2. Put the cursor in a read-only cell, right-click, and then select **View Reasons for Read-Only Cell**.
   Reasons why a cell may be read-only:

Table 15-3 Reasons Why a Cell May Be Read-Only

Reason Given	Explanation
Not Found or No Access	Either: • You don't have access to the data because the administrator has set the **Apply Security** property, but hasn't granted you Write access permissions to every dimension member of the data intersection. *Getting Started Guide for Administrators* describes how the administrator grants global roles, and your business process administration guides describe how the administrator assigns permissions to your business process artifacts. • The cell is read-only because the member isn't found. For example, maybe the member isn't valid for the form's cube or maybe there's a typo in the member name.
Invalid Intersection	The cell is invalid according to the valid intersection definition.
Cell-Level Security	The cell is secured according to a cell-level security definition.
Read Only Form	The form is read-only.
Formula Cell	The cell has a member formula.
Supporting Detail Cell	The cell has Supporting Detail.
Account Source Cube	The source cube of the account is not the same as the form's cube.
Ad Hoc - Read Only User Role	You're assigned the role Ad Hoc - Read Only User, so you can't change data in the form.
Archive Mode	The application's database is being archived, which temporarily prevents users from entering or changing data.
Attribute, Dynamic Calc, or Label Only	The cell is read-only for a variety of reasons, such as: • It's a calculated attribute value. • It's dynamically calculated. • Its storage type is **Label Only**. • It's an upper-level cell in an Aggregate Storage cube.
Summary Time Period Ineligible For Spreading	Some possible reasons why the data in a summary time period is read-only: The Period doesn't have members that it can spread to or they're locked, for example.
Read Only Segment	The **Segment** form property is set to read-only.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Seeing What's Changed

If your administrator has enabled audit trails for certain items, you can see their history of changes.

For example, if your administrator enabled auditing for **Data**, you could see who changed cell values and when they did so.

To see the history of tracked changes:

1. Click (Property Panel).
2. Click (Data).
3. Under **Details**, click (Show Change History).

Working in Forms 2.0

To work in Forms 2.0, the **Forms Version** setting in application settings must be set to **Forms 2.0**.

Opening a form from the **Data Entry** page, opens the form in the *runtime* environment.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Forms 1.0. Users on new environments created on or after October 3, 2025 will see all their forms rendered exclusively in Forms 2.0, with no option in application settings to switch the **Forms Version** to Forms 1.0. Existing environment users will also see their forms rendered in Forms 2.0 by default. However, users on environments created before October 3, 2025 will have the option to switch back to Forms 1.0 using the **Forms Version** application setting, if needed.

Administrators set who can view what data and who can change it. You can enter or change data only in cells that you have Write permission to (cells with a white background).

These topics contain helpful information as you work with 2.0 forms in the runtime environment:

- Working with the Global Toolbar in Forms 2.0
- Working with the Quick Toolbar in Forms 2.0
- Working with POVs in Forms 2.0
- Opening the Member Selector in Forms 2.0
- Performing Calculations Without Having to Submit Your Changes (Calc on the Fly)

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Printing Data in Forms 2.0

Videos

Your Goal	Watch This Video
Learn about working with data in Forms 2.0.	Overview: Introduction to Forms 2.0 in Cloud EPM

Working with the Global Toolbar in Forms 2.0

The icons and menus at the top of each form enable you to view instructions or perform the following actions on the form:

Table 15-4 Form Global Toolbar

Object	Description
	Instructions: Displays instructions if they were added for a form.
	Refresh: Updates the data on the form.
	Search: Enter a keyword in the **Find** box and then click the **Previous** or **Next** arrow to find data within the form.
	Property Panel: Displays specific information for a form, like Data Validation messages. For ad hoc forms, the **Property Panel** displays properties for **General**, **Ad Hoc User Options**, and **Layout**. **Note:** In the future, the **Property Panel** will be used to show other details such as cell formatting, and so on.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 15-4 (Cont.) Form Global Toolbar

Object	Description
Actions menu	Displays the following form actions: • **Edit**: Opens the form in the Form Designer. The Form Designer opens in a dynamic tab next to the current tab. You must have the correct permissions to edit forms. Any updates you make to the layout can be visualized after saving in the Forms Designer. When editing forms, you have the option to **Save As**, which saves the form with a new form name. • **Rules & Smart Push**: View the rules that are used in a form and launch them. Analyze data coming from different cubes. • **Analyze**: Perform ad hoc analysis on a form. • **Show Reasons for Read Only Cells**: Learn why you can't change data in some cells. • **Open in Smart View**: Work with a form in Oracle Smart View for Office. See Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide 23.100*. • **Spreadsheet Export**: Export data from a form to Microsoft Excel so you can explore "what-if" scenarios in Excel before copying and pasting values back to your business process. • **New Ad Hoc Grid**: Create an ad hoc grid. • **Show/Hide Toolbar**: Shows or hides the quick toolbar that is displayed below the form title.
Save	Saves the data in the form.

Working with the Quick Toolbar in Forms 2.0

In Forms 2.0, instead of using a context (right-click) menu, certain common actions have been placed in the quick toolbar for easier accessibility.

You can perform the following actions using the quick toolbar:

Table 15-5 Quick Toolbar

Icon	Description
	Adjust: Increase or decrease the selected cell data by a positive or negative value, or a percentage value.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 15-5 (Cont.) Quick Toolbar

Icon	Description
	Grid Spread: Specify an amount or percentage by which to increase or decrease values across multiple dimensions, based on the existing values in the target cells. You can select a **Proportionally**, **Evenly**, or **Fill** spread pattern. To use grid spread, your administrator must enable Grid Spread as a form property.
	Comments: Explain data or provide background, and attach external files. You can add comments and attachments to a cell or to a range of cells across multiple dimensions. Multiple comments can be posted for the same cell. The comments popup can be used to upload attachments. Posted comments and attachments can also be deleted. Note the following regarding attachments: • In Forms 2.0, you can attach files with file sizes of up to a maximum of 20 MB to formula cells. • Valid attachment file types are as follows: – Image types permitted: `.jpg`, `.gif`, `.png`, `.7z` – Non-image file types permitted: `.csv`, `.xls`, `.xlsx`, `.txt`, `.zip`, `.jlf`, `.doc`, `.docx`, `.ppt`, `.pptx`, `.rtf`, `.pdf`, `.gdoc`, `.gsheet`, `.gslides`, `.msg` • There are restrictions on which characters are allowed in filenames for attachments. Filenames can only contain letters, digits, underscores (_), hyphens (-), periods (.), and spaces. • When adding a URL attachment using Oracle Smart View for Office client, Oracle requires a valid URL using either the HTTP (`http://`) protocol or the secure HTTPS protocol (`https://`).
	Line Item Details: Build logic into how a cell value is calculated. Line item details is an upgraded (alternative) functionality for supporting details: • Line item details can be invoked from the context (right-click) menu or from the Quick Toolbar • Add child or siblings with provisioning to make arithmetic calculations (add, subtract, multiply, and so on) • Support only for rows (not for columns)
	Change History: Displays the history of the changes made to the cell data, if the Service Administrator has enabled Data auditing.
	Undo: Cancel the last change you made.
	Gridlines: Click to toggle displaying the gridlines in the form.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 15-5 (Cont.) Quick Toolbar

Icon	Description
(This icon will change depending on which style option was selected previously. The default option is **Custom and Cell Style**.)	**Cell Style**: Applies Web form styles (such as read-only cells, locked cells, supporting detail), Smart View cell styles defined in Smart View 24.200, data validation rules, and Groovy rules to the form. No custom (format-only) styles are applied. **Custom Style**: Applies format-only rules that were defined in the rule builder at design-time, and any Excel custom formatting that was added by administrators and users in Smart View. No cell styles are applied. **Custom and Cell Style**: Applies all cell styles and custom styles to the form. This is the default style option. **Note:** Format rules have an order of precedence in cases where multiple rules are defined in the same location on a form. Order of precedence could impact how formatting is displayed on the runtime form. For more information, see Order of Precedence for Format Rules in *Administering and Working with Enterprise Profitability and Cost Management*.

Working with POVs in Forms 2.0

About POVs

The information directly below the quick toolbar lets you select different data to work with. This is called the form's point of view (POV).

When a form contains a POV, changes to the POV are automatically applied. If you don't want to automatically apply changes, you can deselect auto-apply for the POV bar in the form's **POV Settings** menu. You can also hide dimension labels on the POV bar, and clear POV selections.

Changing POV Settings

To access POV settings:

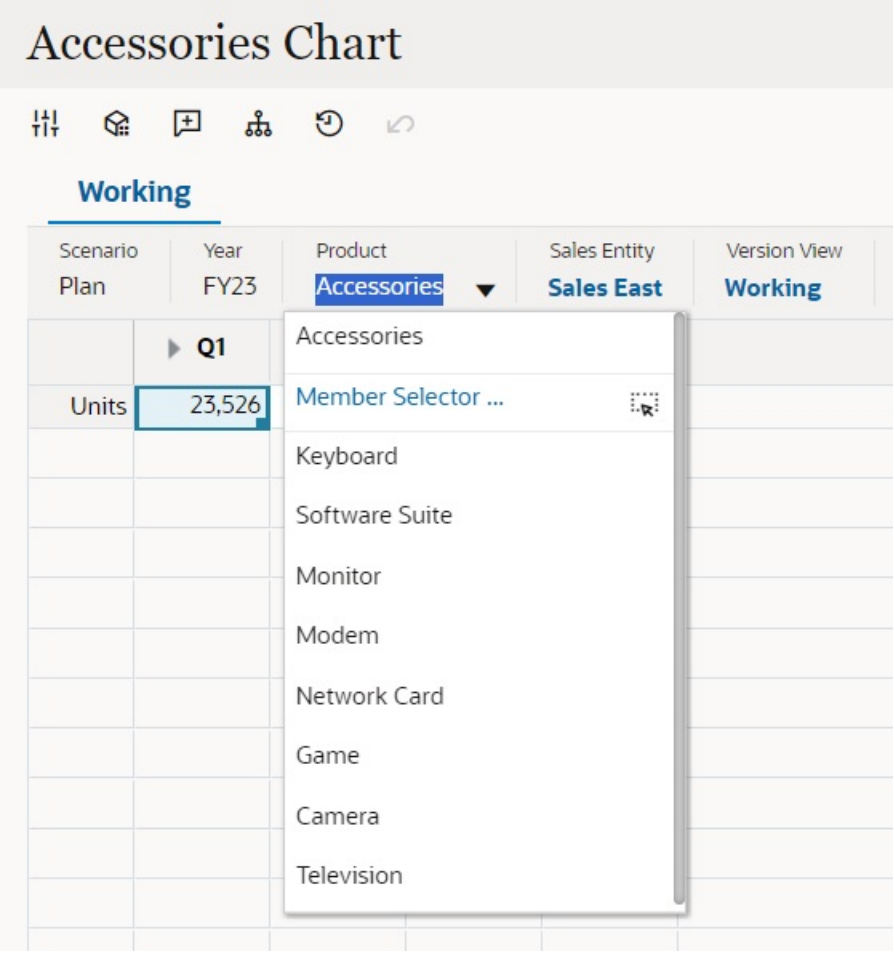
1. Click (POV Settings).
2. Select from the following options:
   - **Hide Dimension Labels**: Makes the form look more compact
   - **Auto-Apply**: Automatically refreshes the data grid every time POV values are changed
   - **Clear Selections**

Searching for POV Members in Forms 2.0

When working in Forms 2.0, you can easily find new POV members. To search, click a POV link. The search interface displays a list of the most recently used members from which you can choose.

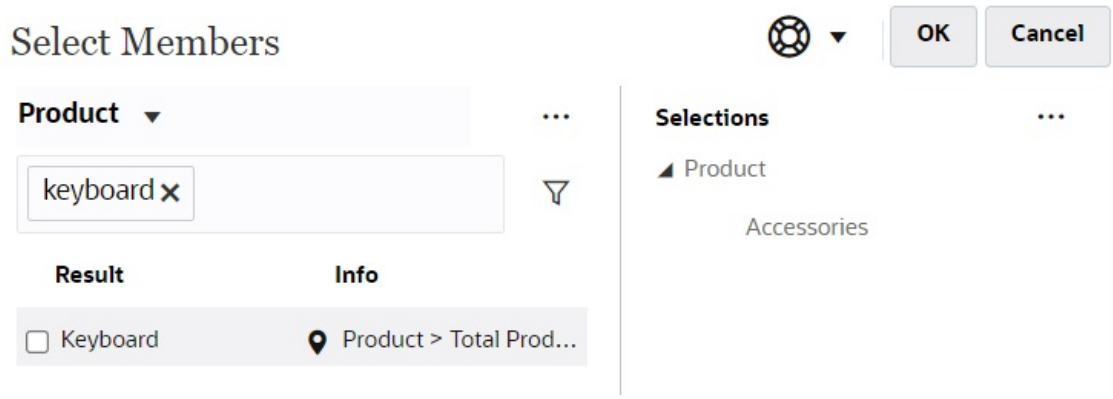
Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 15-1 Forms 2.0 POV Most Recently Used Members List



You also can search using the member selector. Click a POV link, then click the Member Selector icon to launch the member selector. Members in the member selector are displayed as a hierarchy or you can type a member name in the **Search** box. If a member is located using the **Search** box, you'll see a result displayed under the Search box.

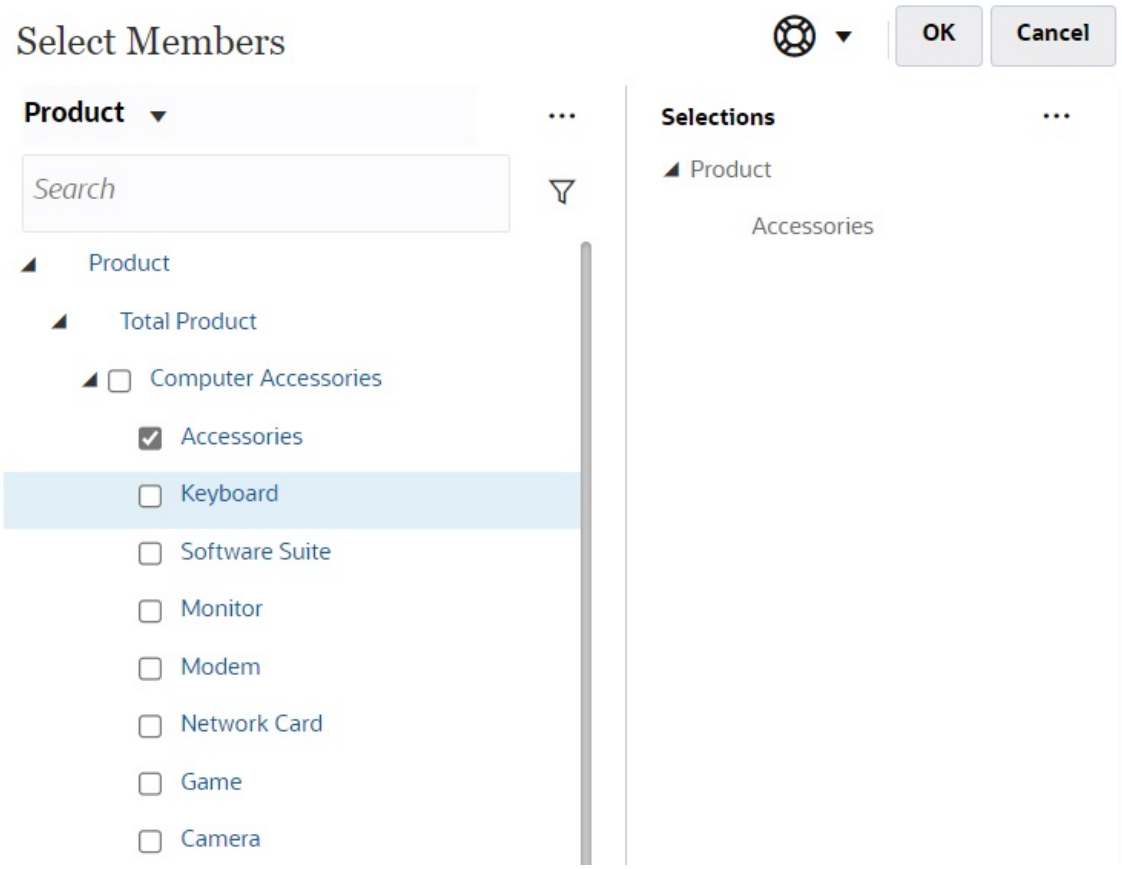
Figure 15-2 Forms 2.0 Select Members Search Results



Copyright © 2022, 2026, Oracle and/or its affiliates.

You can view where the member is located within the hierarchy by hovering over the result's **Info** column and clicking (Locate Member).

Figure 15-3 Forms 2.0 Select Members Search Results in Hierarchy

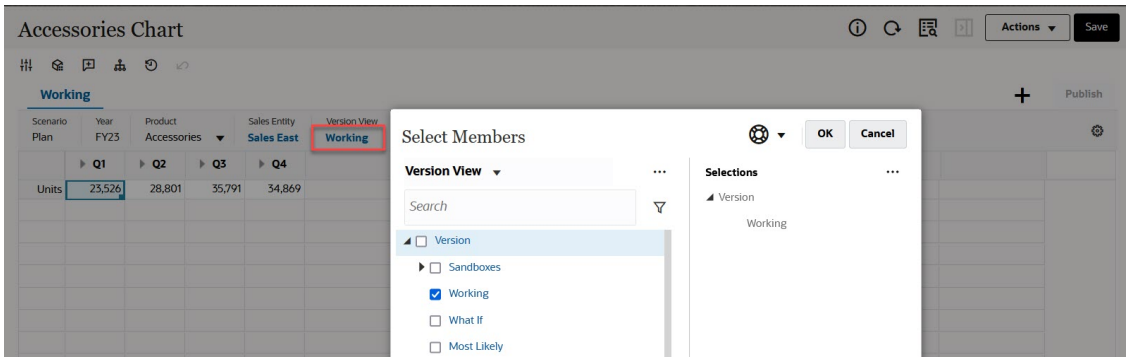


Opening the Member Selector in Forms 2.0

To select members in Forms 2.0, use the member selector.

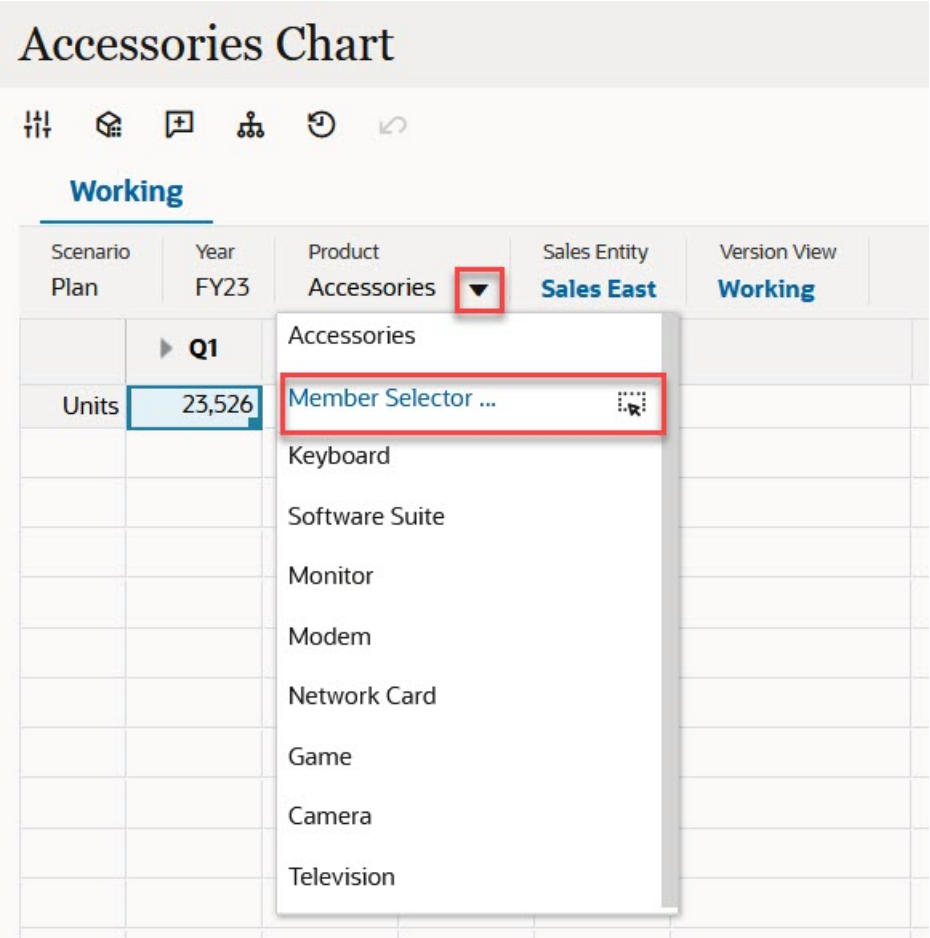
To open the member selector from a Forms 2.0 form:

Click a member on the POV bar:



Copyright © 2022, 2026, Oracle and/or its affiliates.

You can also click the Page drop-down list, and then select **Member Selector**:



In a business rules run-time prompt, when the prompt is for members, click the **Member Selector** icon:

> **Note**
>
> When working with forms in Oracle Smart View for Office or Forms 2.0 in the web, you will not be able to submit data if a form contains both a member formula in the first data row, and if one or more of the other rows are enabled for drop-down member selectors. To work with a form that contains both a member formula row and drop-down member selectors, the member formula row must be moved to any position other than the first data row.

For more information about using the member selector, see Using the Member Selector.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Performing Calculations Without Having to Submit Your Changes (Calc on the Fly)

Use calc on the fly to change data values and see calculated changes instantly without submitting the updated values.

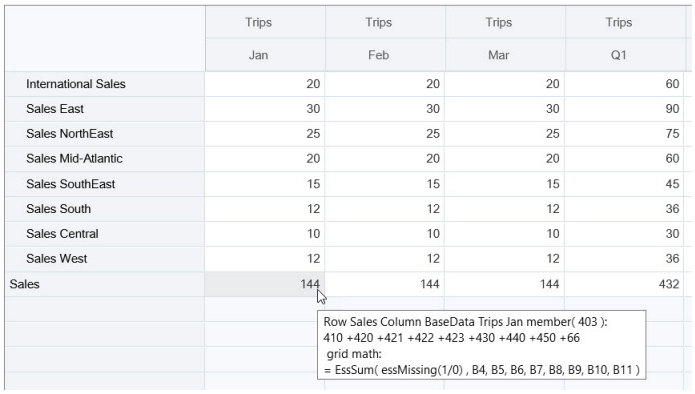
When working with Forms 2.0, or during ad hoc analysis, you can perform calc on the fly without having to submit changes to the database and refresh. This capability saves you time and enables you to do multiple changes to the grid at once.

For Forms 2.0, this option is available if your administrator enabled this feature for the form. When this feature is enabled, in a 2.0 version of a form, when you hover over a cell with a member formula attached, you see the member formula associated with the cell and you can perform calc on the fly.

For ad hoc analysis, your administrator might have enabled this feature for you. Or, you can set a display preference for calc on the fly by selecting **Yes** for **Enable User Formulas in Ad Hoc** on the **Display** tab in **User Preferences**. When this setting is enabled, in an ad hoc grid, when you hover over a cell with a member formula attached, you see the member formula associated with the cell and you can perform calc on the fly.

To perform calc on the fly:

1. Open a 2.0 version of a form or an ad hoc grid, and hover over cells to see members with formulas attached, for both member formulas and consolidation operators.
   In this example, you can see the formula for **Sales** for **Jan**.



   There must be enter-able cells (level zero members) in the form or ad hoc grid in order for formulas to appear.

2. Perform calculations as needed, and then move the cursor from the cell:
   - Modify values that contribute to a calculated cell. The calculated cell value is updated.
   - Modify a calculated value. The cells that are on the form or ad hoc grid that contribute to the calculated cell are updated.
     For formula spreading to work correctly, all source cells for the calculated value must be visible on the form or ad hoc grid.

   A color change indicates a modified cell. Cells refresh immediately to display the newly calculated values, without submitting the changes to the database.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Cell formatting (including color changes) using data validation and format-only rules based on data values will not be applied to cells calculated on the client for forms, even when **Enable Calc On the Fly** is selected.

In this example of modifying values that contribute to a calculated cell, modify the value of **Sales West** for **Jan**:

	Trips	Trips	Trips	Trips
	Jan	Feb	Mar	Q1
International Sales	20	20	20	60
Sales East	30	30	30	90
Sales NorthEast	25	25	25	75
Sales Mid-Atlantic	20	20	20	60
Sales SouthEast	15	15	15	45
Sales South	12	12	12	36
Sales Central	10	10	10	30
Sales West	15	12	12	36
Sales	144	144	144	432

When you press Tab, calc on the fly calculates updated values for **Sales** for **Jan**, **Q1** for **Sales West**, and **Q1** for **Sales**. Note the color change for the newly calculated values.

	Trips	Trips	Trips	Trips
	Jan	Feb	Mar	Q1
International Sales	20	20	20	60
Sales East	30	30	30	90
Sales NorthEast	25	25	25	75
Sales Mid-Atlantic	20	20	20	60
Sales SouthEast	15	15	15	45
Sales South	12	12	12	36
Sales Central	10	10	10	30
Sales West	15	12	12	39
Sales	147	144	144	435

In this example of modifying a calculated value, modify the calculated value **Sales** for **Feb**:

	Trips	Trips	Trips	Trips
	Jan	Feb	Mar	Q1
International Sales	20	20	20	60
Sales East	30	30	30	90
Sales NorthEast	25	25	25	75
Sales Mid-Atlantic	20	20	20	60
Sales SouthEast	15	15	15	45
Sales South	12	12	12	36
Sales Central	10	10	10	30
Sales West	12	12	12	36
Sales	144	288	144	432

When you press Tab, the values that contribute to the calculated cell are updated. Note the color change for the newly calculated values.

Copyright © 2022, 2026, Oracle and/or its affiliates.

	Trips Jan	Trips Feb	Trips Mar	Trips Q1
International Sales	20	40	20	80
Sales East	30	60	30	120
Sales NorthEast	25	50	25	100
Sales Mid-Atlantic	20	40	20	80
Sales SouthEast	15	30	15	60
Sales South	12	24	12	48
Sales Central	10	20	10	40
Sales West	12	24	12	48
Sales	144	288	144	576

3. When you've completed all of your modifications and are satisfied with the calculations, you can submit the modified values to the server, or you can discard your changes without submitting them.

You can also perform calc on the fly in Oracle Smart View for Office in 2.0 versions of forms or in ad hoc grids. See Performing Calculations Without Having to Submit Your Changes in *Working with Oracle Smart View for Office*.

Review the supported formula functions and operators. See Supported Functions and Operators for Calc on the Fly in *Working with Oracle Smart View for Office*.

Not all formula functions support calc on the fly. See Unsupported Functions and Formulas for Calc on the Fly in *Working with Oracle Smart View for Office*.

For additional considerations when performing calc on the fly, see Guidelines and Considerations in *Working with Oracle Smart View for Office*.

Tutorials

Tutorials provide instructions with sequenced videos and documentation to help you learn a topic.

Your Goal	Learn How
In this tutorial, you learn how to perform calc on the fly during ad hoc analysis using member formulas. You can work with calc on the fly either in the web or with Smart View.	Performing Calc on the Fly in Cloud EPM

Printing Data in Forms 2.0

If you require printing, you can print data in forms 2.0 using the browser's print feature or the Excel Print feature in Oracle Smart View for Office.

To work with a form in Smart View, open a form, click **Actions**, and then select **Open in Smart View**.

See Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide*.

Managing Data Validation and Format Rules in Forms

Learn how to build data validation and format rules that are checked when conditions are met in forms.

Related Links

- About Data Validation Rules

Copyright © 2022, 2026, Oracle and/or its affiliates.

- About Format Rules in Forms

About Data Validation Rules

To implement business policies and practices, you can build data validation rules that are checked when conditions are met in forms. Validation messages can be generated if entered data violates validation rules.

Sample scenarios that can be addressed using data validation rules are described in Data Validation Rule Scenarios.

Defining data validation rules involves these main tasks:

- Identifying the data cells or location that you want to display with validation messages or in different colors when conditions are met.
- Identifying the cells that need to participate during rule evaluation, and defining the rule accordingly.
- Creating the data validation rule at the location identified, as described in the topics linked below.

Related Links

- Creating and Updating Data Validation Rules in Forms
- Formatting Cells
- Viewing Data Validation Rules
- Order of Evaluation and Execution for Data Validation Rules
- Conditions Supported by the Rule Builder
- Data Validation Conditional Operators
- Data Validation Rule Scenarios

Creating and Updating Data Validation Rules in Forms

Data validation rules are defined by Administrators on the **Layout** tab of the Form Designer. You can add validation rules at the grid, row heading, column heading, or cell level. Areas on the **Layout** tab with a green background, indicate locations where rules have been defined.

To create and update validation rules:

1. On the Home page, click **Navigator** , and then under **Create and Manage**, click **Forms**.
2. Create or edit a form, and then on the **Form and Ad Hoc Grid Management** page, click **Layout**.
3. In **Layout**, right-click the row, column, or cell, for which you want to add or update the validation rule. Depending on the location and whether rules were already defined at that location, you'll see some or all of the following context menu options:
   - **Add/Edit Format/Validation Rules**: Create or modify rules for individual data cells or all data cells in a grid, row, or column in the **Format/Validation Rule Builder**.
   - **Copy | Paste Format/Validation Rules**: Copy and paste the rules at the selected locations.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Add/Edit Format/Validation Rules for Metadata**: Create or modify format rules for the row metadata cells or column metadata cells in the **Format/Validation Rule Builder**.
- **Copy | Paste Format/Validation Rules for Metadata**: Copy and paste the rules for row metadata cells or column metadata cells at the selected locations.

4. Select **Add/Edit Format/Validation Rules** to create or update rules.

> **Note**
>
> To add rules for the entire grid, expand the **Format/Validation Rules** pane on the right. For **Rules for location**, select **Grid**, and then select (Add Validation Rule).

5. In the **Format/Validation Rule Builder**, create a new rule or update an existing rule.
   - If necessary, move the rule by selecting an option from **Location**. To create a rule similar to an existing rule, click (Duplicate) and then update the rule. To view rules in the current location, click **View Rule**. See Viewing Data Validation Rules.
   - **Enable format/validation rule**: Select to make the format/validation rule available in forms. You can temporarily disable a format/validation rule by clearing this checkbox.
   - **Format Only**: Select to mark a rule as format only. This option is automatically enabled when a format-only rule is created. See Creating and Updating Format Rules in Forms.
6. Update the rule.
   a. For **Condition**, select an option to begin the condition statement: **If**, **Else If**, **Else**, **Then**, **Range**, **Check Range**, or **Format**.

   > **Note**
   >
   > For the **Format** condition, the **Source Type** field will automatically display the **Process Cell** option. There are no other **Source Type** options for the **Format** condition. See About Format Rules in Forms.

   For validation rules, the first part of a validation rule must include an **If** condition. Validation rules must also contain some form of **Then** condition. See Conditions Supported by the Rule Builder.

   b. For **Source Type**, select an option for evaluation by the rule.

   The **Source Type** list displays the appropriate options for the Condition. For example, **If** conditions can include the following **Source Type** options: **Current Cell Value**, **Cell Value**, **Column Value**, **Row Value**, **Member Name**, **Member**, **Cross-Dim Member**, **Account Type**, **Version Type**, **Var Reporting Type**, **UDA**, **Attribute**, **Generation**, **Has Children**, or **Dimension Name**. For detailed information about each type of condition, see Conditions Supported by the Rule Builder.

   c. If applicable for the selected **Source Type**, enter a value in **Source Value** by selecting an option or entering a free form value.

   d. Select an operator for the evaluation: **=**, **!=**, **<**, **<=**, **>**, **>=**, **Equals**, **Not Equals**, **Contains**, **Starts With**, or **Ends With, In, or Not In**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For examples, see Data Validation Conditional Operators.

e. Select an option for the appropriate **Target Type** for the rule.

f. Update conditions by clicking an icon in the **Actions** column to the right of the condition builder:

- **Add Condition** : Add a condition next to the current row.
- **Delete Condition** : Delete a condition at the current row.

g. Select conditions or condition blocks to update.

To update condition blocks, click an icon in the **Condition** area, at the top of the condition builder:

- **Add Condition Block**: Add a condition block within the validation rule starting with If. You can expand or collapse the condition. See Conditions Supported by the Rule Builder.
- **Delete Condition Block**: Delete the selected condition block.
- **Cut Conditions**: Delete selected conditions, and copy them to paste in a new location.
- **Copy Conditions**: Copy selected conditions.
- **Paste Conditions**: Paste selected conditions to a new location.
- **Group Conditions**: Group the selection within a condition, and add a grouping parenthesis. In addition to groupings that you set, the If statement in the grouping block is grouped when a condition is grouped, and the **Custom Grouping** option is enabled.
- **Ungroup Conditions**: Ungroup the selected conditions. The grouping parentheses are removed from the selected condition. One grouping is removed from the condition each time Ungroup is selected.

  You can also set your own grouping for conditions by selecting **Custom Grouping**, then setting up the grouping in the rule definition area.

  Selected conditions are displayed as shaded. To clear selected conditions, click once more to the left of the **Condition** column.

7. Click (Process Cell) in the rightmost column to add processing instructions.

> **Note**
>
> If the icon isn't displayed, ensure that the rule is valid and that it permits cell processing instructions. For example, cell processing instructions are included for Else, Range, Then, and Format conditions. The icon isn't displayed until all required columns are selected for a rule.

See Formatting Cells.

8. As a reminder, when you're ready to enable the rule to make it available in the form, select **Enable format/validation rule**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Tip**
>
> While you're building a rule, you can save the rule without enabling it. After any errors are resolved and the rule is ready to be validated and used, you can enable and save the rule to make it available in the form. You can temporarily disable a rule by clearing **Enable format/validation rule**.

9. When you finish updating the rule, validate the rule:
   a. Click **Validate**.

      The validation status displays at the top of the dialog box. You must correct errors before you save changes. If you close the dialog box without validating rules and fixing errors noted during validation, updates are not saved.

   b. After fixing any errors noted during validation, ensure that **Enable format/validation rule** is selected above the rule definition area to enable the rule for the application.

   c. After the rule is validated, click **OK**.

10. **Optional**: In the **Form and Ad Hoc Grid Management** page, view and update rules:
    - In the **Format/Validation Rules** pane on the right side of the **Form and Ad Hoc Grid Management** page, add, edit, or delete rules at any level, including the grid level, by clicking (Add Validation Rule), (Edit Validation Rule), or (Delete Selected Validation Rule).
    - If multiple rules are defined at the same location, you can change the order in which rules are processed when rules have the same precedence. To move a rule up, down, or to the top or bottom of the list, select the rule and click the arrows. See Order of Evaluation and Execution for Data Validation Rules.
    - Select form validation rules options:

      Table 15-6 Form Validation Rules Options

Option	Description
Validate only for pages with existing blocks	When enabled, the system figures out which page combinations have potential blocks and runs the validations only for those page combinations. There are a few exceptions to this. If a page combination has any Dynamic Calc, Dynamic Calc and Store, Label only, or Store with one child member, then that page is always loaded.
Validate only for cells and pages the user has access to	When enabled, validations are run as the currently logged-in user and not as the Service Administrator, which means the user's security will be applied to the form members.

11. In the **Form and Ad Hoc Grid Management** page, preview and validate the form, resolve any validation errors, and then save changes.
    - For forms that have data validation rules enabled, rules are validated when the form is loaded or saved. Data validation rules are saved when the form is saved.
    - When users open the form, they can view and resolve validation messages using the **Format/Validation Messages** pane.

Formatting Cells

After a rule is set up, use the Process Cell dialog box to set how cells display in forms.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To format cells:

1. In the **Format/Data Validation Rule Builder** dialog box, click (Process Cell) in the right-most column.

> **Note**
>
> If the Process Cell icon isn't displayed, ensure that the rule is valid and that it permits cell processing instructions. For example, cell processing instructions are included for Else, Range, Then, and Format conditions. The icon isn't displayed until all required columns are selected for a rule. See Creating and Updating Data Validation Rules in Forms.

2. In the Process Cell dialog box, set how the cell should appear in forms if the conditions defined by this rule are fulfilled.

   When the rule is enabled, it doesn't validate unless you specify at least one of the formatting options or a validation message.

   - To add formatting options, click options in **Format Cell** for **Font and Alignment** and **Border and Shading**. As format options are selected, the **Current Format** displays how it would appear when displayed on the form.
   - To display a validation message for the cell, enter the message in the **Message** field. Users see this text when they select **Show Data Validation Messages** in the context menu that appears when you hover over the cell in the form. It also appears as a link in the **Data Validation Messages** pane if data cells are flagged by the validation rules and the **Show in Format/Validation Messages pane** check box is selected. For information on viewing and resolving data validation errors, see .

3. Click **OK**.

   Updates for the rule are displayed in the **Process** column for the rule. If you specified formatting, that formatting is displayed. You can preview a validation message by hovering the cursor over the Process column.

Viewing Data Validation Rules

After data validation rules are defined on the **Layout** tab, you can view rules that apply to the selected grid, row, column, or cell, or you can opt to view all rules on the form. Areas on the **Layout** tab with a green background, indicate locations where rules have been defined.

To view data validation rules:

1. Open the form, and then click **Layout**.
2. Expand the **Format/Data Validation Rules** pane on the right, and then click the drop-down list next to **Rules for location** to view rules for a specific location (grid, row, column, cell) or select **All Rules** to view all rules in the form.
3. Double-click a rule name to view rule details.

Order of Evaluation and Execution for Data Validation Rules

For data validation rules in forms, the precedence for rule evaluation depends on condition priority, location of the rule, and position of the rule in the rule list (if multiple rules exist in the same location). First, cell-level rules are processed. Next, rules at the column level are

Copyright © 2022, 2026, Oracle and/or its affiliates.

processed, and then row-level rules are processed. Finally, rules at the grid level are processed. The rules are evaluated based on their position in the rule list within each level.

Location and position determine the order in which the rule will be processed. However, the priority of the processing instructions determines which rule is applied to the data cell. So, if a cell-level rule contains processing instructions with priority 4 and a grid-level rule contains processing instructions with priority 5, the grid-level rule is applied to the data cell. If all rules have processing instructions with the same priority, the first processed rule wins. The priority is based on whether the cell processing instructions specify a validation message, a color, the **Do Not Promote** promotional path option, or a combination of these settings.

Table 15-7 Priority for Rules in Forms

Default Condition Priority	Validation Message	Color	Do Not Promote
1 (lowest)	X		
1		X	
1	X	X	
2			X
3	X		X
4		X	X
5 (highest)	X	X	X

Conditions Supported by the Rule Builder

These conditions are supported by the format/data validation rule builder: If, Else, Else If, Then, Range, Check Range, and Format.

For details and examples of the values supported by these conditions, see these sections:

- **If, Else, Else If**: If Condition Values
- **Then**: Then Condition Values
- **Range, Check Range**: Range Condition Values
- **Format**: Format Condition Values

If Condition Values

For information on other conditions, see Conditions Supported by the Rule Builder.

Current Cell Value

Action:

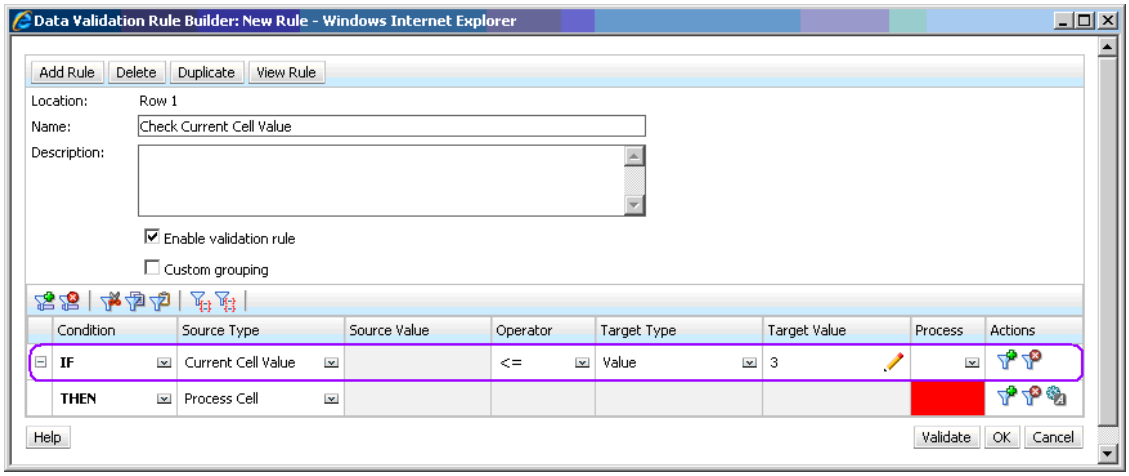
The action is performed when the value in the current data cell on which the rule is invoked satisfies this condition.

Operators:

The operators available for this function: =, !=, <, <=, >, >=, Equals, Not Equals, Contains, Starts With, or Ends With These operators act on the selected target value, which can be a free form value, cell value, column value, row value, or cross-dimension member.

Condition Definition:

Copyright © 2022, 2026, Oracle and/or its affiliates.



Condition Evaluation:

With the condition shown in the previous figure, the cells in Row 1 with member Row_Member1 will turn red when the condition is evaluated.

		A	
		Column_Member 1	Column_Member 2
1	Row_Member 1	1.0	2.0
	Row_Member 2	5.0	6.0
	Row_Member 3	9.0	10.0
2	Row_Member 4	13.0	14.0
	Row_Member 5	17.0	18.0

Cell Value

Action:

The action is performed when the value for the specified cell satisfies the condition.

Operators:

The operators available for this function: =, !=, <, <=, >, >=, Equals, Not Equals, Contains, Starts With, Ends With. These operators act on the target value selected, which can be a free form value, cell value, column value, row value, or cross-dimension member.

Condition Definition:

Condition Evaluation:

A design-time cell can expand to one or more data cells at data entry time, as shown in the following figure. The value for the cell is the sum of values in all the expanded data cells. For example, the value for cell A1 is the sum of the values in the cells outlined in purple (1+2+5+6+9+10=33), and the value for cell A2 is the sum of the values in the cells outlined in blue (13+14+17+18=62).

Copyright © 2022, 2026, Oracle and/or its affiliates.

		A	
		Column_Member 1	Column_Member 2
1	Row_Member 1	1.0	2.0
	Row_Member 2	5.0	6.0
	Row_Member 3	9.0	10.0
2	Row_Member 4	13.0	14.0
	Row_Member 5	17.0	18.0

Column Value

Action:

The action is performed when the value for the specified column satisfies the condition.

Operators:

The operators available for this function: =, !=, <, <=, >, >=, Equals, Not Equals, Contains, Starts With, or Ends With. These operators act on the target value selected, which can be a free form value, cell value, column value, row value or cross dim member.

Condition Definition:

Condition Evaluation:

A design-time column can expand to data cells at data entry, as shown in the following figure. The value for a column is the sum of the values in all the expanded data cells in that column at the current row location. The current row changes as the current cell for which the rule is being evaluated changes within the grid.

For example, the value for column A is the sum of the values in the cells outlined in purple (1+2=3), when the rule is evaluated for any cell in row 1 with member Row_Member1. The value for column A is the sum of values in cells outlined in blue (9+10=19) when the rule is evaluated for any cell in row 1 with member Row_Member3. Similarly, the value for column A is the sum of values in cells outlined in green (17+18=35) when the rule is evaluated for any cell in row 2 with member Row_Member5, and so on.

		A	
		Column_Member 1	Column_Member 2
1	Row_Member 1	1.0	2.0
	Row_Member 2	5.0	6.0
	Row_Member 3	9.0	10.0
2	Row_Member 4	13.0	14.0
	Row_Member 5	17.0	18.0

Copyright © 2022, 2026, Oracle and/or its affiliates.

Row Value

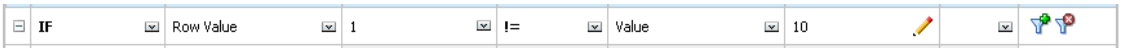
Action:

The action is performed when the value for the specified row satisfies the condition.

Operators:

The operators available for this function: =, !=, <, <=, >, >=, Equals, Not Equals, Contains, Starts With, Ends With. These operators act on the target value selected, which can be a free form value, cell value, column value, row value, or cross-dimension member.

Condition Definition:



Condition Evaluation:

A design-time row can expand to one or more data cells at data entry time, as shown in the following figure. The value for a row is the sum of the values in all of the expanded data cells in that row at the current column location. The current column changes as the current cell for which the rule is being evaluated changes within the grid.

For example, the value for row 1 is the sum of the values in the cells outlined in purple (1+5+9=15), when the rule is evaluated for any cell in column A with member Column_Member1. Similarly, the value for row 2 is the sum of values in cells outlined in blue (14+18=32) when the rule is evaluated for any cell in column A with member Column_Member2, and so on.

		A	
		Column_Member 1	Column_Member 2
1	Row_Member 1	1.0	2.0
	Row_Member 2	5.0	6.0
	Row_Member 3	9.0	10.0
2	Row_Member 4	13.0	14.0
	Row_Member 5	17.0	18.0

Cross-Dim Member

Action:

The action is performed when the value in the data cell referenced by the cross-dimension member satisfies the condition. The current data cell members are used to fully qualify the cell for dimensions whose members are not specified in the cross-dimension. This member name is a free form entry.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If a form validation rule uses the cross-dim operator, the cross-dimension cell must be represented on the form. The column or row containing the cross-dimension cell might be hidden on the form if the user does not want to see it there.

Operators:

The operators available for this function: =, !=, <, <=, >, >=, Equals, Not Equals, Contains, Starts With, or Ends With. These operators act on the target value selected. The target value can be a free form value, cell value, column value, row value or cross-dimensional member. It can include one member only from each dimension, and must include only members for dimensions on rows or columns.

Condition Definition:

Condition Evaluation:

When the previous rule is applied at grid level, the rule is invoked on each cell in the form, and the value in that cell is compared with the value in the cell outlined in purple. Thus, the cell at Row_Member 5->Column_Member 2 will turn red.

		A	
		Column_Member 1	Column_Member 2
1	Row_Member 1	1.0	2.0
	Row_Member 2	5.0	6.0
	Row_Member 3	9.0	10.0
2	Row_Member 4	13.0	14.0
	Row_Member 5	17.0	18.0

Member Name

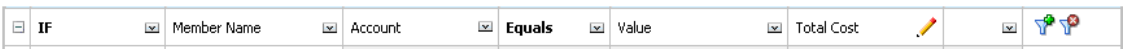
Action:

The action is performed if the current data cell on which the rule is invoked has the specified dimension member in its intersection. The member name for the selected dimension should be in the cube for which the form is created.

Operators:

The operators can be Equals, Not Equals, Contains, Starts With, or Ends With. The target value, which is the member name, is selected or entered free form.

Condition Definition:



Copyright © 2022, 2026, Oracle and/or its affiliates.

Member

Action:

The action is performed if the current data cell on which the rule is invoked has the specified dimension member (or any one of the members that result from evaluating the specified function) in its intersection.

Operator:

The available operators are In and Not In. The target value, which is the member, is selected or entered free form.

Including Attributes

Rules can include attribute values. If Source Type is **Attribute**, the available operator is Is, and you can type an attribute value directly in the Target Value field. If Source Type is **Member**, and you select the In or Not In operator in the Target Value field, you can select an attribute by clicking (Rule Selection), and then clicking **Variables** in the Member Selection dialog box. You can use the member selection function selector to select functions for the attribute, such as NotEqual and GreaterOrEqual.

When using attribute values in data validation rules, keep in mind the way attributes are evaluated. If a rule references one or more attributes from one or more dimensions, they are evaluated as an OR for attribute values from the same attribute dimension, and as an AND for attributes from different attribute dimensions. For example, if the rule includes attributes IN Red, Blue, True, Big, then all members are selected that are either (Red OR Blue) AND True AND Big. For additional information, see Selecting Attribute Values as Members.

Condition Definition for Member Source Type

Condition Definition for Attribute Source Type

Account Type

Action:

The action is performed if the current data cell on which the rule is invoked has an account with the specified account type in its intersection. Refers to all the currently supported Account Types: Expense, Revenue, Asset, Liability, Equity, and Saved Assumption.

Operator:

The available operator is Is.

Condition Definition:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Version Type

Action:

The action is performed if the current cell on which the rule is invoked has a version with the specified version type in its intersection. It refers to the version types currently supported, standard bottom-up and standard top down.

Operator:

The available operator is Is.

Condition Definition:

Variance Reporting Type

Action:

The action is performed if the current cell on which the rule is invoked has an account with the specified variance reporting type in its intersection. Refers to the available variance reporting types, Expense and Non-Expense.

Operator:

The available operator is Is.

Condition Definition:

UDA

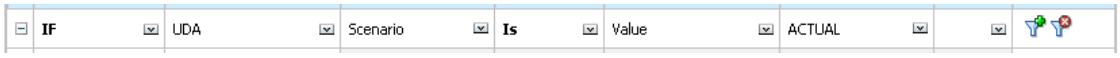
Action:

The action is performed if the current cell on which the rule is invoked has this UDA associated with the specified dimension's member in its intersection. The UDA reference is selected based on the selected dimension. The condition is based on the UDA for this dimension being equal to the selected value. You must select the UDA value from the drop-down list.

Operator:

The available operator is Is.

Condition Definition:



Attribute

Action:

Copyright © 2022, 2026, Oracle and/or its affiliates.

The action is performed if the current cell on which the rule is invoked has this attribute associated with the specified dimension's member in its intersection. The attribute reference is selected based on the selected dimension. The condition is based on the attribute for this dimension being the selected target value.

Operator:

The available operator is Is.

Condition Definition:

Generation

Action:

The action is performed if the current data cell or header (metadata) cell on which the rule is invoked has a member from the dimension specified in Source Value (Account) belonging to the generation specified in the Target Value (1) in the dimension hierarchy.

Operator:

The operators available for this function: =, !=, <, <=, >, >=

Condition Definition:

Has Children

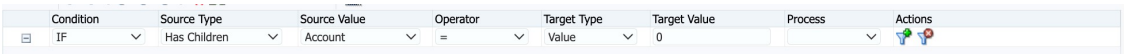
Action:

The action is performed if the current data cell or header (metadata) cell on which the rule is invoked has a level 0 member if the Target Value is 0 (false) or is a non-level 0 members if the Target Value is 1 (true) from the dimension specified in the Source Value (Account).

Operator:

The operators available for this function: =, !=

Condition Definition:



Dimension Name

Action:

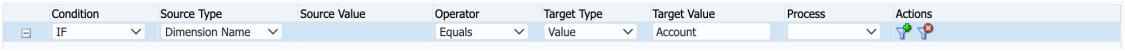
The action is performed if the current header (metadata) cell on which the rule is invoked belongs to the dimension specified in the Target Value.

Operator:

Copyright © 2022, 2026, Oracle and/or its affiliates.

The operators can be Equals, Not Equals, Contains, Starts With, or Ends With. The target value, which is the dimension name, is selected or entered free form.

Condition Definition:



Then Condition Values

For information on other conditions, see Conditions Supported by the Rule Builder.

Then

Action:

The Then conditions supported by the data validation rule builder support Process Cell conditions only. To enter Process Cell Conditions, see Formatting Cells.

Condition Definition:

Range Condition Values

The **Check Range** and **Range** conditions are used together. These conditions can be used in the data validation rule builder in a Then clause or standalone.

For information on other conditions, see Conditions Supported by the Rule Builder.

Check Range

Action:

Defines the value that needs to be in a specific range.

Value:

This value can be the Current Cell Value or the value in a particular Row, Column, or Cell.

Range

Action:

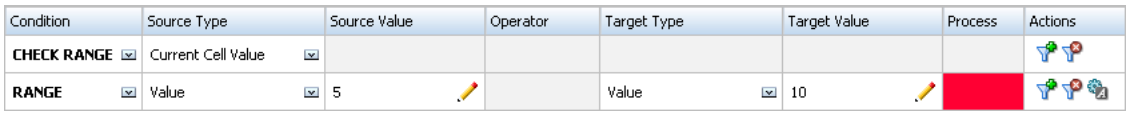
Defines a valid range for the value defined in the Check Range condition. This range includes all values that are >= the minimum value and < the maximum value. If the value specified in the Check Range condition is within this range, then the processing instructions defined by this condition are applied to the data cell on which the rule is being invoked. You can define multiple ranges of values and provide different processing instructions for each range.

Value:

The minimum and maximum values for the range can be defined using Cell Value, Current Cell Value, Row Value, Column Value, Cross-dimension Value, or by entering a free-form value. For example, the following rule ensures that the current cell value is >= 5 and < 10. If this condition is met, the cell is turned red.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Condition Definition:



Format Condition Values

For information on other conditions, see Conditions Supported by the Rule Builder.

Format

Action:

The Format conditions supported by the format/data validation rule builder support Process Cell conditions only. To enter Process Cell Conditions, see Formatting Cells.

Condition Definition:

Data Validation Conditional Operators

Conditional operators in the data validation rule builder can include these types of comparisons:

- Numeric comparisons, using these operators: =, !=, <, <=, >, >=.
- String value comparisons, using these operators: Equals, Not Equals, Contains, Starts With, Ends With, In, and Not In.

Rules can compare cells with different data types; for example, text and Smart List. The data type of the cell is honored if the referenced value always comes from one cell. This is the case when using Current Cell Value and Cross Dim Member to refer to a cell value. In cases where the value being compared comes from multiple cells (such as row value, column value, and cell value), the data type is defaulted to double.

When comparing values for these data types:

- For double, a string representation is used for the double value, such as "123.45." If the double is a whole number with no fractional part, such as 123.00, the integer value is used, for example, "123."
- For text, rules use only the text value for comparison.
- All other data types (percentage and date) are treated as double.

Table 15-8 Examples of Results for Starts With, Ends With, and Contains

Operator	Compare Value	Compare To Value
Starts With	2.0	2
	1234.0	12.0
	101.0	10
	2.0	2.0
	2.5	"2."
	"YearTotal"	"Year"

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 15-8 (Cont.) Examples of Results for Starts With, Ends With, and Contains

Operator	Compare Value	Compare To Value
Ends With	2.0	2.0
	2.0	2
	2.5	5
	2.5	".5"
	"YearTotal"	"al"
	"YearTotal"	"Total"
Contains	2.0	2.0
	2.0	2
	2.5	5
	2.5	".5"
	2.5	2.5
	23.567	3.5
	23.567	67
	23.567	"23."
	23.567	".56"
	"YearTotal"	"al"

Data Validation Rule Scenarios

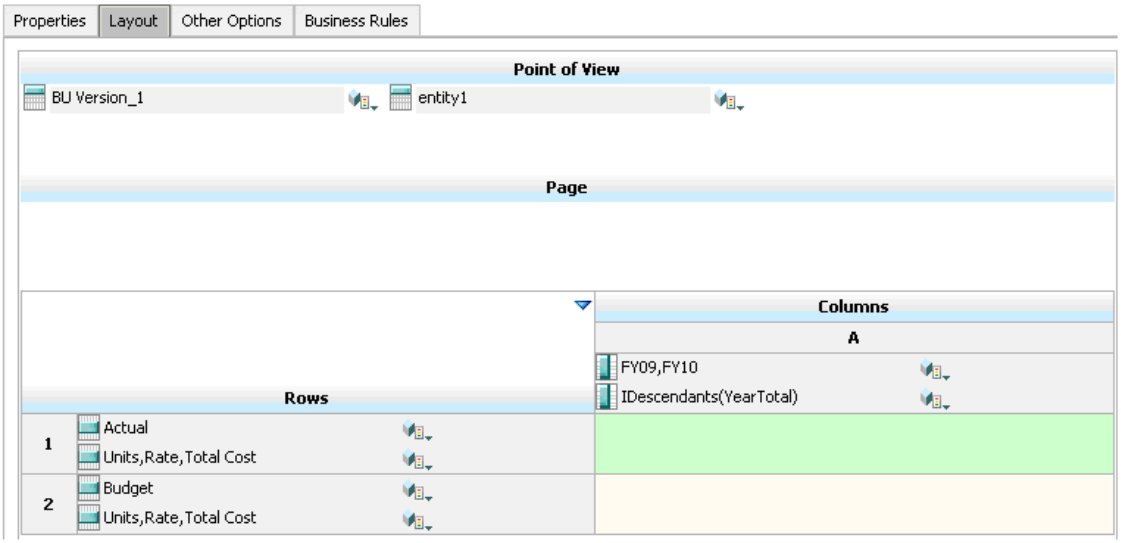
These scenarios provide examples of how data validation can help implement business policies.

Scenario 1

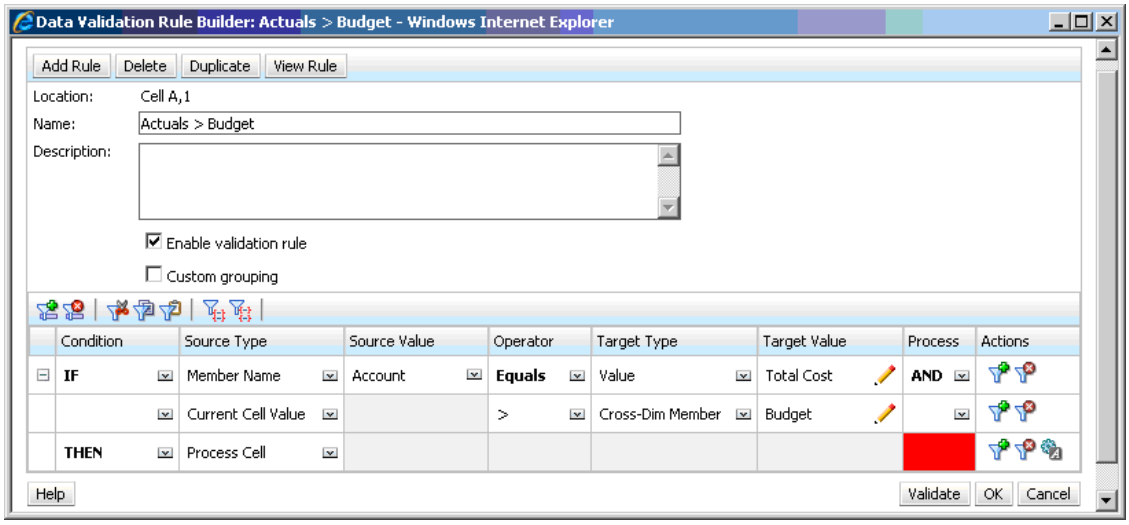
John is hired by a company called Acme, Inc. as a consultant to design forms and implement data validation rules that enforce some of the company policies. He is asked to implement a validation rule that flags Actual amounts in red if the Total Cost in actuals exceeds the budgeted amount. This test must be repeated for each year and time period in the application. John designs the form and adds a data validation rule at cell level using a cross-dimension member, as shown in the following figures.

Form Layout at Design Time:

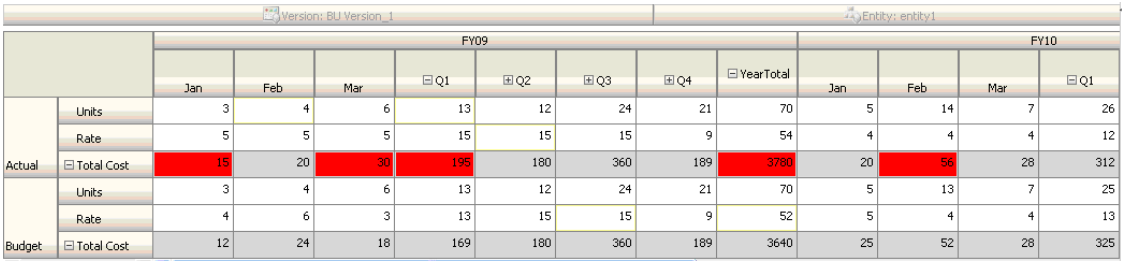
Copyright © 2022, 2026, Oracle and/or its affiliates.



Data Validation Rule at Design Time:



Form at Data Entry Time with Data Validations Applied:



Copyright © 2022, 2026, Oracle and/or its affiliates.

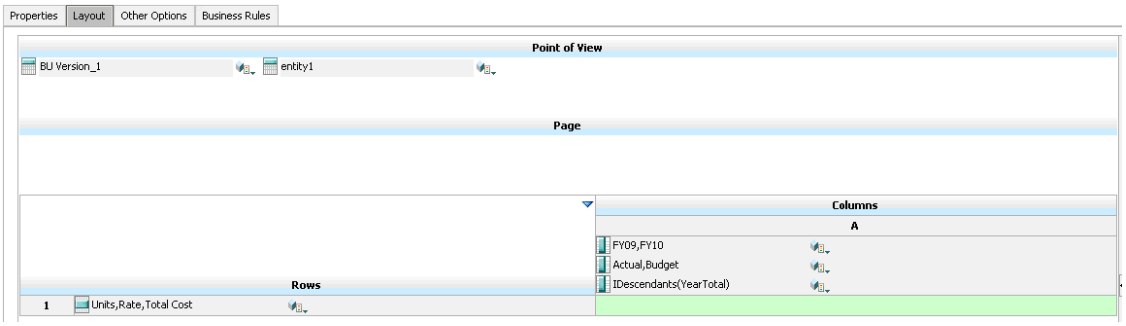
Tips:

- John can split Total Cost into its own segment and apply the data validation rule at that segment for a slight performance gain. However, doing so would increase maintenance as new accounts and scenarios were added to the form.
- If the requirements changed such that only the YearTotal Period in Actual had to be flagged in red, John would have two options. The best option is to add an IF entry to check if the Period member is YearTotal. Another option is to split the YearTotal member into a separate column for better performance. However, doing so would break the spreading logic, the column header for Year would repeat, and the form would be harder to maintain as new years were added.

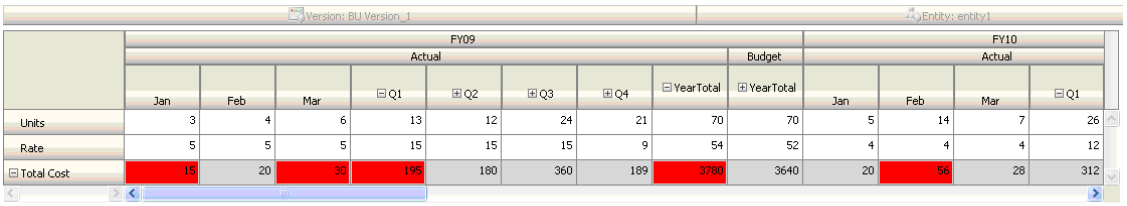
Scenario 2

After reviewing the form designed by John in Scenario 1, Acme decides that they want Budget on the column instead of the row. To implement this requirement, John can move members within the axes to change the form layout. However, he doesn't need to update the data validation rules. John updates the form as shown in the following figure.

Form Layout at Design Time:



Form at Data Entry Time with Data Validations Applied:



Scenario 3

Following the successful rollout of these forms, John is asked to implement the next policy, which is to ensure that this year's Budget amounts are not significantly higher than previous year's Actual amounts. If the difference is greater than 5%, then flag the difference in red.

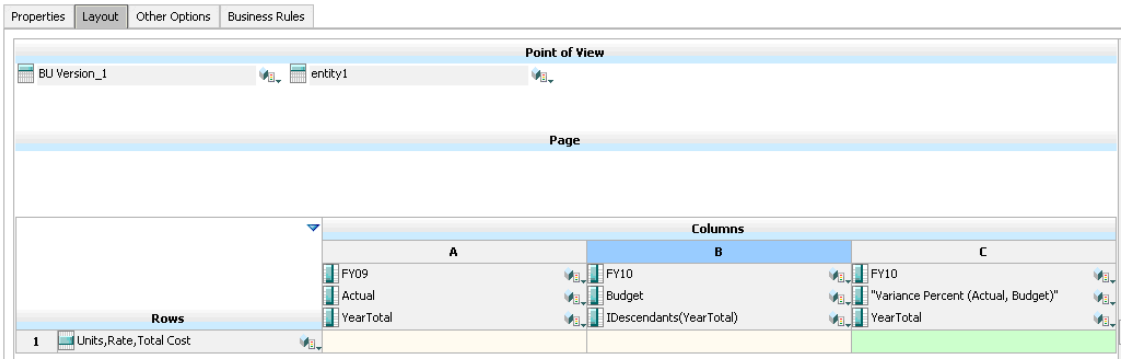
John decides to use a member with a member formula to calculate the variance between this year's Budget and the previous year's Actual amount. He adds this member formula:

```
@varper(@Prior("Actual", 1, @Relative("Year", 0)), budget)/100;
```

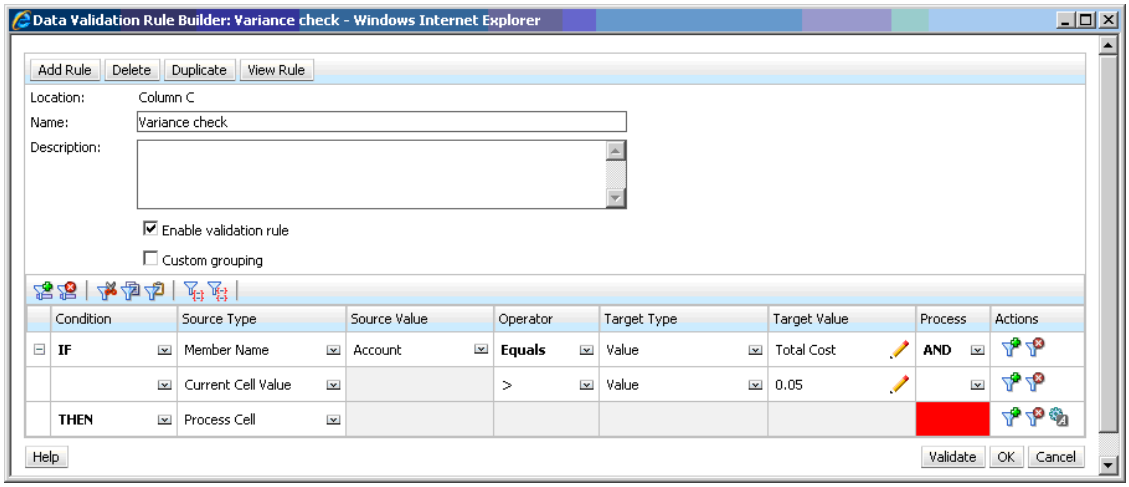

Copyright © 2022, 2026, Oracle and/or its affiliates.

John designs the form and adds a data validation rule at cell level, as shown in the following figure. He uses Member Name to apply the validation only to Total Cost.

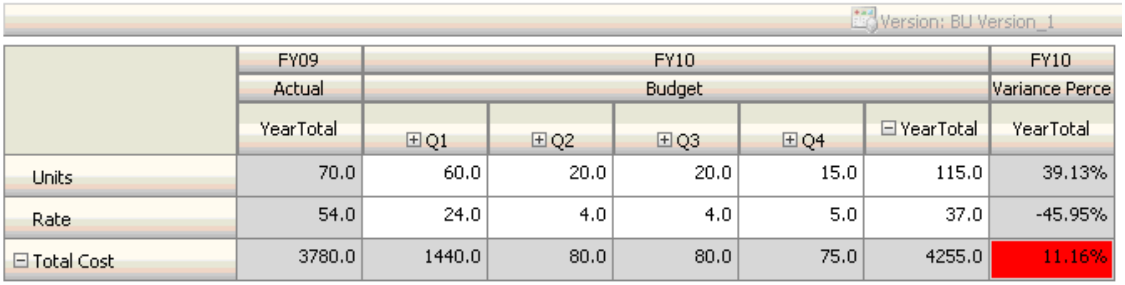
Form Layout at Design Time:



Data Validation Rule at Design Time:



Form at Data Entry Time with Data Validations Applied:



	FY09	FY10				FY10
	Actual	Budget				Variance Perce
	YearTotal	Q1	Q2	Q3	Q4	YearTotal	YearTotal
Units	70.0	60.0	20.0	20.0	15.0	115.0	39.13%
Rate	54.0	24.0	4.0	4.0	5.0	37.0	-45.95%
Total Cost	3780.0	1440.0	80.0	80.0	75.0	4255.0	11.16%

Copyright © 2022, 2026, Oracle and/or its affiliates.

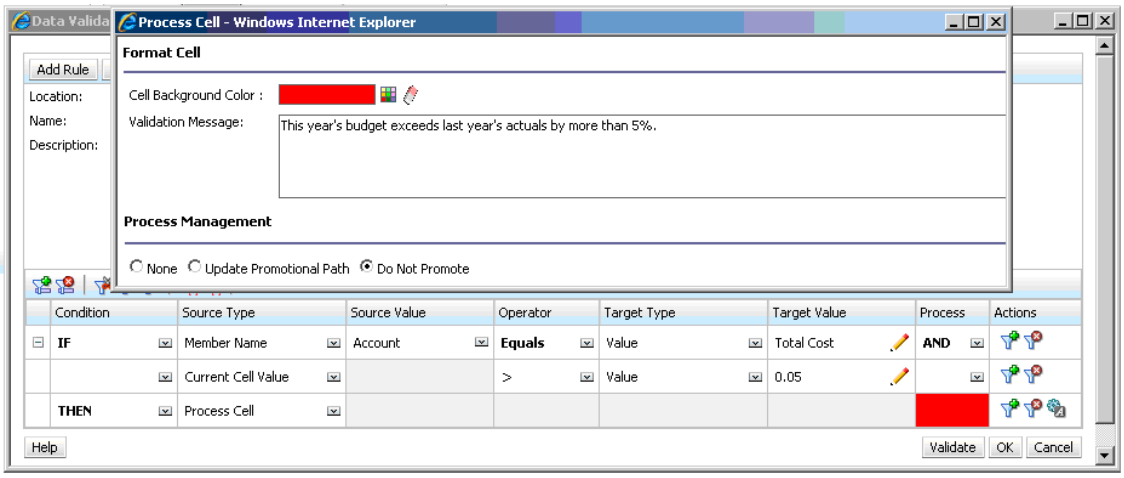
Tips:

- If John isn't allowed to change the outline, or if he experiences performance issues related to member formulas, he can use a formula column.
- John defines the rule at the Variance Percent column for these reasons.
  - It improves performance. The rule is evaluated only on the cells in the Variance Percent column. If the rule had been assigned to YearTotal, it would have to be evaluated for all Time Periods for the current year budget.
  - It helps users respond to the data validation message. John can add a message to the Variance Percent column stating that the variance is higher instead of adding it to YearTotal. This way, users don't have to look for Variance Percent to determine the difference.
- John could have flagged both YearTotal and Variance Percent in red if this had been part of the requirement.

Scenario 4

In addition to flagging the cell in red, the rule is also required to prevent anyone from promoting the approval unit if this year's Budget is significantly higher (> 5%) than the previous year's Actual amounts. To implement this requirement, all John needs to do is edit the data validation rule's processing instructions and select **Do Not Promote**, as shown in the following figure.

Data Validation Rule at Design Time:



Scenario 5

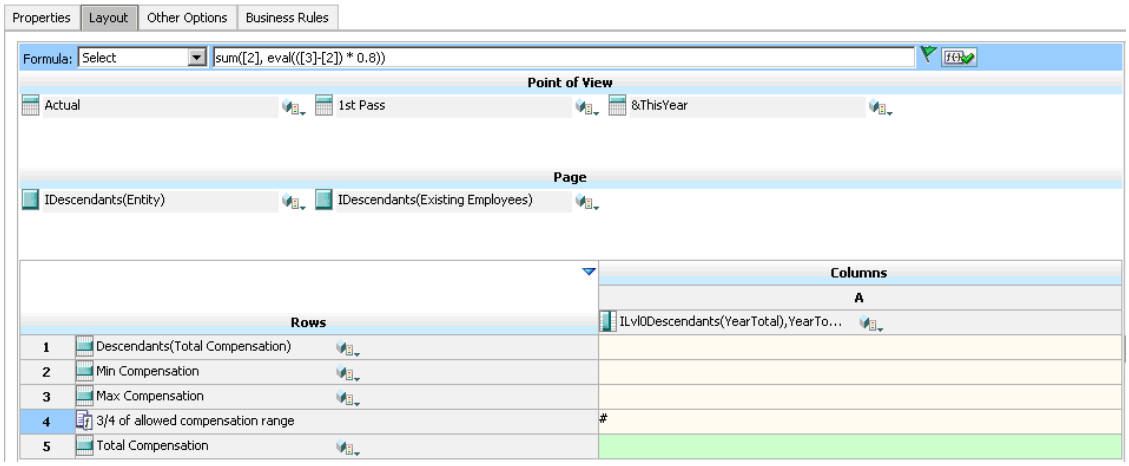
Finally, John is asked to design a data validation rule to validate that the total compensation for employees in a particular department is within the allowed range. The rule evaluates Existing Employees in the Operations department. It validates that, if Total Compensation is > than Min allowed, and is <= ¾ of the compensation range for the employee's grade, no action is needed.

If Total Compensation is greater than ¾ of the compensation range, a validation message is provided, and the approval units must be approved by a human resource manager. If the value is less than Min and greater than Max, an error is generated, and users can't promote their approval units.

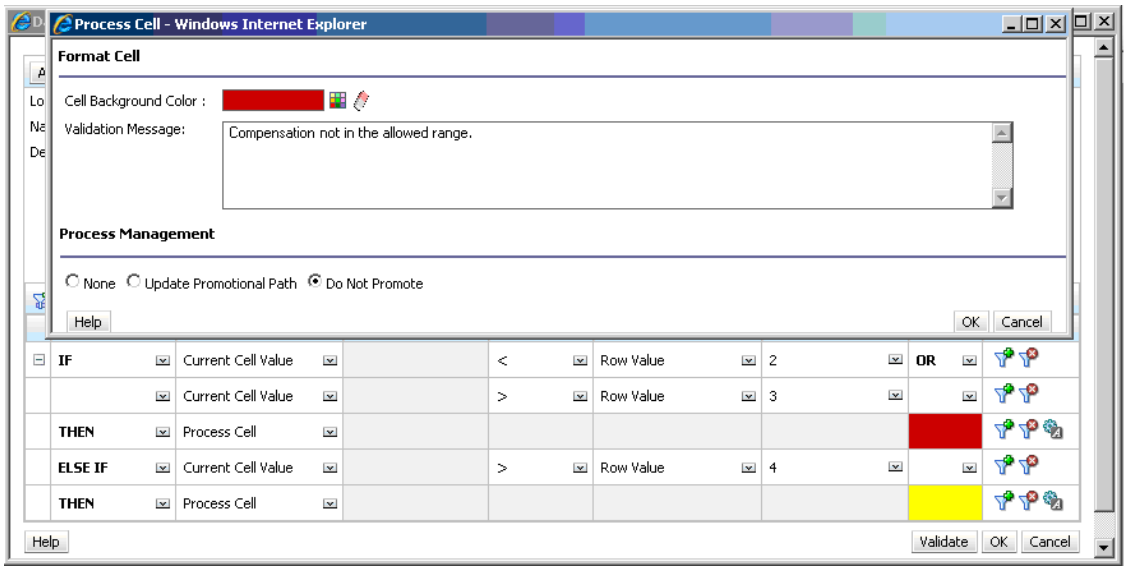
Copyright © 2022, 2026, Oracle and/or its affiliates.

John opens the Employee Expenses Summary form in the Form Management dialog box. The form has employees and departments on the page, accounts (such as Total Compensation) on the row, and time period on the column. To make validations easier to build, John adds a calculated row to calculate ¾ of the compensation range, and adds Min Compensation and Max Compensation members to the form, as shown in the following figures. Min Compensation and Max Compensation for the employee's grade are calculated using member formulas.

Form Layout at Design Time:

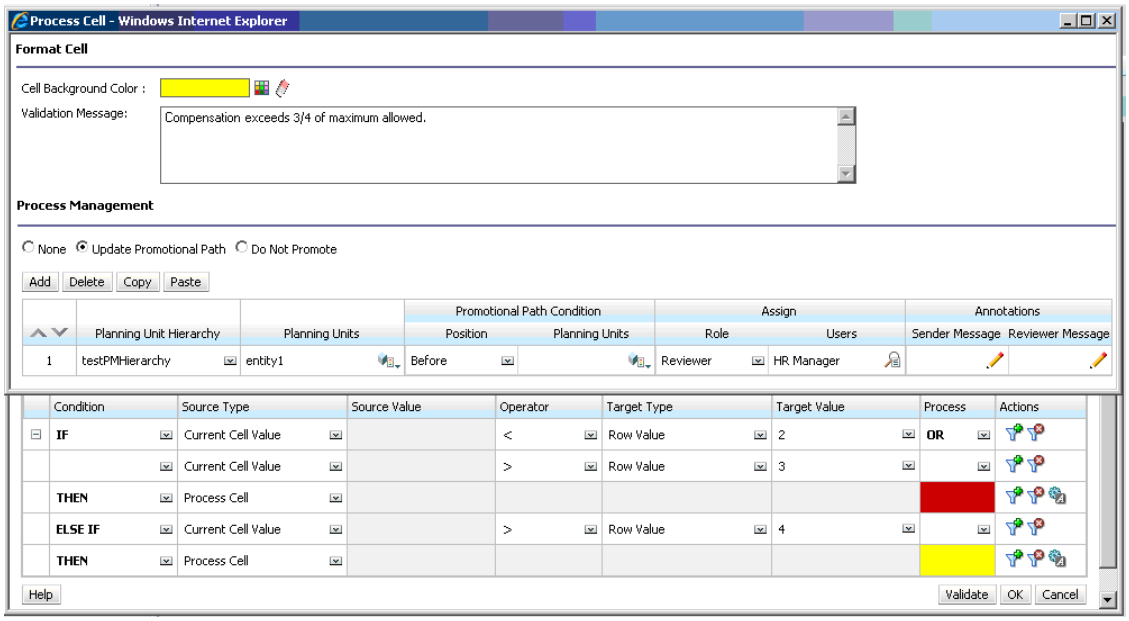


Data Validation Rule to Stop Promotion of Approval Units:

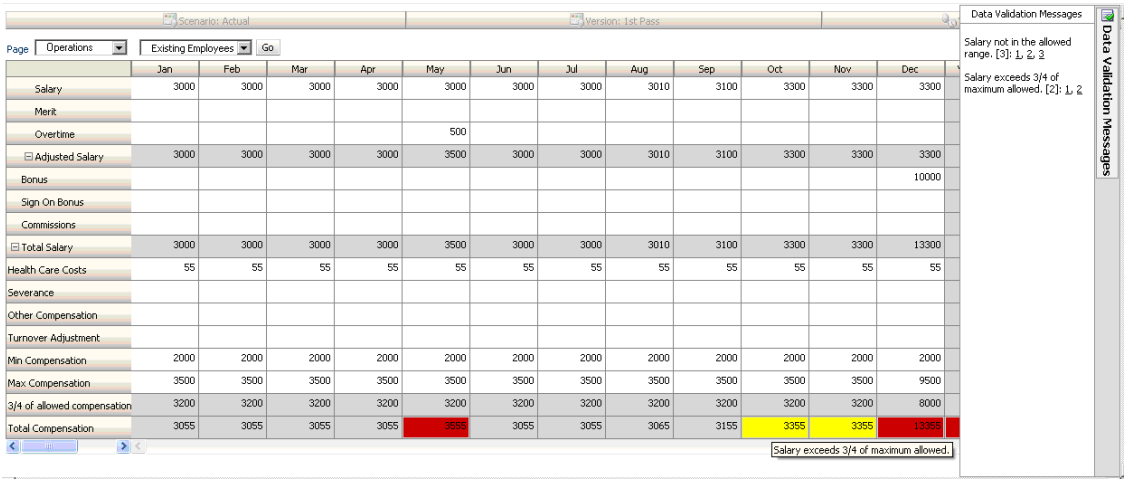


Data Validation Rule to Add the Human Resources Manager as Reviewer:

Copyright © 2022, 2026, Oracle and/or its affiliates.



Form at Data Entry Time with Data Validations Applied and Validation Messages Shown:



About Format Rules in Forms

You can define format rules for a form at design time, which enables users to view formatting at runtime when custom styles are applied to the form.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Sample scenarios that can be addressed using format rules are described in Format Rule Scenarios.

Defining format rules involves these main tasks:

- Identifying the cells or location that you want to display with formatting
- Creating the format rule at the location identified
- Applying styles at runtime

Related Links

- Creating and Updating Format Rules in Forms
- Cell Formatting Options in Forms
- Viewing Format Rules
- Order of Precedence for Format Rules
- Applying Format Rules to Forms at Runtime
- Format Rule Scenarios

Tutorials

Tutorials provide instructions with sequenced videos and documentation to help you learn a topic.

Your Goal	Learn How
Get an introduction to Design Time Formatting (DTF). You'll navigate to the menus for important user interface elements in Format Rules. You'll modify the Format Rules to show Form Data Grids with distinctive display elements.	Data Forms Design Time Formatting – Introduction
Get an introduction to the Design Time Formatting (DTF) options in web forms. You'll use the style selector and review the differences in runtime on applying the available style options. You'll see that Groovy Rule takes precedence over all other rules.	Data Forms in Web - Format Display in Runtime

Copyright © 2022, 2026, Oracle and/or its affiliates.

Your Goal	Learn How
Learn about creating a Format Rule and using the Design Time Formatting (DTF) options in web forms. You'll format various sections for an Income Statement using multiple Format Rules. You'll also duplicate and modify Format Rules.	Data Forms Design Time Formatting - Advanced
Get an introduction to the Design Time Formatting (DTF) options in Oracle Smart View for Office. You'll review the differences in runtime on applying the available style options. You'll see the order of precedence for the different types of Rules and Cell Styles in Smart View.	Data Forms in Smart View - Format Display Options

Creating and Updating Format Rules in Forms

Format rules are defined by Administrators on the **Layout** tab of the Form Designer. You can add format rules at the grid, row, row metadata cell, column, column metadata cell, or cell level.

Areas on the **Layout** tab with a green background, indicate locations where rules have been defined.

To create and update format rules:

1. On the Home page, click **Navigator**, and then under **Create and Manage**, click **Forms**.
2. Create or edit a form, and then on the **Form and Ad Hoc Grid Management** page, click **Layout**.
3. In **Layout**, right-click the row, column, or cell level for which you want to add or update the format rule. Depending on the location and whether rules were already defined at that location, you'll see some or all of the following context menu options:
   - **Add/Edit Format/Validation Rules**: Create or modify rules for individual data cells or all data cells in a grid, row, or column in the **Format/Validation Rule Builder**.
   - **Copy | Paste Format/Validation Rules**: Copy and paste the rules at the selected locations.
   - **Add/Edit Format/Validation Rules for Metadata**: Create or modify format rules for the row metadata cells or column metadata cells in the **Format/Validation Rule Builder**.
   - **Copy | Paste Format/Validation Rules for Metadata**: Copy and paste the rules for row metadata cells or column metadata cells at the selected locations.
4. Select **Add/Edit Format/Validation Rules** or **Add/Edit Format/Validation Rules for Metadata** to create or update rules.

> **Note**
>
> To add rules for the entire grid, expand the **Format/Validation Rules** pane on the right. For **Rules for location**, select **Grid**, and then select (Add Validation Rule).

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. In the **Format/Validation Rule Builder**, create a new rule or update an existing rule.
6. To add a rule, enter a name and description for the rule.
   - If necessary, move the rule by selecting an option from **Location**. To create a rule similar to an existing rule, click (Duplicate) and then update the rule. To view rules in the current location, click **View Rule**. See Viewing Format Rules.
   - **Enable format/validation rule**: Select to make the format/validation rule available in forms. You can temporarily disable a format/validation rule by clearing this checkbox.
   - **Format Only**: Select to mark a rule as format only. This option is automatically enabled when a format-only rule is created.
7. Enter conditional logic for the rule:
   a. For **Condition**, select **Format**.

      You can use conditional logic similar to data validation rules when defining or updating format rules. In that case the THEN condition will have the Process Cell Source Type similar to FORMAT condition.

   b. The **Source Type** field will automatically display the **Process Cell** option. There are no other **Source Type** options for the **Format** condition.

   c. In the **Actions** column on the right, click (Process Cell) to add formatting instructions. See Cell Formatting Options in Forms.
   d. After you finish adding format instructions, click **OK**.
8. As a reminder, when you're ready to enable the rule to make it available in the form, select **Enable format/validation rule**.

> **Tip**
>
> While you're building a rule, you can save the rule without enabling it. When the rule is ready to be used, you can enable and save the rule to make it available in the form. You can temporarily disable a rule by clearing **Enable format/validation rule**.

9. **Optional**: In the **Form and Ad Hoc Grid Management** page, you can view and update rules:
   - In the **Format/Validation Rules** pane on the right side of the **Form and Ad Hoc Grid Management** page, add, edit, or delete rules at any level, including grid level and metadata cells, by clicking (Add Validation Rule), (Edit Validation Rule), or (Delete Selected Validation Rule).
   - If multiple rules are defined at the same location, you can change the order in which rules are processed when rules have the same precedence. To move a rule up, down, or to the top or bottom of the list, select the rule and click the arrows. You cannot reorder rules when you are viewing **All Rules**. For information about precedence of rules, see Order of Precedence for Format Rules.
10. In the **Form and Ad Hoc Grid Management** page, click **Finish** to save your updates.

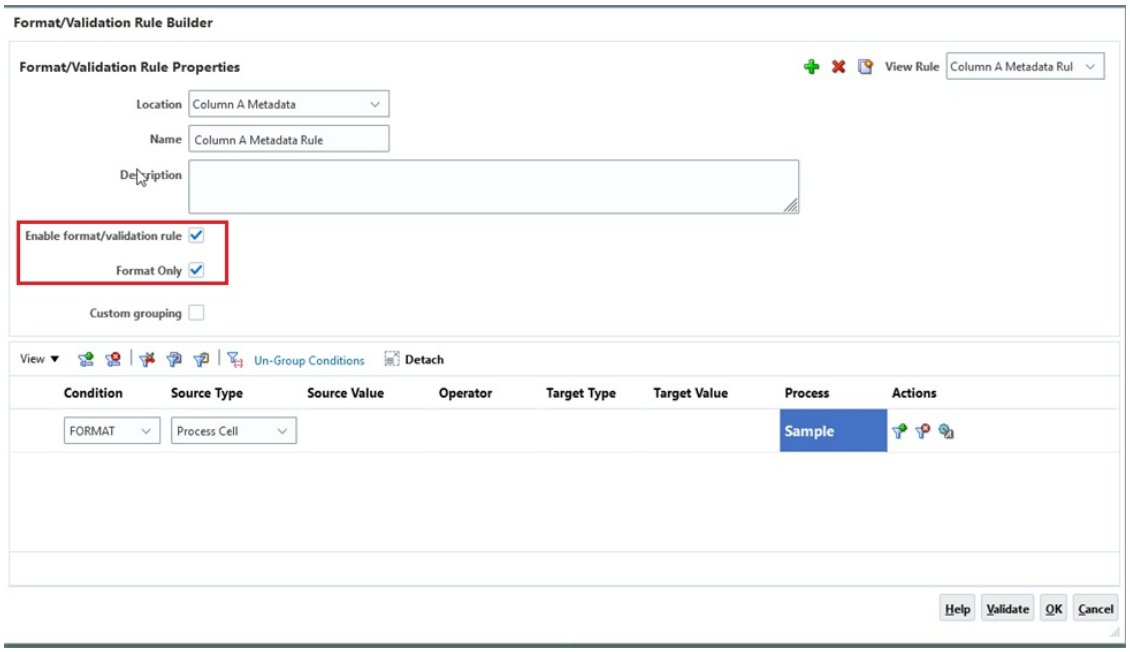
    For forms that have formatting rules enabled, formatting is displayed when the form is loaded.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Currently the preview only displays Forms 1.0 runtime. Hence the formatting rules will not be rendered.

Cell Formatting Options in Forms

Use the **Format/Validation Rule Builder** dialog box to enable format/validation rules, mark rules as format only, and to define formatting for cells in forms.



- **Enable format/validation rule**: Select to make the format/validation rule available in forms. You can temporarily disable a format/validation rule by clearing this checkbox.
- **Format Only**: Select to mark a rule as format only. This option is automatically enabled when a format-only rule is created.

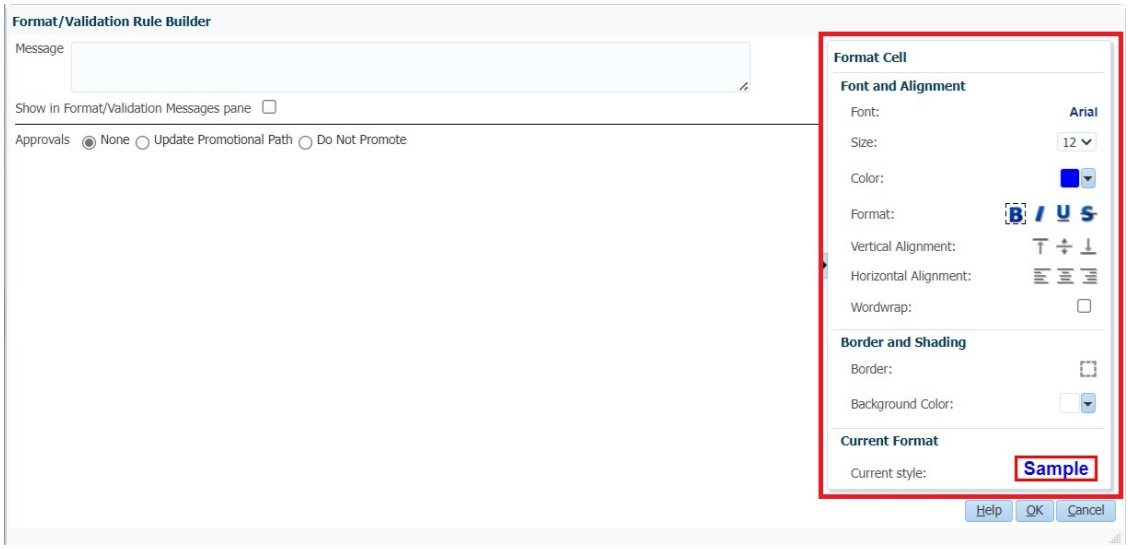
In the **Actions** column for a rule, click (Process Cell) to add formatting instructions.

> **Note**
>
> If the Process Cell icon isn't displayed, ensure that the rule is valid and that it permits cell processing instructions. For example, cell processing instructions are included for Else, Range, Then, and Format conditions. The icon isn't displayed until all required columns are selected for a rule.

There are options under **Format Cell** for **Font and Alignment** and **Border and Shading**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 15-4 Format Cell Pane in the Format/Validation Rule Builder Dialog Box



To format cells:

1. In the **Format Cell** pane, select options to set how the cell should appear in forms. Select options for **Font and Alignment** and **Border and Shading**.

   Click options on the right for **Font and Alignment**, including **Font**, **Size**, **Color**, **Format**, **Vertical Alignment**, **Horizontal Alignment**, and **Wordwrap**.

   Click options on the right for **Border and Shading**, including **Border** (**Left**, **Top**, **Right**, **Bottom**, and **All**) and **Background Color**.

   As options are selected, the **Current Format** displays how it would appear when displayed on the form.

2. Optionally, you can add tooltip text to the **Message** field. At runtime when a user hovers their mouse over the location on the form that is formatted, they'll see the tooltip.

   > **Note**
   >
   > The **Show in Format/Validation Messages page** checkbox is disabled for Format only rules and, consequently, messages will not appear in the **Data Validation Messages** pane in forms.

3. Click **OK**.

   Cell formatting for each rule is displayed in the **Process** column for that rule.

Viewing Format Rules

After format rules are defined on the **Layout** tab, you can view rules that apply to the selected grid, row, row metadata cell, column, column metadata cell, or cell level, or you can opt to view all rules on the form. Areas on the **Layout** tab with a green background, indicate locations where rules have been defined.

grid, row, row metadata cell, column, column metadata cell, or cell level

To view format rules:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Open the form, and then click **Layout**.
2. Expand the **Format/Data Validation Rules** pane on the right, and then click the drop-down list next to **Rules for location** to view rules for a specific location (grid, row, row metadata cell, column, column metadata cell, or cell level) or select **All Rules** to view all rules in the form.

> **Note**
>
> Click on a specific location on the grid area to refresh that location's rules (**Rules for location**) in the **Format/Data Validation Rules** pane.

3. Double-click a rule name to view rule details.

Order of Precedence for Format Rules

It's possible to have multiple rules specified in the same location on a form which could impact how formatting is displayed. For example, a form could include a Groovy rule, a data validation rule, Web form styles, and a format rule all at the same location. Therefore, there's an order of precedence for displaying rules in forms.

The order of precedence is as follows:

1. (P1) Groovy rule
2. (P2) Data Validation rule in the Format/Data Validation Rule Builder

> **Note**
>
> For a cell that inherits data validation rules that are defined in multiple places (grid, row, column, or cell level), the rule that is closest to the location of the rule definition wins priority. So if there is a rule applied at the cell level, that rule wins. Next is column level, then row level, and then grid level.

3. (P3) Oracle Smart View for Office cell styles
4. (P4) Format rule in the Format/Data Validation Rule Builder

> **Note**
>
> Same as the note above. For a cell that inherits rules that are defined in multiple places (grid, row, column, or cell level), the rule that is closest to the location of the rule definition wins priority. So if there is a rule applied at the cell level, that rule wins. Next is column level, then row level, and then grid level.

5. (P5) Smart View Custom formatting (not applicable on Web forms)

Considerations When Merging Rules

When merging formats from different rules (format and data validation rules), the rule with merged formatting is uplifted to the priority of a data validation rule (P2). In other words, if there is a P4 format rule, a P2 data validation rule, and a P3 style defined for the same cell, the formatting for the P4 format rule will display instead of the P3 style because the merging of the formatting and validation rules uplifted the format rule to a P2 priority level.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Tooltips and valid flags will be that of the higher priority data validation rule. Only formats are merged.

If a format is not set for a property, it will take on the properties of an incoming format regardless of the type of rule it is (format only or data validation). For example, if a left border is not set, it will be set with the incoming left border value. Each border is treated as a separate property. Also, left border thickness/style count as the same property.

Applying Format Rules to Forms at Runtime

After you define format rules for forms at design time, users can apply the format rules to forms at runtime using styles. Styles control how format rules are displayed for grids, row headings, column headings, and cells.

> **Note**
>
> You can only view runtime forms with format-only rules in Forms 2.0. To work in Forms 2.0, the **Forms Version** setting in application settings must be set to **Forms 2.0**. Also, format rules are supported in Oracle Smart View for Office 24.200. Versions earlier than 24.200 do not support this feature. If you define format-only rules for a form and then view the runtime form in Forms 1.0 or in a previous version of Smart View, the format rules will be ignored.

To apply styles to forms:

1. Open a form in Forms 2.0 (or in Smart View 24.200).
2. Click the style icon on the quick toolbar that is displayed above the form, and select one of the following style options:
   - **Cell Style**: Applies Web form styles (such as read-only cells, locked cells, supporting detail), Smart View cell styles defined in Smart View 24.200, data validation rules, and Groovy rules to the form. No custom (format-only) styles are applied.
   - **Custom Style**: Applies format-only rules that were defined in the rule builder at design-time, and any Excel custom formatting that was added by administrators and users in Smart View. No cell styles are applied.
   - **Custom and Cell Style**: Applies all cell styles and custom styles to the form. This is the default style option.

> **Note**
>
> Format rules have an order of precedence in cases where multiple rules are defined in the same location on a form. Order of precedence could impact how formatting is displayed on the runtime form. For more information, see Order of Precedence for Format Rules.

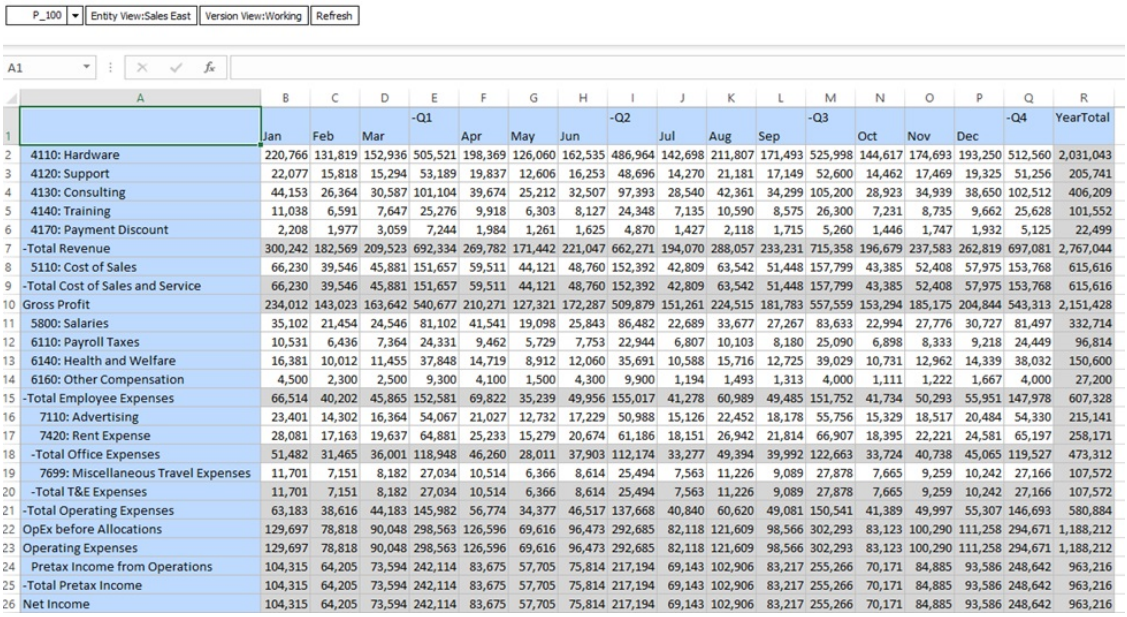
Copyright © 2022, 2026, Oracle and/or its affiliates.

Format Rule Scenarios

These scenarios provide examples of how format/validation rules and Groovy rules that are defined at design time affect the display in runtime forms when cell styles and custom styles are applied.

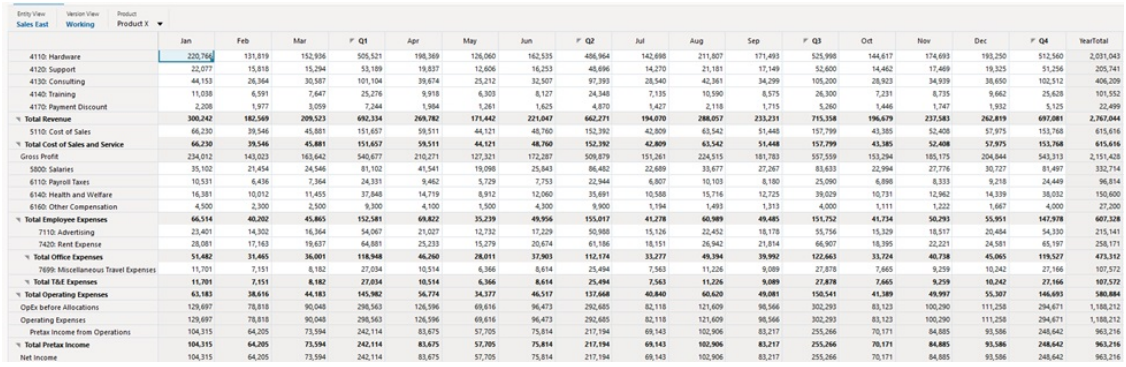
Scenario 1: Apply Cell Styles

Smart View runtime data grid with Smart View cell styles applied:



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		Jan	Feb	Mar	-Q1	Apr	May	Jun	-Q2	Jul	Aug	Sep	-Q3	Oct	Nov	Dec	-Q4	YearTotal
2	4110: Hardware	220,766	131,819	152,936	505,521	198,369	126,060	162,535	486,964	142,698	211,807	171,493	525,998	144,617	174,693	193,250	512,560	2,031,043
3	4120: Support	22,077	15,818	15,294	53,189	19,837	12,606	16,253	48,696	14,270	21,181	17,149	52,600	14,462	17,469	19,325	51,256	205,741
4	4130: Consulting	44,153	26,364	30,587	101,104	39,674	25,212	32,507	97,393	28,540	42,361	34,299	105,200	28,923	34,939	38,650	102,512	406,209
5	4140: Training	11,038	6,591	7,647	25,276	9,918	6,303	8,127	24,348	7,135	10,590	8,575	26,300	7,231	8,735	9,662	25,628	101,552
6	4170: Payment Discount	2,208	1,977	3,059	7,244	1,984	1,261	1,625	4,870	1,427	2,118	1,715	5,260	1,446	1,747	1,932	5,125	22,499
7	-Total Revenue	300,242	182,569	209,523	692,334	269,782	171,442	221,047	662,271	194,070	288,057	233,231	715,358	196,679	237,583	262,819	697,081	2,767,044
8	5110: Cost of Sales	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
9	-Total Cost of Sales and Service	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
10	Gross Profit	234,012	143,023	163,642	540,677	210,271	127,321	172,287	509,879	151,261	224,515	181,783	557,559	153,294	185,175	204,844	543,313	2,151,428
11	5800: Salaries	35,102	21,454	24,546	81,102	41,541	19,098	25,843	86,482	22,689	33,677	27,267	83,633	22,994	27,776	30,727	81,497	332,714
12	6110: Payroll Taxes	10,531	6,436	7,364	24,331	9,462	5,729	7,753	22,944	6,807	10,103	8,180	25,090	6,898	8,333	9,218	24,449	96,814
13	6140: Health and Welfare	16,381	10,012	11,455	37,848	14,719	8,912	12,060	35,691	10,588	15,716	12,725	39,029	10,731	12,962	14,339	38,032	150,600
14	6160: Other Compensation	4,500	2,300	2,500	9,300	4,100	1,500	4,300	9,900	1,194	1,493	1,313	4,000	1,111	1,222	1,667	4,000	27,200
15	-Total Employee Expenses	66,514	40,202	45,865	152,581	69,822	35,239	49,956	155,017	41,278	60,989	49,485	151,752	41,734	50,293	55,951	147,978	607,328
16	7110: Advertising	23,401	14,302	16,364	54,067	21,027	12,732	17,229	50,988	15,126	22,452	18,178	55,756	15,329	18,517	20,484	54,330	215,141
17	7420: Rent Expense	28,081	17,163	19,637	64,881	25,233	15,279	20,674	61,186	18,151	26,942	21,814	66,907	18,395	22,221	24,581	65,197	258,171
18	-Total Office Expenses	51,482	31,465	36,001	118,948	46,260	28,011	37,903	112,174	33,277	49,394	39,992	122,663	33,724	40,738	45,065	119,527	473,312
19	7699: Miscellaneous Travel Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
20	-Total T&E Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
21	-Total Operating Expenses	63,183	38,616	44,183	145,982	56,774	34,377	46,517	137,668	40,840	60,620	49,081	150,541	41,389	49,997	55,307	146,693	580,884
22	OpEx before Allocations	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
23	Operating Expenses	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
24	Pretax Income from Operations	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
25	-Total Pretax Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
26	Net Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216

Web runtime data grid with Web cell styles applied:

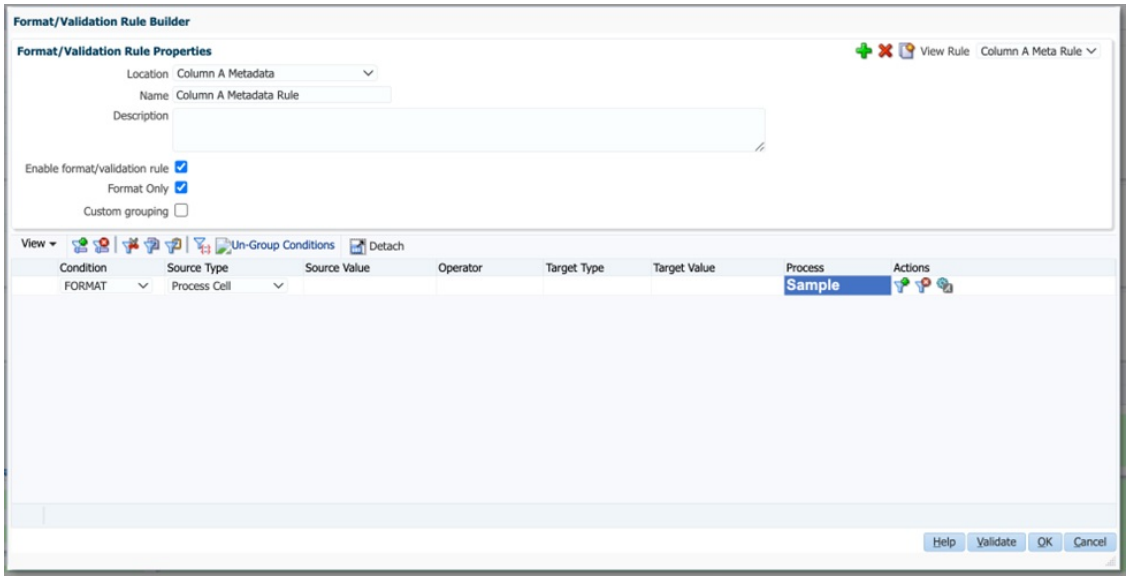


Scenario 2: Apply Custom Style

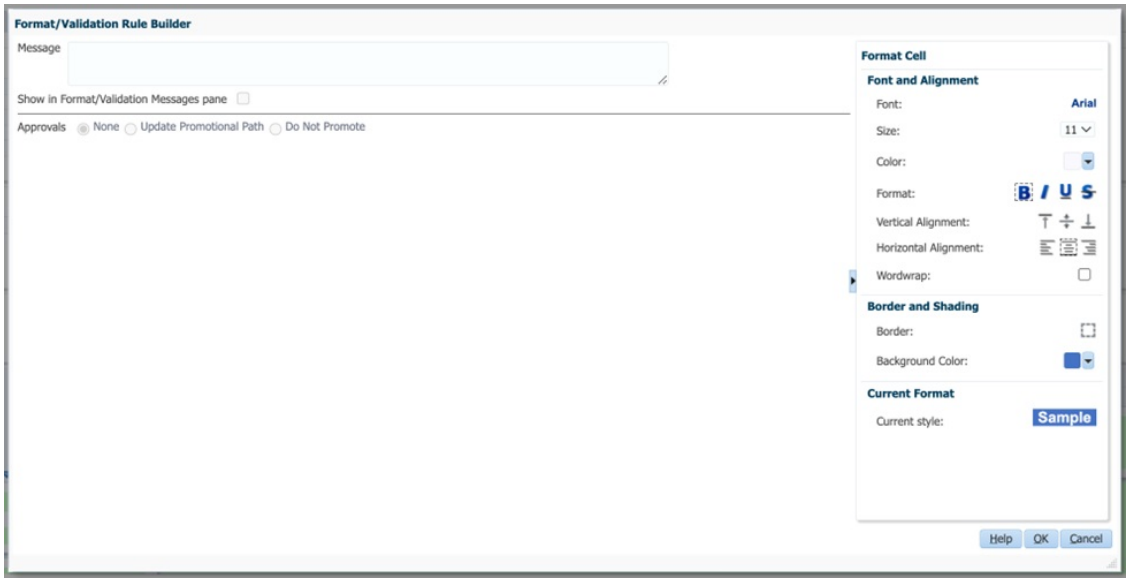
In the Format/Validation Rule Builder, a format-only rule is created on each of the row and column header cells and on Column A and Column B as shown in the screen shots below.

Format/Validation Rule Builder Properties:

Copyright © 2022, 2026, Oracle and/or its affiliates.

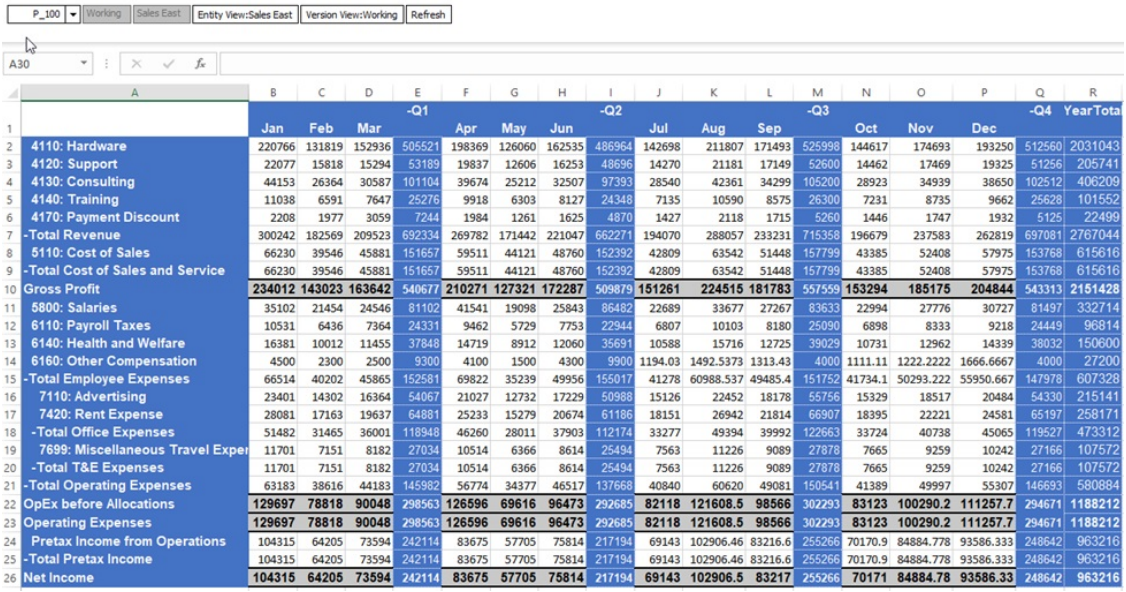


Format/Validation Rule Builder Format Cell Options:



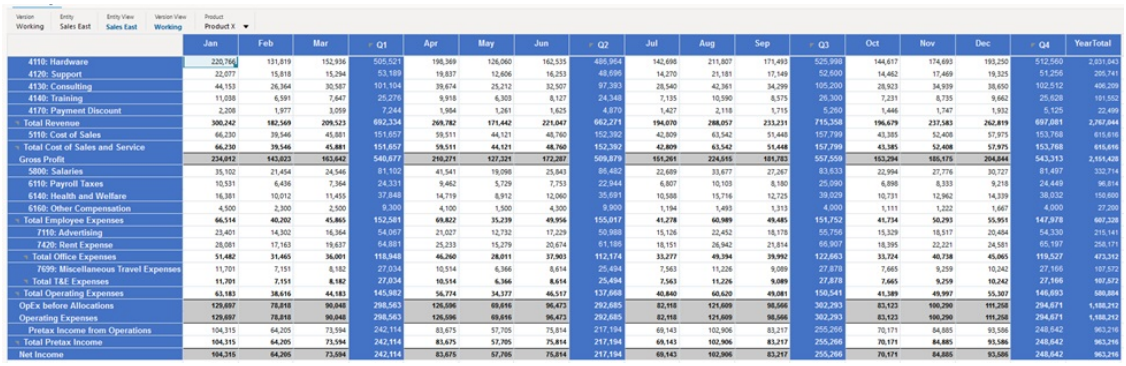
Smart View runtime data grid with custom styles applied so only design-time format rules display:

Copyright © 2022, 2026, Oracle and/or its affiliates.



		Jan	Feb	Mar	-Q1	Apr	May	Jun	-Q2	Jul	Aug	Sep	-Q3	Oct	Nov	Dec	-Q4	YearTotal
2	4110: Hardware	220766	131819	152936	505521	198369	126060	162535	486964	142698	211807	171493	525998	144617	174693	193250	512560	2031043
3	4120: Support	22077	15818	15294	53189	19837	12606	16253	48696	14270	21181	17149	52600	14462	17469	19325	51256	205741
4	4130: Consulting	44153	26364	30587	101104	39674	25212	32507	97393	28540	42361	34299	105200	28923	34939	38650	102512	406209
5	4140: Training	11038	6591	7647	25276	9918	6303	8127	24348	7135	10590	8575	26300	7231	8735	9662	25628	101552
6	4170: Payment Discount	2208	1977	3059	7244	1984	1261	1625	4870	1427	2118	1715	5260	1446	1747	1932	5125	22499
7	-Total Revenue	300242	182569	209523	692334	269782	171442	221047	662271	194070	288057	233231	715358	196679	237583	262819	697081	2767044
8	5110: Cost of Sales	66230	39546	45881	151657	59511	44121	48760	152392	42809	63542	51448	157799	43385	52408	57975	153768	615616
9	-Total Cost of Sales and Service	66230	39546	45881	151657	59511	44121	48760	152392	42809	63542	51448	157799	43385	52408	57975	153768	615616
10	Gross Profit	234012	143023	163642	540677	210271	127321	172287	509879	151261	224515	181783	557559	153294	185175	204844	543313	2151428
11	5800: Salaries	35102	21454	24546	81102	41541	19098	25843	86482	22689	33677	27267	83633	22994	27776	30727	81497	332714
12	6110: Payroll Taxes	10531	6436	7364	24331	9462	5729	7753	22944	6807	10103	8180	25090	6898	8333	9218	24449	96814
13	6140: Health and Welfare	16381	10012	11455	37848	14719	8912	12060	35691	10588	15716	12725	39029	10731	12962	14339	38032	150600
14	6160: Other Compensation	4500	2300	2500	9300	4100	1500	4300	9900	1194.03	1492.5373	1313.43	4000	1111.11	1222.2222	1666.6667	4000	27200
15	-Total Employee Expenses	66514	40202	45865	152581	69822	35239	49956	155017	41278	60988.537	49485.4	151752	41734.1	50293.222	55950.667	147978	607328
16	7110: Advertising	23401	14302	16364	54067	21027	12732	17229	50988	15126	22452	18178	55756	15329	18517	20484	54330	215141
17	7420: Rent Expense	28081	17163	19637	64881	25233	15279	20674	61186	18151	26942	21814	66907	18395	22221	24581	65197	258171
18	-Total Office Expenses	51482	31465	36001	118948	46260	28011	37903	112174	33277	49394	39992	122663	33724	40738	45065	119527	473312
19	7699: Miscellaneous Travel Exper	11701	7151	8182	27034	10514	6366	8614	25494	7563	11226	9089	27878	7665	9259	10242	27166	107572
20	-Total T&E Expenses	11701	7151	8182	27034	10514	6366	8614	25494	7563	11226	9089	27878	7665	9259	10242	27166	107572
21	-Total Operating Expenses	63183	38616	44183	145982	56774	34377	46517	137668	40840	60620	49081	150541	41389	49997	55307	146693	580884
22	OpEx before Allocations	129697	78818	90048	298563	126596	69616	96473	292685	82118	121608.5	98566	302293	83123	100290.2	111257.7	294671	1188212
23	Operating Expenses	129697	78818	90048	298563	126596	69616	96473	292685	82118	121608.5	98566	302293	83123	100290.2	111257.7	294671	1188212
24	Pretax Income from Operations	104315	64205	73594	242114	83675	57705	75814	217194	69143	102906.46	83216.6	255266	70170.9	84884.778	93586.333	248642	963216
25	-Total Pretax Income	104315	64205	73594	242114	83675	57705	75814	217194	69143	102906.46	83216.6	255266	70170.9	84884.778	93586.333	248642	963216
26	Net Income	104315	64205	73594	242114	83675	57705	75814	217194	69143	102906.5	83217	255266	70171	84884.78	93586.33	248642	963216

Web runtime data grid with custom styles applied so only design-time format rules display:

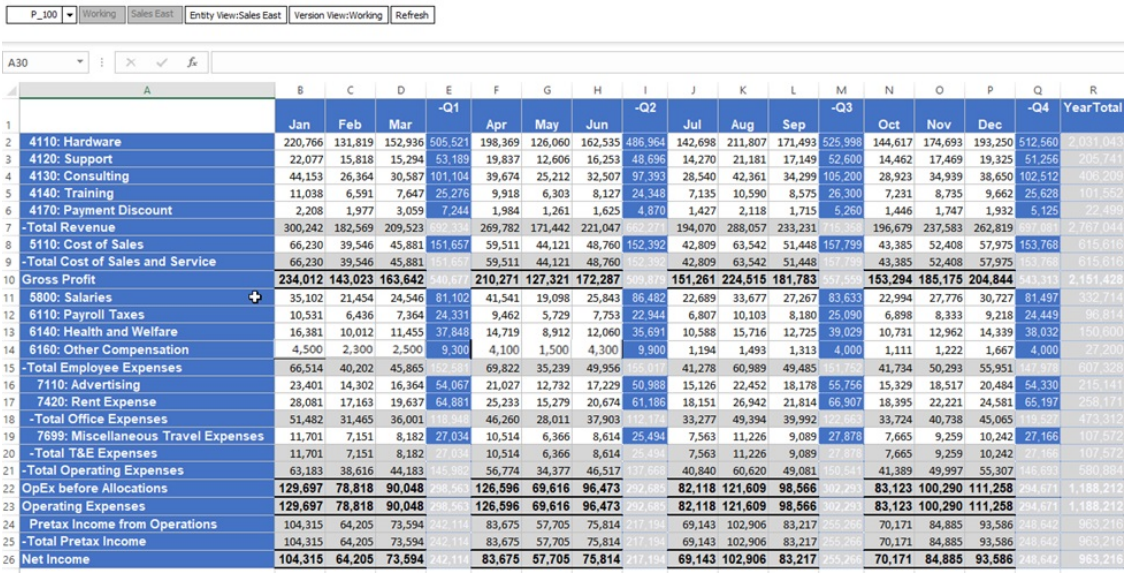


Scenario 3: Apply Custom and Cell Styles

In the screen shots below, the Oracle Smart View for Office cell styles take precedence over design-time format rules.

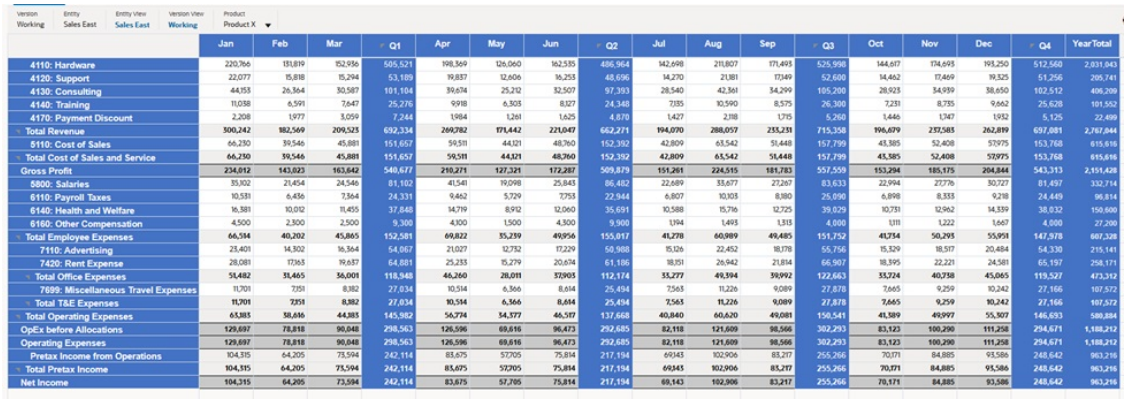
Smart View runtime data grid with custom and cell styles applied:

Copyright © 2022, 2026, Oracle and/or its affiliates.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		Jan	Feb	Mar	-Q1	Apr	May	Jun	-Q2	Jul	Aug	Sep	-Q3	Oct	Nov	Dec	-Q4	YearTotal
2	4110: Hardware	220,766	131,819	152,936	505,521	198,369	126,060	162,535	486,964	142,698	211,807	171,493	525,998	144,617	174,693	193,250	512,560	2,031,043
3	4120: Support	22,077	15,818	15,294	53,189	19,837	12,606	16,253	48,696	14,270	21,181	17,149	52,600	14,462	17,469	19,325	51,256	205,741
4	4130: Consulting	44,153	26,364	30,587	101,104	39,674	25,212	32,507	97,393	28,540	42,361	34,299	105,200	28,923	34,939	38,650	102,512	406,209
5	4140: Training	11,038	6,591	7,647	25,276	9,918	6,303	8,127	24,348	7,135	10,590	8,575	26,300	7,231	8,735	9,662	25,628	101,552
6	4170: Payment Discount	2,208	1,977	3,059	7,244	1,984	1,261	1,625	4,870	1,427	2,118	1,715	5,260	1,446	1,747	1,932	5,125	22,499
7	-Total Revenue	300,242	182,569	209,523	692,334	269,782	171,442	221,047	662,271	194,070	288,057	233,231	715,358	196,679	237,583	262,819	697,081	2,767,044
8	5110: Cost of Sales	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
9	-Total Cost of Sales and Service	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
10	Gross Profit	234,012	143,023	163,642	540,677	210,271	127,321	172,287	509,879	151,261	224,515	181,783	557,559	153,294	185,175	204,844	543,313	2,151,428
11	5800: Salaries	35,102	21,454	24,546	81,102	41,541	19,098	25,843	86,482	22,689	33,677	27,267	83,633	22,994	27,776	30,727	81,497	332,714
12	6110: Payroll Taxes	10,531	6,436	7,364	24,331	9,462	5,729	7,753	22,944	6,807	10,103	8,180	25,090	6,898	8,333	9,218	24,449	96,814
13	6140: Health and Welfare	16,381	10,012	11,455	37,848	14,719	8,912	12,060	35,691	10,588	15,716	12,725	39,029	10,731	12,962	14,339	38,032	150,600
14	6160: Other Compensation	4,500	2,300	2,500	9,300	4,100	1,500	4,300	9,900	1,194	1,493	1,313	4,000	1,111	1,222	1,667	4,000	27,200
15	-Total Employee Expenses	66,514	40,202	45,865	152,581	69,822	35,239	49,956	155,017	41,278	60,989	49,485	151,752	41,754	50,293	55,951	147,978	607,328
16	7110: Advertising	23,401	14,302	16,364	54,067	21,027	12,732	17,229	50,988	15,126	22,452	18,178	55,756	15,329	18,517	20,484	54,330	215,141
17	7420: Rent Expense	28,081	17,163	19,637	64,881	25,233	15,279	20,674	61,186	18,151	26,942	21,814	66,907	18,395	22,221	24,581	65,197	258,171
18	-Total Office Expenses	51,482	31,465	36,001	118,948	46,260	28,011	37,903	112,174	33,277	49,394	39,992	122,663	33,724	40,738	45,065	119,527	473,312
19	7699: Miscellaneous Travel Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
20	-Total T&E Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
21	-Total Operating Expenses	63,183	38,616	44,183	145,982	56,774	34,377	46,517	137,668	40,840	60,620	49,081	150,541	41,389	49,997	55,307	146,693	580,884
22	OpEx before Allocations	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
23	Operating Expenses	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
24	Pretax Income from Operations	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
25	-Total Pretax Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
26	Net Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216

Web runtime data grid with custom and cell styles applied:



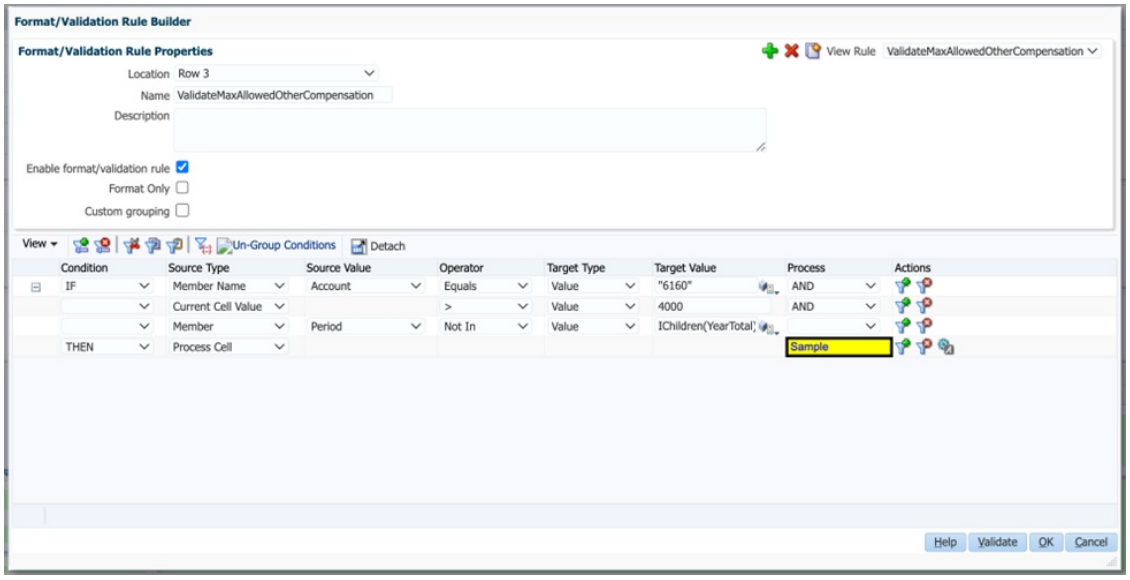
	Jan	Feb	Mar	Q1	Apr	May	Jun	Q2	Jul	Aug	Sep	Q3	Oct	Nov	Dec	Q4	YearTotal
4110: Hardware	220,766	131,819	152,936	505,521	198,369	126,060	162,535	486,964	142,698	211,807	171,493	525,998	144,617	174,693	193,250	512,560	2,031,043
4120: Support	22,077	15,818	15,294	53,189	19,837	12,606	16,253	48,696	14,270	21,181	17,149	52,600	14,462	17,469	19,325	51,256	205,741
4130: Consulting	44,153	26,364	30,587	101,104	39,674	25,212	32,507	97,393	28,540	42,361	34,299	105,200	28,923	34,939	38,650	102,512	406,209
4140: Training	11,038	6,591	7,647	25,276	9,918	6,303	8,127	24,348	7,135	10,590	8,575	26,300	7,231	8,735	9,662	25,628	101,552
4170: Payment Discount	2,208	1,977	3,059	7,244	1,984	1,261	1,625	4,870	1,427	2,118	1,715	5,260	1,446	1,747	1,932	5,125	22,499
-Total Revenue	300,242	182,569	209,525	692,334	269,782	171,442	221,047	662,271	194,070	288,057	233,231	715,358	196,679	237,585	262,819	697,081	2,767,044
5110: Cost of Sales	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
-Total Cost of Sales and Service	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
Gross Profit	234,012	143,023	163,642	540,677	210,271	127,321	172,287	509,879	151,261	224,515	181,783	557,559	153,294	185,175	204,844	543,313	2,151,428
5800: Salaries	35,102	21,454	24,546	81,102	41,541	19,098	25,843	86,482	22,689	33,677	27,267	83,633	22,994	27,776	30,727	81,497	332,714
6110: Payroll Taxes	10,531	6,436	7,364	24,331	9,462	5,729	7,753	22,944	6,807	10,103	8,180	25,090	6,898	8,333	9,218	24,449	96,814
6140: Health and Welfare	16,381	10,012	11,455	37,848	14,719	8,912	12,060	35,691	10,588	15,716	12,725	39,029	10,731	12,962	14,339	38,032	150,600
6160: Other Compensation	4,500	2,300	2,500	9,300	4,100	1,500	4,300	9,900	1,194	1,493	1,313	4,000	1,111	1,222	1,667	4,000	27,200
-Total Employee Expenses	66,514	40,202	45,865	152,581	69,822	35,239	49,956	155,017	41,278	60,989	49,485	151,752	41,754	50,295	55,951	147,978	607,328
7110: Advertising	23,401	14,302	16,364	54,067	21,027	12,732	17,229	50,988	15,126	22,452	18,178	55,756	15,329	18,517	20,484	54,330	215,141
7420: Rent Expense	28,081	17,163	19,637	64,881	25,233	15,279	20,674	61,186	18,151	26,942	21,814	66,907	18,395	22,221	24,581	65,197	258,171
-Total Office Expenses	51,482	31,465	36,001	118,948	46,260	28,011	37,903	112,174	33,277	49,394	39,992	122,663	33,724	40,738	45,065	119,527	473,312
7699: Miscellaneous Travel Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
-Total T&E Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
-Total Operating Expenses	63,183	38,616	44,183	145,982	56,774	34,377	46,517	137,668	40,840	60,620	49,081	150,541	41,389	49,997	55,307	146,693	580,884
OpEx before Allocations	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
Operating Expenses	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
Pretax Income from Operations	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
-Total Pretax Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
Net Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216

Scenario 4: Apply Cell Style with One Data Validation Rule

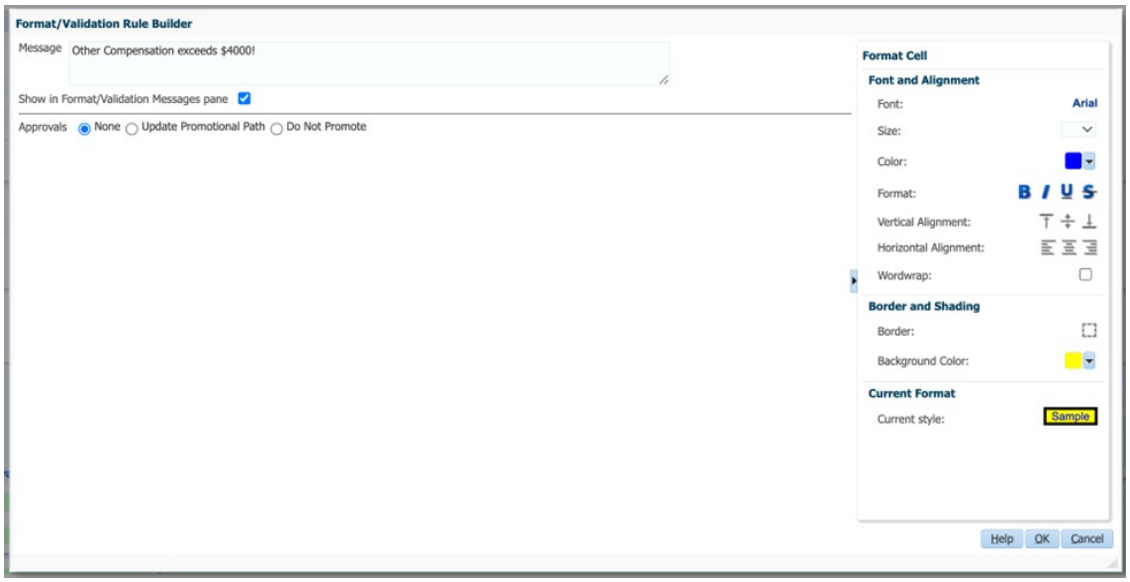
In the Format/Validation Rule Builder screen shots below, a data validation rule is added that sets the background color and tooltip for level 0 Other Compensation cells if the value exceeds $4000.

Format/Validation Rule Builder Properties:

Copyright © 2022, 2026, Oracle and/or its affiliates.

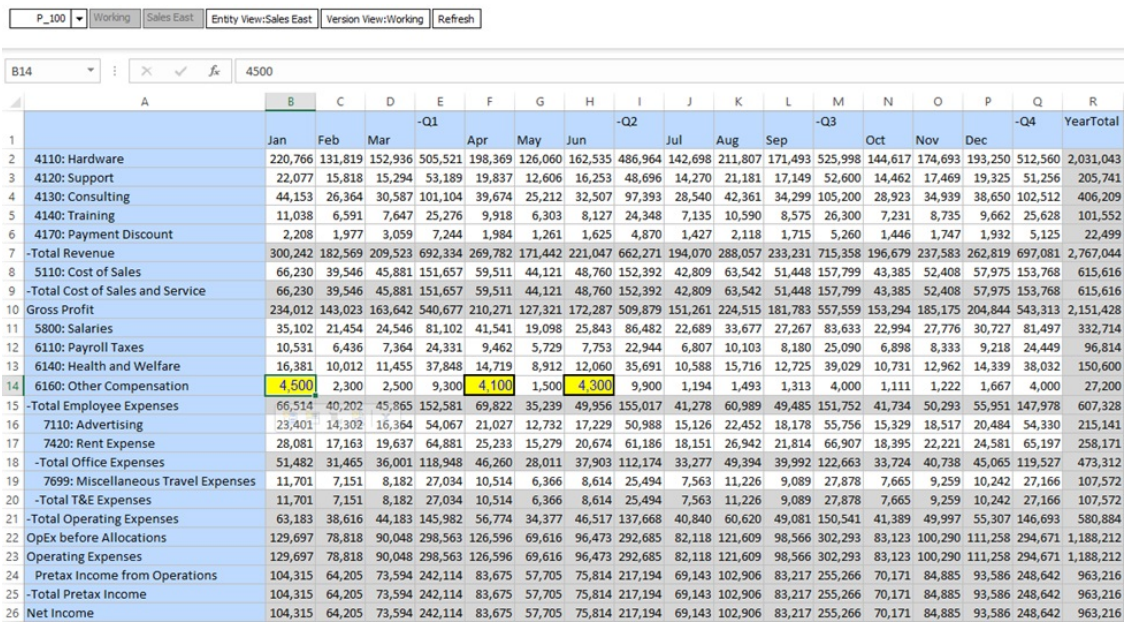


Format/Validation Rule Builder Format Cell Options:



Smart View runtime data grid with cell styles applied and one data validation rule:

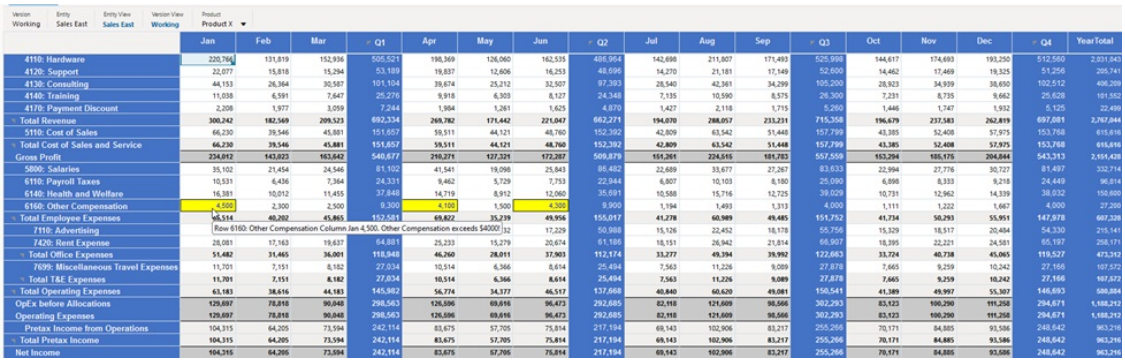
Copyright © 2022, 2026, Oracle and/or its affiliates.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		Jan	Feb	Mar	-Q1	Apr	May	Jun	-Q2	Jul	Aug	Sep	-Q3	Oct	Nov	Dec	-Q4	YearTotal
2	4110: Hardware	220,766	131,819	152,936	505,521	198,369	126,060	162,535	486,964	142,698	211,807	171,493	525,998	144,617	174,693	193,250	512,560	2,031,043
3	4120: Support	22,077	15,818	15,294	53,189	19,837	12,606	16,253	48,696	14,270	21,181	17,149	52,600	14,462	17,469	19,325	51,256	205,741
4	4130: Consulting	44,153	26,364	30,587	101,104	39,674	25,212	32,507	97,393	28,540	42,361	34,299	105,200	28,923	34,939	38,650	102,512	406,209
5	4140: Training	11,038	6,591	7,647	25,276	9,918	6,303	8,127	24,348	7,135	10,590	8,575	26,300	7,231	8,735	9,662	25,628	101,552
6	4170: Payment Discount	2,208	1,977	3,059	7,244	1,984	1,261	1,625	4,870	1,427	2,118	1,715	5,260	1,446	1,747	1,932	5,125	22,499
7	-Total Revenue	300,242	182,569	209,523	692,334	269,782	171,442	221,047	662,271	194,070	288,057	233,231	715,358	196,679	237,583	262,819	697,081	2,767,044
8	5110: Cost of Sales	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
9	-Total Cost of Sales and Service	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
10	Gross Profit	234,012	143,023	163,642	540,677	210,271	127,321	172,287	509,879	151,261	224,515	181,783	557,559	153,294	185,175	204,844	543,313	2,151,428
11	5800: Salaries	35,102	21,454	24,546	81,102	41,541	19,098	25,843	86,482	22,689	33,677	27,267	83,633	22,994	27,776	30,727	81,497	332,714
12	6110: Payroll Taxes	10,531	6,436	7,364	24,331	9,462	5,729	7,753	22,944	6,807	10,103	8,180	25,090	6,898	8,333	9,218	24,449	96,814
13	6140: Health and Welfare	16,381	10,012	11,455	37,848	14,719	8,912	12,060	35,691	10,588	15,716	12,725	39,029	10,731	12,962	14,339	38,032	150,600
14	6160: Other Compensation	4,500	2,300	2,500	9,300	4,100	1,500	4,300	9,900	1,194	1,493	1,313	4,000	1,111	1,222	1,667	4,000	27,200
15	-Total Employee Expenses	66,514	40,202	45,865	152,581	69,822	35,239	49,956	155,017	41,278	60,989	49,485	151,752	41,734	50,293	55,951	147,978	607,328
16	7110: Advertising	23,401	14,302	16,364	54,067	21,027	12,732	17,229	50,988	15,126	22,452	18,178	55,756	15,329	18,517	20,484	54,330	215,141
17	7420: Rent Expense	28,081	17,163	19,637	64,881	25,233	15,279	20,674	61,186	18,151	26,942	21,814	66,907	18,395	22,221	24,581	65,197	258,171
18	-Total Office Expenses	51,482	31,465	36,001	118,948	46,260	28,011	37,903	112,174	33,277	49,394	39,992	122,663	33,724	40,738	45,065	119,527	473,312
19	7699: Miscellaneous Travel Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
20	-Total T&E Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
21	-Total Operating Expenses	63,183	38,616	44,183	145,982	56,774	34,377	46,517	137,668	40,840	60,620	49,081	150,541	41,389	49,997	55,307	146,693	580,884
22	OpEx before Allocations	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
23	Operating Expenses	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
24	Pretax Income from Operations	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
25	-Total Pretax Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
26	Net Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216

In the screen shot above, the data validation rule that was defined in the rule builder is applied to cells [B,14], [F,14], and [H,14]. There's a black border on all four sides, yellow background color, and blue font.

Web runtime data grid with cell styles applied and one data validation rule:



Note the following about the screen shot above:

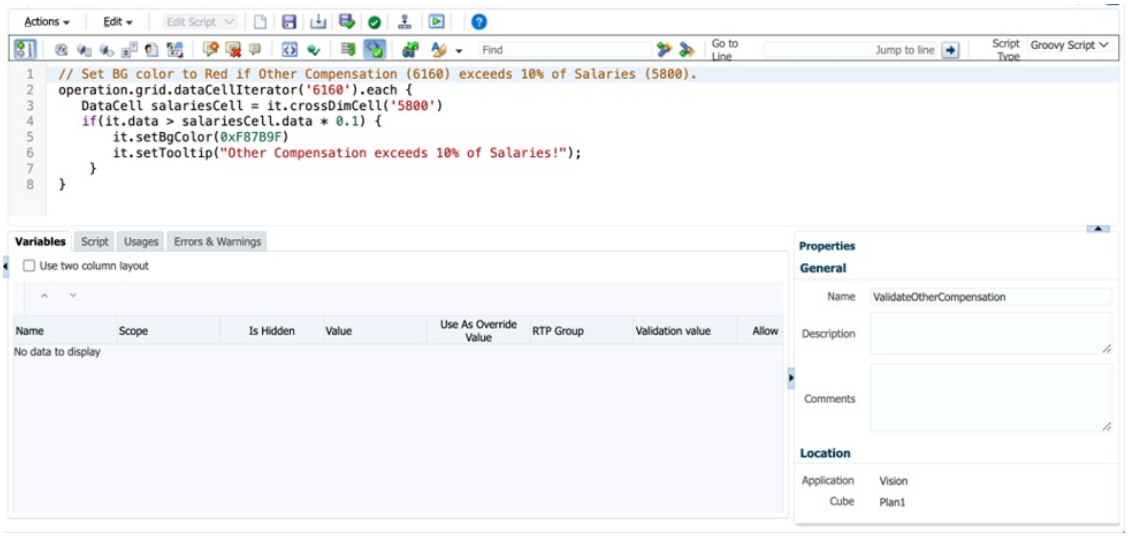
- Formatting: Black border on all four sides, yellow background color, and blue font.
- Tooltip Message: Other Compensation exceeds $4000!

Scenario 5: Apply Cell Style with One Data Validation Rule and One Groovy Rule

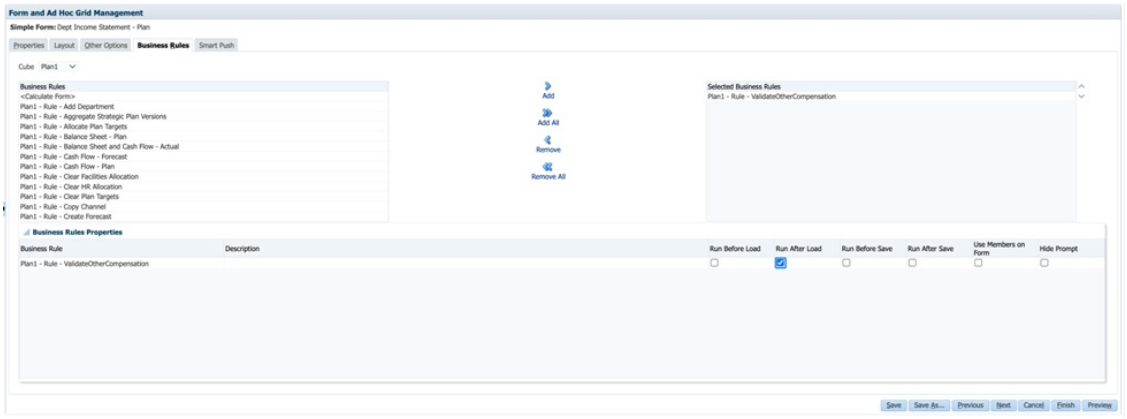
The Groovy rule definition sets the background color and a tooltip for the Other Compensation cells if the cell value exceeds 10% of Salaries.

Groovy Rule definition:

Copyright © 2022, 2026, Oracle and/or its affiliates.



Adding the Groovy rule to the form on the Business Rules tab of the Form Designer:



Smart View runtime data grid with Groovy rules and data validation rules applied:

Copyright © 2022, 2026, Oracle and/or its affiliates.

P_100 | Working | Sales East | Entity View:Sales East | Version View:Working | Refresh

B2 | 220766

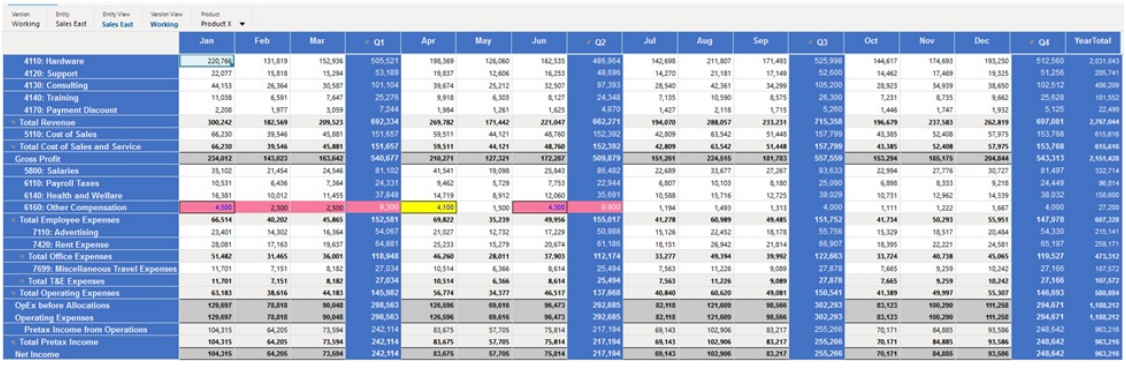
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		Jan	Feb	Mar	-Q1	Apr	May	Jun	-Q2	Jul	Aug	Sep	-Q3	Oct	Nov	Dec	-Q4	YearTotal
2	4110: Hardware	220,766	131,819	152,936	505,521	198,369	126,060	162,535	486,964	142,698	211,807	171,493	525,998	144,617	174,693	193,250	512,560	2,031,043
3	4120: Support	22,077	15,818	15,294	53,189	19,837	12,606	16,253	48,696	14,270	21,181	17,149	52,600	14,462	17,469	19,325	51,256	205,741
4	4130: Consulting	44,153	26,364	30,587	101,104	39,674	25,212	32,507	97,393	28,540	42,361	34,299	105,200	28,923	34,939	38,650	102,512	406,209
5	4140: Training	11,038	6,591	7,647	25,276	9,918	6,303	8,127	24,348	7,135	10,590	8,575	26,300	7,231	8,735	9,662	25,628	101,552
6	4170: Payment Discount	2,208	1,977	3,059	7,244	1,984	1,261	1,625	4,870	1,427	2,118	1,715	5,260	1,446	1,747	1,932	5,125	22,499
7	-Total Revenue	300,242	182,569	209,523	692,334	269,782	171,442	221,047	662,271	194,070	288,057	233,231	715,358	196,679	237,583	262,819	697,081	2,767,044
8	5110: Cost of Sales	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
9	-Total Cost of Sales and Service	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
10	Gross Profit	234,012	143,023	163,642	540,677	210,271	127,321	172,287	509,879	151,261	224,515	181,783	557,559	153,294	185,175	204,844	543,313	2,151,428
11	5800: Salaries	35,102	21,454	24,546	81,102	41,541	19,098	25,843	86,482	22,689	33,677	27,267	83,633	22,994	27,776	30,727	81,497	332,714
12	6110: Payroll Taxes	10,531	6,436	7,364	24,331	9,462	5,729	7,753	22,944	6,807	10,103	8,180	25,090	6,898	8,333	9,218	24,449	96,814
13	6140: Health and Welfare	16,381	10,012	11,455	37,848	14,719	8,912	12,060	35,691	10,588	15,716	12,725	39,029	10,731	12,962	14,339	38,032	150,600
14	6160: Other Compensation	4,500	2,300	2,500	9,300	4,100	1,500	4,300	9,900	1,194	1,493	1,313	4,000	1,111	1,222	1,667	4,000	27,200
15	-Total Employee Expenses	66,514	40,202	45,865	152,581	69,822	35,239	49,956	155,017	41,278	60,989	49,485	151,752	41,734	50,293	55,951	147,978	607,328
16	7110: Advertising	23,401	14,302	16,364	54,067	21,027	12,732	17,229	50,988	15,126	22,452	18,178	55,756	15,329	18,517	20,484	54,330	215,141
17	7420: Rent Expense	28,081	17,163	19,637	64,881	25,233	15,279	20,674	61,186	18,151	26,942	21,814	66,907	18,395	22,221	24,581	65,197	258,171
18	-Total Office Expenses	51,482	31,465	36,001	118,948	46,260	28,011	37,903	112,174	33,277	49,394	39,992	122,663	33,724	40,738	45,065	119,527	473,312
19	7699: Miscellaneous Travel Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
20	-Total T&E Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
21	-Total Operating Expenses	63,183	38,616	44,183	145,982	56,774	34,377	46,517	137,668	40,840	60,620	49,081	150,541	41,389	49,997	55,307	146,693	580,884
22	OpEx before Allocations	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
23	Operating Expenses	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
24	Pretax Income from Operations	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
25	-Total Pretax Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
26	Net Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216

The data validation rule and the Groovy rule are applied to cells [B,14] and [H,14].

Note the following in the above Smart View runtime data grid:

- The background color is applied from the Groovy rule as it has higher precedence than the data validation rule. The formatting (border and blue font) is merged from the data validation rule since the Groovy rule does not apply any formatting.
- In cells [C,14], [D,14], [E,14], and [I,14], only the Groovy rule definition is displayed.
- Only cell [F,14] applies the data validation rule

Web runtime data grid with Groovy rules and data validation rules applied:



Note the following in the above Web runtime data grid:

- The background color is applied from the Groovy rule as it has higher precedence than the data validation rule. The formatting (border and blue font) is merged from the data validation rule since the Groovy rule does not apply any formatting.
- In some cells, only the Groovy rule definition is displayed.
- Only one cell applies the data validation rule

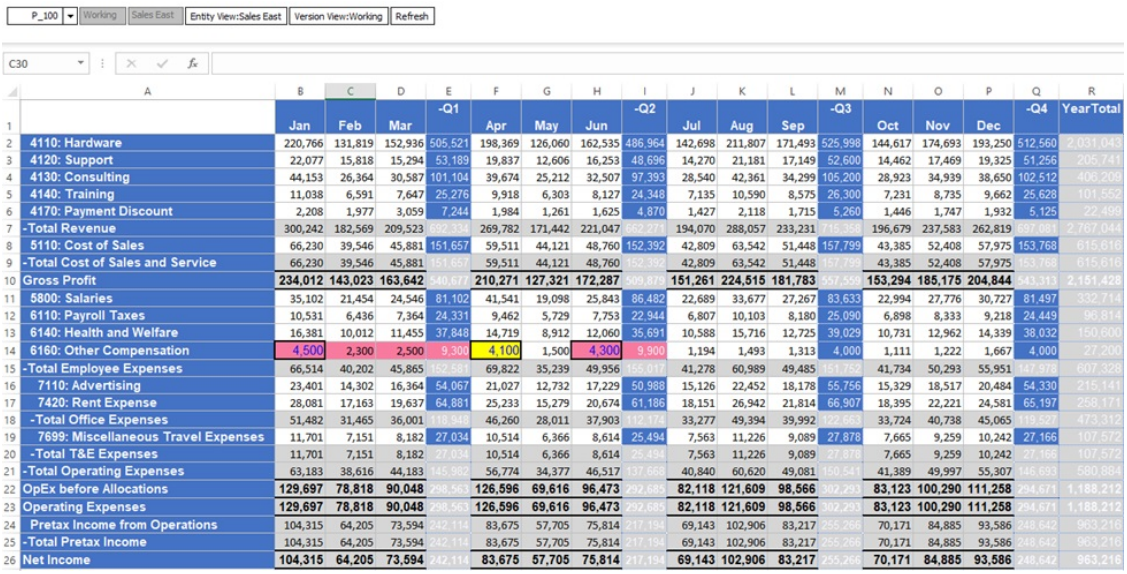
Copyright © 2022, 2026, Oracle and/or its affiliates.

Scenario 6: Apply Custom and Cell Styles with One Data Validation Rule and One Groovy Rule

In the screen shots below, the order of precedence is applied with P1 being the highest precedence:

- (P1) Groovy rule
- (P2) Data Validation rule in the Format/Data Validation Rule Builder
- (P3) Smart View cell styles
- (P4) Format rule in the Format/Data Validation Rule Builder
- (P5) Smart View Custom formatting

Smart View runtime data grid with custom and cell styles applied and one data validation rule and one groovy rule:



	Jan	Feb	Mar	-Q1	Apr	May	Jun	-Q2	Jul	Aug	Sep	-Q3	Oct	Nov	Dec	-Q4	YearTotal
4110: Hardware	220,766	131,819	152,936	505,521	198,369	126,060	162,535	486,964	142,698	211,807	171,493	525,998	144,617	174,693	193,250	512,560	2,031,043
4120: Support	22,077	15,818	15,294	53,189	19,837	12,606	16,253	48,696	14,270	21,181	17,149	52,600	14,462	17,469	19,325	51,256	205,741
4130: Consulting	44,153	26,364	30,587	101,104	39,674	25,212	32,507	97,393	28,540	42,361	34,299	105,200	28,923	34,939	38,650	102,512	406,209
4140: Training	11,038	6,591	7,647	25,276	9,918	6,303	8,127	24,348	7,135	10,590	8,575	26,300	7,231	8,735	9,662	25,628	101,552
4170: Payment Discount	2,208	1,977	3,059	7,244	1,984	1,261	1,625	4,870	1,427	2,118	1,715	5,260	1,446	1,747	1,932	5,125	22,499
-Total Revenue	300,242	182,569	209,523	692,334	269,782	171,442	221,047	662,471	194,070	288,057	233,231	715,358	196,679	237,583	262,819	697,681	2,767,044
5110: Cost of Sales	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
-Total Cost of Sales and Service	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
Gross Profit	**234,012**	**143,023**	**163,642**	540,677	**210,271**	**127,321**	**172,287**	509,879	**151,261**	**224,515**	**181,783**	557,559	**153,294**	**185,175**	**204,844**	543,313	2,151,428
5800: Salaries	35,102	21,454	24,546	81,102	41,541	19,098	25,843	86,482	22,689	33,677	27,267	83,633	22,994	27,776	30,727	81,497	332,714
6110: Payroll Taxes	10,531	6,436	7,364	24,331	9,462	5,729	7,753	22,944	6,807	10,103	8,180	25,090	6,898	8,333	9,218	24,449	96,814
6140: Health and Welfare	16,381	10,012	11,455	37,848	14,719	8,912	12,060	35,691	10,588	15,716	12,725	39,029	10,731	12,962	14,339	38,032	150,600
6160: Other Compensation	4,500	2,300	2,500	9,300	4,100	1,500	4,300	9,900	1,194	1,493	1,313	4,000	1,111	1,222	1,667	4,000	27,200
-Total Employee Expenses	66,514	40,202	45,865	152,581	69,822	35,239	49,956	155,017	41,278	60,989	49,485	151,752	41,734	50,293	55,951	147,978	607,328
7110: Advertising	23,401	14,302	16,364	54,067	21,027	12,732	17,229	50,988	15,126	22,452	18,178	55,756	15,329	18,517	20,484	54,330	215,141
7420: Rent Expense	28,081	17,163	19,637	64,881	25,233	15,279	20,674	61,186	18,151	26,942	21,814	66,907	18,395	22,221	24,581	65,197	258,171
-Total Office Expenses	51,482	31,465	36,001	118,948	46,260	28,011	37,903	112,174	33,277	49,394	39,992	122,663	33,724	40,738	45,065	119,527	473,312
7699: Miscellaneous Travel Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
-Total T&E Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
-Total Operating Expenses	63,183	38,616	44,183	145,982	56,774	34,377	46,517	137,668	40,840	60,620	49,081	150,541	41,389	49,997	55,307	146,693	580,884
OpEx before Allocations	**129,697**	**78,818**	**90,048**	298,563	**126,596**	**69,616**	**96,473**	292,685	**82,118**	**121,609**	**98,566**	302,293	**83,123**	**100,290**	**111,258**	294,671	1,188,212
Operating Expenses	**129,697**	**78,818**	**90,048**	298,563	**126,596**	**69,616**	**96,473**	292,685	**82,118**	**121,609**	**98,566**	302,293	**83,123**	**100,290**	**111,258**	294,671	1,188,212
Pretax Income from Operations	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
-Total Pretax Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
Net Income	**104,315**	**64,205**	**73,594**	242,114	**83,675**	**57,705**	**75,814**	217,194	**69,143**	**102,906**	**83,217**	255,266	**70,171**	**84,885**	**93,586**	248,642	963,216

Smart View runtime data grid with read-only disabled:

Copyright © 2022, 2026, Oracle and/or its affiliates.

P_100 | Working | Sales East | Entity View:Sales East | Version View:Working | Refresh

C28

	Jan	Feb	Mar	-Q1	Apr	May	Jun	-Q2	Jul	Aug	Sep	-Q3	Oct	Nov	Dec	-Q4	YearTotal
4110: Hardware	220,766	131,819	152,936	505,521	198,369	126,060	162,535	486,964	142,698	211,807	171,493	525,998	144,617	174,693	193,250	512,560	2,031,043
4120: Support	22,077	15,818	15,294	53,189	19,837	12,606	16,253	48,696	14,270	21,181	17,149	52,600	14,462	17,469	19,325	51,256	205,741
4130: Consulting	44,153	26,364	30,587	101,104	39,674	25,212	32,507	97,393	28,540	42,361	34,299	105,200	28,923	34,939	38,650	102,512	406,209
4140: Training	11,038	6,591	7,647	25,276	9,918	6,303	8,127	24,348	7,135	10,590	8,575	26,300	7,231	8,735	9,662	25,628	101,552
4170: Payment Discount	2,208	1,977	3,059	7,244	1,984	1,261	1,625	4,870	1,427	2,118	1,715	5,260	1,446	1,747	1,932	5,125	22,499
-Total Revenue	300,242	182,569	209,523	692,334	269,782	171,442	221,047	662,271	194,070	288,057	233,231	715,358	196,679	237,583	262,819	697,081	2,767,044
5110: Cost of Sales	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
-Total Cost of Sales and Service	66,230	39,546	45,881	151,657	59,511	44,121	48,760	152,392	42,809	63,542	51,448	157,799	43,385	52,408	57,975	153,768	615,616
Gross Profit	234,012	143,023	163,642	540,677	210,271	127,321	172,287	509,879	151,261	224,515	181,783	557,559	153,294	185,175	204,844	543,313	2,151,428
5800: Salaries	35,102	21,454	24,546	81,102	41,541	19,098	25,843	86,482	22,689	33,677	27,267	83,633	22,994	27,776	30,727	81,497	332,714
6110: Payroll Taxes	10,531	6,436	7,364	24,331	9,462	5,729	7,753	22,944	6,807	10,103	8,180	25,090	6,898	8,333	9,218	24,449	96,814
6140: Health and Welfare	16,381	10,012	11,455	37,848	14,719	8,912	12,060	35,691	10,588	15,716	12,725	39,029	10,731	12,962	14,339	38,032	150,600
6160: Other Compensation	4,500	2,300	2,500	9,300	4,100	1,500	4,300	9,900	1,194	1,493	1,313	4,000	1,111	1,222	1,667	4,000	27,200
-Total Employee Expenses	66,514	40,202	45,865	152,581	69,822	35,239	49,956	155,017	41,278	60,989	49,485	151,752	41,734	50,293	55,951	147,978	607,328
7110: Advertising	23,401	14,302	16,364	54,067	21,027	12,732	17,229	50,988	15,126	22,452	18,178	55,756	15,329	18,517	20,484	54,330	215,141
7420: Rent Expense	28,081	17,163	19,637	64,881	25,233	15,279	20,674	61,186	18,151	26,942	21,814	66,907	18,395	22,221	24,581	65,197	258,171
-Total Office Expenses	51,482	31,465	36,001	118,948	46,260	28,011	37,903	112,174	33,277	49,394	39,992	122,663	33,724	40,738	45,065	119,527	473,312
7699: Miscellaneous Travel Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
-Total T&E Expenses	11,701	7,151	8,182	27,034	10,514	6,366	8,614	25,494	7,563	11,226	9,089	27,878	7,665	9,259	10,242	27,166	107,572
-Total Operating Expenses	63,183	38,616	44,183	145,982	56,774	34,377	46,517	137,668	40,840	60,620	49,081	150,541	41,389	49,997	55,307	146,693	580,884
OpEx before Allocations	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
Operating Expenses	129,697	78,818	90,048	298,563	126,596	69,616	96,473	292,685	82,118	121,609	98,566	302,293	83,123	100,290	111,258	294,671	1,188,212
Pretax Income from Operations	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
-Total Pretax Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216
Net Income	104,315	64,205	73,594	242,114	83,675	57,705	75,814	217,194	69,143	102,906	83,217	255,266	70,171	84,885	93,586	248,642	963,216

Copyright © 2022, 2026, Oracle and/or its affiliates.

16

Working with Reports

Related Topics

- About Reports
- Accessing Reports and Viewing the Reports Repository
- Managing Folders and Reports
- Reports Books and Bursting
- Managing Fonts

About Reports

Reports in Enterprise Profitability and Cost Management provide a user-friendly, robust report development framework along with an enriched report viewer experience. Reports, which has previously been available as Management Reporting in the Narrative Reporting business process, is now embedded in the Oracle Enterprise Performance Management Cloud Platform business processes.

To learn about designing and working with reports, see Learning About Reports in *Designing with Reports*.

> **Note**
>
> The backslash character (\ ) is restricted in Reports.

Accessing Reports and Viewing the Reports Repository

To access reports:

1. From the Home page, select **Reports**.
2. Click a tab on the the left side of the page to view the Reports repository or to to access other documents:

   The **Reports** listing page uses the same folder hierarchy as dashboards, infolets, and data entry forms. All artifacts and folders reside under a root folder called **Library**. Reports, books, and bursting definitions are stored in the Reports repository.

   To search for Reports or a folder, enter search text in the **Search** box at the top of the pane and click .

   On the listing page for **Reports**, you can toggle between viewing reports folders in a flat view or a tree view:

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Only administrators can add files (for example, dashboards, infolets, forms, and reports) to the **Library** root folder.

Use the **Documents** page to access 3rd party documents used and generated with Books and Bursting. For example, MS Word and PDF documents inserted in Books, and CSV files used in a bursting definition, along with PDF files generated by a bursting definition.

Managing Folders and Reports

Reports are managed on the **Reports** listing page with different view options available. Under **Documents**, you can access and maintain 3rd party documents used and generated with Books and Bursting; for example, MS Word and PDF documents inserted in Books and `.CSV` files used in a bursting definition, along with PDF files generated by a bursting definition.

Reports and Documents are grouped into folders. When viewing the Reports listing you can:

- Search by a report artifact or document
- Filter by a folder

  For report artifacts, you can filter by the type (Report, Snapshot, Book, Bursting Definition)
- Switch between a folder tree view or a flat list view:

Report designers can perform the following folder and report management tasks by clicking for folders or for individual reports:

- For folders:
  - **Upload file** (Documents only)
  - **Create Folder**
  - **Delete**
  - **Rename**
  - **Move to**
  - **Assign Permissions**
- For reports, books, and bursting definitions:
  - **Open** (reports and books only)
  - **Edit**
  - **Rename**
  - **Copy As**
  - **Delete**
  - **Move To**
  - **Assign Permissions**

Copyright © 2022, 2026, Oracle and/or its affiliates.

- For documents:
  - **Properties**
  - **Copy As**
  - **Delete**
  - **Move to**
  - **Assign Permissions**

The **Documents** listing page supports the following file types and extensions (the default file size limit is 5mb, except for `.PDF` which supports 100mb):

- Word (`.DOC`, `.DOCX`)
- Excel (`.XLS`, `.XLSX`)
- Comma Separated Values (`.CSV`)
- PDF (`.PDF`)
- Text (`.TXT`)
- PowerPoint (`.PPT`, `.PPTX`)

To upload a 3rd party file in **Documents**:

1. In the **Documents** listing, select a destination folder, and then either:
   - Click **Upload** in the top right of the **Documents** panel.
   - Click and select **Upload File**.
2. In **Upload File**, select a file to upload from your local file system, and then click **OK**. The file will be uploaded to the selected folder.

To download a 3rd party file in **Documents**, in the **Documents** listing, browse to the desired file location and click on the file name to download it.

Reports Books and Bursting

Reports includes books and bursting functionality. Books provide the ability to group together one or more reports, books, and other documents, to generate a single PDF output. Bursting enables you to run a single report or book for more than one member of a single dimension for one data source, and publish a PDF output for each member. You can schedule a bursting definition as a scheduled job. To learn how to work with the books and bursting features in Reports, see the following topics in *Designing with Reports*:

- Working with Books
- Working with Bursting

Managing Fonts

Oracle recommends that you upload any TrueType fonts that your company uses to produce reports. You can upload individual font files or zipped files containing multiple TrueType fonts.

The font file must be a TrueType font and cannot already exist in the font folder structure. If you do upload a duplicate font, you will receive an error message indicating the duplicate (or invalid) font file. If you uploaded multiple fonts in a zip file, all other valid files are loaded.

To upload fonts:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. From the Home page, select **Application**, and then **Settings**.
2. On the **Application Settings** page, under **System Settings**, scroll down to **Set Reporting Options,** and then click **Report Settings**.
3. On the **Settings** page, click **Manage Fonts**.
4. On the **Fonts** page, click , and then select **Upload File**.
5. Click **Browse** in the **Upload File** dialog box to navigate to the TrueType fonts that you want to upload, and then click **OK**.

> **Note**
>
> If you need to upload more than one font, create a zip file. Be aware that it might take some time to perform the upload depending on the size of the font file.

Copyright © 2022, 2026, Oracle and/or its affiliates.

17

Designing and Working with Dashboards

Related Topics

- Designing Dashboards
- Using Dashboards to Work with Data

Designing Dashboards

Design dashboards that show summary data to users. Dashboards enable users to chart, evaluate, highlight, comment on, and even change key business data, as well as add and edit rules.

Related Topics

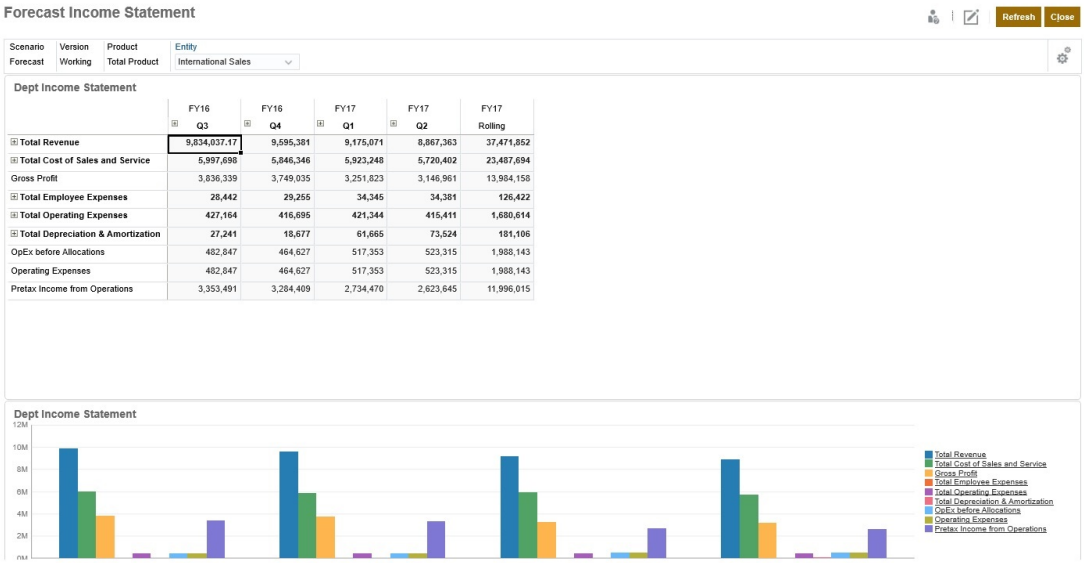
- The Power of Dashboards
- Creating and Managing Dashboards
- Creating and Managing Dashboards 1.0
- Creating and Managing Dashboards 2.0

The Power of Dashboards

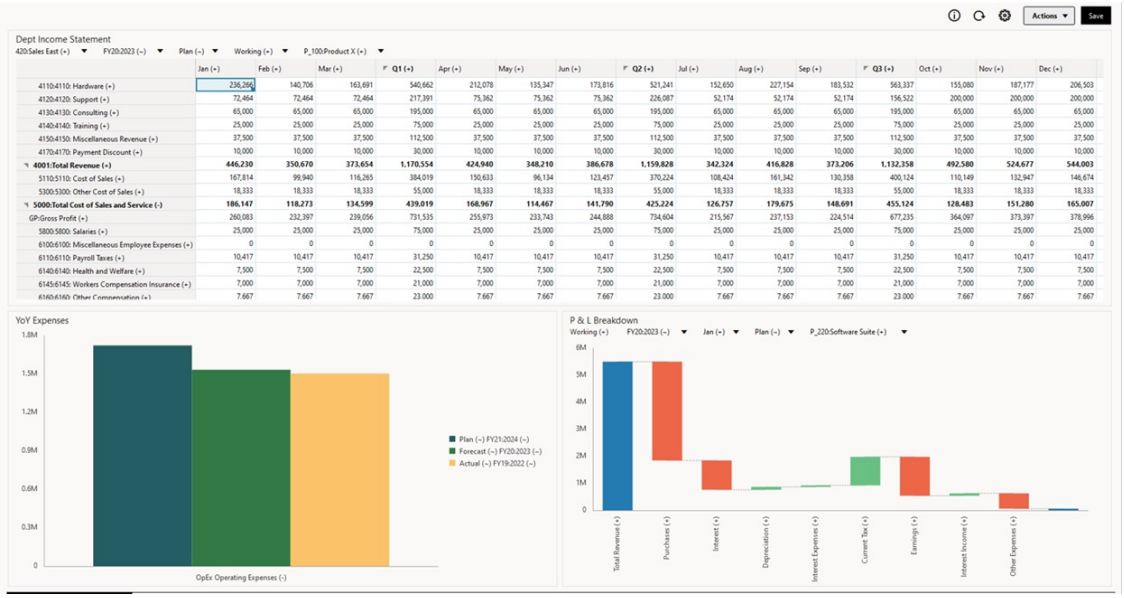
Dashboards typically provide an overview to users at the beginning of their planning and forecast process by showing summary data. The versatility of dashboards enables users to chart, evaluate, highlight, comment on, and even change key business data. They can change a driver in a form that's in a dashboard and immediately see its impact in other forms and charts:

Sample Dashboard 1.0

Copyright © 2022, 2026, Oracle and/or its affiliates.



Sample Dashboard 2.0



You create dashboards by simply dragging and dropping a variety of objects from the library panel on the left to the dashboard workspace.

With dashboards, you can:

- Include multiple forms that dynamically update, including their associated charts, as users change data in the form.
- Include tiles that display a specific value from the cube. To provide the value for each tile, you can specify a form or a cell intersection as a data source.
- Switch easily between using the design environment and the runtime environment, so you can see exactly what the dashboard user will see.
- Depict data interactively with a wide variety of chart types such as area, bar, bubble, column, combination bar and line, doughnut, funnel, gauge, scatter, radar, and so on.
- Control the dashboard's layout.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Depending on the form design, enable users to drill down into underlying detail and select which members to work with.
- Include user variables in the global POV bar and the local POV.
- In certain charts, customize the colors and line width, and show or hide gridlines.
- Add links to dynamically display external Web pages.
- Include explanations of data called *Commentary* in the dashboard.
- Tag a form as master and then filter members from the master form to detail forms or charts within the same dashboard.
- Change legend and label positions in charts.
- In Dashboard 2.0:
  - Add up to 12 components within a dashboard
  - Add up to 10 tiles in a tile chart type
  - Add hierarchical labels in charts
  - Use a logarithmic scale in relevant chart types
  - Add a secondary Y-axis in relevant chart types
  - Render the dashboard in Default, Light, and Dark background colors using the Style property
  - Use grid display with write-enabled grids (used with Forms 2.0)
  - Enjoy other usability improvements such as more screen space, options to open and edit a form directly, option to edit a dashboard without data, automatically apply POV changes, and hide dimension names
  - Improved Rules on Save with dashboards: with/without runtime prompts before/after Load/Save
  - Migrate easily from Dashboard 1.0

> **Note**
>
> Dashboard 1.0 dashboards are deployed with Forms 1.0, even when the **Forms Version** setting is **Forms 2.0**.

When users use a dashboard (referred to as *runtime*), they can set many aspects of the components, such as the type of chart displayed, the dashboard's title, and so on. A toolbar is available for each component. Dashboard users can change and save data, run rules, and so on. However, changes made in runtime to the chart type options aren't saved for the next session. Clicking **Save** in runtime saves the data, but not the dashboard definition.

Service Administrators create, redesign, delete, and assign permissions to dashboards and dashboard folders.

Creating and Managing Dashboards

Related Topics

- About Dashboard Versions
- Viewing Dashboards - Standardized Interface

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Viewing Dashboards - Legacy Interface
- Converting Dashboard 1.0 Dashboards to 2.0
  Learn how to convert Dashboard 1.0 dashboards to Dashboard 2.0 dashboards.

About Dashboard Versions

Dashboards are currently available in two versions:

- **Dashboard 1.0**: Uses Oracle Application Development Framework (Oracle ADF) technology
- **Dashboard 2.0**: Uses Oracle JavaScript Extension Toolkit (Oracle JET) technology

Both dashboard versions currently coexist in the same business process at the same time. Dashboard 1.0 uses Oracle ADF technology and the behavior of the Oracle ADF-based dashboards remains unchanged. You can still create and update these dashboards in your business process as you did before. Dashboard 2.0 uses the existing Dashboard functionality and enhances it with Oracle JET technology for faster rendering, sophistication, ease of use, improved flexibility, better visualization, and additional designs.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Dashboard 1.0. Users on new environments created on or after October 3, 2025 won't be able to create Dashboard 1.0 artifacts. You'll only be able to create and modify dashboards using the Dashboard 2.0 framework. Users on environments created before October 3, 2025 will still have the flexibility to create and modify dashboards using either the Dashboard 1.0 or 2.0 frameworks.

To help you differentiate between the dashboard versions on the **Dashboards** page, we've provided icons in front of each dashboard.

Table 17-1 Dashboard Version Icons

Icon	Dashboard Version
	Dashboard 1.0 (Standardized list page interface)
	Dashboard 1.0 (Legacy list page interface)
	Dashboard 2.0 (Standardized list pages interface)
	Dashboard 2.0 (Legacy list pages interface)

Dashboard 2.0 Designer Features

Dashboard 2.0 Designer supports:

- More chart types than Dashboard 1.0; for example, Waterfall, Pyramid, and Geomap and sub-chart types for Radar, Combination, and Gauge charts are all Dashboard 2.0 features

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Creating tables in dashboards with visual inline views of data, called Spark Charts
- Quick Analysis, which lets you add components to dashboards without having a prebuilt form

  You create a Quick Analysis ad hoc query by typing member names in the Search bar or using the Member Selector, and then you control the layout of the query in the Layout tab of the Properties panel.
- Working directly with data in form grids if the underlying form is a Forms 2.0 form
- Creating an ad hoc grid directly from a chart built on forms in Dashboard 2.0 dashboards

  You create an ad hoc grid by right-clicking a chart element; for example, right-clicking on a bar within a Bar chart, and then clicking **Analyze** to open ad hoc in a dynamic tab.
- A URL type of dashboard component
- A Commentary type of dasboard component with a text editor
- A custom formatted dashboard title
- Custom formatted dashboard instructions
- Background colors for URL, Commentary, and Grid component types
- Grid chart type option to render Forms 2.0 inside Dashboards 2.0
- A new **Associations** tab in the Properties panel for associating global rules
- Multiple charts for Gauge, Pie, and Doughnut chart types
- New menu options for directly opening and editing forms from within dashboard components
- An Information icon for forms and dashboards. Drop any form into a dashboard and see its information.
- The ability to resize the Properties panel
- The ability to set the background color for each dashboard component
- An option to remove the component title, using the saved space for visualizations
- An increased number of dashboard components (up to 12)
- An increased number of tiles (up to 10)
- The ability to edit without data
- A customized cell visualization limit of up to 10,000 cells with any row x column combination, such as:
  - 100 rows x 100 columns=10,000 cells
  - 1000 rows x 10 columns=10,000 cells
  - 250 rows x 40 columns= 10,000 cells
- The ability to select a dashboard **Style**. Options are **Default**, **Light**, and **Dark**.
- Options to show and hide borders between dashboard components and POV bars
- The new Oracle JET member selector
- A surface Designer in Dynamic Tabs

To review considerations for Dashboard 2.0, see Considerations for Dashboard 2.0.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Dashboards - Standardized Interface

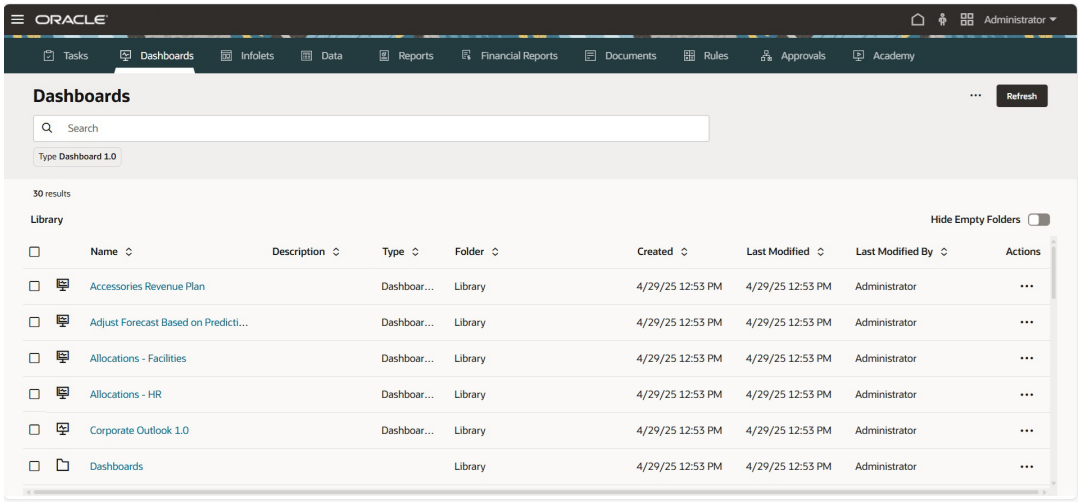
About the Dashboards Interface

This topic provides details about working with the **Dashboards** page in the default standardized interface. To learn more about the standardized interface, see About the Standardized Cloud EPM Platform Artifact Pages.

Viewing the Dashboards Page

To view the **Dashboards** page:

1. On the Home page, click **Dashboards**.



2. To open a dashboard, click the dashboard name.

This opens the dashboard in the *runtime* environment.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - If you've selected a Dashboard 2.0 dashboard and you see an `Error during Dashboard 2.0 component initialization` message, the dashboard has Forms 2.0 forms associated with it. You must ensure that Forms 2.0 is enabled before you can view the dashboard.
>
>   To enable Forms 2.0, click **Application**, then **Settings**, and then under **Other Options**, find **Forms Versions**, select **Forms 2.0**, and then click **Save**.
> - A dashboard form might be prevented from opening if it includes undefined user variables. If you're prevented from viewing a dashboard form, you'll see a message prompting you to select members for the user variables:
>
>   ```
>   Before you can open this form, you must select a member for each
>   User Variable. To select members for missing user variables: Click
>   here
>   ```
>
>   When you click the link in the message, the **User Preferences** page opens in a new dynamic tab and the user variables with missing member values are displayed first. Select a member for each undefined user variable.

Features of the Standardized Dashboards Page

On the standardized **Dashboards** page:

- Folders are supported. The **Dashboards** page uses the same folder hierarchy as infolets and data entry forms and all artifacts and folders reside under a root folder called **Library**. You cannot delete or rename the **Library** folder.

  > **Note**
  >
  > Only administrators can add files (for example, dashboards, infolets, forms, reports, and so on) to the **Library** root folder.

- To help you differentiate between the dashboard versions on the **Dashboards** page, we've provided an icon in front of each dashboard:
  - : Dashboard 1.0
  - : Dashboard 2.0
- The **Dashboards** page can be filtered by type. In the Standardized interface, click the **Type** filter chip in the **Search** box and select **Dashboard 1.0**, **Dashboard 2.0**, or select both.
- **Hide Empty Folders**: Hides folders that don't contain relevant artifacts for the current context. When the toggle is off, all folders are visible in the list region, including empty ones. When the toggle is on, only folders containing relevant artifacts for the **Dashboards** artifact page are displayed.

  By default this option is off, and will reset to off each time you start a new session. The state of the toggle is retained by the page during the session and is page-specific. Navigating away from the **Dashboards** page and returning preserves the toggle state until the tab is closed or the user logs out.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- To search for a specific dashboard, enter search criteria and the search results will display in a drop-down under the **Search** box. Click **Enter** to view the search results in the list region. Search results list all instances of dashboards that include the search criteria (including folder names). Each search result displays the complete folder path. Searching inside a folder narrows the search to that folder and its subfolders.

> **Note**
>
> – The search considers the **Name**, **Description**, and **Folder** columns, wherever applicable, in the search.
>
> – If you perform a **Search** and the **Hide Empty Folders** toggle is off, all matching folders and artifacts are displayed. If the toggle is on, only folders containing matching artifacts are displayed. Empty folders are hidden.

Standardized Interface Dashboards Actions

The Standardized interface **Dashboards** page features a global Actions menu ••• and a line item-specific **Actions** menu.

The global Actions menu ••• (within the header region of the **Dashboards** page) includes the following options:

- **Create Dashboard 1.0**: Creates a Dashboard 1.0 dashboard and places it in the folder that is currently open. If no folder is open, new dashboards are placed in the Library folder.
- **Create Dashboard 2.0**: Creates a Dashboard 2.0 dashboard and places it in the folder that is currently open. If no folder is open, new dashboards are placed in the Library folder.
- **Create Folder**: Creates a new folder in the folder that is currently open. If no folders are open, new folders are created in the Library folder.

> **Note**
>
> Keep in mind that newly created folders are empty and therefore will not display if the **Hide Empty Folders** toggle is on. New folders become visible after content is added to them, or if the toggle is switched off.

- **Convert Dashboards to 2.0**: Finds any Dashboard 1.0 dashboards in the folder that is currently open, including any subfolders, and converts them all to Dashboard 2.0 dashboards. Selecting a folder in the listing and then selecting the global action for **Convert Dashboards to 2.0**, finds any Dashboard 1.0 dashboards within the folder, including any subfolders, and converts them to Dashboard 2.0 dashboards. Selecting one or more Dashboard 1.0 dashboards in the listing and then selecting the global action for **Convert Dashboards to 2.0**, converts the selected dashboards to Dashboard 2.0 dashboards. This action cannot be undone.
- **Assign Permission**: Assigns access permissions to the folder that is currently open. If no folder is open, permissions are assigned to the Library folder.
- **Move to**: (This option is only visible if one or more artifacts in the listing are selected.) Moves the selected artifacts to another location in the folder hierarchy.

Each dashboard line item also has an item-specific **Actions** menu which includes the following options:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Open**: Opens the dashboard in the *runtime* environment so you can view it. The dashboard opens in a dynamic tab.
- **Edit**: Opens the dashboard in the Dashboard Designer with the underlying form data. The dashboard opens in a dynamic tab.
- **Delete**: Deletes a folder or a dashboard. The folder must be empty to delete it.
- **Rename**: Renames a folder or a dashboard. The folder cannot be renamed if it contains other folders.
- **Copy As**: Copies a dashboard with a new name. The dashboard is copied to the listing directly under the original dashboard.
- **Move to**: Moves the folder to another location in the folder hierarchy or moves a dashboard to another folder.

> **Note**
>
> All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

- **Copy URL**: Enables you to copy and share the direct URL for a dashboard.
- **Convert Dashboards to 2.0** (Dashboard 1.0 option only): For folders, finds any Dashboard 1.0 dashboards within the folder hierarchy, and converts them to Dashboard 2.0 dashboards. For dashboards, converts the dashboard to a Dashboard 2.0 dashboard. This action cannot be undone.
- **Assign Permission**: Assigns access permissions to the folder or dashboard.

Viewing Dashboards - Legacy Interface

About the Dashboards Interface

This topic provides details about working with the **Dashboards** page in the legacy interface. If you're viewing the default standardized **Dashboards** page, see Viewing Dashboards - Standardized Interface.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support legacy artifact pages. For all new and existing environments, the **Legacy List Pages** application setting will be removed and the **Dashboards** page will only render as standardized.

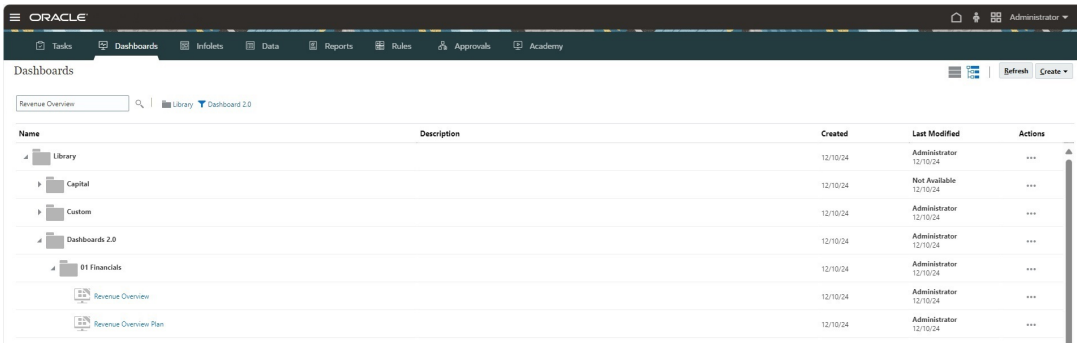
To learn more about the standardized interface, see About the Standardized Cloud EPM Platform Artifact Pages.

Viewing the Dashboards Page

To view the **Dashboards** page:

1. On the Home page, click **Dashboards**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



2. To open a dashboard, click the dashboard name.

   This opens the dashboard in the *runtime* environment.

> **Note**
>
> - If you've selected a Dashboard 2.0 dashboard and you see an `Error during Dashboard 2.0 component initialization` message, the dashboard has Forms 2.0 forms associated with it. You must ensure that Forms 2.0 is enabled before you can view the dashboard.
>
>   To enable Forms 2.0, click **Application**, then **Settings**, and then under **Other Options**, find **Forms Versions**, select **Forms 2.0**, and then click **Save**.
> - A dashboard form might be prevented from opening if it includes undefined user variables. If you're prevented from viewing a dashboard form, you'll see a message prompting you to select members for the user variables:
>
>   ```
>   Before you can open this form, you must select a member for each
>   User Variable. To select members for missing user variables: Click
>   here
>   ```
>
>   When you click the link in the message, the **User Preferences** page opens in a new dynamic tab and the user variables with missing member values are displayed first. Select a member for each undefined user variable.

Features of the Legacy Dashboards Page

On the legacy **Dashboards** page:

- Folders are supported. The **Dashboards** page uses the same folder hierarchy as infolets and data entry forms and all artifacts and folders reside under a root folder called **Library**. You cannot delete or rename the **Library** folder.

  > **Note**
  >
  > Only administrators can add files (for example, dashboards, infolets, forms, reports, and so on) to the **Library** root folder.

- To help you differentiate between the dashboard versions on the **Dashboards** page, we've provided an icon in front of each dashboard:

Copyright © 2022, 2026, Oracle and/or its affiliates.

  -
    : Dashboard 1.0
  -
    : Dashboard 2.0
- You can toggle between viewing dashboards by a Flat View or a Tree View:

- The **Dashboards** page can be filtered by type. Click (Filter), and then select from the following filter options:
  - **All Types** (default)
  - **Dashboard 1.0**
  - **Dashboard 2.0**
- To search for a specific dashboard, click

  (Search) to search by keywords or (Library) to narrow the search to specific library folders.

Legacy Interface Dashboards Actions

On the right side of the **Dashboards** page there is an **Actions** column. Clicking ••• (Actions) next to the dashboard or folder, displays the following actions:

- Folder Actions:
  - **Assign Permission**: Assigns access permissions to the folder. Folder permissions apply to all items within that folder, even to items that may not be visible in the list.
  - **Create Dashboard**: Creates a Dashboard 1.0 dashboard.
  - **Create Dashboard 2.0**: Creates a Dashboard 2.0 dashboard.
  - **Create Folder**: Creates a new folder.
  - **Delete**: Deletes a folder. The folder must be empty to delete it.
  - **Rename**: Renames a folder. The folder cannot be renamed if it contains other folders.
  - **Move to**: Moves the folder to another location in the folder hierarchy.
  - **Convert All Dashboards to 2.0**: Finds any Dashboard 1.0 dashboards within the folder hierarchy, and converts them to Dashboard 2.0 dashboards.
- Individual Dashboard Actions:
  - **Edit**: Opens the dashboard in the Dashboard Designer with the underlying form data. The dashboard opens in a dynamic tab.
  - **Edit without Data** (Dashboard 2.0 option only): Opens the dashboard in the Dashboard Designer without the underlying form data so you can more easily perform such actions as realigning the dashboard components and tiles. The dashboard opens in a dynamic tab.
  - **Rename**: Renames a dashboard.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Copy As**: Copies a dashboard with a new name. The dashboard is copied to the listing directly under the original dashboard.
- **Delete**: Deletes a dashboard.
- **Move to**: Moves a dashboard to another folder.
- **Assign Permission**: Assigns access permissions to the dashboard.
- **Convert to Dashboards 2.0** (Dashboard 1.0 option only): Converts the dashboard to a Dashboard 2.0 dashboard.
- **Copy URL**: Enables you to copy and share the direct URL for a dashboard.

Converting Dashboard 1.0 Dashboards to 2.0

Learn how to convert Dashboard 1.0 dashboards to Dashboard 2.0 dashboards.

If your application currently uses Dashboard 1.0, you can convert them to Dashboard 2.0.

You convert dashboards on the **Dashboards** listing page at the individual dashboard level or at the folder level. For example, if you wish to convert all dashboards in the application from 1.0 to 2.0, you can select the top level Library folder and convert them all.

> **Note**
>
> - After converting to Dashboard 2.0, you cannot convert your dashboards back to Dashboard 1.0.
> - The conversion process does not change the dashboard names. Navigation flows will still work as they did before the conversion.
> - After converting to Dashboard 2.0, dynamic POVs are displayed first instead of fixed POVs.

To convert Dashboard 1.0 to Dashboard 2.0:

1. On the Home page, click **Dashboards**.
2. Navigate to the folder or to the individual Dashboard 1.0 dashboard that you'd like to convert, then select from the following options:
   - To convert an individual dashboard, click ••• (Actions) to the right of the dashboard, and then select **Convert to Dashboards 2.0**.
   - To convert all dashboards within a folder, click ••• (Actions) to the right of the folder, and then select **Convert All Dashboards to 2.0**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Note

- Very old dashboards might include a dashboard definition with a component width value that is no longer supported. This could result in an unexpected dashboard rendering after converting an old dashboard to Dashboard 2.0.

  To resolve this issue, we recommend any of the following workarounds:

  – Open the original dashboard in Dashboard 1.0, edit the dashboard, and then save it. The dashboard will be automatically saved with the corrected component width values, and then it can be converted to Dashboard 2.0.

  – Create a new dashboard in Dashboard 1.0 with the same set of forms and charts and the same settings, then convert the dashboard to Dashboard 2.0.

  – Create a new dashboard in Dashboard 2.0 with the same artifacts and settings.

- Dashboards containing master forms and details that were converted to Dashboard 2.0 prior to the 23.11 update might display two **Apply Context** menu options in a grid's context menu. This issue was fixed in 23.11.

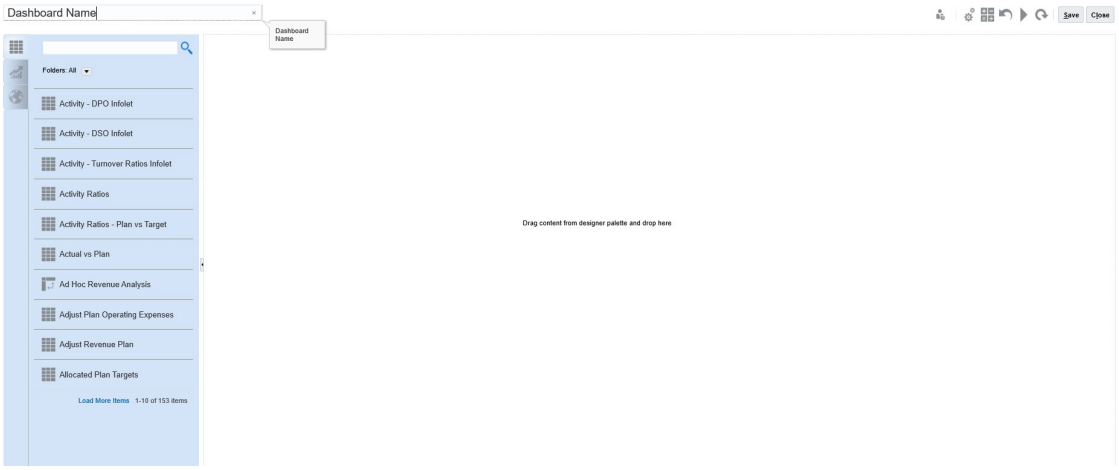
Creating and Managing Dashboards 1.0

- Concepts in Designing 1.0 Dashboards
- Creating Dashboard 1.0 Dashboards
- Creating Dashboards Containing Master Forms and Details
- About Your Dashboard's Layout - Version 1.0
- About the Gauge Chart Type
- About the Tile Chart Type
- Customizing Dashboard Colors
- About Global and Local POVs in 1.0 Dashboards
- Dashboard POVs and Valid Intersections

Concepts in Designing 1.0 Dashboards

Helpful information as you design 1.0 dashboards:

Copyright © 2022, 2026, Oracle and/or its affiliates.



- On the left is the design palette. Simply drag and drop objects from the palette to the canvas.

  Tip

  Drag an object to a border line. The drag icon changes to a plus sign when you can drop the object in an allowed space. See About Your Dashboard's Layout - Version 1.0.

- On the top right are settings for the entire dashboard:

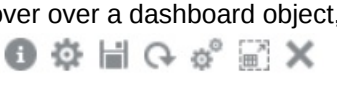
- Click **Settings**

  to set these general aspects of the dashboard:

Table 17-2 Dashboard General Settings

Option	Description
Use name as title	By default, this option is selected. Clear this option to give the dashboard a title with custom formatting.
Borders	When you create a new dashboard, borders are hidden by default. To show borders in newly-created dashboards, select **Show**.
Layout	Select **Fixed** (default) or **Flexible**.
POV Bars	Select **Show** (default) or **Hide**.
Global POV Bar	Select **Enable** (default) or **Disable**.

For information about POVs, see About Global and Local POVs in 1.0 Dashboards.

- When you hover over a dashboard object, a toolbar for that object displays in the upper right corner: 

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Dashboard 1.0 hover icons provide options such as **Instructions** (available only if instructions are configured for a form), **Actions**, **Save**, **Refresh**, **Settings**, and **Maximize**, depending on the type of object.

- As you create a dashboard, click **Runtime** so that you can immediately see how the dashboard looks and works to a dashboard user. To return to designer mode to continue designing the dashboard, click (Dashboard Designer).
- By default, missing or suppressed data is plotted as zeros in graphs. You can clear the **Plot Missing Values as Zero** setting to ignore missing or suppressed data in certain chart types so it's no longer plotted as zeros.
- The listing page for dashboards supports folders. Folders enable you to assign permissions to all dashboards within a folder rather than assigning permissions to each individual dashboard. The dashboard listing page uses the same folder hierarchy as infolets and data entry forms and all artifacts and folders reside under a root folder called **Library**.

> **Note**
>
> Only administrators can add files (for example, dashboards, infolets, forms, reports, and so on) to the **Library** root folder.

- On the listing page for dashboards, you can toggle between viewing dashboards by a Flat View or a Tree View:

  Then you can search for dashboards using **Search**. The flat view displays only the dashboards that meet the search criteria, not the folders that contain them. The tree (or hierarchical) view displays dashboards in the context of the folders that contain them.

  To search on another keyword, clear the search criteria by clicking × in the **Search** box.

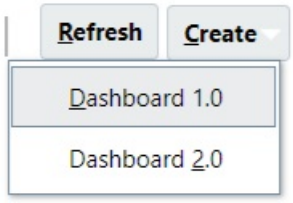
Creating Dashboard 1.0 Dashboards

Need help deciding which dashboard version to choose? See About Dashboard Versions.

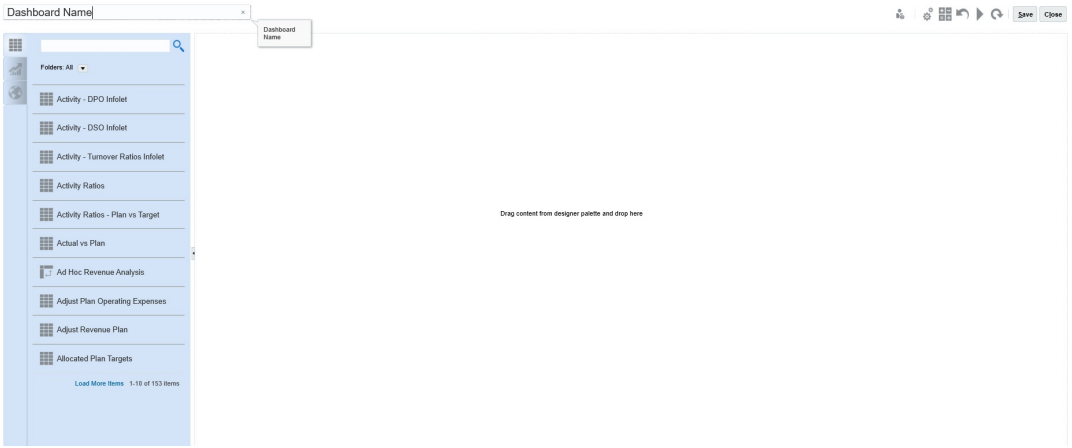
> **Note**
>
> To create a Dashboard 2.0 dashboard, see Creating Dashboard 2.0 Dashboards.

1. From the Home page, click **Dashboards**, and then click **Create**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



2. From the options provided, select **Dashboard 1.0**.



3. Enter a name by clicking the default dashboard name and entering a new name in the input box.

   You can give the dashboard a title with custom formatting, click **Settings**, clear **Use name as title**, and then enter the title and set formatting the dialog box.

4. From the design palette on the left, drag and drop objects onto the dashboard canvas.

   Select from these objects:

Table 17-3 Dashboard Objects

Object	Description
Forms	Select forms to include in the dashboard by navigating to the forms folders or by searching for them by name. To view instructions for forms after they've been added to the dashboard, hover over the form and click **Instructions** . The access permissions set for forms are honored in dashboards.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-3 (Cont.) Dashboard Objects

Object	Description
Chart Types	Select the chart types to include in the dashboard. When first added, a selected chart has sample data. You then associate it with a form as its data source. When you link a chart to a form, users can immediately see the impact of changing data in the form on the associated charts. By default, missing or suppressed data is plotted as zeros. For selected chart types (Area, Bubble, Combination, Line, Radar, and Scatter), you can disable this setting by clearing the **Plot Missing Values as Zero** option in the chart's settings. When this option is cleared, the missing or suppressed data is ignored and is no longer plotted for those chart types. The Combination chart type alternates displaying row data with vertical bars and lines in the chart. For example, the data in row 1 of a form is displayed as a bar and the data in row 2 as a line, with alternating chart types for even and odd-numbered rows. Although the Combination chart type can display up to 20 rows of data, it's particularly useful when you want to compare two categories of data. For example, you want to compare Germany and France's average exchange rates over several years, so the form has Germany rates in row 1 of the form, and France's rates are in row 2. For information on the Gauge chart type, see About the Gauge Chart Type. The Tile chart type, sometimes called *performance tiles*, lets you select specific values from the cube to display. See About the Tile Chart Type.
Commentary	Select **External Artifacts**, and then **Commentary**. Enter text that explains the data or charts. Note that the text limit is 2000 characters, including any formatting tags that are added for rich text.
URL	Dynamic web page summary. Select **External Artifacts**, and then **URL**. Insert only external site URLs starting with the `https://` security protocol. Don't use internal or relative URLs or URLs for unconsenting third party sites such as google.com.

5. Customize the dashboard using the dashboards settings and the objects' hover toolbar, and then click **Save**.

   See About Your Dashboard's Layout - Version 1.0.

You can easily duplicate and modify a dashboard using **Copy As** on the Dashboard list page. Select the Actions icon next to the dashboard you want to copy.

Creating Dashboards Containing Master Forms and Details

You can design dashboards that have one master form and multiple detail (or target) objects (forms or charts). When you do so, the selection of members in the master form automatically filters to the members in the target objects, and the target objects show only the details that are relevant to the members highlighted in the master form.

Considerations when designing dashboards with master forms and target objects:

- Master forms must always be a form (you cannot tag a chart as a master form).
- The target objects can be forms or charts.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- The dashboard containing a master form must always contain more than one object.
- Only one form on a dashboard can be tagged as master. If you want to tag a different form on a dashboard as master, you must first untag the existing master form.

To create a dashboard containing a master form and target objects:

1. Create a dashboard with at least one form and one or more target objects.

   See Creating and Managing Dashboards.
2. Ensure the dashboard is in designer mode by clicking **Actions**, and then clicking **Edit**.
3. Select the form on the dashboard that you want to designate as master, click the Settings icon for that form, and then select **Tag as Master**.

To filter the data in the target forms or charts that is relevant to the data in a master form, right-click the relevant data in the master form and select **Apply Context**.

About Your Dashboard's Layout - Version 1.0

About setting up a dashboard layout in version 1.0:

- The first object you drag occupies the whole canvas.
- Then drag objects to the left, the right, the top, or the bottom of the existing object.
- The dashboard canvas provides two types of drop zones: One to place two objects next to each other, each occupying half the space, and the other to place three objects, each occupying a third of the space.
- You can design a dashboard with objects to display vertically, horizontally, and each can have its own size.
- To resize an object that uses **Flexible** layout, drag the object’s border. You can also click an object's handle to expand it, and then click the handle again to restore the object to its original size.
- To resize an object that uses **Fixed** layout, set its width or height percentage in **Settings**.
- The form layout can be asymmetric.
- In runtime mode, if a user doesn't have access to a form or if the form is missing, then an adjacent object takes its space. In designer mode, all empty objects are displayed so that the designer can choose to remove them.

About the Gauge Chart Type

Gauge chart types are handy for showing whether data values fall within an acceptable range or not. You set the maximum value, the range maximums, and the gauge displays ranges as red, yellow, and green to help you quickly assess a current value. So, gauge chart types help you identify problems in important data points or measures. For example, you could use a gauge to display the current sales, where the thresholds are set to represent the sales targets.

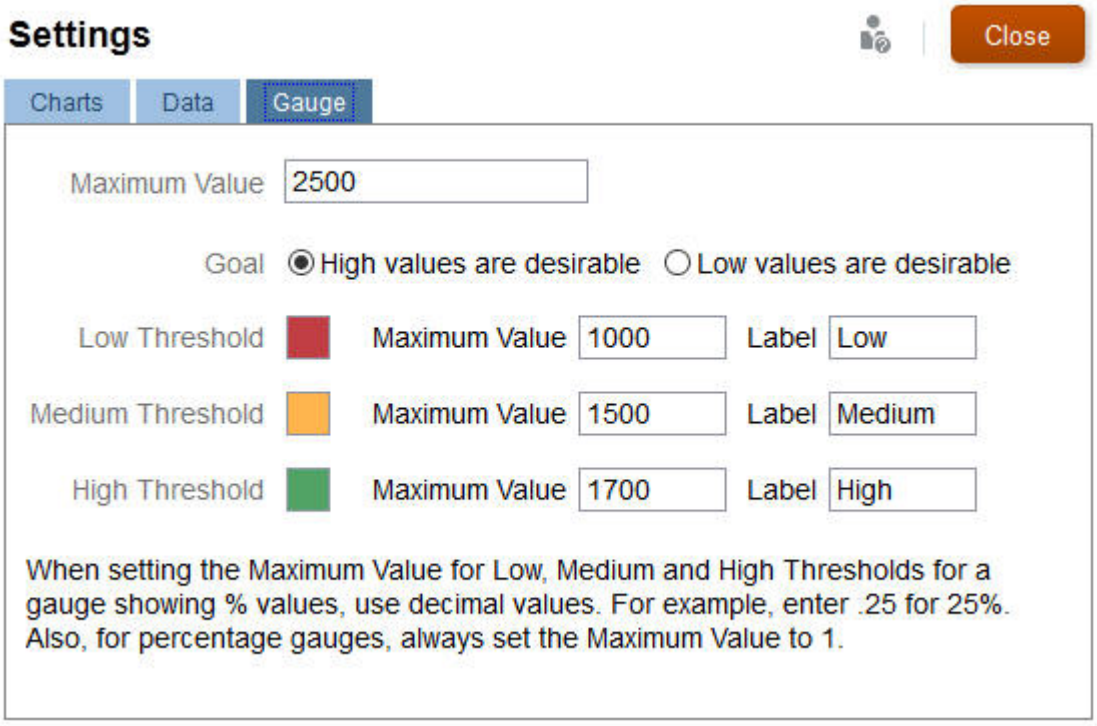
If the form has multiple values, you can display multiple gauges, up to a maximum of 36 (the values in the first 6 rows and the first 6 columns in the form). The remaining values in the form are ignored. If you want the gauge chart to display only one value, then associate it with a form that has only one cell value.

You can select either a dial gauge or a status meter gauge. You can display a status meter gauge using either horizontal or vertical bars.

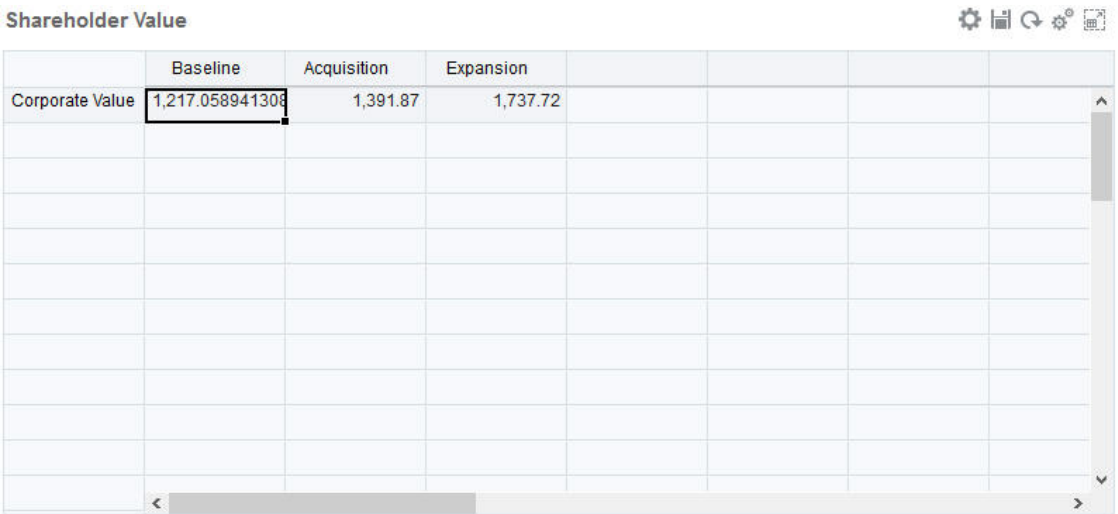
Dashboard designers can set:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Maximum Value**: The highest value on the gauge. The dashboard designer sets the **Maximum Value** as a default, and then users can temporarily change it at runtime. If the dashboard designer doesn't specify a maximum value, the application automatically sets the maximum value as greater than the value on the gauge.
- **Thresholds**:
  - Low, Medium, and High thresholds: To visually indicate whether a measure lies in the acceptable range or not, these thresholds enable you to display the gauge in red, yellow and green based on the specified values.
  - Thresholds where low values are desirable.
  - Appropriate labels for the thresholds that are displayed when hovering over the thresholds in the gauge.



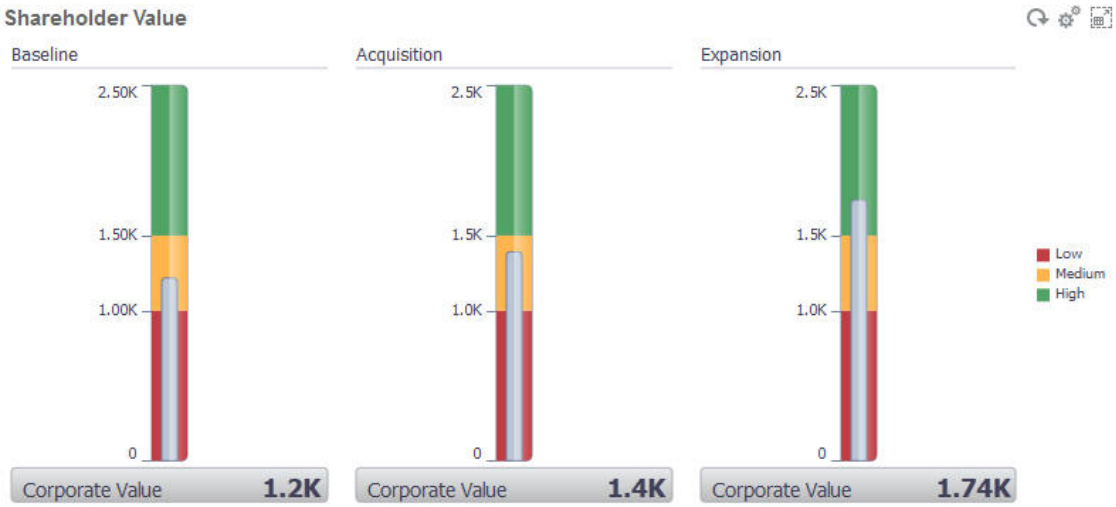
For example, here's a form's data:



Copyright © 2022, 2026, Oracle and/or its affiliates.

Here's the resulting dial gauge:

Here's the resulting status meter gauge with vertical bars:



> **Note**
>
> If a cell in the form is missing a value, no gauge is displayed for that cell. Also, you must specify at least 2 consecutive thresholds. The application needs the middle threshold value to calculate the chart.

About the Tile Chart Type

A tile is a chart type that lets you select specific values from the cube to display. In addition to using a form as a data source, you can directly enter a cell intersection that provides the value for a tile. You can have up to 6 tiles across, and 4 rows down in a dashboard, and give them a title. Until you associate a tile with data, it displays sample data.

With a form as the data source for a tile:

- You can have up to six tiles per object.
- The values in the first column (up to the sixth row) are used to create the tiles.

Copyright © 2022, 2026, Oracle and/or its affiliates.

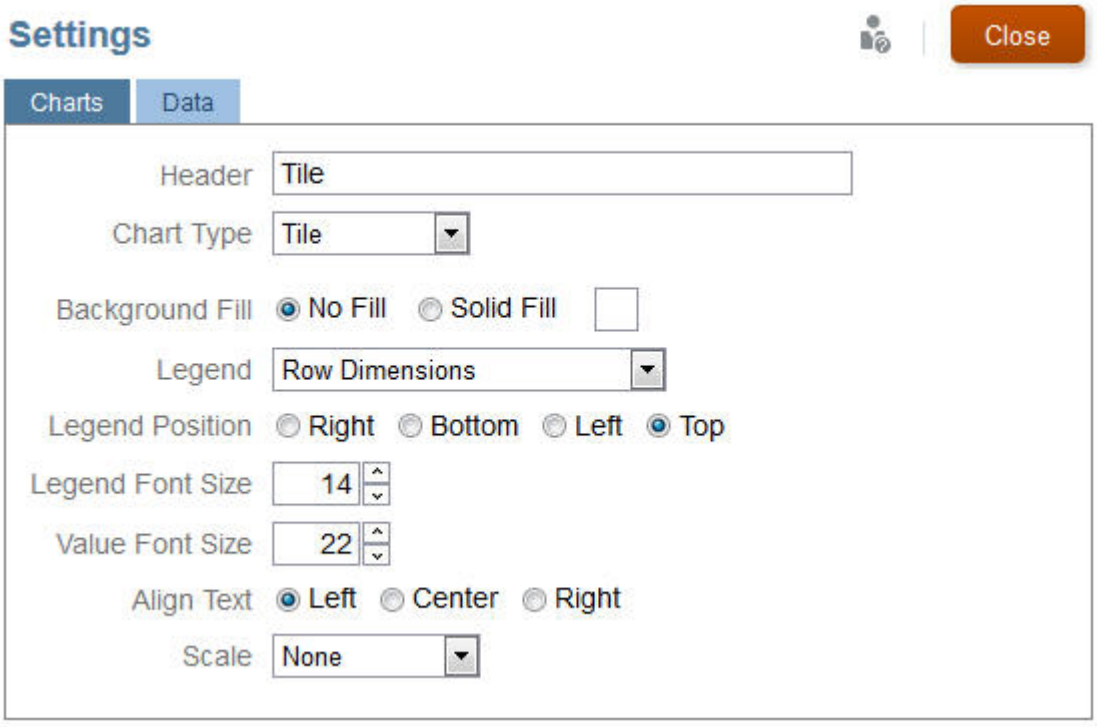
> **Note**
>
> Sometimes in a form, the first column may be collapsed (hidden) when viewed as a grid. But the collapsed column is still considered when the tile gets its values from the form.

- The tile's title is the row's title, and it gets its values from the first column, then by row.
- You can set the tile's title, the tile's height percentage, legend, and can select which axes from the form to include. For example, if you select a form with three rows, the tile displays three values.

With a cell intersection as the data source for a tile, you can have only one tile per object.

> **Tip**
>
> To select a tile chart type, expand the list of chart types by clicking the link at the bottom of the list.

Here are options you can set for a tile chart type. Note that you can set whether the displayed value is horizontally aligned in the tile to the left, the center, or the right.



Scaling Large Numbers

Especially useful for large numbers, you can scale how a value is displayed. For example, if the tile value is 1,689,000 and you select **K** as the scaling option, the tile displays the value as 1689K. Your scaling options:

- **None**: No scaling is applied.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T.
- **K**: The value is displayed as thousands units. For example, 1689000 displays as 1689K.
- **M**: The value is displayed as millions units. For example, 123,456,789 displays as 123M.
- **B**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B.
- **T**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.

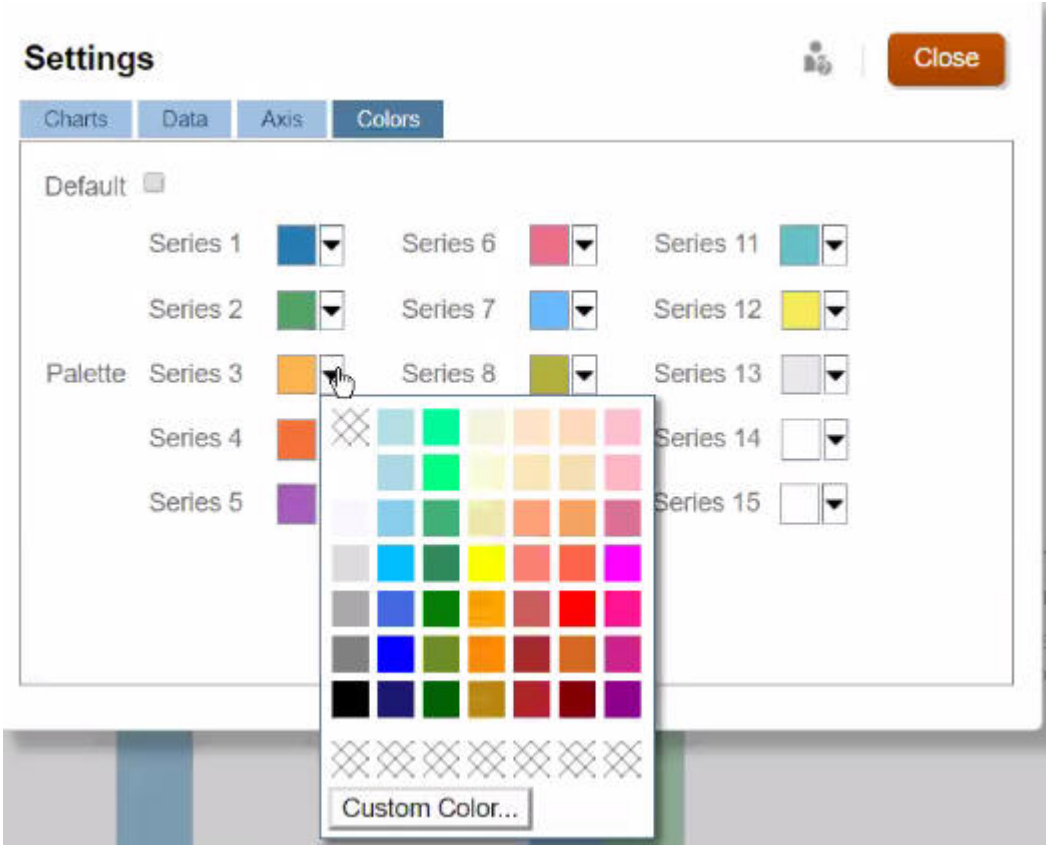
Customizing Dashboard Colors

Maybe your company uses a standard set of colors in charts to denote different types of data. For example, dark blue might represent actual data versus light blue for budget data. When you customize dashboard colors, you select colors in the order of rows on the form. Series 1 represents the first row of data, and so on. You can assign each row in the form a color that represents its data in the chart.

You can customize dashboard colors in Bar, Line, Area, Bubble, Column, Combination, Doughnut, Pie, Radar, and Scatter chart types.

1. With the chart on the dashboard's design palette, click **Settings** .
2. Click **Colors**.
3. Clear the **Default** check box, and then click the down arrow for the Series you want to change.

   Check the chart in the background to see the data type that each series represents.



Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Click the colors you want for the selected Series, and then click **Close**.

> **Note**
>
> To select more shades of colors than the ones initially displayed, click **Custom Color...**.

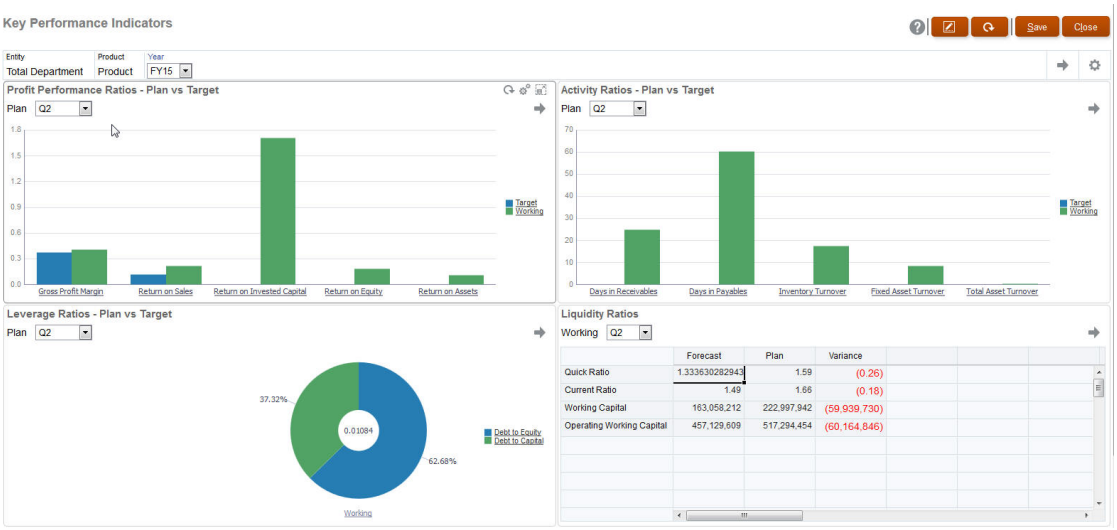
Your selections apply only to the current chart. Follow these steps to change the colors of other charts in the dashboard.

About Global and Local POVs in 1.0 Dashboards

A local POV on a form reflects the dimension members the form designer selected for that form. Dashboards also support *global POV bars*, so that the local POVs that are common are combined in the global POV bar to avoid repeating them in each object.

Dashboard 1.0 POVs Example

Here's a 1.0 dashboard showing a global POV bar (showing Entity, Product, and Year) and a local POV (the Plan drop-down list showing Q2):



With a global POV bar, if you change a page in the global POV bar and then click **GO**, the page changes for all objects that are based on forms. The global POV bar displays at the top of the dashboard above all the objects, while the local POV bar displays within the object. User variables are supported in both global and local POVs in dashboards and you can change dynamic user variables directly from the POV bar.

In dashboard **Settings**, you can set whether to show or hide POVs and whether to enable or disable global POV bars. (If you select **Hide** for **POV Bars**, and **Enable** for **Global POV Bar**, the **Hide** option overrides the **Enable** option.) The global POV bar is enabled by default; if you disable it, the complete POV is displayed for each local POV as applicable.

About global POV bars:

- The POV Bar is made up of local POV dimensions, Page dimensions and user variables.
- Depending on the local POV and page of each form on the dashboard, the global POV bar is automatically calculated.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- They are reflected in the other objects using forms in that dashboard. That is, they apply to forms in a dashboard, to charts that are linked to forms, and to tiles that use forms as a data source. So if the dashboard doesn't include a form as a data source, then neither the local nor global POV bar is available.

Here's an example of how the global POV bar is calculated, based on the local POV dimensions for two forms:

The global POV bar is disabled:

- Form A local POV: Year, Entity, Product
- Form B local POV: Year, Entity, Project

The global POV bar is enabled:

- Global POV bar: Year, Entity
- Form A local POV: Product
- Form B local POV: Project

Because not all dimensions and page selections may be common to all forms on a dashboard, the complete POV for a dashboard object may get split between the local and global POV bar. The global POV bar and the local POV together contain the complete intersection information for each form on a dashboard.

If there is only one object on the dashboard that uses a form as a data source, then the entire POV/page of the form can be moved to the global POV bar.

If there is more than one object on a dashboard that use forms as a data source, then this is how the application determines which dimensions go in the global POV bar or stay in the local POV:

- If the dimension is in the POV or page of all the forms, and the member selection is the same in all the forms, the dimension goes in the global POV bar.
- If the dimension is in the POV on one form and in the page of another form, then the dimension stays in the local POV.
- If the dimension is in the POV, then the same members must be selected in all the forms for the dimension.
- If the dimension is a page dimension, then the selected page members must be the same and display in the same order in all the forms.

The POVs in 1.0 dashboards honor valid intersections by hiding invalid Page members. See Dashboard POVs and Valid Intersections.

Dashboard POVs and Valid Intersections

The POVs in dashboards honor the valid intersections by hiding invalid Page members. Just like in forms, the Page drop-down list is filtered for all selected members in the POV and Page dimensions. Because dashboards support both global and local POVs, the context for filtering the Page drop-down list depends on which POV the members are located. If the Page drop-down list is on a global POV, the filtering context is only the global POV dimensions. If the Page drop-down list is on the local POV, the filtering context is all the global dimensions plus the dimensions on a chart's local POV.

See also About Global and Local POVs in 1.0 Dashboards.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating and Managing Dashboards 2.0

Related Links:

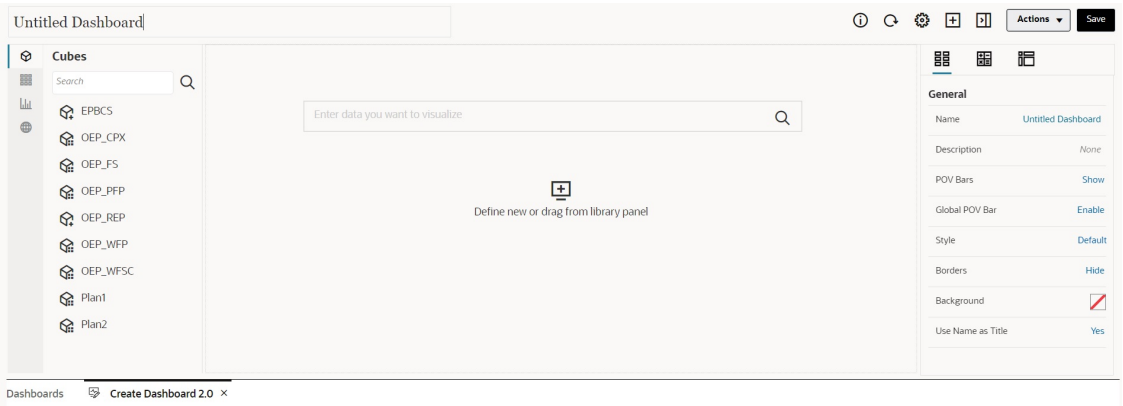
- Concepts in Designing Dashboard 2.0 Dashboards
- Considerations for Dashboard 2.0
- Creating Dashboard 2.0 Dashboards
- Working with the Member Selector When Designing Dashboards 2.0
- About Forms 2.0 Grids in Dashboard 2.0
- Using Tables in Dashboards
- About Global and Local POVs in Dashboard 2.0
- About Quick Analysis
- About Dashboard Charts
- Dashboard Design Guidelines

Concepts in Designing Dashboard 2.0 Dashboards

This topic contains helpful information as you design Dashboard 2.0 dashboards:

- About the Dashboard 2.0 Designer
- Opening the Dashboard 2.0 Designer
- Data Sources for Charts
- More Helpful Information About Dashboard 2.0
- Videos

About the Dashboard 2.0 Designer



The Dashboard Designer consists of the following dashboard components:

- Object Palette
- Dashboard Toolbar
- Dashboard Workspace
- Properties Panel
- Dashboard Components

Copyright © 2022, 2026, Oracle and/or its affiliates.

Opening the Dashboard 2.0 Designer

As a reminder, Dashboard 2.0 dashboards on the **Dashboards** page are identified by one of the following icons:

- (Dashboard 2.0 icon in the standardized interface)
- (Dashboard 2.0 icon in the legacy interface)

To open the Dashboard 2.0 Designer:

1. From the Home page, click **Dashboards**.
2. Select one of the following options:
   - To create a dashboard, click **Create**, and then select **Dashboard 2.0**.
   - To edit a dashboard, in the **Actions** column to the right of the Dashboard 2.0 dashboard you'd like to edit, click ••• (Actions), and then click **Edit**.

     If you don't need to work with data while editing a Dashboard 2.0 dashboard; for example, you'd like to realign the dashboard components and tiles, click ••• (Actions), and then click **Edit without Data**.
3. If the Dashboard 2.0 dashboard is open in the runtime environment, you can switch from the runtime environment to the Dashboard Designer environment.

   Click **Actions**, and then select **Edit** or **Edit without Data**.

Data Sources for Charts

Dashboard 2.0 supports ad hoc grids, forms, and cubes for choosing the data. You pick the data sources from the object palette.

> **Note**
>
> You can include a maximum of 12 components in a Dashboard 2.0 dashboard.

- The properties panel provides full data source information for a dashboard component on the **Chart** tab . Select the dashboard component, then click (Chart). The data source information is displayed under the **Visualization** heading.
- When using a cube as the data source for quick analysis, drag and drop a cube from the object palette to the dashboard workspace, then click in the Search box and either enter the member name or launch the member selector to choose members. The **Layout** tab will then display in the properties panel where you can pivot the dimensions and choose which dimensions appear on the POV, row, or column axis. See About Quick Analysis.

> **Note**
>
> There is an upper limit of 50 members across all dimensions that can be selected to create a chart using quick analysis. This limit together with the number of dimensions in the cube will determine the maximum size of the grid that is supported for a chart based on quick analysis.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- When the data source for a dashboard component is a form or an ad hoc grid, the data is fetched using the form definition.
  - You can change the source form in the properties panel by clicking the **Form** property in the (Chart) tab of the properties panel.
  - The total amount of form data that's allowed to be visualized in a chart is 10,000 cells. By default, this is 100 rows and 100 columns. However, you can change the number of rows and columns to any combination that totals 10,000 cells or less; for example, if you reduce the number of rows to 5, then you can increase the number of columns to 2,000 (5 x 2000=10,000).
  - If a form's precision is set, displayed values after conversion to Dashboard 2.0 are based on the form's precision setting. If the precision value on a form is not set, then the values displayed after conversion to Dashboard 2.0 might change.

> **Note**
>
> When the data source for a dashboard component is a form, and the form has rows that contain blank header cells or empty formula rows that are not configured, then the corresponding chart legends will not display.

- For Doughnut, Pie, and Gauge chart types, you can add multiple charts to one component. To add multiple charts, click **Single** or **Multiple** in the chart's **Display** property. If **Single** is selected, the chart displays only the first column of the underlying form's data. If **Multiple** is selected, a chart is displayed for each column of the underlying form's data.

> **Note**
>
> For dashboards with Doughnut, Pie, and Gauge chart types that are converted from Dashboard 1.0 to Dashboard 2.0, the default option for the **Display** property is **Multiple**. For newly created Dashboard 2.0 dashboards, the default option for **Display** is **Single**.

More Helpful Information About Dashboard 2.0

- As you create a dashboard, click **Actions** and then select **Save and Run** to immediately see how the dashboard looks and works to a dashboard user. To return to designer mode to continue designing the dashboard, click **Actions** and then select **Edit** or **Edit without Data**.
- By default, missing or suppressed data is plotted as zeros. For selected chart types (Area, Bubble, Combination, Line, Radar, and Scatter), you can disable this setting by selecting the **Plot Missing Values as Zero** option in the chart's settings. When this option is disabled, the missing or suppressed data is ignored and is no longer plotted as zeros for those chart types.
- To review Dashboard 2.0 considerations, see Considerations for Dashboard 2.0.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Videos

Your Goal	Watch This Video
Learn how to create a dashboard with multiple components in the Dashboard Designer for Dashboard 2.0.	Creating Dashboards in Dashboards 2.0

Object Palette

On the left side of the Dashboard Designer is the object palette where you select the content for dashboard components. Simply drag and drop objects from the object palette to the workspace or search for content using the Search box.

The object palette can be resized. To resize the object palette, hover over the right side of the palette and drag it. To hide the palette, hover over the palette until you see the handle icon , then click it to hide the palette. Click (Handle) again to reopen the palette.

Content in the object palette is grouped into these categories:

Table 17-4 Object Palette Content Categories

Icon	Description
	Cubes: Perform quick analysis by adding components of a cube to a dashboard without having a prebuilt form. See About Quick Analysis.
	Library: Select ad hoc and standard forms to include in the dashboard by navigating to the forms folders or by searching for them by name. • Click **List** to view forms in a **List View** or **Tree View**. • Click (Search) to type search keywords. The access permissions set for forms are honored in dashboards.
	Visualizations: Select a chart to include in the dashboard. To view data in a chart, you must select components of a cube or associate the chart with a form as its data source. When you link a chart to a form, users can immediately see the impact of changing data in the form on the associated charts.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-4 (Cont.) Object Palette Content Categories

Icon	Description
	Other: • **Commentary**: Adds the comment you enter below the graph or chart and to the bottom of the **Chart** tab in the properties panel. **Commentary** includes a WYSIWYG text editor. • **URL**: Adds the URL you enter below the graph or chart and to the bottom of the **Chart** tab in the properties panel. **URL** includes a Reference URL link and the URL must be IFrame supported. Insert only external site URLs starting with the `https://` security protocol. Don't use internal or relative URLs or URLs for unconsenting third party sites such as google.com. Don't imbed into a dashboard direct URLs to other EPM artifacts such as forms and dashboards on either the same Oracle Fusion Cloud Enterprise Performance Management instance or to a different Cloud EPM instance. **Note:** If a URL added to a dashboard doesn't work in the runtime environment, right-click the URL and open the link in a new tab.

Dashboard Toolbar

In the upper right corner of the Dashboard Designer is the dashboard toolbar where you can perform these dashboard tasks:

Table 17-5 Dashboard Toolbar

Icon	Description
	The **Information** icon displays the folder in which the dashboard is located.
	The **Refresh Data** icon refreshes all data associated with the entire dashboard.
	The **POV Settings** icon performs these POV actions: • **POV : Hide Dimension Labels**: If your dashboard contains a global POV bar, select to hide the dimension names on the global POV bar. Clearing this option once again displays dimension names on the global POV bar. • **POV : Auto-Apply**: If your dashboard contains a global or local POV, enable this action to automatically apply changes to the POV. If you don't want to automatically apply changes, clear this option. • **POV : Clear All Page Selections**:
	The **Add** icon adds a new empty dashboard component to the design canvas (this is an alternative to drag and drop).
	The **Properties** icon hides and unhides the Properties Panel.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-5 (Cont.) Dashboard Toolbar

Icon	Description
Actions menu	The **Actions** menu enables you to perform these actions: • **Revert to Last Saved**: Discards edits made since the last time the dashboard was saved • **Save and Run**: Saves any edits made and opens the dashboard in the runtime environment • **Create Form**: If you have the correct permissions, allows you to create a form associated with the dashboard component in the forms editor. The forms editor opens in a dynamic tab next to the current tab. • **Open Jobs**: Opens the Jobs console in a dynamic tab next to the current tab. • **Show Details**: Displays the underlying form details, including the form name, the folder path of the form, and the cube
Save	Clicking **Save** saves the dashboard definition.

Dashboard Workspace

The large area in the middle of the page between the object palette and Properties panel is the dashboard workspace. In addition to drag and drop, you can use the Search box to specify or search for the data you want to display for each component (a *component* is an empty object in the dashboard workspace into which you can add a dashboard object, such as a chart or a table). You can add up to 12 components to the dashboard workspace.

If the forms version is Forms 2.0, any forms dropped into the workspace are rendered initially as editable grids. Ad hoc grids dropped into the workspace are rendered initially as tables.

- The first object that you drag and drop occupies the entire workspace, then drag additional objects from the object palette to the left, the right, the top, or the bottom of the existing component.
- To move a component to another part of the dashboard, click the component, and then hover your cursor over the upper edge of the component until you see the drag icon. Drag and drop the component to the left, right, top, or bottom of another component and the other components on the dashboard will move and realign.
- To maximize a component so it fills the workspace, hover over the component, click ••• (Actions), and then click **Maximize**. The component will fill the workspace, and the other components on the workspace will be hidden. Clicking ••• (Actions), and then **Restore** resizes the component to its original size and makes the other components in the workspace visible again.

> **Note**
>
> The **Maximize** option only enlarges the dashboard component. If the dashboard component is a grid and you want to perform grid actions on the component such as **Adjust**, **Grid Spread**, **Comment**, and so on, select **Open Form** (in the **Actions** menu) to open the underlying form associated with the component. The form will open in a dynamic tab next to the current tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- To change the height and the width of components in the dashboard, perform one of the following actions:
  - Drag the borders of the components within the dashboard workspace
  - Select a dashboard component, then in the Properties panel on the right, click (Charts) to view and change the component's height and width.
- To maximize the overall size of the dashboard workspace, you can resize or hide the object palette and properties panel on either side of the workspace.
- For a dashboard with a URL component, clicking on the body of the URL component does not switch focus to the URL component. To switch focus to the URL component, either click Alt + W or hover over the URL title bar until you see the cursor change to the **Move** icon , then click to change the focus.

> **Note**
>
> In the runtime environment, if a user doesn't have access to an object like a form, or if the form is missing, then an adjacent component will take its space. In the designer environment, all empty components are displayed so that the designer can choose to remove them.

Properties Panel

On the right side of the Dashboard Designer is the Properties panel where you can set general properties for the entire dashboard as well as component-specific properties.

The Properties panel can be resized. To resize the panel, hover over the left side of the panel and drag it. To hide the panel, click (Properties) at the top of the page. Click (Properties) again to reopen the panel.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-6 Properties Panel

Icon	Description
	The **General** tab includes the following properties for the entire dashboard: • **Name**: Edit the title of the entire dashboard. • **Description** (optional): Describe the dashboard. • **POV Bars**: Show or hide POV bars. • **Global POV Bar**: Enable or disable the global POV bar. • **Style**: Select the dashboard color scheme. Options are **Default**, **Light**, and **Dark**. **Note:** If you select **Dark**, dashboard error messages and legend text will be more difficult to view. • **Borders**: Show or hide component borders. • **Background**: Select a new dashboard background from a menu of colors. **Note:** If your dashboard contains a grid, only the background color will change. The grid color will remain the same. • **Use Name as Title**: Selecting **No** lets you customize the dashboard's title. You can further customize the title by changing the font family, font size, bolding, italicizing, underlining, font color, and font background color. • **Instructions**: Enable or disable instructions for the entire dashboard. Choose **Enable** to enter instructional text, format it, and then display it to runtime dashboard viewers. Note that the text limit for instructions is 2000 characters. The instructions can be viewed by clicking (Instructions) in the runtime dashboard's global toolbar. Choose **Disable** to hide instructions. **Note:** To add instructions for individual dashboard components, open the dashboard component and edit it. For information about POVs, see About Global and Local POVs in Dashboard 2.0.
	The **Associations** tab lists the rules associated with the dashboard and the underlying form data. **Note:** You can associate rules which are required to be run during a global **Save**. These rules can be associated or removed at any time. You can add rules and edit them: • If no rules are associated, click (Add/Edit business rules) to view a list of rules from which to choose. Rules already associated with forms in the dashboard are listed first and are named as follows: Business Rules for <name of form> • When you add rules, you'll need to specify when the rule should run: **Before Load**, **After Load**, **Before Save**, **After Save**, **Use Members on Form**, **Hide Prompt**. • Under **Actions**, you can delete rules or change the order in which they will run: **Move to Top**, **Move Up**, **Move Down**, **Move to Bottom**, and **Delete**. • If the rules have runtime prompts, they will be displayed when the rule is run.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-6 (Cont.) Properties Panel

Icon	Description
	The **Chart** tab includes properties for the selected components in the dashboard such as chart title, component height, width, and background color. You can also change the chart type, the data source type, and which underlying form is used for each component. Using different background colors for each component enables you to uniquely differentiate each dashboard component. Removing the chart title frees space that is then adjusted for the local POV bar and for the chart itself. For rows and columns, the total amount of form data that's allowed to be visualized in a chart is 10,000 cells. By default, this is 100 rows and 100 columns. However, you can change the number of rows and columns to any combination where the multiplication totals 10,000 cells or less; for example, if you reduce the number of rows to 5, then you can increase the number of columns to 2,000 (5 x 2000=10,000). **Note:** The 10,000 cell visualization limit does not apply to grids. If the form associated with a chart exceeds the 10,000 cell visualization limit, it might result in discrepancies between the data you see in the form and the way the data is visualized in the dashboard chart. It also might result in some other runtime issues such as drilling through on charts and legends. If you've added **Commentary** or **URL** information types to this component, you can edit the content of those information types at the bottom of this tab.
(this icon will change depending on the component that's selected in the dashboard)	This tab lets you customize visualizations for the selected chart or table. Set display properties for the selected components such as how to scale values, show or hide row dividers or grid lines, choose different font sizes and colors for headers and data, set orientation vertically or horizontally, define legend positions, add spark charts to tables, add a secondary Y-axis, and so on. See the chart type topics for detailed property descriptions. **Note:** For data visualizations in Dashboard 2.0, the custom color palette now supports only 12 colors instead of 15. If you created a dashboard in an earlier update that used 15 colors, you will continue to see 15 colors at runtime. However when you try to change the custom colors, the dashboard designer will only display 12 colors from which you can select and save.
	The **Layout** tab includes the **POV**, **Row**, and **Column** properties for the selected cube for quick analysis. See About Quick Analysis.

Dashboard Components

You can add up to 12 components to the dashboard workspace.

When you hover over a component in the workspace, a toolbar for that component displays in the upper right corner:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-7 Dashboard Components Toolbar

Icon	Description
	Instructions: Displays instructions for the form associated with the dashboard component (only available if the form designer added instructions to the form)
	Save: Saves any changed data and runs any rules associated with the dashboard component
	Refresh: Refreshes the data associated with the dashboard component
	Chart Type: Changes the chart type associated with the dashboard component
Actions menu	**Actions** menu: • **Save and Run**: Saves any edits made and opens the dashboard in the runtime environment • **Maximize**: Enlarges the dashboard component. Once maximized, click **Restore** to minimize the dashboard component to its original size. **Note:** The **Maximize** option only enlarges the dashboard component. If the dashboard component is a grid and you want to perform grid actions on the component such as **Adjust**, **Grid Spread**, **Comment**, and so on, select **Open Form** (in the **Actions** menu) to open the underlying form associated with the component. The form will open in a dynamic tab next to the current tab. • **Rules & Smart Push**: Lists any rules associated with the form. Click the rules to launch them. Analyze data coming from different cubes with Smart Push. • **Analyze**: Perform ad hoc analysis on a form. This menu option only displays if the chart type is a grid and if the data source is a form. • **Open in Smart View**: Work with a form in Oracle Smart View for Office. This menu option only displays if the chart type is a grid and if the data source is a form. See Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide 23.100*. • **Spreadsheet Export**: Export data from a form to Microsoft Excel so you can explore "what-if" scenarios in Excel before copying and pasting values back to your business process. This menu option only displays if the chart type is a grid and if the data source is a form. • **Open Form**: Opens the runtime form associated with the dashboard component in a dynamic tab next to the current tab • **Edit Form**: If you have the correct permissions, opens the form associated with the dashboard component in the forms editor. The forms editor opens in a dynamic tab next to the current tab. • **Create Form**: If you have the correct permissions, allows you to create a form associated with the dashboard component in the forms editor. The forms editor opens in a dynamic tab next to the current tab. • **Show Details**: Displays the underlying form details, including the form name, the folder path of the form, and the cube • **Open Jobs**: Opens the Jobs console in a dynamic tab next to the current tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Considerations for Dashboard 2.0

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Dashboard 1.0. All Oracle Fusion Cloud EPM environments will default to Dashboard 2.0 with existing environments created before October 3, 2025 having the option to switch back to Dashboard 1.0. All new environments created on or after October 3, 2025 will be deployed with Dashboard 2.0 only.

Note the following considerations when using Dashboard 2.0:

- When viewing dashboards in Dashboard 2.0, data for each form is visualized based on the data type of the form's first row, first cell. For example, if the first row, first cell in a form uses a percentage data type, then the data displayed for that form in Dashboard 2.0 is visualized as a percentage. If another form in the same dashboard uses a numeric data type in the first row, first cell, then the data will display as a decimal.
- For charts, each column must have a unique name in order for the data to be rendered properly.
- In some Dashboard 2.0 charts (such as Line and Area charts), data markers are defaulting to always display. In a future update, dashboard designers will have the ability to control the visibility of data markers.
- 3D visualization is not supported in Dashboard 2.0. This affects the following Dashboard 2.0 chart types:
  - Area
  - Bar
  - Bubble
  - Column
  - Combination
  - Doughnut
  - Gauge
  - Grid
  - Line
  - Radar
  - Scatter

  > **Note**
  >
  > Dashboard 1.0 still supports 3D visualizations for charts, as applicable.

- In a future update, Dashboard 2.0 will support Smart Push.
- Funnel charts are useful for viewing data for stages of a process, such as the stages of a sales process. The area of a funnel slice is proportional to its value for the corresponding

Copyright © 2022, 2026, Oracle and/or its affiliates.

stage. Dashboard 1.0 renders the funnel chart very differently than the way in which Dashboard 2.0 renders the funnel chart. In Dashboard 1.0, the funnel chart supports multiple columns, and the first two rows of the form are used to compare Actual with Target. The chart then plots the differences between the two in the funnel corresponding to the respective column. In Dashboard 2.0 the funnel chart supports only the first column and the area of the funnel corresponding to each cell on the row is colored and is sized proportionally to its numeric value.

- When accessing ad hoc grids from Dashboard 2.0 chart types:
  - **Analyze** only works for chart elements built on a form.
  - **Analyze** is not supported for Geomap chart types or for Quick Analysis charts.
  - For charts built on a form with a formula row or column, after right-clicking the chart element which corresponds to the formula row/column (like a bar in a Bar chart), clicking **Analyze** will not perform any action.
- All future dashboard enhancements will be in Dashboard 2.0.

Forms Versions and Dashboard 2.0

Runtime forms are also available in two versions:

- **Forms 1.0**: Uses Slick Grid with Oracle ADF Fuse components
- **Forms 2.0**: Uses Slick Grid with Oracle JET components

Certain features in Dashboard 2.0 only work with Forms 2.0; for example, Dashboard 2.0 only lets you work directly with data in form grids if the underlying form is a Forms 2.0 form. The **Forms Version** can be updated in your application settings.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Forms 1.0. Users on new environments created on or after October 3, 2025 will see all their forms rendered exclusively in Forms 2.0, with no option in application settings to switch to Forms 1.0. Existing environment users will also see their forms rendered in Forms 2.0 by default. However, users on environments created before October 3, 2025 will have the option to switch back to Forms 1.0 using the **Forms Version** application setting, if needed.

You'll need to be aware of some differences in the way the dashboard versions interact with the forms versions.

Forms Version 1.0

When the **Forms Version** application setting is set to **Forms 1.0**:

- You can continue to use Dashboard 1.0 with Forms 1.0.
- You cannot use Dashboard 2.0 with Forms 1.0.

  Forms 2.0 is supported with Dashboard 2.0 only. Use Forms 2.0 with Dashboard 2.0 for all interactions.

  If you've selected a Dashboard 2.0 dashboard and you see an `Error during Dashboard 2.0 component initialization` message, the dashboard has Forms 2.0 forms associated with it and you'll need to ensure that Forms 2.0 is enabled before you can view the dashboard.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- When Dashboard 2.0 artifacts are created, the **Grid** visualization option will not be available.
- To use forms as grids in Dashboard 2.0, update the **Forms Version** application setting to Forms 2.0.
- Existing Dashboard 2.0 dashboards (Dashboard 2.0 dashboards created before November 2023) will continue to display forms as tables and charts, not grids.

Forms Version 2.0

When the **Forms Version** application setting is set to **Forms 2.0**:

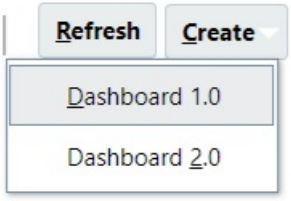
- You can continue to use Dashboard 1.0 with Forms 2.0.
- Dashboard 2.0 will display the **Grid** visualization option, which uses Forms 2.0 with read, write, and calculate abilities.
- Forms 2.0 within Dashboard 1.0 will appear as Forms 1.0.

> **Note**
>
> Saved forms definitions can be used as a data source for dashboard charts regardless of the **Forms Version** application setting: **Forms 1.0** or **Forms 2.0**.

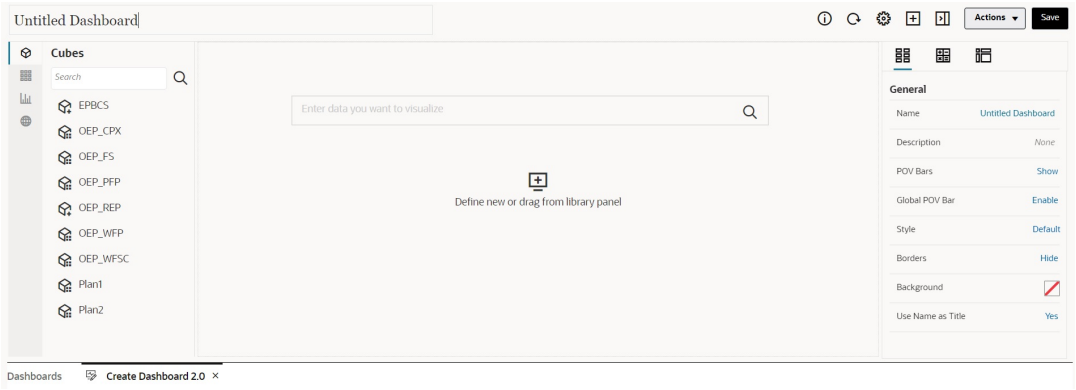
Creating Dashboard 2.0 Dashboards

To create a Dashboard 2.0 dashboard:

1. From the Home page, click **Dashboards**, and then click **Create**.



2. From the options provided, select **Dashboard 2.0**.



3. Enter a name for the dashboard by clicking the default dashboard name and entering a new name in the input box.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Drag and drop content from the object palette on the left onto the dashboard workspace. Customize the dashboard using the dashboard settings and properties.

   For a detailed description of the Dashboard Designer, see Concepts in Designing Dashboard 2.0 Dashboards.

   While working on the dashboard, you can save it as a new dashboard, including any unsaved changes. To do so, click **Actions**, then **Save As,** and then save the dashboard with the new name.

5. Click **Save**.

You can easily duplicate and modify a dashboard using **Copy As** on the **Dashboards** listing page. Select **Actions** ••• next to the dashboard you want to copy.

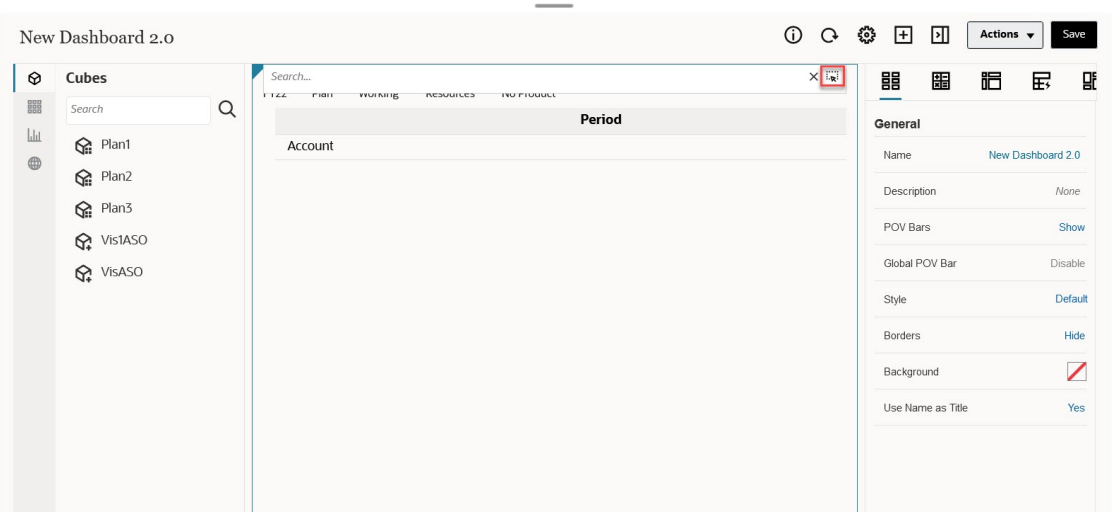
Working with the Member Selector When Designing Dashboards 2.0

When designing Dashboard 2.0 dashboards, you can easily search for and select new dimension members using the member selector.

When you're creating a Quick Analysis in your dashboard, after you add a cube, you can select members for each dimension using the member selector.

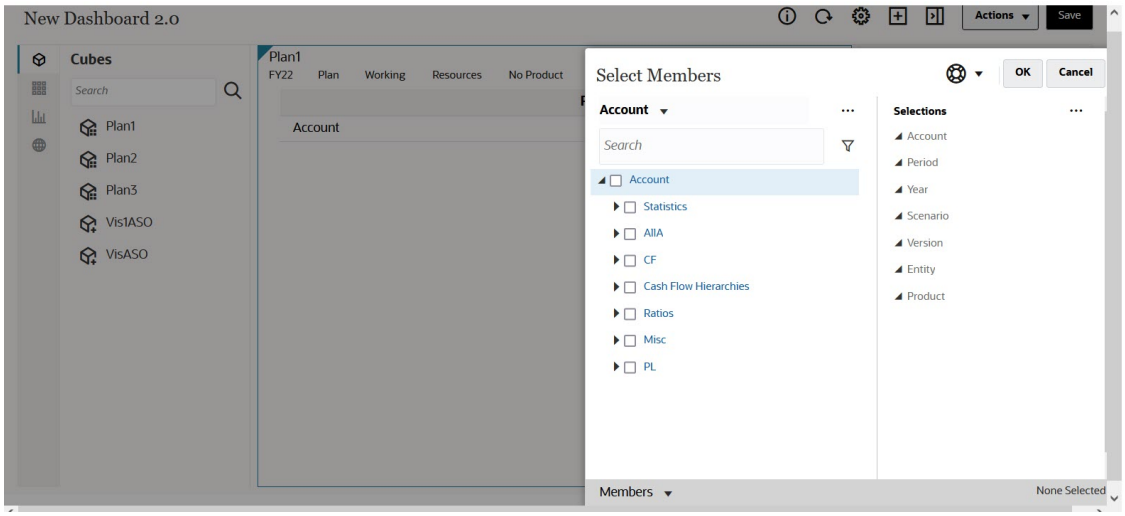
To open the member selector for Quick Analysis:

Click the member selector icon in the Quick Search bar:



Select members for each dimension using the member selector.

Copyright © 2022, 2026, Oracle and/or its affiliates.



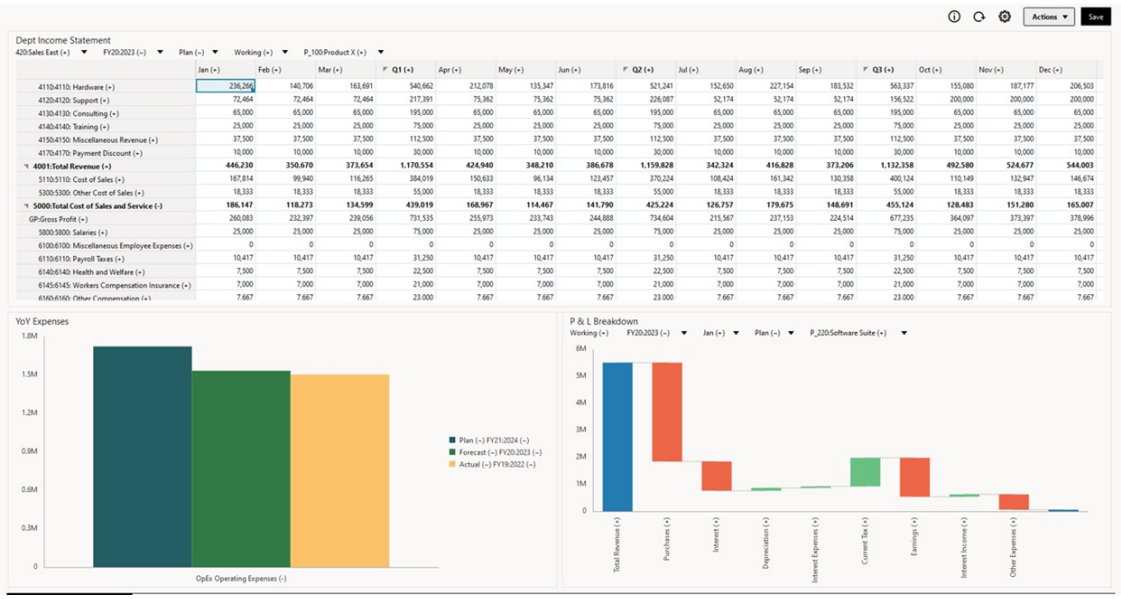
For more information about working with the member selector, see Using the Member Selector.

About Forms 2.0 Grids in Dashboard 2.0

Newly added components in Dashboard 2.0 default to displaying the form grid, and the grids are writable if the associated form is a Forms 2.0 form. Grids in dashboards enable you to work directly with data in forms if the underlying form is a Forms 2.0 form. You can write-back data updates and invoke rules in dashboards with grid components. You can also analyze form data, work with a form in Oracle Smart View for Office, and export data from a form to a spreadsheet.

Right-clicking inside a grid enables you to view a context menu where you can perform additional grid actions such as grid spread, and adding comments and attachments.

Example Dashboard with a Grid and Charts

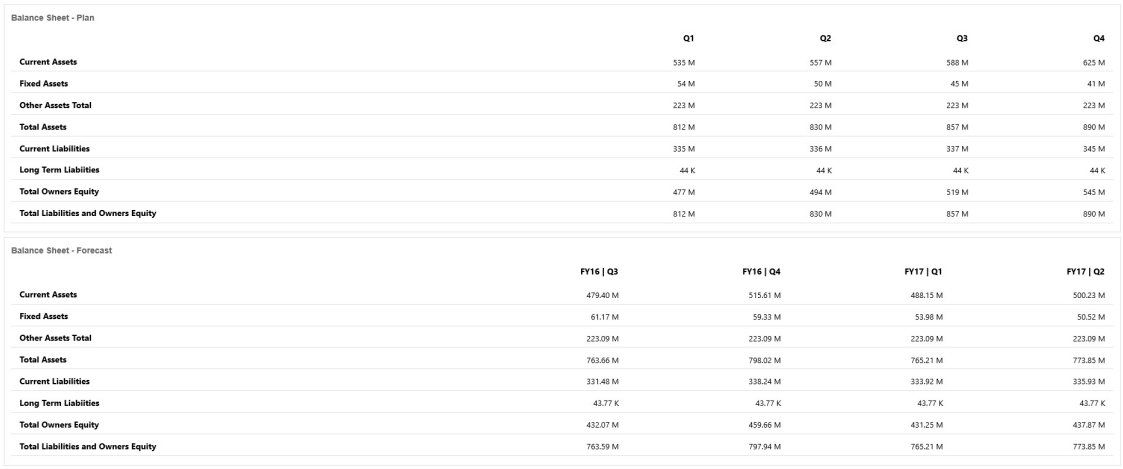


Copyright © 2022, 2026, Oracle and/or its affiliates.

Using Tables in Dashboards

Tables in dashboards provide a list view of the data showing multiple values from a form or grid. You can embed mini-charts into each row of the table, called Spark Charts, which plot column data. Tables are also searchable. Note that currency symbols or currency codes are displayed in tables for multicurrency applications.

Example Dashboard Showing Plain Tables



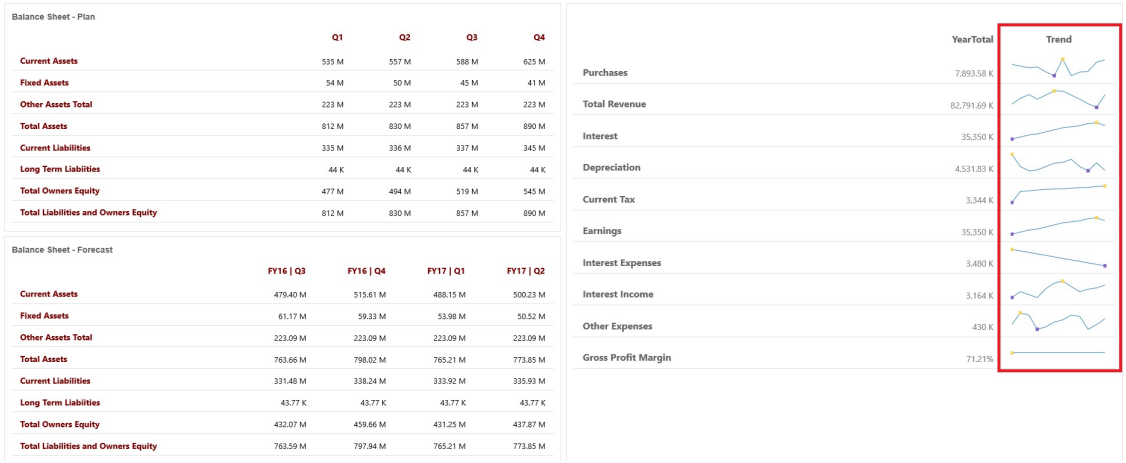
Balance Sheet - Plan

	Q1	Q2	Q3	Q4
Current Assets	535 M	557 M	588 M	625 M
Fixed Assets	54 M	50 M	45 M	41 M
Other Assets Total	223 M	223 M	223 M	223 M
Total Assets	812 M	830 M	857 M	890 M
Current Liabilities	335 M	336 M	337 M	345 M
Long Term Liabilities	44 K	44 K	44 K	44 K
Total Owners Equity	477 M	494 M	519 M	545 M
Total Liabilities and Owners Equity	812 M	830 M	857 M	890 M

Balance Sheet - Forecast

	FY16 | Q3	FY16 | Q4	FY17 | Q1	FY17 | Q2
Current Assets	479.40 M	515.61 M	488.15 M	500.23 M
Fixed Assets	61.17 M	59.33 M	53.98 M	50.52 M
Other Assets Total	223.09 M	223.09 M	223.09 M	223.09 M
Total Assets	763.66 M	798.02 M	765.21 M	773.85 M
Current Liabilities	331.48 M	338.24 M	333.92 M	335.93 M
Long Term Liabilities	43.77 K	43.77 K	43.77 K	43.77 K
Total Owners Equity	432.07 M	459.66 M	431.25 M	437.87 M
Total Liabilities and Owners Equity	763.59 M	797.94 M	765.21 M	773.85 M

Example Dashboard Showing a Table With a Spark Chart



Balance Sheet - Plan

	Q1	Q2	Q3	Q4
Current Assets	535 M	557 M	588 M	625 M
Fixed Assets	54 M	50 M	45 M	41 M
Other Assets Total	223 M	223 M	223 M	223 M
Total Assets	812 M	830 M	857 M	890 M
Current Liabilities	335 M	336 M	337 M	345 M
Long Term Liabilities	44 K	44 K	44 K	44 K
Total Owners Equity	477 M	494 M	519 M	545 M
Total Liabilities and Owners Equity	812 M	830 M	857 M	890 M

Balance Sheet - Forecast

	FY16 | Q3	FY16 | Q4	FY17 | Q1	FY17 | Q2
Current Assets	479.40 M	515.61 M	488.15 M	500.23 M
Fixed Assets	61.17 M	59.33 M	53.98 M	50.52 M
Other Assets Total	223.09 M	223.09 M	223.09 M	223.09 M
Total Assets	763.66 M	798.02 M	765.21 M	773.85 M
Current Liabilities	331.48 M	338.24 M	333.92 M	335.93 M
Long Term Liabilities	43.77 K	43.77 K	43.77 K	43.77 K
Total Owners Equity	432.07 M	459.66 M	431.25 M	437.87 M
Total Liabilities and Owners Equity	763.59 M	797.94 M	765.21 M	773.85 M

	YearTotal	Trend
Purchases	7,893.58 K	
Total Revenue	82,791.69 K	
Interest	35,350 K	
Depreciation	4,531.83 K	
Current Tax	3,344 K	
Earnings	35,350 K	
Interest Expenses	3,480 K	
Interest Income	3,164 K	
Other Expenses	430 K	
Gross Profit Margin	71.21%	

Dashboard designers can set these table properties:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-8 Table Properties

Setting	Description
Value Scale	Especially useful for large numbers, you can scale how a value is displayed. For example, if the value is 1,689,000 and you select **K - Thousand** as the scaling option, the table displays the value as 1,689K. Your scaling options: • **None**: No scaling is applied. • **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T. • **K - Thousand**: The value is displayed as thousands units. For example, 1,689,000 displays as 1689K. • **M - Million**: The value is displayed as millions units. For example, 123,456,789 displays as 123M. • **B - Billion**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B. • **T - Trillion**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.
Row Divider	Choose **Show** or **Hide**.
Font	Specify size and color options for headers and data.
Spark Chart	• **Chart Type**: Select **Bar**, **Line**, **Area**, and **Line with Area** with associated options. Or you can select **None**. • **Header**: Column header for the Spark Chart column • **Starting Index**: Column index where to start charting data • **Ending Index**: Column index where to stop charting data

Videos

Your Goal	Watch This Video
See how to create a dashboard with multiple components in the Dashboard Designer for Dashboard 2.0. You create a dashboard with a table, a table with a spark chart, and a tile chart.	Creating Table, Spark, and Tile Charts in Dashboards 2.0

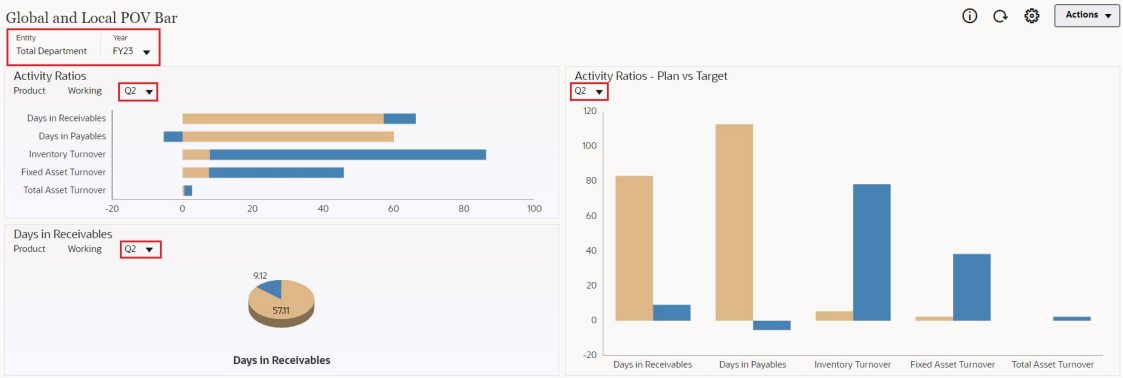
About Global and Local POVs in Dashboard 2.0

A local POV on a form reflects the dimension members the form designer selected for that form. Dashboards also support *global POV bars*, so that the local POVs that are common are combined in the global POV bar to avoid repeating them in each component.

Dashboard 2.0 POVs Example

This Dashboard 2.0 dashboard shows a global POV bar (showing Entity and Year) and local POVs (the drop-down lists for Q2):

Copyright © 2022, 2026, Oracle and/or its affiliates.



With a global POV bar, if you change a page in the global POV bar and **POV Bar : Auto-Apply** is enabled, the page changes for all components in the dashboard that are based on forms. The global POV bar displays at the top of the dashboard above all the components, while the local POV bar displays within the component. User variables are supported in both global and local POVs in dashboards and you can change dynamic user variables directly from the POV bar.

In the dashboard toolbar **POV Settings** menu (in both the runtime and edit modes), you can set whether to hide dimension labels in the global POV (**POV Bar : Hide Dimension Labels**) and whether to enable or disable automatically applying changes (**POV Bar : Auto-Apply**).

About global POV bars:

- The POV Bar is made up of local POV dimensions, Page dimensions, and user variables.
- Depending on the local POV and page of each form on the dashboard, the global POV bar is automatically calculated.
- Global POVs reflect the content of the components using forms in that dashboard. That is, they apply to forms in a dashboard, to charts that are linked to forms, and to tiles that use forms as a data source. So if the dashboard doesn't include a form as a data source, then neither the local nor global POV bar is available.

Here's an example of how the global POV bar is calculated, based on the local POV dimensions for two forms:

The global POV bar is disabled:

- Form A local POV: Year, Entity, Product
- Form B local POV: Year, Entity, Project

The global POV bar is enabled:

- Global POV bar: Year, Entity
- Form A local POV: Product
- Form B local POV: Project

Because not all dimensions and page selections may be common to all forms on a dashboard, the complete POV for a dashboard component may get split between the local POV and the global POV bar. The global POV bar and the local POV together contain the complete intersection information for each form on a dashboard.

If there is only one component on the dashboard that uses a form as a data source, then the entire POV/page of the form is moved to the global POV bar.

Copyright © 2022, 2026, Oracle and/or its affiliates.

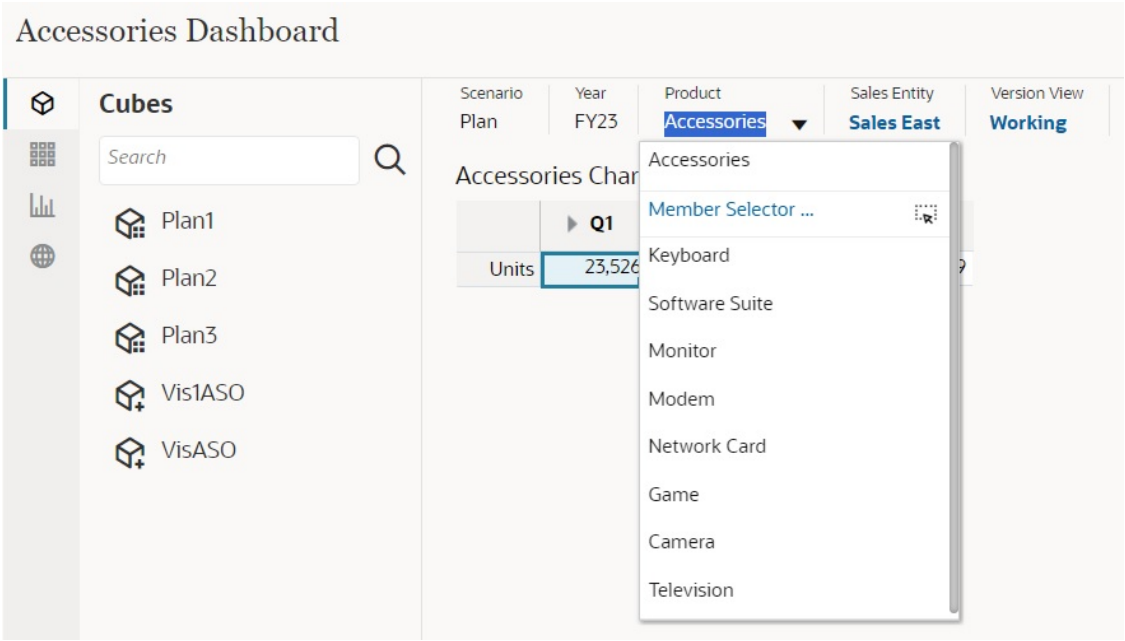
If there is more than one component on a dashboard that uses forms as a data source, then this is how the application determines which dimensions go in the global POV bar or stay in the local POV:

- If the dimension is in the POV or page of all the forms, and the member selection is the same in all the forms, the dimension goes in the global POV bar.
- If the dimension is in the POV on one form and in the page of another form, then the dimension stays in the local POV.
- If the dimension is in the POV, then the same members must be selected in all the forms for the dimension.
- If the dimension is a page dimension, then the selected page members must be the same and display in the same order in all the forms.

Searching for POV Members in Dashboard 2.0 Dashboards

When working in Dashboard 2.0 dashboards, you can easily find new POV members. To search, click a POV link. The search interface displays a list of the most recently used members from which you can choose.

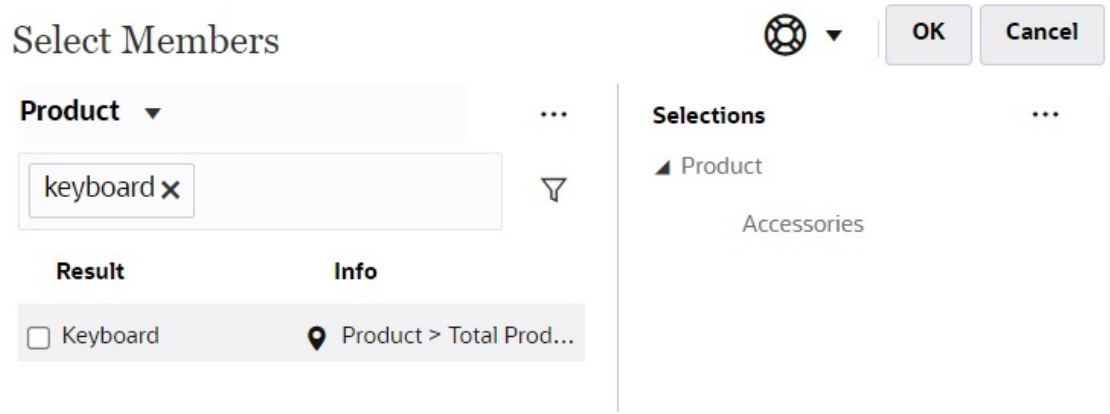
Figure 17-1 Dashboard 2.0 POV Most Recently Used Members List



You also can search using the member selector. Click a POV link, then click the member selector icon to launch the member selector. Members in the member selector are displayed as a hierarchy or you can type a member name in the **Search** box. If a member is located using the **Search** box, you'll see a result displayed under the Search box.

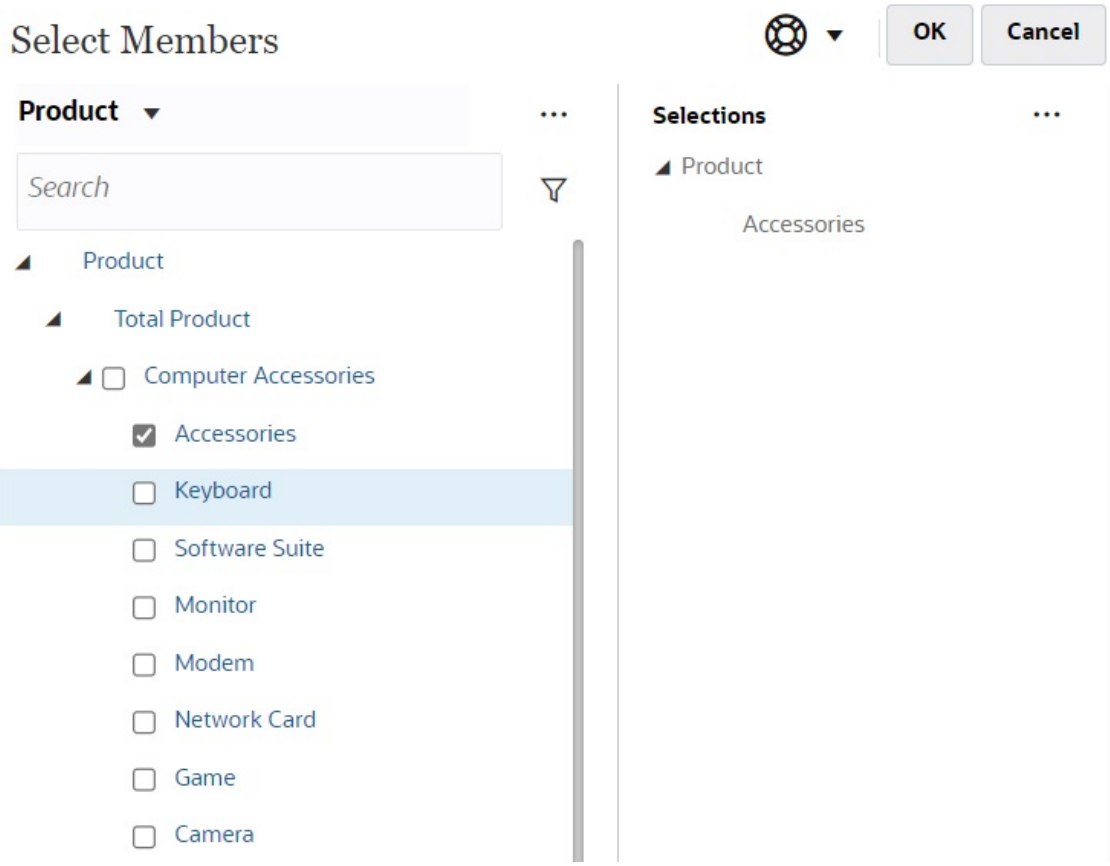
Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 17-2 Dashboard 2.0 Member Selector Search Results



You can view where the member is located within the hierarchy by hovering over the result's **Info** column and clicking (Locate Member).

Figure 17-3 Dashboard 2.0 Member Selector Search Results in Hierarchy



Copyright © 2022, 2026, Oracle and/or its affiliates.

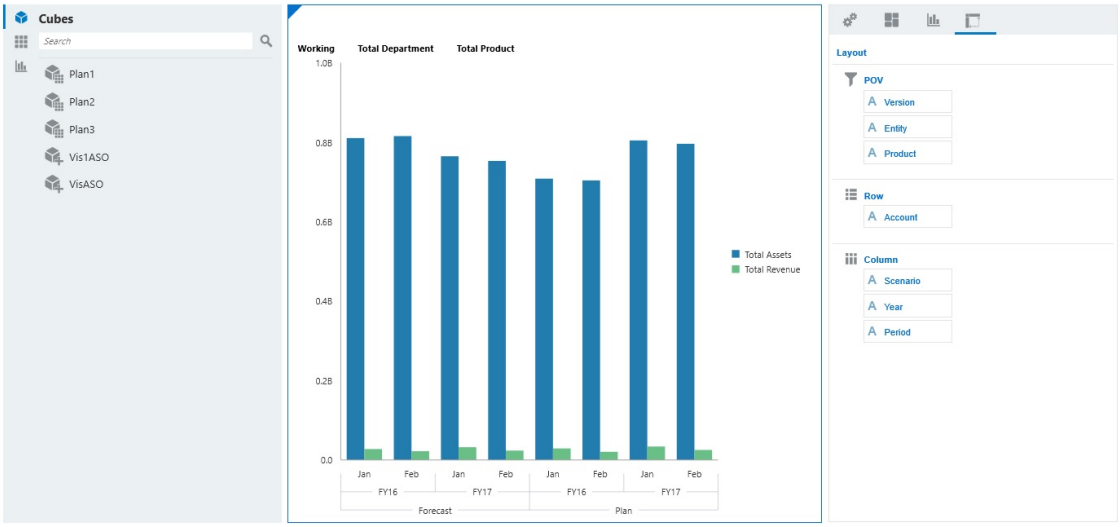
Dashboard 2.0 POV Bar Considerations

- For POV bar Page drop-down lists, the number of members shown in the page drop-down is controlled in **User Preferences** under **Page Options**. (From the Home page, click **Tools**, then **User Preferences**, and then click **Display** to view the **Page Options**.) If the number of items in the page drop-down exceeds this limit, then users cannot view them. Note that this will be fixed in a future release with the ability to use the member selector to browse through the rest of the members, similar to Dashboards 1.0.
- If your dashboard includes multiple forms, but some forms have different properties for the same dimension; for example, the Version dimension is hidden on some forms but it's visible on other forms in the same dashboard, the global POV might not display any Version dimension members. We recommend you ensure that all properties for all dimensions are the same for all forms included within a dashboard.

About Quick Analysis

Quick Analysis lets you add components to dashboards without having a prebuilt form. You create an ad hoc query by typing member names in the Search bar or using the Member Selector, and then you control the layout of the query in the Layout tab of the Properties panel.

Example Dashboard 2.0 Quick Analysis Chart in Design Mode



To create a quick analysis in your dashboard:

1. Select a cube for the query. You can do this in one of two ways:
   - Click in the workspace Search box to display a list of cubes, then select a cube.
   - Drag and drop a cube from the object palette to the dashboard workspace.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> With either method, the system starts with a default query; a single intersection in the cube driven from your Most Recently Used, or MRU. The default query varies based on what you've recently been looking at in the cube.
>
> If the MRU intersection in the cube is invalid, you'll get an error. If you see an error, open another form and change the page to a valid intersection so that the MRU gets updated with a valid intersection.

2. Refine the query by specifying members for the query:
   - In the Search box, type member names to display an auto-complete list from the cube.
   - Launch the member selector to select members, and then click **OK**.

> **Note**
>
> When using the Search box to find members for quick analysis and more than 25,000 members are present in a cube, the Search box only searches the first 3000 members in the dimension for the cube. If the cube contains less than 25,000 members, then the Search box will search through all members. To search a cube with more than 25,000 members, launch the member selector to make your quick analysis selections.

3. Select a chart type for the query.

   Click (Chart Type) to select a chart type; for example, Bar .

4. In the Properties panel, click the Layout tab .
5. Drag and drop the dimensions in the Layout tab of the Properties panel to other sections of the Layout tab to change the POV, Row, and Column layout of the dashboard component.

Videos

Your Goal	Watch This Video
Discover how to add quick analysis components to dashboards without having a prebuilt form. You learn how to create an ad hoc query in the Dashboard Designer and format the results by changing the dimension layout and applying visualizations.	Creating Quick Analyses in Dashboards 2.0

About Dashboard Charts

Dashboard charts are the visual elements that make up a dashboard. They take complex data and translate it into easily understandable visuals like:

- **Bar Charts:** Used to compare data across different categories or to show changes over time.
- **Line Charts:** Used to display trends and patterns over time.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Pie Charts:** Used to show the proportion of different parts to a whole.
- **Other types:** There are many other specialized charts like geomap, tile, gauge, radar, and combination charts, each with their own specific uses.

See the following topics for chart descriptions:

Chart Type	Icon	Want to know more?
Geomap		See About the Geomap Chart Type.
Pyramid		See About the Pyramid Chart Type.
Waterfall		See About the Waterfall Chart Type.
Gauge		See About the Gauge Chart Type for Dashboard 2.0.
Radar		See About the Radar Chart Type for Dashboard 2.0.
Combination		See About the Combination Chart Type for Dashboard 2.0.
Tile		See About the Tile Chart Type for Dashboard 2.0.

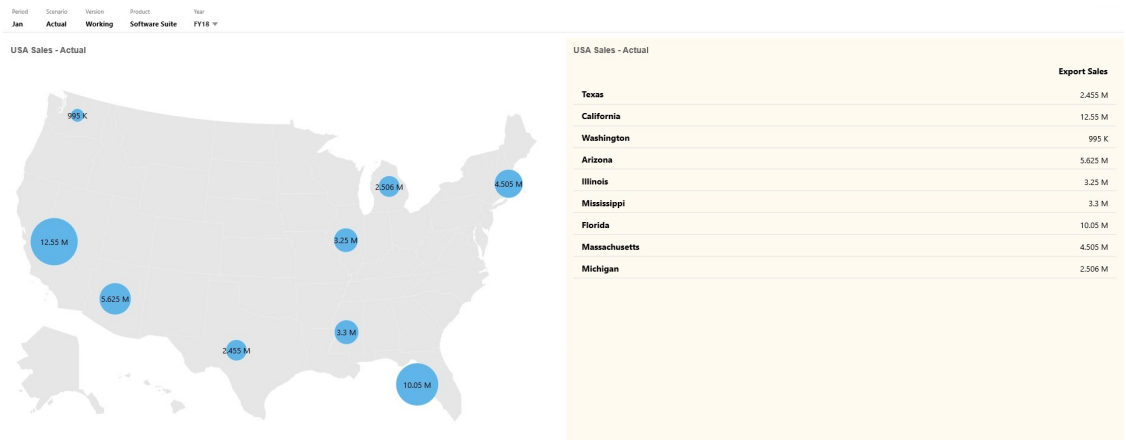
About the Geomap Chart Type

Geomaps are geographical maps with overlays and charts that display some measure about each of the geographical areas that are displayed. Hovering over the bubbles or the color highlight in the Geomap displays a data label.

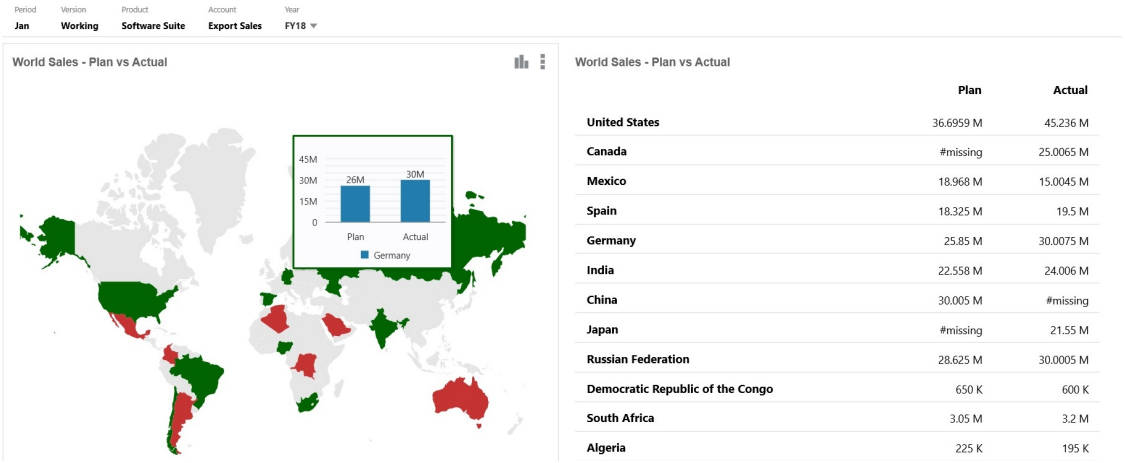
> **Note**
>
> Color highlight geomaps are designed to show any variances (red or green, depending upon your **Desired Variance Trend** setting) based on the values in the underlying data. If a geomap region has missing values in the 1st or 2nd column or if the values in those columns are equal and there is no variance, the region will be highlighted blue. Hovering over a highlighted region displays a bar chart with all the values for the row except for any missing values.

Example Geomap - USA Sales Using Data Bubbles

Copyright © 2022, 2026, Oracle and/or its affiliates.



Example Geomap - World Sales Using Color Highlight



Dashboard designers can set these geomap chart properties:

Table 17-9 Geomap Chart Properties

Setting	Description
Map Layer	Select **World** or narrow the scope of the map to a continent such as **Asia**, **North America**, or **Africa**.
Type	The **Data Bubbles** geomap displays data as sized bubbles over the map layer. The **Color Highlight** geomap compares two data values, displaying geographical areas that have an increase in green, and those with a decrease in red. Select **Data Bubbles** or **Color Highlight** and then specify the following additional options: • For **Data Bubbles**, select the desired settings for **Label** (**Show** or **Hide**), **Label Color**, and **Bubble Color**. • For **Color Highlight**, specify the **Desired Variance Trend** (**Increase** or **Decrease**).

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-9 (Cont.) Geomap Chart Properties

Setting	Description
Geography Names	We've provided you with a metadata load file that contains the geographical elements the geomap uses like countries, states, and cities. Click to download a CSV file which you can then upload into a dimension as new members or (with some manual changes) as aliases to existing members in your application. Note that geomaps only work if the geography names in the forms match exactly the geography names that Dashboard 2.0 uses for its map layers. So if your entity/geography dimension says, for example, USA, that won't be recognized as a valid name in the map layer, which uses United States.

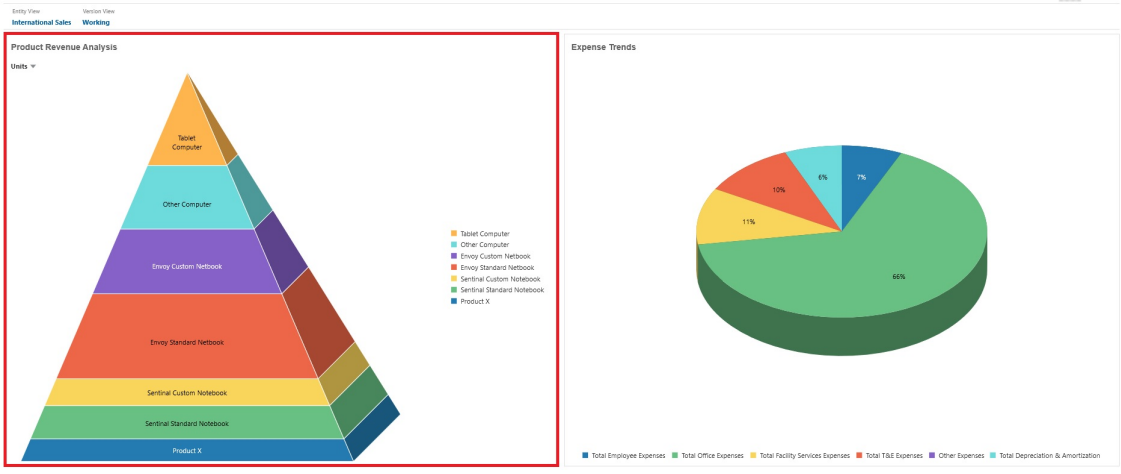
Videos

Your Goal	Watch This Video
Learn how to download geography members for geomap charts, then import them into your dimension. You learn how to set up both data bubble and color highlight geomap charts.	Creating Geomaps in Dashboards 2.0

About the Pyramid Chart Type

Pyramid chart types use a triangle diagram to represent hierarchies visually. The triangle is divided into sections, illustrating vertically top-down and broad-narrow structures and processes.

Example 3D Pyramid Chart



Dashboard designers can set these pyramid chart properties:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-10 Pyramid Chart Properties

Setting	Description
Legend Position	Choose **Left**, **Right**, **Top**, **Bottom**, or **None**.
Value Scale	Especially useful for large numbers, you can scale how a value is displayed. For example, if the value is 1,689,000 and you select **K - Thousand** as the scaling option, the chart displays the value as 1,689K. Your scaling options: • **None**: No scaling is applied. • **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T. • **K - Thousand**: The value is displayed as thousands units. For example, 1,689,000 displays as 1689K. • **M - Million**: The value is displayed as millions units. For example, 123,456,789 displays as 123M. • **B - Billion**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B. • **T - Trillion**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.
3D Graph	Choose **Yes** to visualize the data as a 3D chart.
Color	Select **Default** or click a section of the pyramid chart and choose a custom color for that section.

About the Waterfall Chart Type

Waterfall charts display a running total of positive and negative values, which is helpful in showing how you arrived at a net value from an initial value.

Waterfall charts are used to portray how an initial value is affected by a series of intermediate positive or negative values. Usually the initial and the final values (end points) are represented by whole columns, while the intermediate values are shown as floating columns that begin based on the value of the previous column. The columns can be color-coded to distinguish between positive and negative values.

Example Waterfall Chart - Inventory Analysis

This example visualizes changes in a single account over time.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Example Waterfall Chart - P & L Statement

This example has expense accounts that are shown as a negative change to Total Revenue, and income accounts that are shown as a positive change, for a final Net Income value.

P & L Statement

	Total Revenue	Purchases	Interest	Depreciation	Interest Expenses	Current Tax	Earnings	Interest Income	Other Expenses
International Sales	5.5 M	1.845 M	760 K	865 K	925 K	1.98 M	540 K	630 K	60 K

Dashboard designers can set these waterfall chart properties:

Table 17-11 Waterfall Chart Properties

Setting	Description
Value Scale	Especially useful for large numbers, you can scale how a value is displayed. For example, if the value is 1,689,000 and you select **K - Thousand** as the scaling option, the chart displays the value as 1,689K. Your scaling options: • **None**: No scaling is applied. • **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T. • **K - Thousand**: The value is displayed as thousands units. For example, 1,689,000 displays as 1689K. • **M - Million**: The value is displayed as millions units. For example, 123,456,789 displays as 123M. • **B - Billion**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B. • **T - Trillion**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.
Grid Lines	Select **Hide** or **Show** to display the x-axis lines of the grid.
Connecting Lines	Select **Hide** or **Show** to display the lines connecting the end of each column to the beginning of the next column. This helps visualize the flow of the data in the chart.
Legend Position	Choose **Left**, **Right**, **Top**, **Bottom**, or **None**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-11 (Cont.) Waterfall Chart Properties

Setting	Description
Plot Deltas	Select **Yes** to automatically calculate and plot the common start and end points from one bar to the next based on the values provided. This is useful for showing the trend for balance type of accounts. Otherwise, select **No** to manually set increase and decrease points. When **No** is selected, you can manually set these increase/decrease options on a bar-by-bar basis: • Bar Direction: Select a bar to manually set the bar direction to increase/decrease. • All bars: Display a list of all bars in the chart to manually set bar directions to increase/decrease. The manual options you can set for each bar are **Auto**, **Reverse**, and **Total**. **Auto** will consider the positive/negative values from the data source and plot accordingly. **Reverse** will change the sign, and **Total** will make the chart restart at the corresponding bar.
Increase **Decrease** **Total**	Select a color for each property.
End Bar	Select whether to **Hide** or **Show** the end bar on the chart. In the preceding example, the end bar is shown. If the end bar is shown, you can specify a label.
Axes	Select a **Custom Range** for the **X-Axis** and the **Y-Axis**, or select **Off**.

Videos

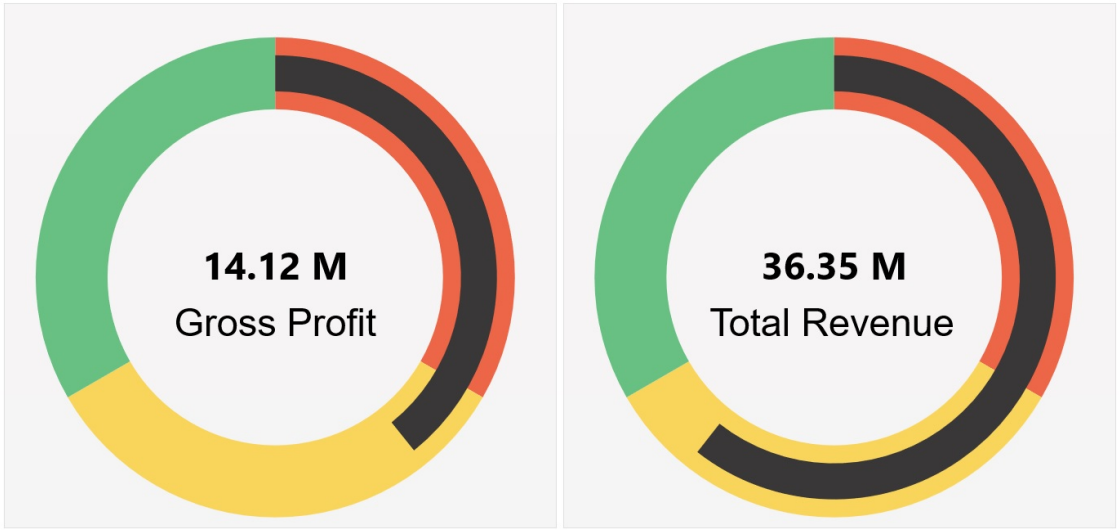
Your Goal	Watch This Video
Learn how to create waterfall charts to track the changes in a single account over time and to track how multiple accounts interact to produce a final total.	Creating Waterfall Charts in Dashboards 2.0

About the Gauge Chart Type for Dashboard 2.0

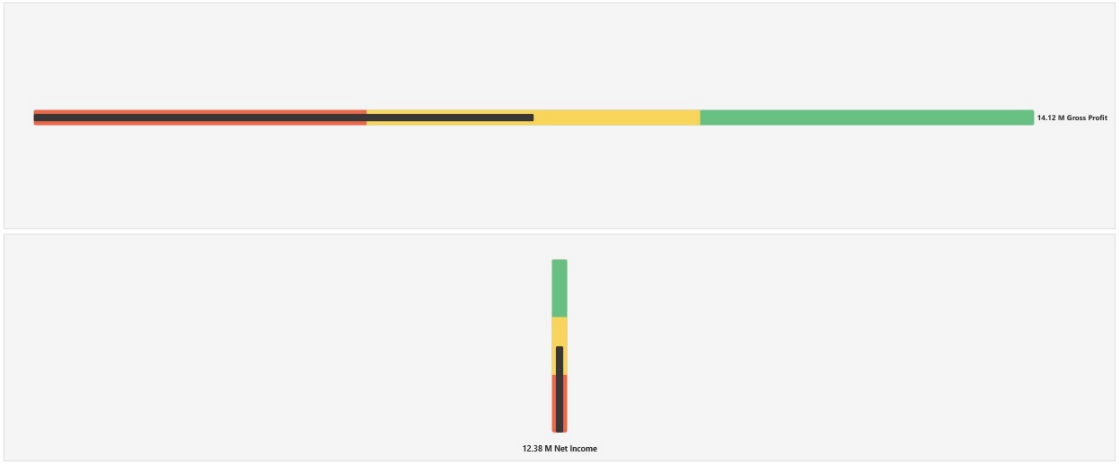
Gauge chart types show you whether data values fall within an acceptable range or not. You set the minimum and maximum values, the range maximums, and the gauge uses red, yellow, and green traffic lighting to help you quickly assess a current value and identify problems in important data points or measures. For Dashboard 2.0 dashboards, you can select circular, horizontal, and vertical gauge types.

Dashboard 2.0 Example - Circular Gauge Type

Copyright © 2022, 2026, Oracle and/or its affiliates.

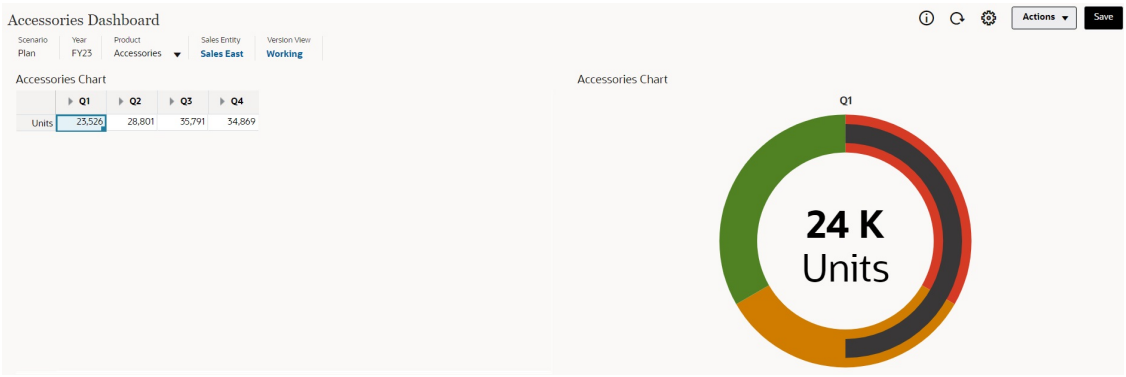


Dashboard 2.0 Example - Horizontal and Vertical Gauge Types



Dashboard 2.0 Example - Single Gauge Display

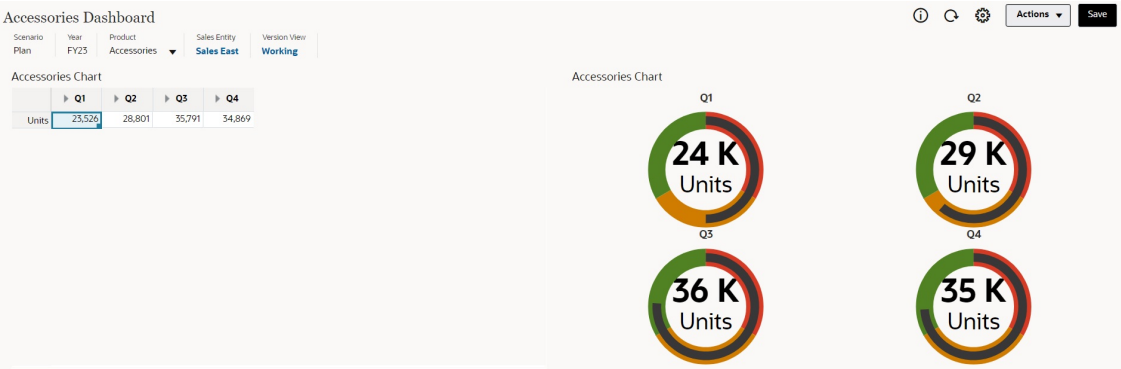
For **Display**, if **Single** is selected, then the gauge chart displays only the first column of the underlying form's data.



Copyright © 2022, 2026, Oracle and/or its affiliates.

Dashboard 2.0 Example - Multiple Gauge Display

For **Display**, if **Multiple** is selected, then a gauge chart is displayed for each column of the underlying form's data.



Dashboard designers can set these gauge chart type properties:

Table 17-12 Gauge Chart Type Properties

Setting	Description
Scale	Especially useful for large numbers, you can scale how a value is displayed. For example, if the value is 1,689,000 and you select **K - Thousand** as the scaling option, the chart displays the value as 1,689K. Your scaling options: • **None**: No scaling is applied. • **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T. • **K - Thousand**: The value is displayed as thousands units. For example, 1,689,000 displays as 1689K. • **M - Million**: The value is displayed as millions units. For example, 123,456,789 displays as 123M. • **B - Billion**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B. • **T - Trillion**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.
Display	You can display **Single** or **Multiple** gauge charts in a component. If **Single** is selected, then the gauge chart displays only the first column of the underlying form's data. If **Multiple** is selected, then a gauge chart is displayed for each column of the underlying form's data.
Gauge Type	Select from the following options: • **Circular** • **Horizontal** • **Vertical**
Minimum Value **Maximum Value**	The lowest and highest values on the gauge. The dashboard designer sets the values as a default, and then users can temporarily change them at runtime. If the dashboard designer doesn't specify these values, the application automatically sets the minimum value as zero and the maximum value as greater than the value on the gauge.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-12 (Cont.) Gauge Chart Type Properties

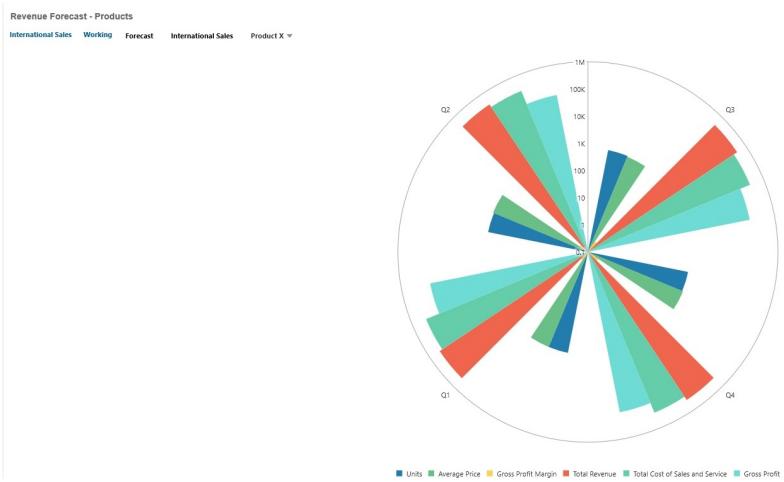
Setting	Description
Desired Goal	Specify whether **High** values or **Low** values are desirable.
Low Threshold **Medium Threshold** **High Threshold**	To visually indicate whether a measure lies in the acceptable range or not, these thresholds enable you to display the gauge in red, yellow and green based on the specified values. Specify a text **Label** and a number **Value** for each threshold.

About the Radar Chart Type for Dashboard 2.0

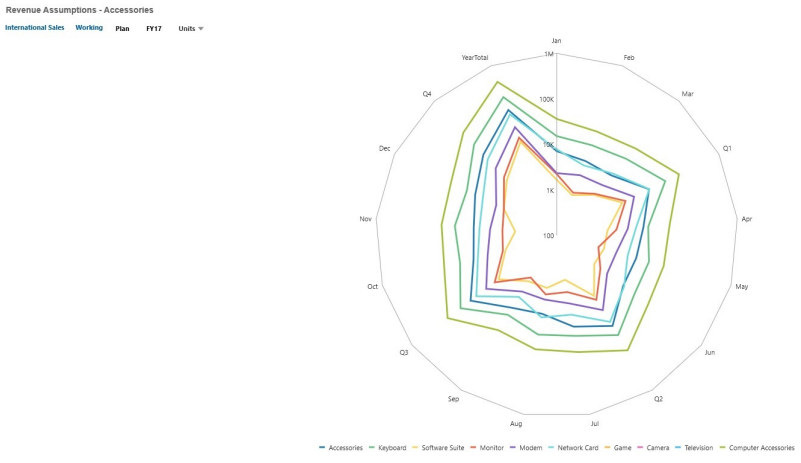
A radar chart is a two-dimensional chart type designed to plot one or more series of values over multiple quantitative variables. Radar charts are best for determining which variable in the data is doing better than the rest. Hence, they are mostly used for performance analysis.

For Dashboard 2.0, you can select bar, line, area, scatter, and bubble radar types.

Dashboard 2.0 Example - Radar Bar Chart Type



Dashboard 2.0 Example - Radar Line Chart Type



Copyright © 2022, 2026, Oracle and/or its affiliates.

Dashboard designers can set these radar chart type properties:

Table 17-13 Radar Chart Type Properties

Setting	Description
Value Scale	Especially useful for large numbers, you can scale how a value is displayed. For example, if the value is 1,689,000 and you select **K - Thousand** as the scaling option, the chart displays the value as 1,689K. Your scaling options: • **None**: No scaling is applied. • **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T. • **K - Thousand**: The value is displayed as thousands units. For example, 1,689,000 displays as 1689K. • **M - Million**: The value is displayed as millions units. For example, 123,456,789 displays as 123M. • **B - Billion**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B. • **T - Trillion**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.
Type	Select from the following options: • **Bar** • **Line** • **Area** • **Scatter** • **Bubble**
Legend Position	Choose **Left**, **Right**, **Top**, **Bottom**, or **None**.
Grid Lines	Select **Hide** or **Show**.
Logarithmic Scale	Especially useful for displaying numerical data that covers a wide range of values (typically, the largest numbers in the data are hundreds or even thousands of times larger than the smallest numbers), a logarithmic scale displays these values in a way that is more compact and readable. Select whether to use a logarithmic scale in your radar chart.
Color	Select **Default** or click data in the chart and choose a custom color for that data.

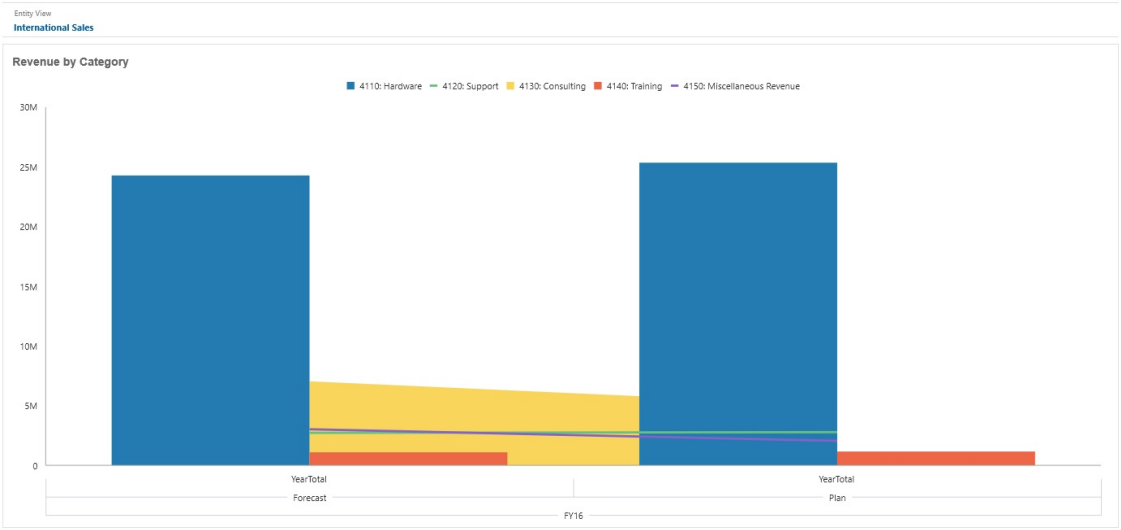
About the Combination Chart Type for Dashboard 2.0

The combination chart is a visualization that lets you merge into one chart any combination of bar, line, and area charts.

You can also add a secondary Y-axis on the opposite side from the primary Y-axis. Adding a secondary Y-axis lets you display the scale for one measure that doesn't scale appropriately with the other measures on the chart; for example, showing a percentage measure and a currency measure on the same chart.

Dashboard 2.0 Example - Area Bar Line Combination Chart

Copyright © 2022, 2026, Oracle and/or its affiliates.



Dashboard designers can set these combination chart type properties:

Table 17-14 Combination Chart Type Properties

Setting	Description
Value Scale	Especially useful for large numbers, you can scale how a value is displayed. For example, if the value is 1,689,000 and you select **K - Thousand** as the scaling option, the chart displays the value as 1,689K. Your scaling options: • **None**: No scaling is applied. • **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T. • **K - Thousand**: The value is displayed as thousands units. For example, 1,689,000 displays as 1689K. • **M - Million**: The value is displayed as millions units. For example, 123,456,789 displays as 123M. • **B - Billion**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B. • **T - Trillion**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.
Line Weight	Click the counter to set the line width. Note that the default width of a line is 5 pixels. You can select from 1 to 12 pixels.
Legend Position	Choose **Left**, **Right**, **Top**, **Bottom**, or **None**.
Label Position	Set the position of the data labels on the chart. Choose **Outside Bar Edge**, **Center**, **Inside Bar Edge**, or **None**.
Grid Lines	Select **Hide** or **Show**.
Logarithmic Scale	Especially useful for displaying numerical data that covers a wide range of values (typically, the largest numbers in the data are hundreds or even thousands of times larger than the smallest numbers), a logarithmic scale displays these values in a way that is more compact and readable. Select whether to use a logarithmic scale in your combination chart.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-14 (Cont.) Combination Chart Type Properties

Setting	Description
Secondary Y	Select which data to plot on a secondary Y-axis which will appear on the opposite side of the chart from the primary Y-axis. When the data values in a chart vary widely from data series to data series, or when you have mixed types of data (for example, currency and percentages), you can plot one or more data series on a secondary vertical (Y) axis. While the secondary Y-axis can be used with any line and bar chart type, it is more commonly used with the combination chart type, which helps to distinguish the data series that are plotted on the secondary Y-axis. For example, use a bar for the primary Y- axis, and line for the secondary Y-axis.
Series	Select the bar/line/area combination for the chart.
Color	Select **Default** or click data in the chart and choose a custom color for that data.
Axes	Select a **Custom Range** for the **X-Axis**, **Y-Axis**, and **Secondary Y-Axis**, or select **Off**.

About the Tile Chart Type for Dashboard 2.0

A tile is a chart type that lets you select specific values from the cube to display. In addition to using a form as a data source, you can directly enter a cell intersection that provides the value for a tile. By default, six tiles are initially displayed in a component, but you can display up to 10 tiles in a component. Until you associate a tile with data, it displays sample data.

With a form as the data source for a tile:

- You can have up to 10 tiles per component (six by default).
- The values in the first column of the form (up to the 10th row) are used to create the tiles.
- By default, the row title in the form is the tile's title, and it gets its values from the first column, then by row.
- You can set the tile's component title, the tile's height percentage, legend labels, and can select which axes from the form to include. For example, if you select a form with three rows, the tile displays three values.

> **Note**
>
> Sometimes in a form, the first column may be collapsed (hidden) when viewed as a grid. But the collapsed column is still considered when the tile gets its values from the form. We recommend that you update the form definition and use a form as a data source that contains only the cells to be shown on the tile.

With a cell intersection as the data source for a tile, you can have only one tile per object.

The table below lists the options you can set for the tile chart type. Note that you can set whether the displayed value is horizontally aligned in the tile to the left, the center, or the right. Also note that currency symbols or currency codes are displayed in tiles for multicurrency applications.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-15 Tile Chart Type Properties

Setting	Description
Value Scale	Especially useful for large numbers, you can scale how a value is displayed. For example, if the value is 1,689,000 and you select **K - Thousand** as the scaling option, the chart displays the value as 1,689K. Scaling options: • **None**: No scaling is applied. • **Auto**: The value is displayed based on its range. For example, 1,500 displays as 1.5K, 1,689,000 displays as 1.69M, 42,314,531,211 displays as 42.31B, and 1,234,567,891,234 displays as 1.23T. • **K - Thousand**: The value is displayed as thousands units. For example, 1,689,000 displays as 1689K. • **M - Million**: The value is displayed as millions units. For example, 123,456,789 displays as 123M. • **B - Billion**: The value is displayed as billions units. For example, 12,345,678,912 displays as 12B. • **T - Trillion**: The value is displayed as trillions units. For example, 1,234,567,891,234,567 displays as 1,234T.
Align Text	Text alignment options: • **Left** • **Center** • **Right**
Count	The number of tiles displayed in the component (up to 10)
Display	Legend display options: • **Row and Column Dimensions** • **Row Dimensions** • **Column Dimensions** • **None**
Position	Legend positioning options: • **Left** • **Right** • **Top** • **Bottom**
Legend Font Size	Decrease or increase the legend font size.
Value Font Size	Decrease or increase the value font size.

> **Note**
>
> Dashboard 2.0 does not support cell details. Instead we recommend you use Quick Analysis as a data source, which is a more advanced version of cell details. If you convert a dashboard to Dashboard 2.0 that has a component using cell details, delete the component using cell details as a data source, and recreate it using Quick Analysis as a data source.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Dashboard Design Guidelines

Provides guidance to dashboard designers on how to build visually appealing and functionally effective Oracle Fusion Cloud Enterprise Performance Management dashboards.

Dashboards must visually communicate clearly and immediately a vast array of information in a small amount of space and in a manner that meets the expectations of various audiences and user groups. This requires good design.

The guidelines provided here will assist you in learning how to design effective Cloud EPM dashboards for all types of users.

Related Topics

- Dashboard Types
- Dashboard Layout Guidance
- Dashboard Styles
- Color Sequencing in Charts
- Recommendations for Improving Dashboard Design
- Summary

Dashboard Types

Dashboards are a powerful interactive interface used by various stakeholders with varying use cases. Dashboard designers must understand who is using the dashboard and for what purpose in order to create a dashboard that is appealing and functional to the intended user.

Every dashboard user has unique expectations, and these expectations must be kept in mind while designing dashboards. For Oracle Fusion Cloud Enterprise Performance Management, we've identified two general dashboard types:

- Read-only dashboards: Read-only dashboards are visual tools that aggregate and display critical metrics and key performance indicators (KPIs) in a single screen, enabling users to monitor and examine business performance at a glance. See Read-Only Dashboards.
- Write-enabled dashboards: Write-enabled dashboards are unique to Cloud EPM and they support the ability to update data directly in the dashboard and immediately visualize it. See Write-Enabled Dashboards.

Read-Only Dashboards

Read-only dashboards are visual tools that aggregate and display critical metrics and key performance indicators (KPIs) in a single screen, enabling users to monitor and examine business performance at a glance.

When designing read-only dashboards, keep the following factors in mind so that the dashboards are appealing and functional to the intended users:

- Know your audience

  Different dashboards have different audiences and different uses. Managers and Executives use read-only dashboards strategically to monitor essential business KPIs and metrics so they can effectively make decisions. Data Analysts and Interactive Users use read-only dashboards analytically to visualize important high-level summary data with the ability to drill through to detailed data.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Another type of dashboard user are Data Input and Impact Analyzers. They are data entry users who use dashboards as a data input interface, but also have the ability to immediately view the newly input data impact on a chart in real-time. These types of dashboards are unique to Oracle Fusion Cloud Enterprise Performance Management and are called write-enabled dashboards. For information about designing write-enabled dashboards, see Write-Enabled Dashboards.

- Keep it simple

  The fundamental challenge of dashboard design is to squeeze as much information as possible into a small amount of space. Nobody wants to leave out critical information, but there's a tradeoff between complexity and usefulness. Be clear in your objective for a dashboard, and narrow the information to that which directly applies to meeting that objective. If there is deeper information under the initial data presented, provide an option to drill down and seek ever more focused and useful information.

- Prioritize elements

  Prioritize elements top left to bottom right. Place high-level, easy-to-read, actionable components near the top left, and place components with supporting information lower. If your audience has limited time or attention, place important elements where they will be noticed.

- Aesthetics matter

  The aesthetics of a dashboard (or lack therof) can impact its adoption. Use only one typeface, and don't overuse colors. Each color in a data visualization should serve a purpose. Use different dashboard colors only when you're communicating different things. Be consistent. If your dashboard includes multiple charts, ensure to match colors between charts when they refer to the same group or entity. If colors change their meaning between charts, this can make it harder for users to understand the chart.

Read-Only Dashboard Examples by User

Provided in this topic are examples of read-only dashboards by user. Also provided are recommendations for the information to display in dashboards, the chart types to use, and number of components.

- Read-Only Dashboards for Managers and Executives
- Read-Only Dashboards for Data Analysts and Interactive Users

Read-Only Dashboards for Managers and Executives

Managers and Executives are typically decision makers. They expect to see tables and charts that give them clear information. Make sure to include expected details in one dashboard consisting of multiple components.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-16 Read-Only Dashboard Recommendations for Managers and Executives

Dashboard Content	Recommendation
Information to display	• Key Performance Indicators (KPIs) • High-level trends • Variances • YoY and/or QoQ comparisons
Chart types	Tile, Gauge, Table, Pie/Doughnut, Line/Bar, Geomap, Radar, Waterfall
Number of dashboard components	3 to 6

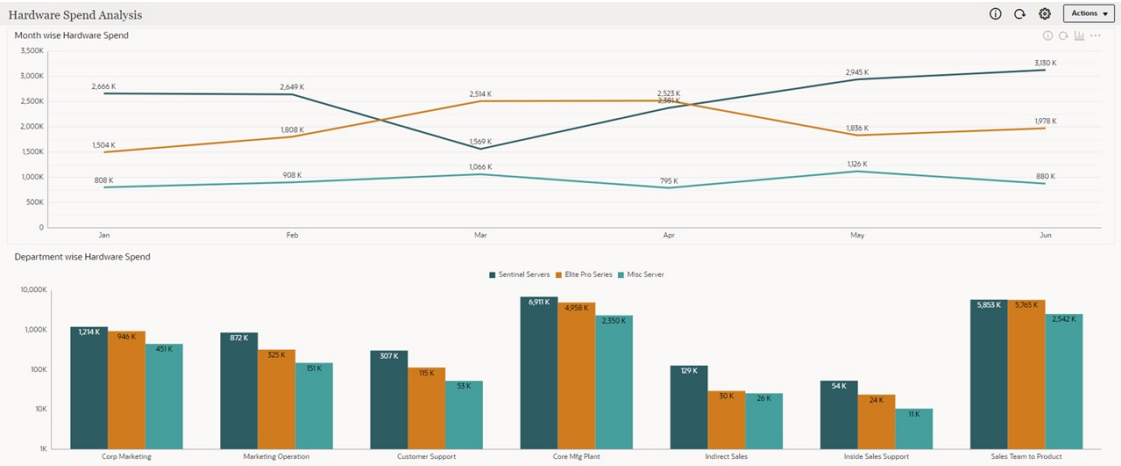
Read-Only Dashboards for Data Analysts and Interactive Users

Data Analysts and Interactive Users typically perform data analysis and provide insights to senior management for important decisions.

Table 17-17 Read-Only Dashboard Recommendations for Data Analysts and Interactive Users

Dashboard Content	Recommendation
Information to display	• Drill-enabled summary level chart • Page-level and chart-level POV switchers to review various data combinations • Variances • YoY and/or QoQ comparisons • Charts with a Master-Detail relationship
Chart types	Tile, Gauge, Table with Spark Chart, Pie/Doughnut, Line/Bar, Geomap, Radar, Waterfall, Bubble, Scatter, Funnel, Pyramid, Grids (with summary data)
Number of dashboard components	3 to 6

Copyright © 2022, 2026, Oracle and/or its affiliates.



Write-Enabled Dashboards

Write-enabled dashboards are unique to Oracle Fusion Cloud Enterprise Performance Management because they enable users to visualize, read, write, and calculate in one dashboard.

Write-enabled dashboards facilitate bi-directional data interactions, both to display data as well as update it. Dashboards typically enable users to visualize data in an easily understandable manner by representing data in different chart types with scales for comparison. Write-enabled dashboards also enable users to make updates to data values and have the visualization rendered instantaneously.

Interactions in Cloud EPM dashboards are not just limited to changing POVs, drill-through, different chart type visualizations, and so on. Write-enabled dashboards enable users to update data directly in the dashboards. And with the ability to associate Business Rules in dashboards, complex calculations can be done on the fly and values are updated.

Write-Enabled Dashboard Examples

With write-enabled dashboards, Oracle Fusion Cloud Enterprise Performance Management supports the ability to update data and immediately visualize it.

Provided in the table below are recommendations for the components to display in write-enabled dashboards, the chart types to use, and the number of components.

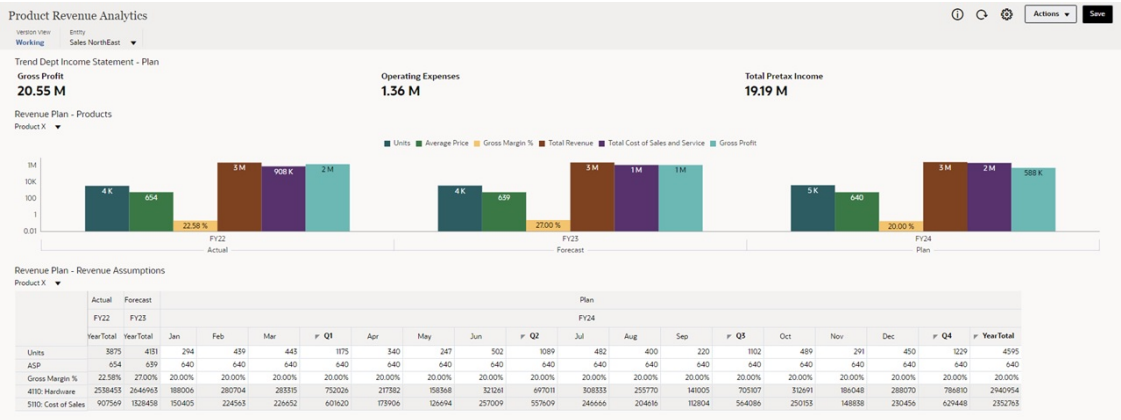
Dashboard Content	Recommendation
Information to display	• Enterable grids • Charts with a Master-Detail relationship • Page-level and chart-level POV switchers to review various data combinations • Reference data stacked side-by-side
Chart types	Grids, Tables, Line/Bar/Area, Waterfall, Pie, Gauge, Doughnut
Number of dashboard components	2 to 4

In the examples below, note that the dashboards have both visual charts to represent data as well as grids (wherein data updates are made). When the grid values are updated and saved, the changes are reflected in the chart(s) in real-time.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Example Write-Enabled Dashboard: KPI Tiles with Writeable Grids

In the dashboard example below, the top component of the dashboard uses tiles. The middle left and bottom components are writeable grids, and the middle right component is a bar chart.



Example Write-Enabled Dashboard: Sales Forecast

In the Sales Forecast dashboard example below, the Actuals vs Forecast chart at the top is a combination chart, and the Sales Forecast with Actuals grid at the bottom is a writeable grid.

Dashboard Layout Guidance

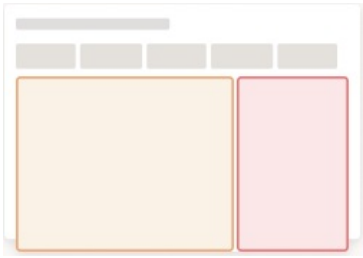
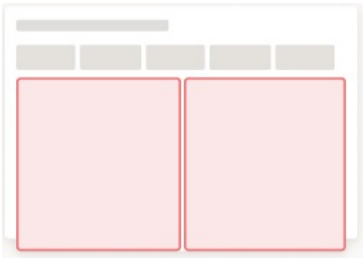
Keep the following in mind while choosing a layout for a dashboard:

- Aim for layouts that adhere to an evenly spaced 3-column or 2-column arrangement of charts. We do not recommend dashboards exceeding three columns.
- Avoid using multiple scroll bars on a dashboard page. Ideally, place any scrolling components in a panel that touches the bottom of the screen. See the yellow panels in the examples below for the recommended placement of scrolling components.

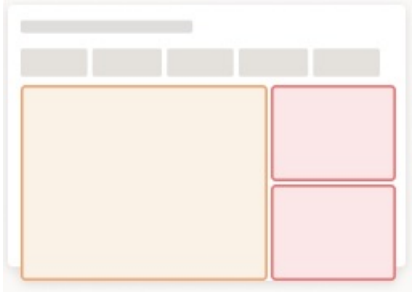
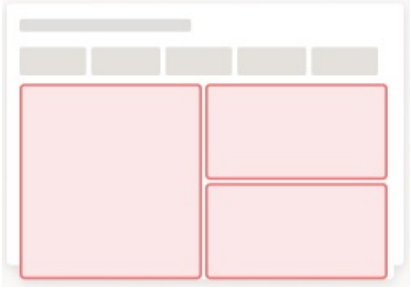
Copyright © 2022, 2026, Oracle and/or its affiliates.

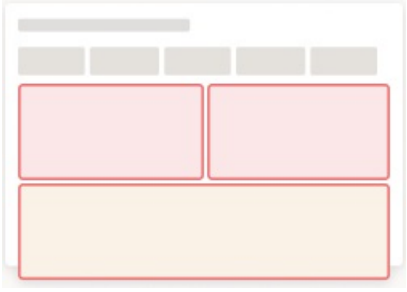
1-Panel Dashboard Layout

2-Panel Dashboard Layouts

Example 1	Example 2	Example 3
		

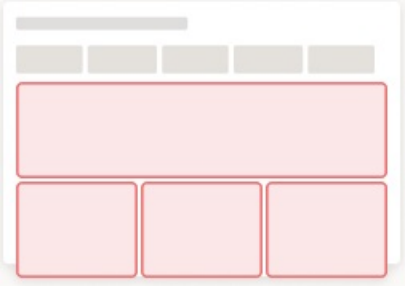
3-Panel Dashboard Layouts

Example 1	Example 2
	

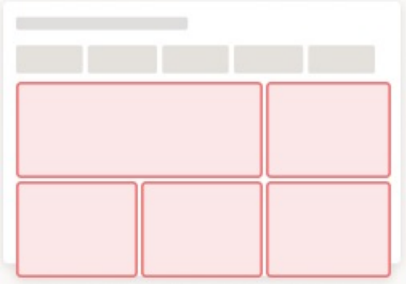
Example 3	Example 4
	

Copyright © 2022, 2026, Oracle and/or its affiliates.

4-Panel Dashboard Layout



5-Panel Dashboard Layout



Dashboard Styles

For Oracle Fusion Cloud Enterprise Performance Management, you design dashboards with a color theme called a style. Each dashboard style provides you with a different set of colors and backgrounds from which you can choose to make your dashboard visually pleasing, easy to read, and impactful.

The dashboard styles are:

- Light (Default)
- Dark
- White

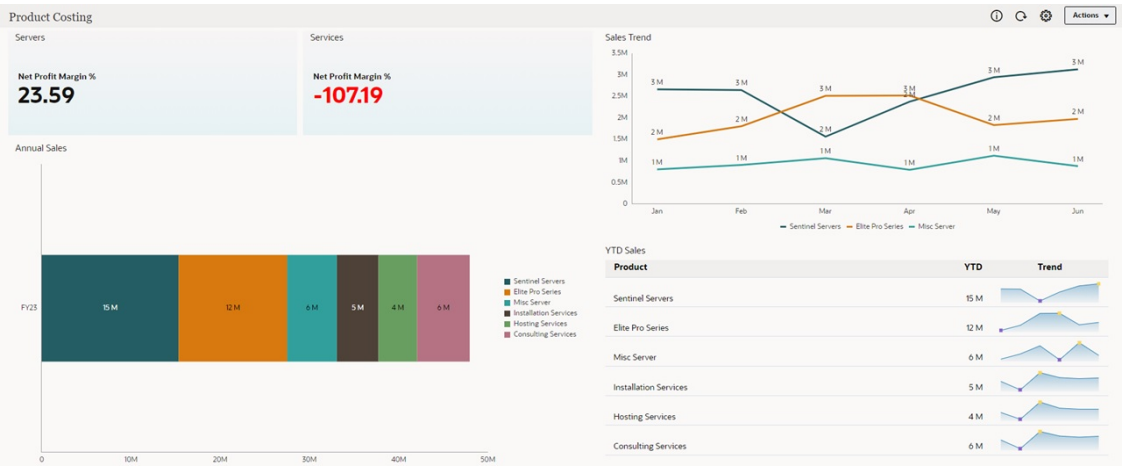
The categorical color palettes for each dashboard style have been intentionally designed to maximize adjacent color differences.

The following examples show dashboards customized with the Light, Dark, and White styles.

Light Dashboard Style

The Light dashboard style provides a light background and uses dark fonts, dark images, and dark icons. If a white background is needed, choose the alternative White dashboard style.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Dark Dashboard Style

The Dark dashboard style provides a dark background and uses light fonts, light images, and light icons.

White Dashboard Style

The White dashboard style provides a pure white background and uses dark fonts, dark images, and dark icons. If a white background is needed, choose this style as an alternative to Light.

Copyright © 2022, 2026, Oracle and/or its affiliates.

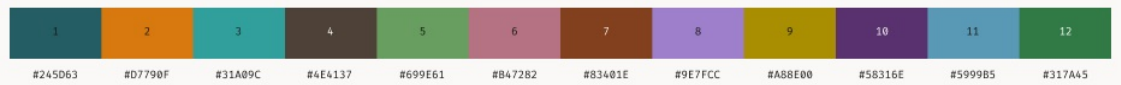
Color Sequencing in Charts

The categorical color pallette is intentionally designed to maximize adjacent color differences. We recommend applying pallette colors to data in the order specified below.

Across charts, color sequences can be repeated or you can pick up the sequence where the last chart ended.

Color Sequence for Charts with Light Backgrounds

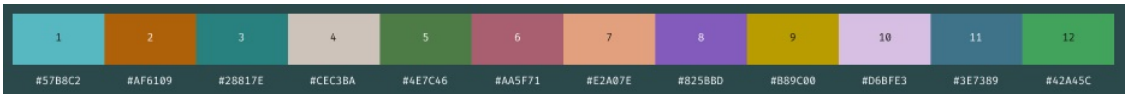
For charts with light backgrounds, we recommend using the following color sequence:



When colors are needed to convey negative, neutral, and positive, we recommend using the following set of colors. These colors can be reserved from the sequence on that page.

Color Sequence for Charts with Dark Backgrounds

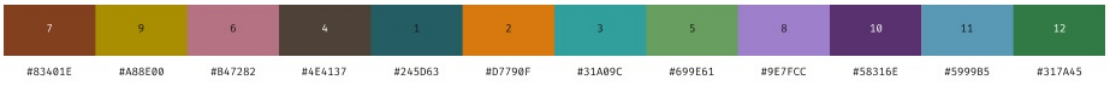
For charts with dark backgrounds, we recommend using the following color sequence:



When colors are needed to convey negative, neutral, and positive, we recommend using the following set of colors. These colors can be reserved from the sequence on that page.

Color Sequence for Charts with White Backgrounds

For charts with white backgrounds, we recommend using the following color sequence:



When colors are needed to convey negative, neutral, and positive, we recommend using the following set of colors. These colors can be reserved from the sequence on that page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Recommendations for Improving Dashboard Design

In the topics to follow, we've identified some best practices for improving your dashboard design and we've provided example dashboards.

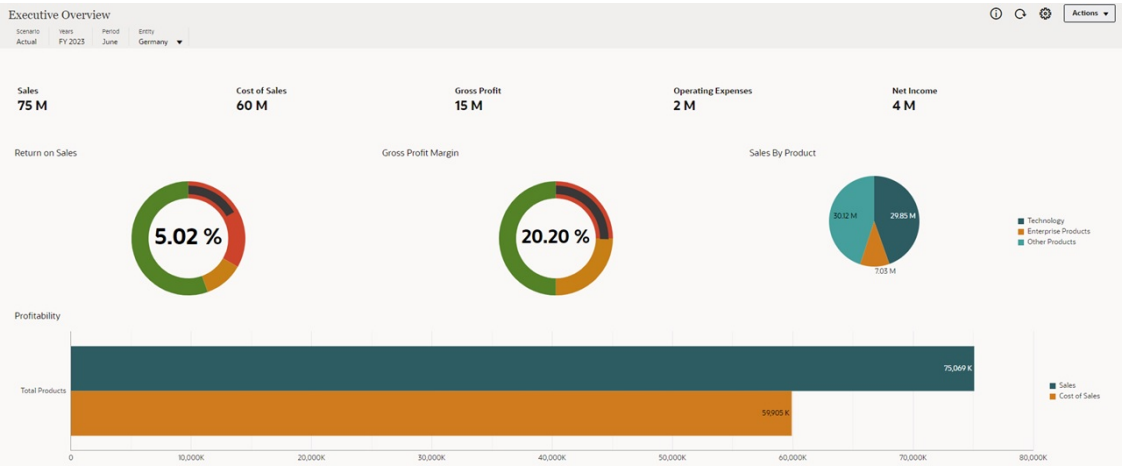
- Chart Sizing
- Readability
- Spacing and Alignment
- Consistency

Chart Sizing

Here are some best practices to follow when sizing charts in dashboards:

- The dashboard layout should be no more than three panels wide.
- Avoid using pie, ring, gauge, and doughnut charts in widths other than one third.
- If using multiple pie, ring, gauge, and doughnut charts in a dashboard, ensure that they're all similarly sized.

Figure 17-4 Executive Overview



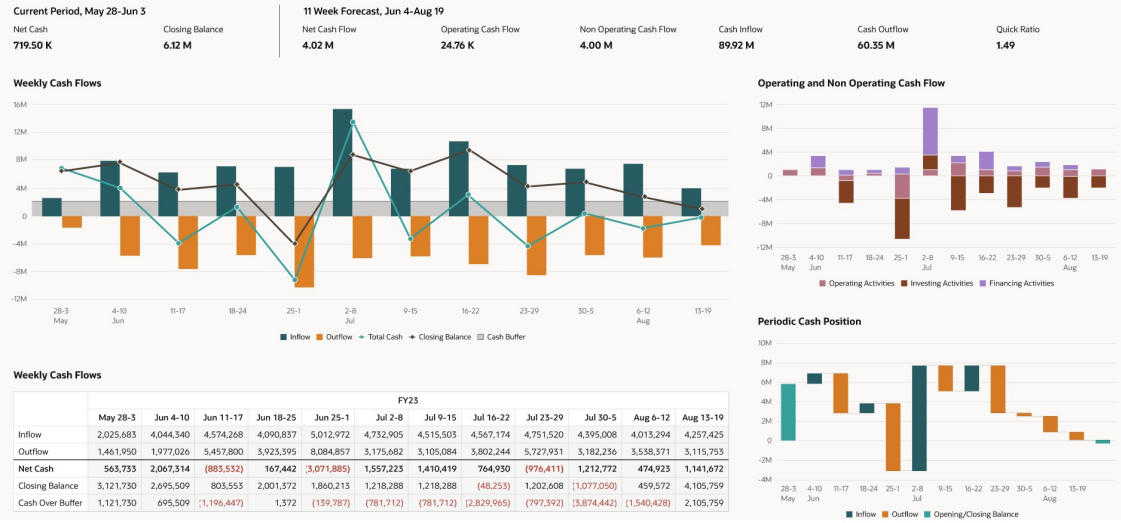
Readability

Here are some best practices to follow to make dashboards more readable:

- Left-align text rather than centering text or setting it to align right.
- Use grid lines in all charts.
- Use red for negative numbers.
- Use the same chart types for similar information; for example, Inflow and Outflow should both be visualized as the same type of chart.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 17-5 Example Dashboard: Periodic Summary



	May 28-3	Jun 4-10	Jun 11-17	Jun 18-25	Jun 25-1	Jul 2-8	Jul 9-15	Jul 16-22	Jul 23-29	Jul 30-5	Aug 6-12	Aug 13-19
Inflow	2,025,683	4,044,340	4,574,268	4,090,837	5,012,972	4,732,905	4,515,503	4,567,174	4,751,520	4,395,008	4,013,294	4,257,425
Outflow	1,461,950	1,977,026	5,457,800	3,923,395	8,084,857	3,175,682	3,105,084	3,802,244	5,727,931	3,182,236	3,538,371	3,115,753
Net Cash	563,733	2,067,314	(883,532)	167,442	(3,071,885)	1,557,223	1,410,419	764,930	(976,411)	1,212,772	474,923	1,141,672
Closing Balance	3,121,730	2,695,509	803,553	2,001,372	1,860,213	1,218,288	1,218,288	(48,253)	1,202,608	(1,077,050)	459,572	4,105,759
Cash Over Buffer	1,121,730	695,509	(1,196,447)	1,372	(139,787)	(781,712)	(781,712)	(2,829,965)	(797,392)	(3,874,442)	(1,540,428)	2,105,759

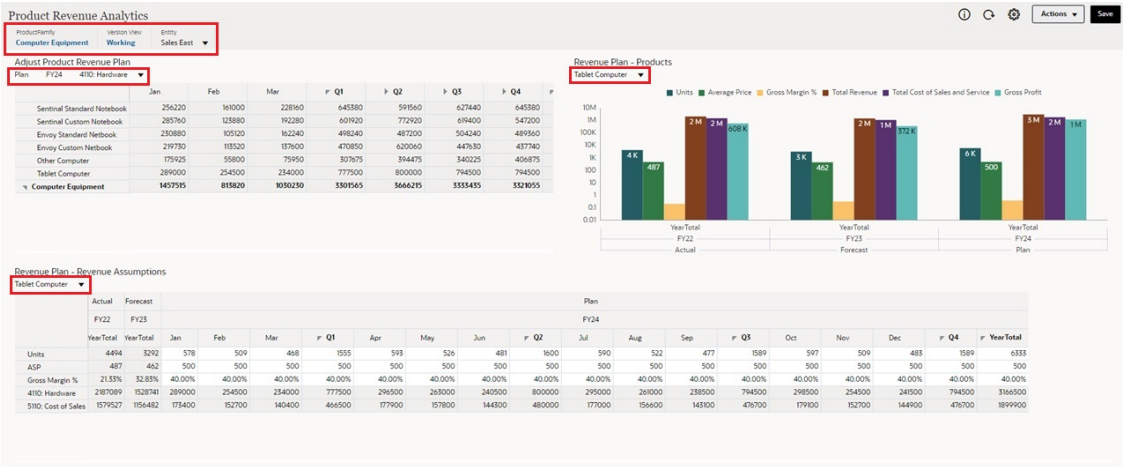
Improving Dashboard Readability with POVs

POVs are useful tools for improving dashboard readability. Follow these best practices for using POVs in dashboards:

- Enable **POV : Auto-Apply** in the **POV Settings** menu. Every time POV members are selected, the associated data and charts are automatically refreshed in the dashboard. This improves efficiency and avoids unnecessary clicks.
- Enable the **Global POV Bar** in the Dashboard **General Settings**. If multiple dashboard components use the same Page and POV dimensions, the dimensions are automatically moved to the global POV instead of repeating them within each component. Using global POVs eliminates clutter and saves space.
- Consider enabling **POV : Hide Dimension Labels** in the **POV Settings** menu. If the dimension member names are self-explanatory, then dimension labels are unnecessary. For example, product names and currencies might not need a "Product" or "Currency" label. Hiding the dimension labels further reduces clutter and improves dashboard readability.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 17-6 Example Dashboard POVs: Product Revenue Analytics



Using Master Details Dashboards

You can design dashboards that have one master form and multiple detail (or target) forms or charts. This is also referred to as a Master Details dashboard. The selection of members in the master form automatically filters to the members in the target forms or charts, and the target forms or charts show only the details that are relevant to the members highlighted in the master form.

Here are some best practices when designing Master Details dashboards to improve efficiency and provide faster visualizations:

- The **Apply Context** right-click menu option filters the data in the target forms or charts that is relevant to the data in a master form. Master Details dashboards help you visualize faster without having to change local POVs. Select a data row in the master form and then right-click to select **Apply Context** to refresh the data for the selected member automatically in all the detail forms or charts.
- Master Details dashboards can be used in various combinations that include grids with write-back capability. This helps you to review and update details for different data sets and effectively enables multitasking.
- Master Details dashboards are not a different type of dashboard, but they can be designed differently from other dashboards. This is accomplished by placing dimension members in rows for the master form, and then repeating the same dimensions at the page level for the other detail forms or charts.

Example Master Details Dashboards

In the examples below, note that the master form in the top left displays a list of products, while the detailed grid and chart display the products as page dimensions. When you select a product in one of the rows and then right-click **Apply Context**, every target grid and chart that includes the selected member in the local POV is automatically and instantly updated, and the data is refreshed.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 17-7 Example Master Details Dashboard Before Applying Context

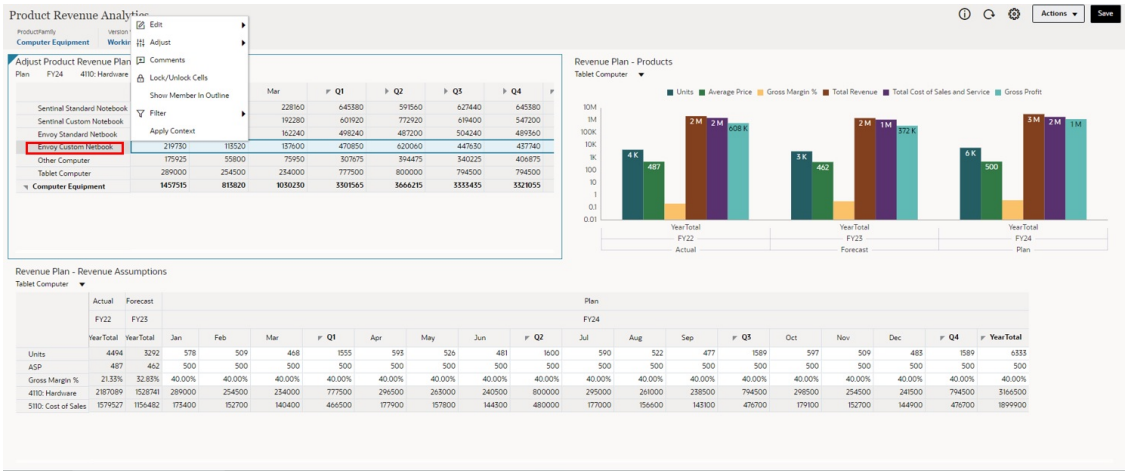
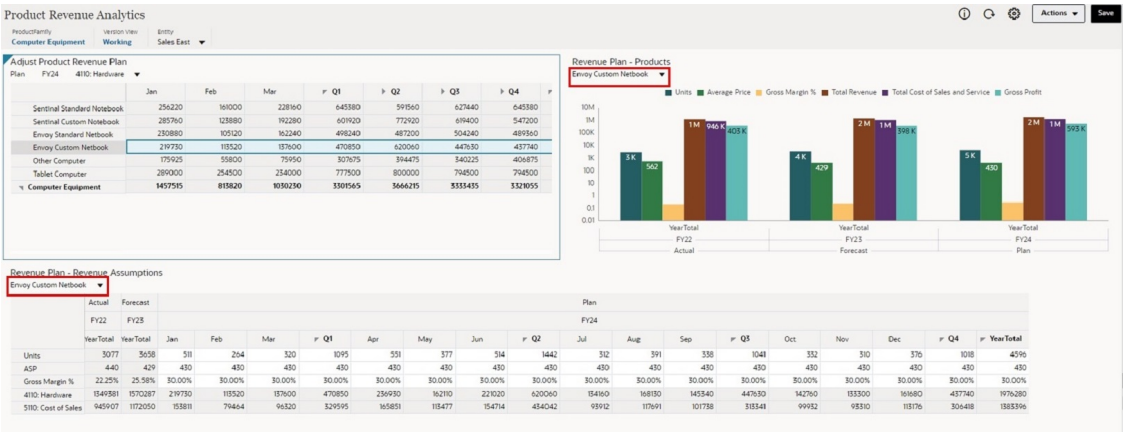


Figure 17-8 Example Master Details Dashboard After Applying Context



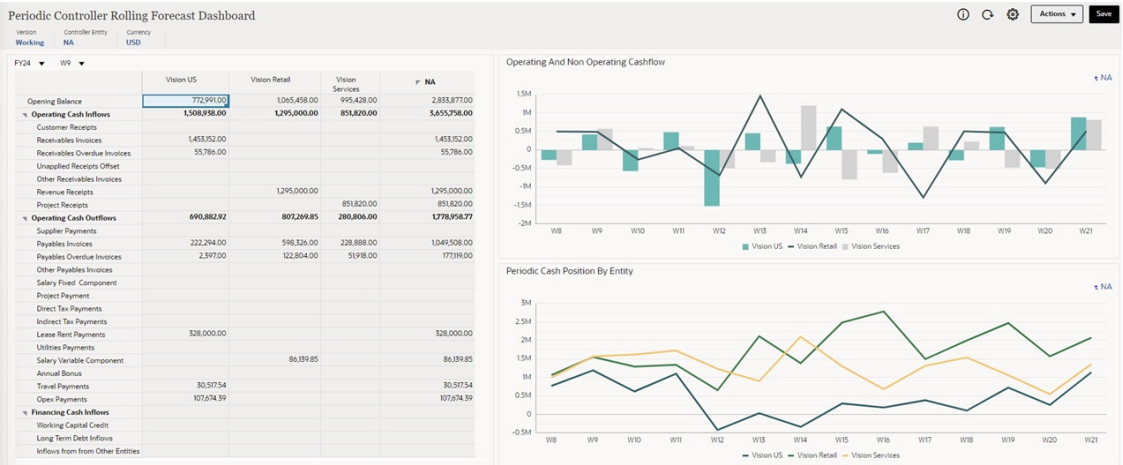
Spacing and Alignment

Here are some best practices to follow for spacing and alignment of charts and grids in dashboards:

- Ensure that grids fill the entire designated area.
- Grid background colors should denote active and read-only cells, if applicable.
- Place legends in a location that enables charts to align. For example in the dashboard below, both of the legends are placed below the charts so the x-axis line in the bottom chart aligns with the x-axis line in the chart above it. If one of the legends was placed to the right of the chart, the x-axis lines would not align.
- To reduce clutter, consider combining charts with similar information (such as Operating Cashflow and Non Operating Cashflow) into one chart.
- Another way to reduce clutter is to hide local and global POVs.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 17-9 Example Dashboard: Periodic Controller Rolling Forecast



Consistency

Here are some best practices to follow to improve consistency in dashboards:

- Use labels in the same order if they're used in multiple places. For example, if using **Inflow** and **Outflow**, use them in the same order everywhere.
- Ensure that all charts have titles.
- Use a single, consistent typeface (for example, Oracle Sans) and no more than three sizes of type; one for titles, one for labels, and another for other content.

Figure 17-10 Example Dashboard: PCF Periodic Overview (Dark)

Summary

To design dashboards that your users will want to work with, focus on the fundamental goal of communicating. Ensure that your users can easily and quickly view the dashboards and understand them.

For additional information about using color to focus attention on what your data means, we recommend the following resource:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Communicating with color in data visualizations

Using Dashboards to Work with Data

Related Topics

- Understanding Dashboards
- About Dashboard Versions
- Viewing Dashboards
- Working with Dashboard 1.0 Dashboards
- Working with Dashboard 2.0 Dashboards

Understanding Dashboards

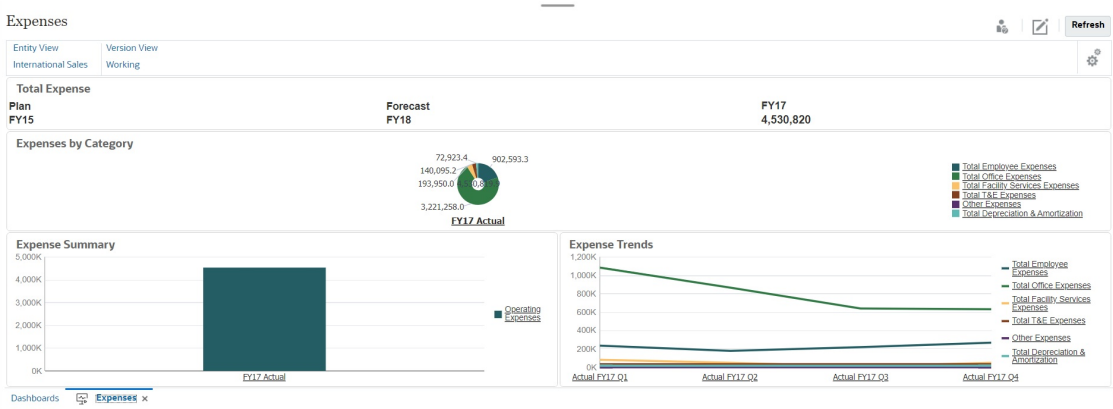
Dashboards give you an overview to key information and let you enter, change, and save data.

You can work with multiple forms or charts, enter data or change the data in one, and see the immediate effects in other forms, charts, and tiles in the dashboard. Change a driver in the grid and see its impact immediately in the chart.

When you save data, it's saved in all the objects in a dashboard. Depending on the form's design, you can also drill down into more detail. You can select which members to work with and change chart types, for example. Hovering your mouse over chart elements highlights the element and displays a data label. Your administrator creates dashboards, but you have a lot of flexibility when using them. For example, for many chart types, you can customize the colors that represent the data.

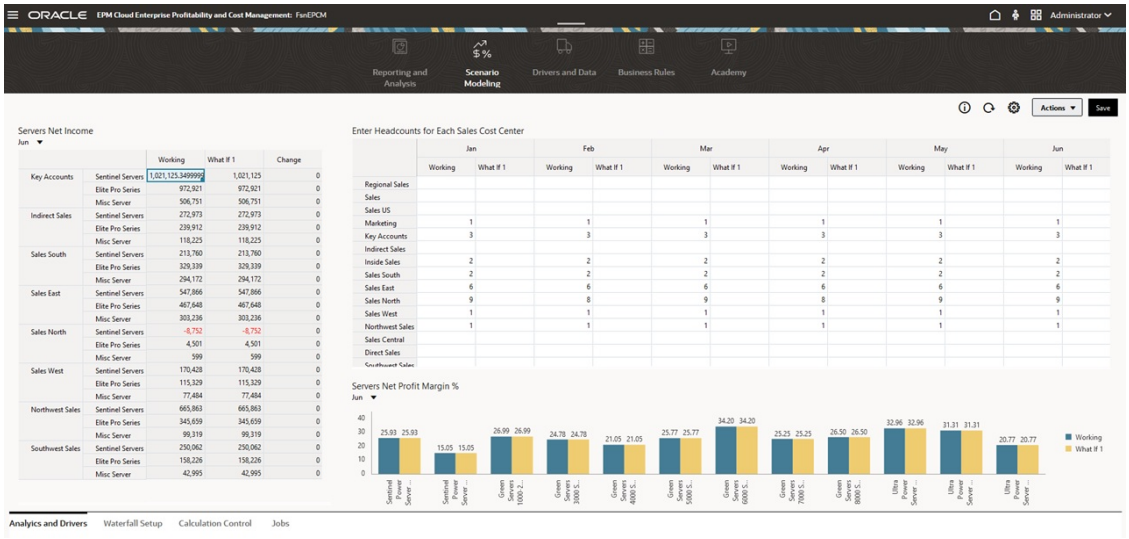
> **Note**
>
> You can no longer mark a dashboard page as default.

Dashboard 1.0 Example



Copyright © 2022, 2026, Oracle and/or its affiliates.

Dashboard 2.0 Example



About Dashboard Versions

Dashboards are currently available in two versions: Dashboard 1.0 and Dashboard 2.0. To help you differentiate between the dashboard versions on the **Dashboards** page, we've provided an icon in front of each dashboard:

- : Dashboard 1.0
- : Dashboard 2.0

Both dashboard versions currently coexist in the same business process at the same time. Depending on which version you are viewing, the dashboards will look a little different and the user interface is also slightly different.

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Dashboard 1.0. Users on new environments created on or after October 3, 2025 won't be able to create Dashboard 1.0 artifacts. You'll only be able to create and modify dashboards using the Dashboard 2.0 framework. Users on environments created before October 3, 2025 will still have the flexibility to create and modify dashboards using either the Dashboard 1.0 or 2.0 frameworks.

Dashboard 2.0 Runtime Features

Dashboard 2.0 Runtime supports:

- More chart types than Dashboard 1.0; for example, Waterfall, Pyramid, and Geomap and sub-chart types for Radar, Combination, and Gauge charts are all Dashboard 2.0 features
- Creating tables in dashboards with visual inline views of data, called Spark Charts

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Quick Analysis, which lets you add components to dashboards without having a prebuilt form

  You create an ad hoc query by typing member names in the Search bar or using the Member Selector, and then you control the layout of the query in the Layout tab of the Properties panel.
- Working directly with data in form grids if the underlying form is a Forms 2.0 form
- If working with a Forms 2.0 form grid:
  - Global write-back option: global **Save** button with **Run on Save** rules
  - Individual form write-back option: local **Save** with **Run on Save** rules
  - In table charts, highlighting parent members to distinguish from leaf-level members
- Updated global and local POV bars that use the Oracle JET member selector
- An updated Maximize mode in charts and grids that are now consistent with one another
- Enhanced master forms and details that enable you to apply context from any grid
- Flexible layouts for all dashboards
- Valid intersections support for global and local POV bars
- The ability to **Edit** and **Edit without Data** from a custom menu outside of the **Dashboards** page
- Information icon for runtime dashboards and forms
- Opening and editing forms from within a runtime dashboard
- The ability to visualize different chart types in a runtime dashboard component
- Drill-through in single and multiple Pie and Doughnut charts
- Rationalized Actions, POV Settings, and Component menus
- The ability to switch over to Oracle Smart View for Office for all data operations; for example, Open, Edit, Create, Refresh, Data Submit, Page/POV Change
- A conversion utility to convert from Dashboard 1.0 to Dashboard 2.0; both batch conversions (at the folder level) and individual dashboard conversions are supported
- The ability to filter Dashboard 1.0 and Dashboard 2.0 dashboards on the **Dashboards** page
- The ability to edit dashboards not only from the **Dashboards** and runtime pages, but also from custom navigation menus wherein dashboards are embedded.

Considerations for Dashboard 2.0

- 3D visualization is not supported in Dashboard 2.0. This affects the following Dashboard 2.0 chart types:
  - Area
  - Bar
  - Bubble
  - Column
  - Combination
  - Doughnut
  - Gauge

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - Line
  - Radar
  - Scatter

  Dashboard 1.0 still supports 3D visualizations for these chart types.
- In a future update, Dashboard 2.0 will support Smart Push.

Viewing Dashboards

- Viewing the Dashboards Page
- Features of the Dashboards Page
- Dashboards Page Actions

Viewing the Dashboards Page

To view the **Dashboards** page:

1. On the Home page, click **Dashboards**.
2. To open a dashboard, click the dashboard's name.

This opens the dashboard in the *runtime* environment.

> **Note**
>
> - If you've selected a Dashboard 2.0 dashboard and you see an `Error during Dashboard 2.0 component initialization` message, the dashboard has Forms 2.0 forms associated with it. You must ensure that a Service Administrator enables Forms 2.0 before you can view the dashboard.
>
>   To enable Forms 2.0, a Service Administrator must click **Application**, then **Settings**, and then under **Other Options**, find **Forms Versions**, select **Forms 2.0**, and then click **Save**.
> - A dashboard form might be prevented from opening if it includes undefined user variables. If you're prevented from viewing a dashboard form, you'll see a message prompting you to select members for the user variables:
>
>   ```
>   Before you can open this form, you must select a member for each
>   User Variable. To select members for missing user variables: Click
>   here
>   ```
>
>   When you click the link in the message, the **User Preferences** page opens in a new dynamic tab and the user variables with missing member values are displayed first. Select a member for each undefined user variable.

Features of the Dashboards Page

On the **Dashboards** page:

- Folders are supported. The **Dashboards** page uses the same folder hierarchy as infolets and data entry forms and all artifacts and folders reside under a root folder called **Library**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Only administrators can add files (for example, dashboards, infolets, forms, reports, and so on) to the **Library** root folder.

- **Hide Empty Folders**: Hides folders that don't contain relevant artifacts for the current context. When the toggle is off, all folders are visible in the list region, including empty ones. When the toggle is on, only folders containing relevant artifacts for the **Dashboards** artifact page are displayed.

  By default this option is off, and will reset to off each time you start a new session. The state of the toggle is retained by the page during the session and is page-specific. Navigating away from the **Dashboards** page and returning preserves the toggle state until the tab is closed or until you log out.

- Dashboards are available in two versions. To help you differentiate between the dashboard versions on the **Dashboards** page, we've provided an icon in front of each dashboard:
  - : Dashboard 1.0
  - : Dashboard 2.0
- The **Dashboards** page can be filtered by type. Click the **Type** filter chip in the **Search** box and select **Dashboard 1.0**, **Dashboard 2.0**, or select both.
- To search for a specific dashboard, enter any sequence of characters (also known as a string) and the search results will display in a drop-down under the **Search** box. Click **Enter** to view the search results in the list region. Search results list all instances of dashboards that include the searched string (including folder names). Each search result displays the complete folder path. Searching inside a folder narrows the search to that folder and its subfolders.

> **Note**
>
> If you perform a **Search** and the **Hide Empty Folders** toggle is off, all matching folders and artifacts are displayed. If the toggle is on, only folders containing matching artifacts are displayed. Empty folders are hidden.

Dashboards Page Actions

There are three types of Actions you can perform on the **Dashboards** page:

- Global Actions: Perform actions at the **Library** (root folder) level. See Global Actions.
- Folder Actions: Perform actions at the level of the selected folder. See Folder Actions.
- Dashboard Actions: Perform actions at the level of the selected dashboard. See Dashboard Actions.

Global Actions

At the top of the **Dashboards** page there is a global Actions menu. Clicking ••• (More Actions) at the top of the page displays the following actions:

- **Create Dashboard 1.0**: Creates a Dashboard 1.0 dashboard and places it in the folder that is currently open. If no folder is open, new dashboards are placed in the Library folder.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Create Dashboard 2.0**: Creates a Dashboard 2.0 dashboard and places it in the folder that is currently open. If no folder is open, new dashboards are placed in the Library folder.
- **Create Folder**: Creates a new folder in the folder that is currently open. If no folders are open, new folders are created in the Library folder.

> **Note**
>
> Keep in mind that newly created folders are empty and therefore will not display if the **Hide Empty Folders** toggle is on. New folders become visible after content is added to them, or if the toggle is switched off.

- **Convert Dashboards to 2.0**: Finds any Dashboard 1.0 dashboards in the folder that is currently open, including any subfolders, and converts them all to Dashboard 2.0 dashboards. Selecting a folder in the listing and then selecting the global action for **Convert Dashboards to 2.0**, finds any Dashboard 1.0 dashboards within the folder, including any subfolders, and converts them to Dashboard 2.0 dashboards. Selecting one or more Dashboard 1.0 dashboards in the listing and then selecting the global action for **Convert Dashboards to 2.0**, converts the selected dashboards to Dashboard 2.0 dashboards. This action cannot be undone.
- **Assign Permission**: Assigns access permissions to the folder that is currently open. If no folder is open, permissions are assigned to the Library folder.
- **Move to**: (This option is only visible if one or more artifacts in the listing are selected.) Moves the selected artifacts to another location in the folder hierarchy.

Folder Actions

To the right of the **Dashboards** listing there is an **Actions** column. Clicking ••• (Actions) next to a folder displays the following actions:

- **Delete**: Deletes a folder. The folder must be empty to delete it.
- **Rename**: Renames a folder. The folder cannot be renamed if it contains other folders.
- **Move to**: Moves the folder to another location in the folder hierarchy.

> **Note**
>
> All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

- **Convert Dashboards to 2.0**: Finds any Dashboard 1.0 dashboards within the folder hierarchy, and converts them to Dashboard 2.0 dashboards. This action cannot be undone.
- **Assign Permission**: Assigns access permissions to the folder. Folder permissions apply to all items within that folder, even to items that may not be visible in the list.

Dashboard Actions

To the right of the **Dashboards** listing there is an **Actions** column. Clicking ••• (Actions) next to a dashboard displays the following actions:

- **Open**: Opens the dashboard in the *runtime* environment.
- **Edit**: Opens the dashboard in the Dashboard Designer with the underlying form data. The dashboard opens in a dynamic tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Edit without Data** (Dashboard 2.0 option only): Opens the dashboard in the Dashboard Designer without the underlying form data so you can more easily perform such actions as realigning the dashboard components and tiles. The dashboard opens in a dynamic tab.
- **Delete**: Deletes a dashboard.
- **Rename**: Renames a dashboard.
- **Copy As**: Copies a dashboard with a new name. The dashboard is copied to the listing directly under the original dashboard.
- **Move to**: Moves a dashboard to another folder.

> **Note**
>
> All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

- **Copy URL**: Enables you to copy and share the direct URL for a dashboard.
- **Convert Dashboards to 2.0** (Dashboard 1.0 option only): Converts the dashboard to a Dashboard 2.0 dashboard. This action cannot be undone.
- **Assign Permission**: Assigns access permissions to the dashboard.

Working with Dashboard 1.0 Dashboards

> **Note**
>
> Starting with the October 2025 (25.10) update, Oracle plans to de-support Dashboard 1.0. Users on new environments created on or after October 3, 2025 won't be able to create Dashboard 1.0 artifacts. You'll only be able to create and modify dashboards using the Dashboard 2.0 framework. Users on environments created before October 3, 2025 will still have the flexibility to create and modify dashboards using either the Dashboard 1.0 or 2.0 frameworks.

As a reminder, Dashboard 1.0 dashboards on the list page are identified by this icon: (Dashboard 1.0)

Move the cursor over an object on the dashboard to display the hover toolbar .

Dashboard 1.0 hover icons provide options such as **Instructions**, **Actions**, **Save**, **Refresh**, **Settings**, and **Maximize**, depending on the type of object.

To work with objects in Dashboard 1.0 dashboards, from the hover toolbar:

- Click **Instructions**
  to view instructions for a form (only available if instructions are configured for a form).
- Click **Actions** to access such form options as **Spreadsheet Export** or **Supporting Detail**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Click **Settings** to change the chart type associated with the form or its height percentage.

Customize charts in dashboards. Each chart type has options that are specific to it. For example, for a bar chart, you can set:

- The width percentage of the bars
- The type of chart displayed (for example to area, bubble, column, doughnut, funnel, gauge, scatter, radar, and so on)
- The chart to display in 3D
- Horizontal or vertical placement
- The background
- The legend's and label's position

And if the 1.0 dashboard includes a gauge chart type, you can set the **Maximum Value** that the dial displays.

Some other points to know about using 1.0 dashboards:

- Changes you make to the chart type options aren't saved for the next session. Clicking **Save** saves the data you enter or change, but not the dashboard definition.
- If you select a new value from the Page drop-down in dashboards, a Go button (right arrow) is displayed in the POV bar.

  Click the Go button to show your selection.
- You can enter or change data in a form's cell only if the intersection in the underlying form is writable.
- In a Smart Form (with the form design option **Autosave** enabled), when you enter data and tab out of the cell, the other objects refresh, displaying fresh data.
- By default, missing or suppressed data is plotted as zeros in graphs. You can clear the **Plot Missing Values as Zero** setting to ignore missing or suppressed data in certain chart types so it's no longer plotted as zeros. The chart types to which this setting applies are Area, Bubble, Combination, Line, Radar, and Scatter.
- For Dashboards that use a **Flexible** layout, you can drag an object's border to resize it. You can also click an object's handle to expand it, and then click the handle again to restore the object to its original size.

Working with Dashboard 2.0 Dashboards

Helpful information about working with Dashboard 2.0 dashboards in the runtime environment.

As a reminder, Dashboard 2.0 dashboards on the **Dashboards** page are identified by this icon: (Dashboard 2.0)

Opening a dashboard from the **Dashboards** page, opens the dashboard in the *runtime* environment.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> When viewing dashboards in Dashboard 2.0, data for each form is visualized based on the data type of the form's first row, first cell. For example, if the first row, first cell in a form uses a percentage data type, then the data displayed for that form in Dashboard 2.0 is visualized as a percentage. If another form in the same dashboard uses a numeric data type in the first row, first cell, then the data will display as a decimal.

Videos

Your Goal	Watch This Video
Learn about the new features and functionality in runtime Dashboards 2.0 in Cloud EPM.	Overview: New Features in Dashboards 2.0 in Cloud EPM (Nov 2023)

Related links:

- Working with the Dashboard 2.0 Global Toolbar
- Working with Dashboard 2.0 Components
- Drilling Through on Charts and Legends
- Working with POVs in Dashboard 2.0
- Opening the Member Selector in Dashboards 2.0
- Working with Dashboard 2.0 Dashboards in Navigation Flows
- Working with Master Forms and Details in Dashboard 2.0 Components
- Support for Valid Intersections in Dashboard 2.0 Dashboards
- About Quick Analysis
- Drilling into Ad Hoc from a Dashboard 2.0 Chart

Working with the Dashboard 2.0 Global Toolbar

The icons and menus at the top of each dashboard enable you to perform the following actions on the entire Dashboard 2.0 dashboard:

Table 17-18 Dashboard Header Toolbar

Object	Description
	Instructions: Displays instructions for the entire dashboard (only available if instructions are enabled in the Dashboard Designer).
	Refresh Data: Refreshes the data for the entire dashboard.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-18 (Cont.) Dashboard Header Toolbar

Object	Description
	POV Settings: Displays the POV Settings menu with the following menu options: • **POV : Hide Dimension Labels**: Hides dimension labels in the global POV. • **POV : Auto-Apply**: Enables or disables the ability to automatically apply changes to the entire dashboard. If you change a page in the global POV bar and **POV : Auto-Apply** is enabled, the page changes for all components in the dashboard that are based on forms. • **POV : Clear All Page Selections**
Actions menu	The **Actions** menu displays the following dashboard actions (you must have the correct permissions to edit dashboards): • **Edit**: Opens the dashboard in the Dashboard Designer with the underlying form data. The dashboard opens in a dynamic tab next to the current tab. • **Edit without Data**: Opens the dashboard in the Dashboard Designer without the underlying form data so you can more easily perform layout changes such as realigning the dashboard components and tiles or updating the form properties. The dashboard opens in a dynamic tab next to the current tab. • **Show Details**: Displays the dashboard name and the folder path of the dashboard
Save	Clicking **Save** writes back all dashboard grid changes and runs any rules associated with the dashboard, including runtime prompts. Note: • You can attach multiple rules with or without runtime prompts with global Save. • Runtime prompts open as a "drawer" from the right side for better usability. Clicking **Save** saves the data you enter or change for all dashboard components, but it does not save changes to the dashboard definition.

Working with Dashboard 2.0 Components

Dashboards are made up of components. Each component contains a dashboard object such as a form, a cube, or another visualization (charts, tiles, and so on).

Dashboard Component Toolbar

Hover over a component on the dashboard to display the component toolbar . The hover toolbar enables you to perform actions on the component only.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-19 Dashboard Component Hover Toolbar

Object	Description
	Instructions: Displays instructions for the form associated with the dashboard component (only available if the form designer added instructions to the form)
	Save: Saves changed data and runs rules associated with the component.
	Refresh: Refreshes the data associated with the dashboard component.
	Chart Type: Changes the visualization for the component.
	Perform the following **Actions** on the component: • **Maximize**: Enlarges the dashboard component. Once maximized, click **Restore** to minimize the dashboard component to its original size. **Note:** The **Maximize** option only enlarges the dashboard component. If the dashboard component is a grid and you want to perform grid actions on the component such as **Adjust**, **Grid Spread**, **Comment**, and so on, select **Open Form** (in the **Actions** menu) to open the underlying form associated with the component. The form will open in a dynamic tab next to the current tab. • **Analyze**: Perform ad hoc analysis on a form. This menu option is displayed only if the chart type is a grid and if the data source is a form. • **Open in Smart View**: Work with a form in Oracle Smart View for Office. This menu option is displayed only if the chart type is a grid and if the data source is a form. See Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide 23.100*. • **Spreadsheet Export**: Export data from a form to Microsoft Excel so you can explore "what-if" scenarios in Excel before copying and pasting values back to your business process. This menu option is displayed only if the chart type is a grid and if the data source is a form. • **Open Form**: Opens the runtime form associated with the component in a dynamic tab next to the current tab. • **Edit Form**: If you have the correct permissions, opens the form associated with the component in the forms editor. The forms editor opens in a dynamic tab next to the current tab. • **Show Details**: Displays the underlying form name, the path of the form, and the cube for the component.

Working with Component Objects in the Runtime Environment

- Changes you make to the dashboard components in the runtime environment aren't saved for the next session. Changes are also not saved if you click the Show/Hide bar to hide the icon ribbon at the top of the page; the page refreshes and any changes you've made will not be saved.
- By default, missing or suppressed data is plotted as zeros in graphs. You can change the **Plot Missing Values as Zero** setting to **No** to ignore missing or suppressed data in certain chart types so it's no longer plotted as zeros. The chart types to which this setting applies are Area, Bubble, Combination, Line, Radar, and Scatter. To reset the **Plot Missing**

Copyright © 2022, 2026, Oracle and/or its affiliates.

Values as Zero setting in the properties panel, click the tab for the type of chart (Area, Bubble, Combination, Line, Radar, or Scatter), then click **Yes** to toggle the setting to **No**.

- Components default to displaying the form grid and the grids displayed are writable if the associated form is a Forms 2.0 form. To replace a grid with a chart, hover over the grid to display the hover icons in the upper-right corner of the component. Click (Chart Type), and a menu of charts is displayed from which you can choose. Charts selected during runtime are not persisted when the runtime dashboard is closed.
- If a URL added to a dashboard doesn't work in the runtime environment, right-click the URL and open the link in a new browser tab.
- While in a dashboard, you can right-click inside a grid to view the grid's context menu:
  - **Edit** options: **Cut**, **Copy**, **Paste**, **Clear**
  - **Adjust** options:
    - **Adjust Data**: Increase or decrease the selected cell data by a positive or negative value, or a percentage value.
    - **Grid Spread**: Specify an amount or percentage by which to increase or decrease values across multiple dimensions, based on the existing values in the target cells. You can select **Proportionally**, **Evenly**, or **Fill** spread pattern. To use Spread, your administrator must enable Grid Spread as a form property.
  - **Comments**: Explain data or provide background, and attach external files. You can add comments and attachments to a cell or to a range of cells across multiple dimensions.
  - **Change History**: Displays the history of the changes made to the cell data.
  - **Lock/Unlock Cells**: Temporarily lock cells while you calculate and fill in other values. A lock icon displays on locked cells. To unlock the cells, click **Lock/Unlock Cells** again.
  - **Analyze on Cell**: Opens ad hoc in a dynamic tab.
  - **Apply Context**: Filters the data in the target forms or charts that is relevant to the data in a master form.
- While in a Dashboard 2.0 dashboard, you can right-click on a chart element to view the **Analyze** context menu option; for example, click a bar in a Bar chart. Selecting **Analyze** launches that chart intersection in ad hoc in a dynamic tab.

  To understand the analyze behavior by chart type, see Drilling into Ad Hoc from a Dashboard 2.0 Chart.
- Line item details are supported only if the component is maximized. To maximize a component, hover over the component to display the hover icons in the upper-right corner of the component. Click (Actions), and then select **Maximize** to enlarge the dashboard component. After you're done working with the component, click **Restore** to minimize the dashboard component to its original size.
- When you click **Refresh Data** either on a Tile or by clicking the global **Refresh Data** option, the Tile data will display after a "blink." The "blink" indicates that the refreshed data is populated.
- When viewing a Table, parent members are highlighted to distinguish them from leaf-level members.

Copyright © 2022, 2026, Oracle and/or its affiliates.

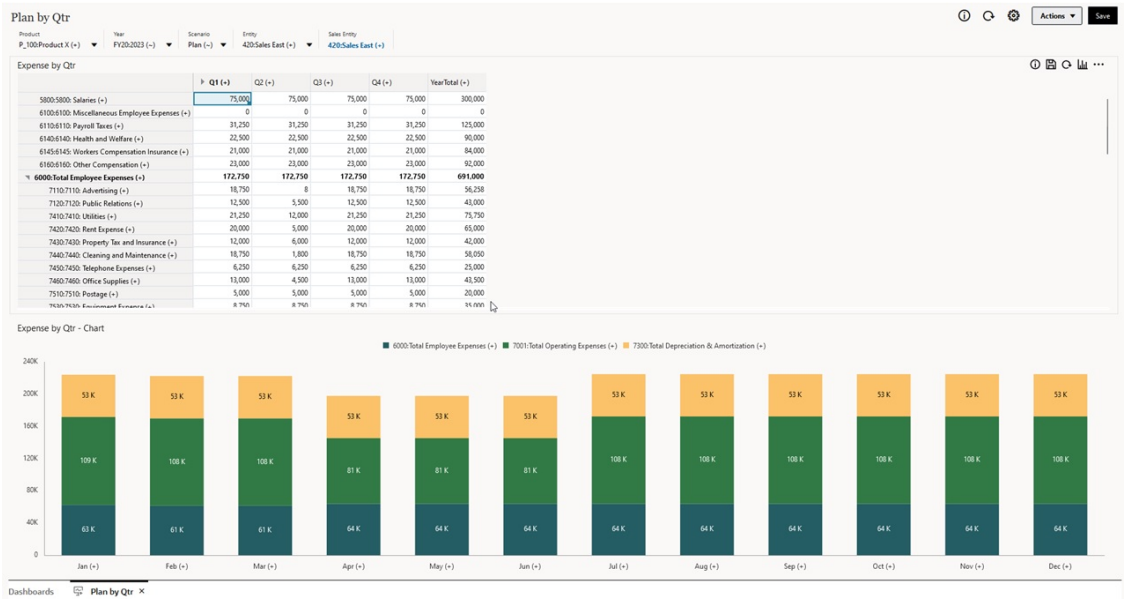
Working with Forms 2.0 Grids in Dashboard 2.0

In Dashboard 2.0, you can work directly with data in forms grids if the underlying form is a Forms 2.0 form.

Newly added components in Dashboard 2.0 default to displaying the form grid, and the grids are writable if the associated form is a Forms 2.0 form.

In grids you can update cell values, run rules, and save changes facilitating write-back from the dashboard. If the data source for a grid is a form, you can also analyze form data, work with a form in Oracle Smart View for Office, and export data from a form to a spreadsheet.

Example Dashboard 2.0 Dashboard with a Grid



Saving Updates to Dashboard 2.0 Grids

After updating a grid within Dashboard 2.0, clicking the global **Save** button writes back all dashboard grid changes and runs any rules associated with the dashboard, including runtime prompts.

Clicking (Save) within an individual grid component in a dashboard writes back the changes for that grid and runs the rules associated only with the individual grid.

Rules

The Dashboard Designer includes an **Associations** tab in the Properties panel for associating rules to a dashboard.

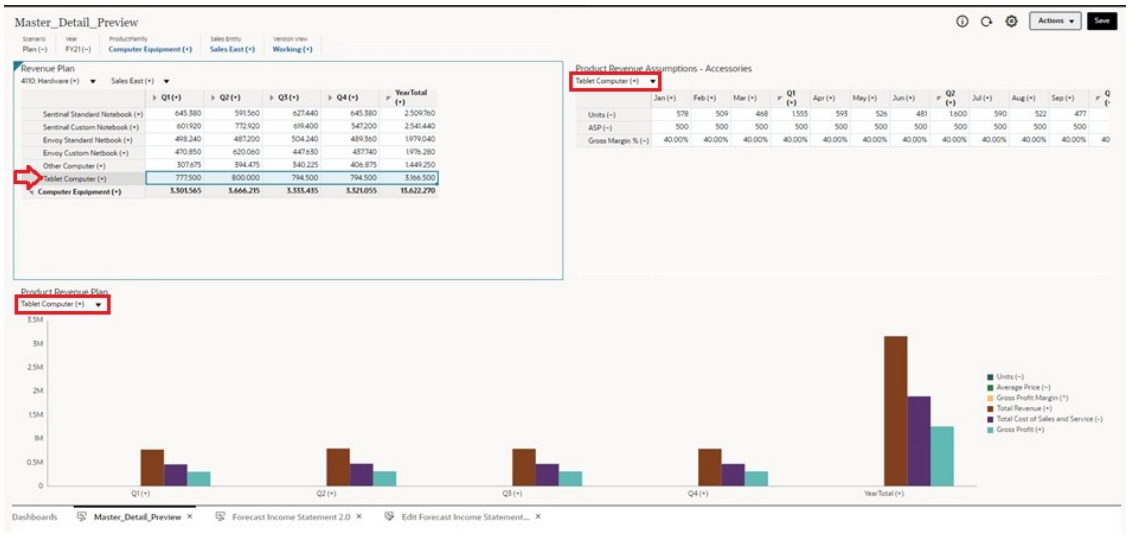
When you save a dashboard or a grid component in a dashboard, any rules associated with the grids will launch when the dashboard grid is saved, including runtime prompts. Runtime prompts open as a "drawer" from the right side.

Grids in Master Details Dashboards

Dashboard 2.0 supports designating grids as the master component when designing dashboards with master details.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To filter the data in the target forms or charts that is relevant to the data in a grid, right-click the relevant data row in the master grid and select **Apply Context**.



Context Menu in Dashboard Grids

While in a dashboard, you can right-click inside a grid to view the grid's context menu:

- **Edit** options: **Cut**, **Copy**, **Paste**, **Clear**
- **Adjust** options:
  - **Adjust Data**: Increase or decrease the selected cell data by a positive or negative value, or a percentage value.
  - **Grid Spread**: Specify an amount or percentage by which to increase or decrease values across multiple dimensions, based on the existing values in the target cells. You can select **Proportionally**, **Evenly**, or **Fill** spread pattern. To use Spread, your administrator must enable Grid Spread as a form property.
- **Comments**: Explain data or provide background, and attach external files. You can add comments and attachments to a cell or to a range of cells across multiple dimensions.
- **Change History**: Displays the history of the changes made to the cell data.
- **Lock/Unlock Cells**: Temporarily lock cells while you calculate and fill in other values. A lock icon displays on locked cells. To unlock the cells, click **Lock/Unlock Cells** again.
- **Analyze on Cell**: Opens ad hoc in a dynamic tab.
- **Apply Context**: Filters the data in the target forms or charts that is relevant to the data in a master form.

Considerations for Working with Grids in Dashboard 2.0

- A Dashboard 2.0 dashboard will not open if the dashboard contains a grid and the **Forms Version** application setting is set to **Forms 1.0**.
- The Grid visualization option will not be available if the **Forms Version** application setting is set to **Forms 1.0** and Dashboard 2.0 artifacts are created.

Drilling Through on Charts and Legends

Drill-through can be performed on parent members to view the values of child members.

Copyright © 2022, 2026, Oracle and/or its affiliates.

You can drill into more detailed information about the data within charts and their legends. To view drill-through details in a chart such as a Pie chart, double-click a color in the pie. Drill-through works for components with single Doughnut and Pie charts, as well as components with multiple Doughnut and Pie charts.

Drill-through is also available from the chart's legends. Double-click a legend label, and the chart changes to display drill-through details for that legend item.

> **Note**
>
> Drill-through in multiple Pie and Doughnut charts from legends is not supported.

To return to the original chart after viewing drill-through details, click the parent link that displays in the upper right corner of the window.

> **Note**
>
> Table, Tile, and Gauge charts do not support drilling. If you drill into a chart type such as a Pie chart, then switch to a Table, Tile, or Gauge chart, you'll no longer see the parent link to return to the original chart. If this occurs, switch back to the Pie chart to view the parent link again.

Working with POVs in Dashboard 2.0

POV Settings

When your Dashboard 2.0 dashboard contains a global or local POV, changes to the POV are automatically applied. If you don't want to automatically apply changes, you can deselect auto-apply for the POV bar in the dashboard **POV Settings** menu. Click (POV Settings), and then click **POV : Auto-Apply** to deselect it.

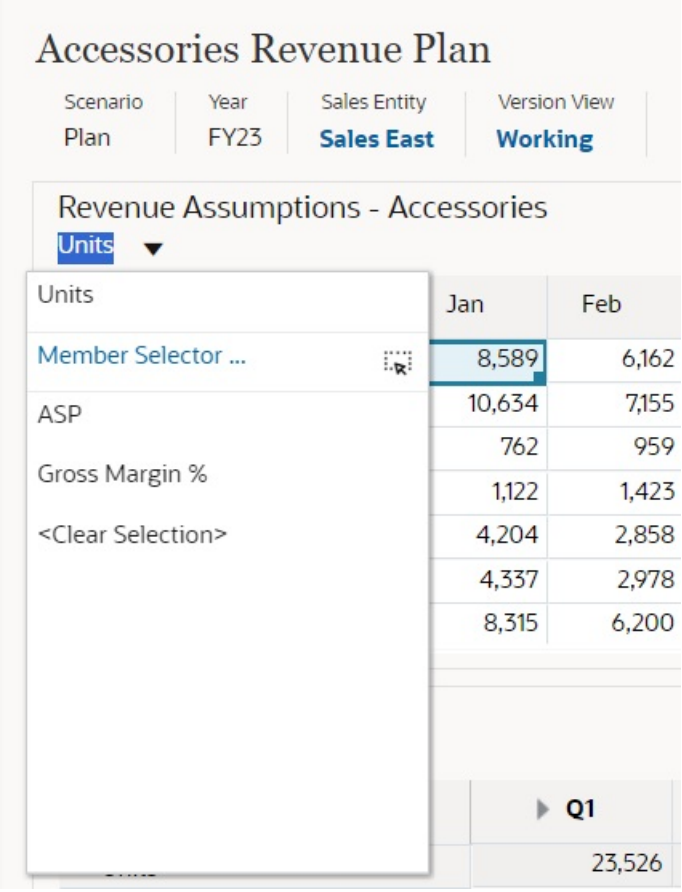
Searching for POV Members

When working in Dashboard 2.0 dashboards, you can more easily search for new POV members in the dashboard's global or local POVs. To search, click a POV link, type the name of another member, and the search function will automatically filter to that member name. The search interface also displays a list of the most recently used members from which you can choose.

> **Note**
>
> Valid intersections are supported for global and local POV bars. This means that Dashboard 2.0 complies with valid intersection rules by excluding invalid intersections from global and local POV bars.

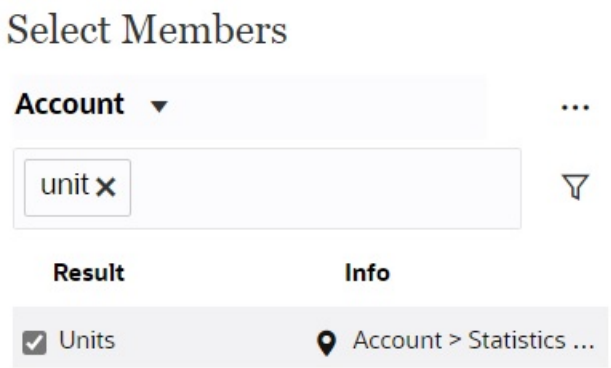
Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 17-11 POV Member Search Interface



You also can search using the member selector. Click a POV link, then click the Member Selector icon to launch the member selector. Members in the member selector are displayed as a hierarchy or you can type a member name in the **Search** box. If a member is located using the **Search** box, you'll see a result displayed under the Search box.

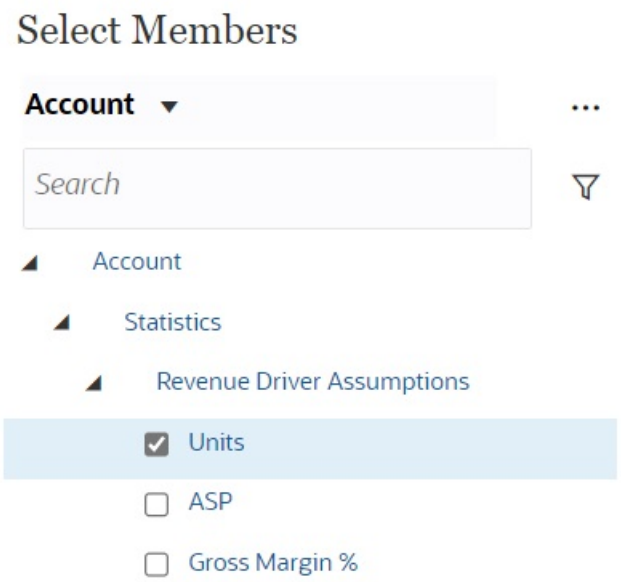
Figure 17-12 Select Members Search



Copyright © 2022, 2026, Oracle and/or its affiliates.

You can view where the member is located within the hierarchy by hovering over the result's **Info** column and clicking (Locate Member).

Figure 17-13 Select Members Search Result in Hierarchy

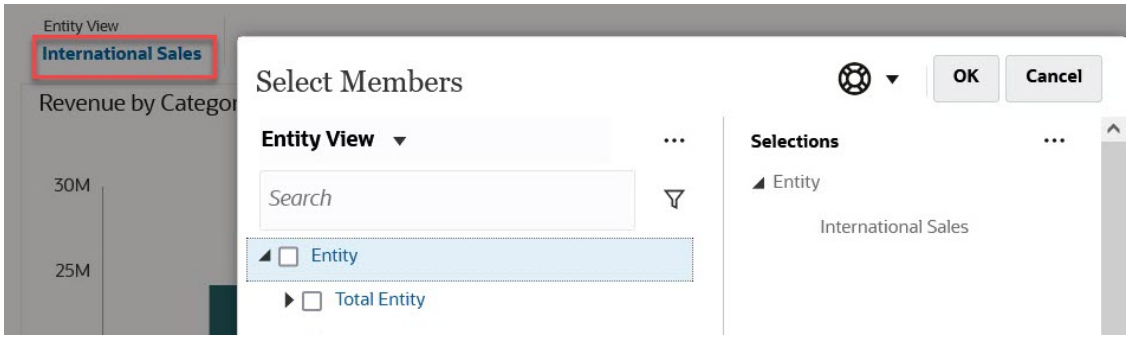


Opening the Member Selector in Dashboards 2.0

To select members in Dashboards 2.0, use the member selector.

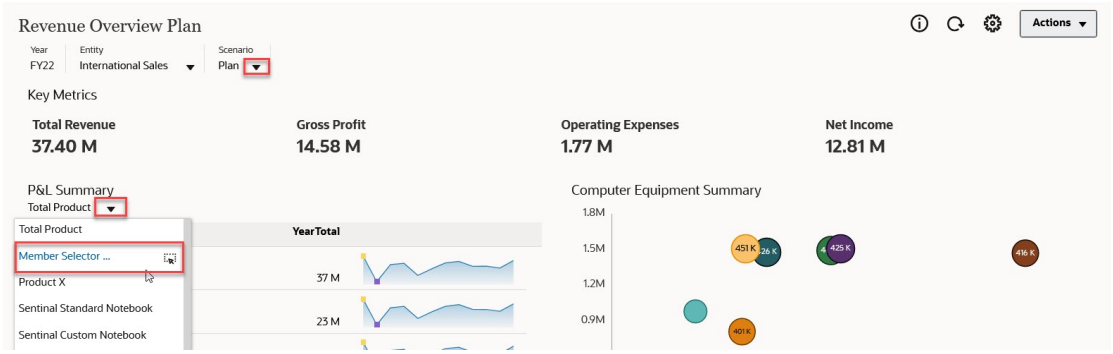
To open the member selector from a Dashboards 2.0 dashboard:

Click a member on the Global POV bar:



You can also click the Page drop-down list in a Global or local POV, and then select **Member Selector**:

Copyright © 2022, 2026, Oracle and/or its affiliates.



In a business rules run-time prompt, when the prompt is for members, click the **Member Selector** icon:

For more information about using the member selector, see Using the Member Selector.

Working with Dashboard 2.0 Dashboards in Navigation Flows

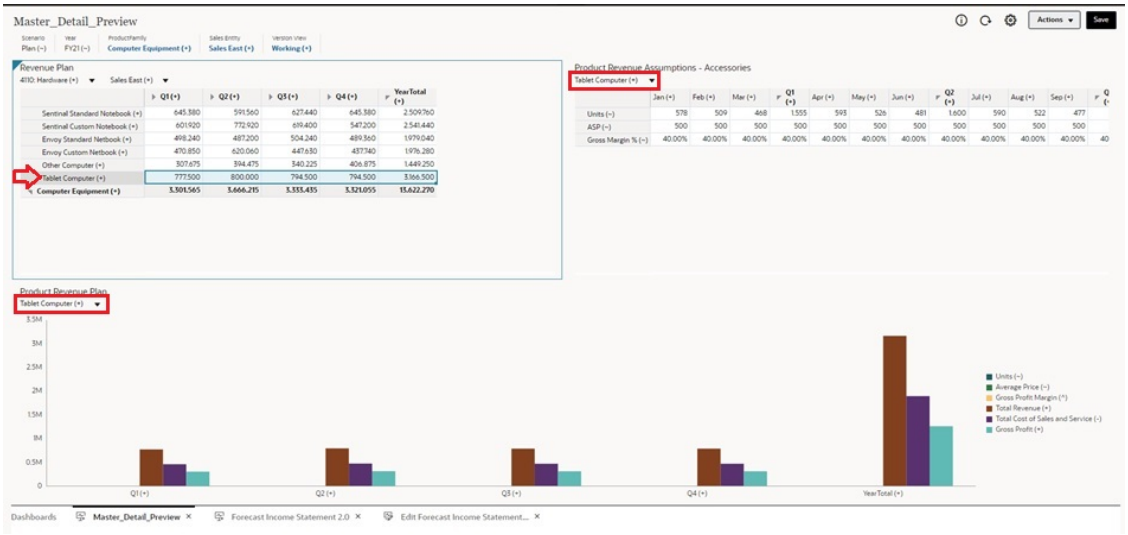
If Dashboard 2.0 and Forms 2.0 are enabled in your business process, navigation flows support the features included in Dashboard 2.0 and Forms 2.0, including the ability to edit a form from within the runtime dashboard, and editing it with or without data. Dashboard 2.0 component actions such as **Maximize** and **Open Form** also work directly within the navigation flow.

Working with Master Forms and Details in Dashboard 2.0 Components

Your administrator can design dashboards that have one master form and multiple detail or target components (forms or charts). With this dashboard configuration, the selection of members in the master form automatically filters to the members in the target components, and the target components show only the details that are relevant to the members highlighted in the master form.

To filter the data in the target forms or charts that is relevant to the data in a master form, right-click the relevant data row in the master form and select **Apply Context**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Support for Valid Intersections in Dashboard 2.0 Dashboards

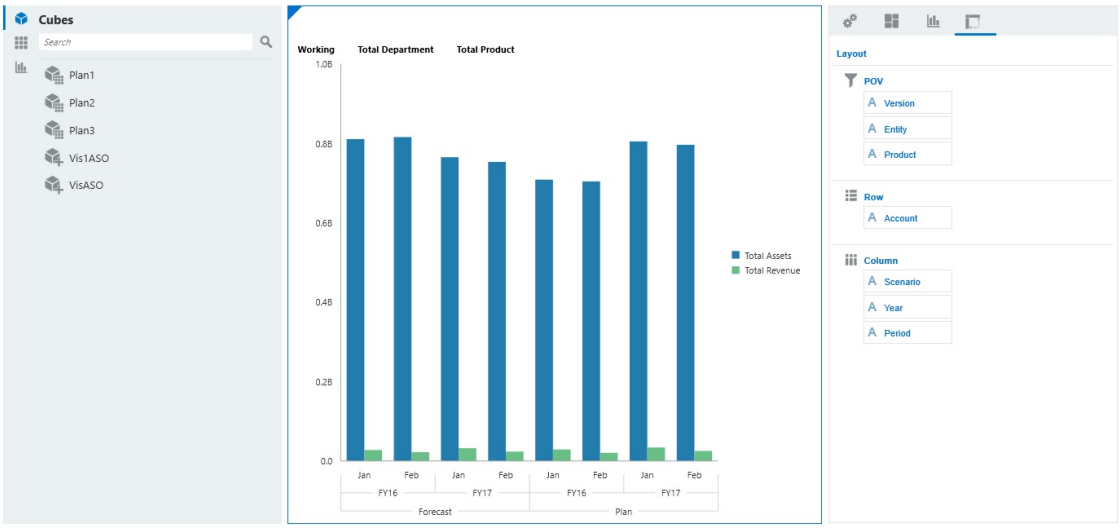
Your administrator can create rules which allow data entry within certain cell intersections in forms. These intersections are called valid intersections.

Dashboard 2.0 complies with valid intersection rules by excluding invalid intersections from dashboards during runtime. If members have been defined by your administrator to be excluded, the runtime dashboard and the member selector will not display those members.

About Quick Analysis

Quick Analysis lets you add components to dashboards without having a prebuilt form. You create an ad hoc query by typing member names in the Search bar or using the Member Selector, and then you control the layout of the query in the Layout tab of the Properties panel.

Example Dashboard 2.0 Quick Analysis Chart in Design Mode



Copyright © 2022, 2026, Oracle and/or its affiliates.

To create a quick analysis in your dashboard:

1. Select a cube for the query. You can do this in one of two ways:
   - Click in the workspace Search box to display a list of cubes, then select a cube.
   - Drag and drop a cube from the object palette to the dashboard workspace.

   > **Note**
   >
   > With either method, the system starts with a default query; a single intersection in the cube driven from your Most Recently Used, or MRU. The default query varies based on what you've recently been looking at in the cube.
   >
   > If the MRU intersection in the cube is invalid, you'll get an error. If you see an error, open another form and change the page to a valid intersection so that the MRU gets updated with a valid intersection.

2. Refine the query by specifying members for the query:
   - In the Search box, type member names to display an auto-complete list from the cube.
   - Launch the member selector to select members, and then click **OK**.

   > **Note**
   >
   > When using the Search box to find members for quick analysis and more than 25,000 members are present in a cube, the Search box only searches the first 3000 members in the dimension for the cube. If the cube contains less than 25,000 members, then the Search box will search through all members. To search a cube with more than 25,000 members, launch the member selector to make your quick analysis selections.

3. Select a chart type for the query.

   Click (Chart Type) to select a chart type; for example, Bar .

4. In the Properties panel, click the Layout tab .
5. Drag and drop the dimensions in the Layout tab of the Properties panel to other sections of the Layout tab to change the POV, Row, and Column layout of the dashboard component.

Videos

Your Goal	Watch This Video
Discover how to add quick analysis components to dashboards without having a prebuilt form. You learn how to create an ad hoc query in the Dashboard Designer and format the results by changing the dimension layout and applying visualizations.	Creating Quick Analyses in Dashboards 2.0

Copyright © 2022, 2026, Oracle and/or its affiliates.

Drilling into Ad Hoc from a Dashboard 2.0 Chart

You can access ad hoc from a chart built on a form within a Dashboard 2.0 dashboard.

To create an ad hoc grid from a chart in a Dashboard 2.0 dashboard:

1. Open a dashboard in Dashboard 2.0.
2. Right-click a chart element such as a bar in a Bar chart, and then select **Analyze** to view the chart intersection in ad hoc.

Right-clicking a chart element and clicking **Analyze** opens ad hoc for the intersection represented by the chart element and it allows for detailed analysis of the cell values beyond the form definition. See the table below for the **Analyze** behavior by chart type.

> **Note**
>
> - **Analyze** only works for chart elements built on a form.
> - **Analyze** is supported for all Dashboard 2.0 chart types except for Geomaps.
> - For charts built on a form with a formula row or column, after right-clicking the chart element which corresponds to the formula row/column (like a bar in a Bar chart), clicking **Analyze** will not perform any action.
> - **Analyze** is not supported for Quick Analysis charts.

Table 17-20 Analyze Behavior by Chart Type

Chart Type	Analyze Behavior
Bar or Column	Right-clicking on a single Bar or a Column section will open ad hoc with the member(s) on the row and column relevant for that bar. Only one value will display in ad hoc.
Area or Line	Right-clicking on a data point in an Area or Line chart will open ad hoc with the member(s) on the row and column relevant for that data point. Only one value will display in ad hoc.
Combination	• The behavior for a Bar chart element is the same as the Bar or Column behavior mentioned previously. • The behavior for Area and Line chart elements is the same as the Area or Line behavior mentioned previously.
Pie or Doughnut (Single or Multiple)	Right-clicking on a slice in a Pie or a Doughnut chart will open ad hoc with the member(s) on the row and column relevant for that slice. Only one value will display in ad hoc.
Gauge (Single or Multiple)	Right-clicking on a value or threshold area of the Gauge chart will open ad hoc with the member(s) on the row and column relevant for that slice. Only one value will display in ad hoc.
Funnel or Pyramid	Right-clicking on a single section of a Funnel or Pyramid will open ad hoc with the member(s) on the row and column relevant for that bar. Only one value will display in ad hoc.
Bubble	Right-clicking on a single Bubble will open ad hoc with the three column members which are used to plot the bubble and the row member relevant for it. Three values will display in ad hoc.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 17-20 (Cont.) Analyze Behavior by Chart Type

Chart Type	Analyze Behavior
Scatter	Right-clicking on a single Scatter point will open ad hoc with the two column members which are used to plot the scatter data point and the row member relevant for it. Two values will display in ad hoc.
Radar with its subtypes	• Bar subtype: Same as Bar or Column behavior mentioned previously. • Line subtype: Same as Area or Line behavior mentioned previously. • Area subtype: Same as Area or Line behavior mentioned previously. • Bubble subtype: Same as Bubble behavior mentioned previously. • Scatter subtype: Same as Scatter behavior mentioned previously.
Waterfall	Right-clicking on any bar in the Waterfall will open ad hoc with all the members on the row and the relevant column member for it. This is because the values plotted in the Waterfall are based on some calculations and opening ad hoc for only the right-clicked bar will not provide the complete context of the trend.
Table (with and without Spark Chart)	• Right-clicking on a column header will open ad hoc for the member(s) on that column and all the row members under it. • Right-clicking on a row header will open ad hoc for the member(s) on that row and all the column members in that row. • For a Table with a Spark Chart, right-clicking on a column header of the column displaying the Spark Chart will open ad hoc for all of the column values plotted in the Spark Chart and for all of the rows under that column, effectively plotting all the values for all the spark charts under that column.
Geomap	**Analyze** is not supported for Geomap chart types.

Copyright © 2022, 2026, Oracle and/or its affiliates.

18

Viewing Key Information with Infolets

Related Topics

- About Infolets
- Anatomy of an Infolet
- About Infolet Views
  Your administrator can design up to three views in an infolet.
- About the Infolet Dots
  You open infolets that your administrator gives you access to by clicking the dots towards the top of the Home page.
- Determining Infolet Content
- Using the Infolets Designer
- Creating Infolets
- Working with Infolets - Standardized Interface
- Customizing the Interface to Access Infolets
- Setting Your Default Infolet
  You can set an infolet that you access most often as the default. Clicking the second dot on your Home page displays your default infolet.

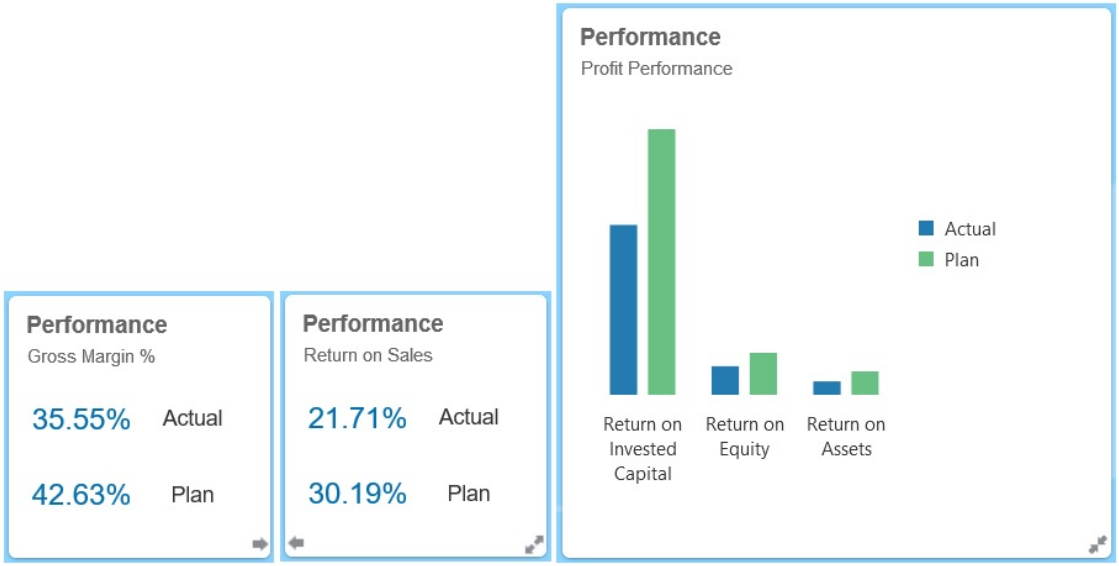
About Infolets

Infolets enable users to view and interact with high-level, essential information generated from different sources so that they can quickly assess where to direct their attention. Service Administrators create, redesign, delete, and assign permissions to infolets.

What is an Infolet?

An infolet is a self-contained, interactive box-shaped container used to display information using text and charts. Infolets are interactive and use progressive disclosure to display high-level, aggregated, essential information for quick consumption at a glance, and then can be acted upon as needed. Infolets can be flipped and resized to display up to three charts or sets of values.

Copyright © 2022, 2026, Oracle and/or its affiliates.



For more information about infolets, see Anatomy of an Infolet.

How Can I Use Infolets?

Use infolets to:

- Promote essential, easily consumable information
- Provide answers to your most critical questions:
  - What is new or what has changed?
  - What is the most important information that supports my work?
- Group key information by user role in a way that helps users quickly assess and prioritize their work
- Progressively display essential details and actions

  Display these additional details in the various infolet views accessed by flipping or expanding an infolet. However, a single infolet view is acceptable.
- Provide a visually rich means of displaying essential or summary information

Do not use infolets to feature highly complex information, such as reporting functions, or to present detailed visuals.

See Determining Infolet Content.

What is an Infolet Page?

An infolets page is a page that contains one or more infolets. It houses a container that manages the space occupied by the infolets and rearranges them depending on the size of the browser and the size of the infolets. Each infolet you create belongs to an infolet page. The **Infolets** card on the Home page provides a list of infolet pages.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Not all features pictured in the preceding image are supported in this update. Oracle plans to support these features in a later update.

See Working with Infolets - Standardized Interface.

Anatomy of an Infolet

Infolet Views

An infolet supports up to three views:

1. Front view (required)

2. Back view (optional)

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Expanded view (optional)

The front view is required, and:

- Provides a quick look or glimpse at high-level information that has a direct effect on your work; for example, the front view can display status, counts, totals, or the most recent updates
- Promotes a glancing action that helps you identify important information that you may want to explore a bit more
- Uses all infolet sizes except 3x2 (see information about infolet sizes below)
- Returns the expanded view to its original size in the front view or back view
- Includes an Actions menu icon available only on hover and either a (optional) flip to back icon or an expand icon in the lower-right corner

> **Note**
>
> If only one view is presented, it must be a front view.

The back view is optional, and:

- Presents analytical information (for example, a graph)

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Promotes a scanning action that helps you explore or become more familiar with the information represented on the front view
- Is sized the same as the front view
- Includes an Actions menu icon available only on hover, a flip to front icon in the lower-left corner, and an (optional) expand icon in the lower-right corner

The expanded view is optional, and:

- Presents even more detailed information about the single data point or interdependent data set presented in the front and back views; for example, the expanded view can display more details about an object or a list of recent items than what's displayed on either the front or back view
- Provides enough information to help you decide if you're ready to take action and move to a focused context on a work area page
- Transitions smoothly from other views. You see a smooth, seamless expansion, as one infolet pushes others into new positions.
- Must be sized bigger than the front or back views
- Includes an Actions menu icon available only on hover, and a collapse icon in the lower-right corner

Infolet views honor the access permissions assigned to the underlying forms and dimensions. Therefore, the same infolet may display varying views from user to user if they have different access permissions.

Infolet Sizes

Infolets can be sized as follows:

> **Note**
>
> 1x1 refers to a box that spans one column and row width (170 pixels).

- 1x1
- 2x1
- 3x1
- 2x2
- 3x2 (expanded view only)

The size of the front and the back views are always the same. Changing the size of the front view will automatically reset the size of the back view. Because the size of the expanded view must always be greater than the size of the front/back views, if the size of the front/back view of an infolet is enlarged, the expanded view automatically resets to a larger size than the front/back view.

> **Note**
>
> Front and back views cannot use the 3x2 size. This size is applicable for the expanded view only.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The size, title, and subtitle of a view is set by the designer in the properties panel. See Using the Infolets Designer.

Navigating Between Infolet Views

An infolet can be created with one of the following view combinations:

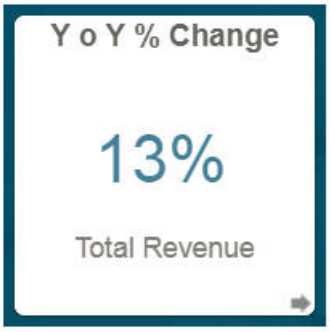
1. Front view only
2. Front and back views
3. Front and expanded views
4. Front, back, and expanded views

Switching from one view to another is controlled by clicking a flip icon, an expand icon, or a collapse icon available in the bottom-right or bottom-left corner of the infolet. Hovering your cursor over the bottom corners reveals a flip, expand, or collapse icon.

About Infolet Views

Your administrator can design up to three views in an infolet.

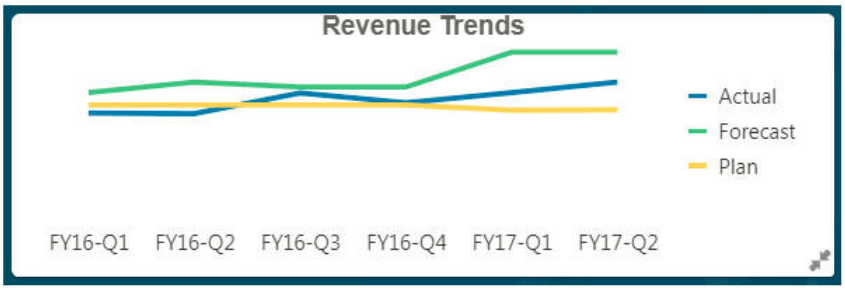
The front page typically identifies key information. For example:



If an infolet has a back view, hover over the bottom right corner to see the flip arrow, and then click it. Back views typically present more analytical information, such as a graph. For example:

To flip to the front view again, hover over and then click the bottom left arrow. An infolet may have an expanded view to present even more detailed information. If so, hover over and then click the double arrow in the bottom right corner to see an expanded view. For example:

Copyright © 2022, 2026, Oracle and/or its affiliates.



To return to the front or back view from an expanded view, click the double arrows in the bottom right corner.

> **Note**
>
> Infolet views honor the access permissions that are assigned to the underlying forms and dimensions. So, your infolet views may differ from other users' views to the same infolet.

About the Infolet Dots

You open infolets that your administrator gives you access to by clicking the dots towards the top of the Home page.

For example:

- The first dot links to the Home page.
- The second dot links to your default, or favorite, infolets page. See Setting Your Default Infolet.
- The third through up to ninth dots link to other infolets that your administrator created.

Determining Infolet Content

Consider the following general tips when determining infolet content:

- Look to existing dashboards and work area pages.

  Dashboards and work area pages are excellent starting points because they display collections of information summaries.

- Apply the 10/90/90 principle.

  Seek out the most essential, easily consumable information that addresses frequently asked questions garnered from the top 10 percent of use cases. These use cases can come from across your enterprise—from business intelligence, social, transactional, external, and so on.

  Then focus this information to reveal what 90 percent of your users would benefit from viewing 90 percent of the time. You can apply this 10/90/90 percent principle to existing dashboard content, to existing work area page content, or generally, to percolate eligible information for an infolet.

- Restate your top use cases in the form of frequently asked business questions.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Present the corresponding infolet content in such a way as to answer these business questions; for example, how many orders are in jeopardy, listed by status?

- Look for one point or a tightly related, interdependent set of points, instead of multiple points of information.

  The process of determining content for an infolet is similar to the process that is used to yield dashboard content—but to a deeper level of analysis. Look for information within a data point or data set that is suitable to be displayed in no more than three views of information hierarchy and that answers a critical business question.

- Start with the single most important point.

  An infolet displays aggregated information about a single data aspect or point of information in relation to an event that the user needs to know about or a task that the user needs to address.

  If a dashboard contains multiple aspects about one or more objects (for example, numeric totals and currency totals), start with the single most important point and add that as a simple overview (for example, as a total using a stylized numeric value) to the front view of an infolet. Then determine the content for the back view, if needed. Finally, determine the content for the expanded view, if needed.

  An infolet should have no more than three views. If there is only a single data point or only one tightly related, interdependent data set to display on an infolet, use only the front view.

Related Links

Designing Forms for Infolets

Designing Charts for Infolets

Designing Forms for Infolets

Use only forms with small data sets in infolets. Permissions that are set for forms are honored in infolets.

You can create forms that are specifically used in infolets:

- Forms used in infolets should have fewer cells than a traditional data entry form; for example, forms used in infolets should only have up to 12 cells.
- Forms used in infolets should have no more than 12 rows and columns. If a form has more than 12 rows and columns, the infolet will only display the first 12 rows and columns.
- Infolets currently don't support Page dimensions or POVs, therefore forms used in infolets should not contain Page dimensions.
- If a form that is used in infolets contains a grid with members that expand, the infolet will display all the members in the form, including the expanded members.

Designing Charts for Infolets

Use the title and subtitle in charts to show static context.

There are six types of charts that you can use in infolets:

- Bar: Displays a graphical summary of multiple data values for comparison purposes. Bar charts can be plotted vertically or horizontally. Up to eight bars are recommended for bar chart infolets.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Column: Displays stacked bars that represent different data sets on top of each other. The height of the resulting bar shows the combined result of the data sets.
- Doughnut: A circular graph which is divided into segments to compare data sets to one another. The blank center displays the sum of all data sets. Up to six segment values are recommended for doughnut chart infolets.
- Line: Use to visualize a trend in data over intervals of time.
- Pie: A circular graph which is divided into slices to compare data sets to one another. Up to six slices are recommended for pie chart infolets.
- Tile: Lets you select specific values from a data set to display. No more than three values are recommended for tile chart infolets.

> **Note**
>
> Tile charts can only use the 1x1 size. You cannot resize an infolet using the tile chart until the chart type is changed. If you drag and drop a tile chart to an infolet that is greater than 1x1, you will be prompted to change either the size of the infolet or the chart type.

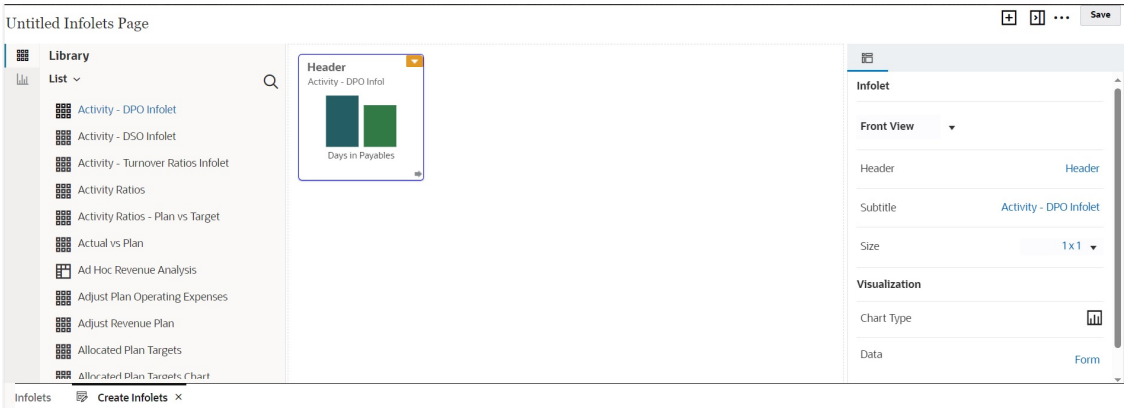
Using the Infolets Designer

Service Administrators use the Infolets Designer to create infolets and infolet pages. The Infolets Designer enables easy toggling between runtime and designer views.

To access the Infolets Designer, click the **Infolets** icon on the Home page, then create an infolet or edit an existing infolet.

Clicking the infolet name in the list region, launches the runtime version of the infolet page. You can toggle from runtime view to designer view by clicking (Infolet Designer).

Infolets Designer



Infolets Toolbar

On the upper right is the Infolets Toolbar.

Copyright © 2022, 2026, Oracle and/or its affiliates.

: Adds a new infolet to the Infolets Designer

: Hides and unhides the Properties panel

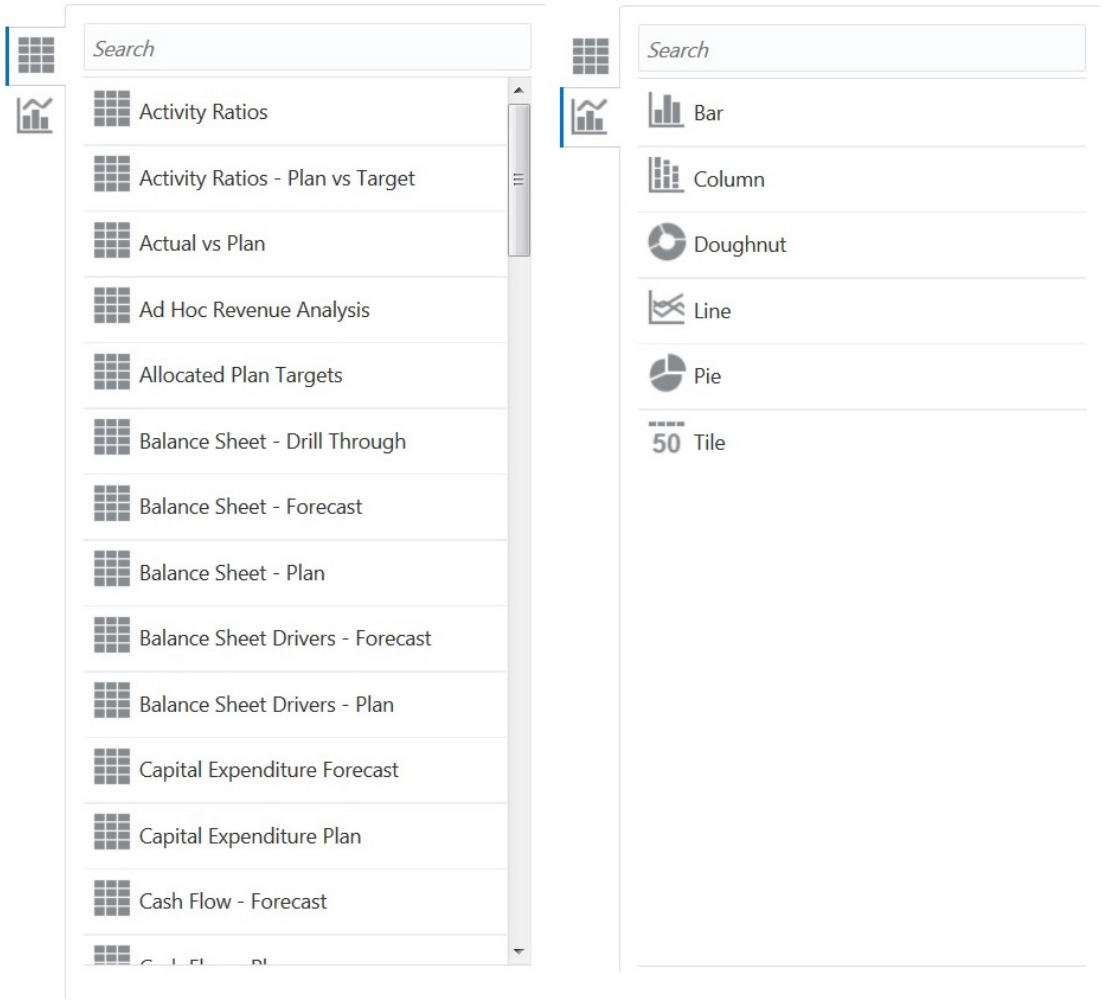
•••: Click to perform these actions:

- **Reset**: Resets the Infolets Designer to a previously saved state
- **Refresh**: Refreshes the data from Essbase and updates the infolet definition from the database
- **Runtime**: Hides all Infolets Designer elements and displays the infolet as it would appear to users during runtime

: From runtime mode, displays the Infolets Designer

Infolets Designer Palette

On the left is the Designer Palette. The Designer Palette has two tabs: Forms and Chart Types. Highlight objects in the Designer Palette and then drag and drop them onto the drop zone.



Copyright © 2022, 2026, Oracle and/or its affiliates.

Designer Palette objects:

- Forms: Select forms to include in the infolet by scrolling through the forms or by searching for them by name. For details about forms, see Designing Forms for Infolets.

> **Note**
>
> The access permissions set for forms are honored in infolets.

- Chart Types: Select the chart types to include in the infolet. Infolets display sample data in the charts until you associate the chart with a form as its data source. When you link a chart to a form, users can see the impact of changing data in the form on the associated charts. To associate a chart with a form, highlight a chart and drag and drop it onto the drop zone, in the Properties panel, click **Sample**, and then click **Forms** to select the data source. For details about charts, see Designing Charts for Infolets.

Infolet Menu

The infolet menu contains the infolet delete and clear actions. To view the infolet menu, hover over the upper right corner of the infolet, and then click the down arrow to display the menu options:

- **Delete**: Removes the infolet from the page
- **Clear**: Clears infolet details

Properties Panel

The properties panel on the right side of the Infolets Designer enables you view and work with these infolet properties:

> **Note**
>
> The header you specify is the same for all views of an infolet, but you can specify a different subtitle for each view; for example, the front, back, and expanded views of an infolet can each have different subtitles, but they must have the same header.

- **Header**
- **Subtitle**
- **Size**: Displays the infolet in the selected size
- **Chart Type**: Displays the infolet data as the selected chart type
- **Data**: Displays the associated data source (Sample or Form)
- **Form**: Displays the selected infolet form

Actions such as delete and clear are on the infolet menu.

By default, the front view of an infolet is displayed in the properties panel. You can see the other views by selecting them from the drop-down. If you flip or expand an infolet to view the back or expanded views, the properties for those views display in the properties panel. In addition, the properties for the corresponding chart type are also displayed in the properties panel.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating Infolets

To create infolets:

1. From the Home page, click **Infolets**.
2. Click **Actions**, then **Create Infolets** (or if you're using the legacy interface, click **Create**).
3. Click **Untitled Infolets Page**, and enter a title for the new infolets page you are creating.
4. From the designer palette on the left, choose either the **Library** tab or the **Visualizations** tab, highlight an object, and then drag and drop it onto the infolets drop zone.

   Alternatively, you can click

   (Add Infolet) at the top of the page to add a new infolet to the workspace.
5. If the **Properties** panel isn't already displaying, click

   (Properties) at the top of the page to reveal it. Customize the highlighted infolet using selections made in the **Properties** panel.
6. Click **Save**.

You can easily duplicate and modify an infolet using the **Copy As** action on the Infolet list page. From the list page, click the Actions icon next to the infolet you want to copy, and then click **Copy As**.

Working with Infolets - Standardized Interface

About the Infolets Interface

This topic provides details about working with the **Infolets** page in the default standardized interface. To learn more about the standardized interface, see About the Standardized Cloud EPM Platform Artifact Pages.

After you've created an infolets page, it is displayed in the list region on the **Infolets** page.

The **Infolets** page supports folders. Folders enable you to assign permissions to all infolets within a folder rather than assigning permissions to each individual infolet. The **Infolets** page uses the same folder hierarchy as dashboards and data entry forms and all artifacts and folders reside under a root folder called **Library**.

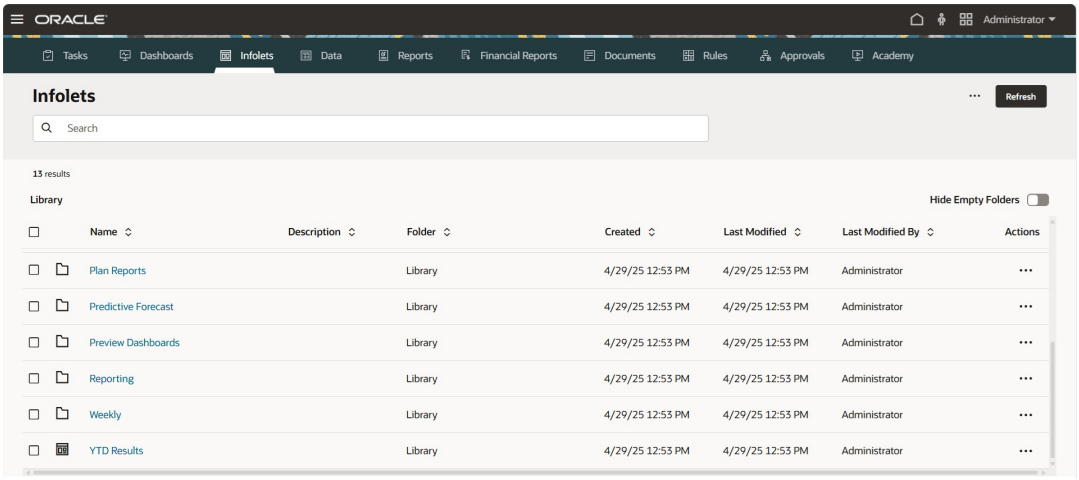
> **Note**
>
> Only administrators can add files (for example, dashboards, infolets, forms, reports, and so on) to the **Library** root folder.

Viewing the Infolets Page

To view the infolets page:

1. On the Home page, click **Infolets**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



2. To open an infolet, click the infolet name.

   This opens the infolet in the *runtime* environment.

Features of the Standardized Infolets Page

On the standardized **Infolets** page:

- To search for a specific infolet, enter search criteria and the search results will display in a drop-down under the **Search** box. Click **Enter** to view the search results in the list region. Search results list all instances of infolets that include the search criteria (including folder names). Each search result displays the complete folder path. Searching inside a folder narrows the search to that folder and its subfolders.

  > **Note**
  >
  > – The search considers the **Name**, **Description**, and **Folder** columns, wherever applicable, in the search.
  >
  > – If you perform a **Search** and the **Hide Empty Folders** toggle is off, all matching folders and artifacts are displayed. If the toggle is on, only folders containing matching artifacts are displayed. Empty folders are hidden.

- **Hide Empty Folders**: Hides folders that don't contain relevant artifacts for the current context. When the toggle is off, all folders are visible in the list region, including empty ones. When the toggle is on, only folders containing relevant artifacts for the **Infolets** artifact page are displayed.

  By default this option is off, and will reset to off each time you start a new session. The state of the toggle is retained by the page during the session and is page-specific. Navigating away from the **Infolets** page and returning preserves the toggle state until the tab is closed or the user logs out.

- To refresh the infolets list, click **Refresh**.

- The global Actions menu ••• (within the header region of the **Infolets** page) includes the following options:

  – **Create Infolets**: Creates a new infolet. See Creating Infolets.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Create Folder**: Creates a new folder.

> **Note**
>
> Keep in mind that newly created folders are empty and therefore will not display if the **Hide Empty Folders** toggle is on. New folders become visible after content is added to them, or if the toggle is switched off.

- **Assign Permission**: Assigns access permissions to the selected infolets or folders. Folder permissions apply to all items within that folder, even to items that may not be visible in the list. You can assign permissions to multiple infolets or folders at one time. If no infolets or folders are selected, the global **Assign Permission** action assigns permissions to the Library folder.
- **Move to**: If one or more infolets or folders is selected in the list region, this option moves the folder to another location in the folder hierarchy or moves an infolet to another folder.

> **Note**
>
> All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

- Each infolet line item also has an item-specific **Actions** menu which includes the following options:
  - **Open**: Opens the infolet in the *runtime* environment so you can view it. The infolet opens in a dynamic tab.
  - **Edit**: Opens the infolet in the Infolets Designer with the underlying form data.The infolet opens in a dynamic tab.
  - **Delete**: Deletes a folder or an infolet. The folder must be empty to delete it.
  - **Rename**: Renames a folder or an infolet. The folder cannot be renamed if it contains other folders.
  - **Copy As**: Copies an infolet with a new name. The infolet is copied to the listing directly under the original infolet.
  - **Move to**: Moves the folder to another location in the folder hierarchy or moves an infolet to another folder.

> **Note**
>
> All folders are displayed and are selectable in the **Move** interface, regardless of the state of the **Hide Empty Folders** toggle.

  - **Copy URL**: Enables you to copy and share the direct URL for an infolet.
  - **Default** or **Unmark**: **Default** marks an infolet page as default and makes it accessible directly from the Home page by clicking the second infolet dot that is displayed beneath the global header on the Home page. Only one infolet page can be marked as default, and a "(Default)" prefix displays before the name of that infolet in the listing. **Unmark** removes the default designation from the infolet page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

– **Assign Permission**: Assigns access permissions to the folder or infolet.

Customizing the Interface to Access Infolets

You can customize the interface to add links to infolet pages from the Home page using the Navigation Flow Designer. When you customize your interface to access infolet pages, dots will appear on the Home page beneath the global header and arrows will display to help you navigate easily between the Home Page and infolet dashboard pages. Each dot that appears on the Home page represents an infolet page and hovering over each dot displays the name of the infolet page. Clicking an infolet dot launches the infolet page associated with that dot. You can define up to seven infolet dots on the Home page. If you've created connections to other EPM Cloud environments, you can also add links to infolet pages in other EPM Cloud environments.

You will only see dots displayed on the Home page for infolet pages to which you have access. The types of infolet dots displayed are as follows:

- Home dot: This dot always appears first and it links to the Home page. There can only be one home dot. If you are not viewing the Home page, clicking the home dot will bring you back to the Home page.
- User dot: Links to an infolet page marked by an end user as the default infolet page. There can only be one user dot and it always appears after the Home dot on the user's Home page. User dots cannot be added using the Navigation Flow Designer. For more information about marking an infolet as the default, see Working with Infolets - Standardized Interface.
- Customizable dot: Links to infolet pages created by Service Administrators. Customizable dots can be integrated into navigation flows and their visibility and the order in which they appear is determined by the navigation flow designer. There can be up to seven customizable dots and they always appear after the home and user dots.

To add infolet dots to your business interface using the Navigation Flow Designer:

1. From the Home page, select **Tools**, and then **Navigation Flows**.
2. Select an inactive navigation flow in the listing, and then click the **Infolets** tab on the Navigation Flow Designer.
3. Click .
4. In **Manage Infolet**, name the infolet dot, set visibility, and then click to select an infolet in the Artifact Library.

   > **Note**
   >
   > You can select an infolet from another EPM Cloud environment if you've created connections to other environments. First select the environment under **My Connections**, and then navigate to the infolet in that environment.

5. Click **Save and Close**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Infolets can also be associated with a tab or a card in a navigation flow. While adding or updating a tab or a card, select an infolet in the Artifact Library.

To view design time changes to the navigation flow, activate the navigation flow, and then from the Home page, click the down arrow next to the user name (upper right corner of the screen) and click **Reload Navigation Flow**.

To learn more about designing navigation flows, see "Designing Custom Navigation Flows" in your EPM Cloud Administering guide.

To learn more about connecting EPM Cloud environments, see "Connecting Environments in EPM Cloud" in your EPM Cloud Administering guide.

Setting Your Default Infolet

You can set an infolet that you access most often as the default. Clicking the second dot on your Home page displays your default infolet.

To set your default infolet:

1. On the Home page, click **Infolets**.
2. From the **Actions** menu for the infolet you want to be the default, click **Default**.
   To undo the **Default** setting, click **Unmark**.

Only an infolet page can be marked as default. You can no longer mark a dashboard page as default.

Copyright © 2022, 2026, Oracle and/or its affiliates.

19

Configuring and Working with IPM

Related Topics:

- Configuring IPM Insights
- Using IPM Insights to Inform Your Decision-Making
- IPM Insights Metrics

Configuring IPM Insights

Use Intelligent Performance Management (IPM) to inform your planning decisions.

Related Topics

- About IPM
  Oracle Fusion Cloud EPM provides Intelligent Performance Management—IPM—integrated directly in your applications to inform your planning decisions with predictive capabilities and accelerate insight discovery with financial pattern recognition.
- Enabling AI for Insights in Enterprise Profitability and Cost Management
  Enable AI in Enterprise Profitability and Cost Management to empower users with data science optimized for multidimensional planning and forecasting use cases.
- About IPM Insights
  IPM Insights empowers finance and operational users with data science optimized for multidimensional planning, and forecasting use cases.
- About Using Calendars and Events in IPM Insights
  When defining IPM insights, you can specify a calendar and events to associate with the insight definition.
- Configuring Calendars and Events
  You can define calendars and events to associate with insights to improve the accuracy of the insights.
- Configuring IPM Insights
  Configure IPM Insights in Enterprise Profitability and Cost Management to define the insights that planners see on the Insights dashboard.
- Running and Scheduling Insights
  After configuring insights, you can run them any time. You can also set up a job to run insights at a regular interval, for example, when you have a new set of actuals.
- Managing Insight Definitions and Generated Insights
  You can edit, delete, or duplicate existing insight definitions. Administrators can delete insights that have been generated.
- Managing Tags
  You can collaborate with your colleagues more effectively and leverage the power of automated analysis with IPM Insights using tags.

Copyright © 2022, 2026, Oracle and/or its affiliates.

About IPM

Oracle Fusion Cloud EPM provides Intelligent Performance Management—IPM—integrated directly in your applications to inform your planning decisions with predictive capabilities and accelerate insight discovery with financial pattern recognition.

Learn more about the Cloud EPM IPM offerings:

- **IPM Insights** reduces time spent in data analysis with financial pattern recognition that offers insights to planners, which they can evaluate and take action on. See About IPM Insights.
  Supported for Enterprise Profitability and Cost Management, Financial Consolidation and Close, FreeForm, Planning, and Tax Reporting.
- **Task Manager Integrations** enable you to automate tasks across Cloud services and on premises applications. See Managing Task Manager Integrations.
  Supported for Enterprise Profitability and Cost Management, Financial Consolidation and Close, Planning, and Tax Reporting.

Enabling AI for Insights in Enterprise Profitability and Cost Management

Enable AI in Enterprise Profitability and Cost Management to empower users with data science optimized for multidimensional planning and forecasting use cases.

To enable AI in Enterprise Profitability and Cost Management:

1. From the Home Page, click **Application**, and then click **Settings**.
2. In the **Enable AI** section, select **Generative AI** to enable the ability to automatically generate narrative summaries for a single insight or group of insights.
   Insight summaries use GenAI. Output from GenAI may not always be factual, accurate, or appropriate. You are responsible for reviewing and using GenAI output at your discretion.

> **Note**
>
> The **Enable AI** option is available only for EPM Enterprise subscriptions and when Hybrid mode is enabled. For more information, see Considerations for IPM Insights.

The **Generative AI** feature is not yet available in all OCI regions. To view the regions where it is available, refer to Availability of Generative AI in the *Operations Guide*. If AI isn't available in your home region, then the **Enable AI** option is not displayed.

About IPM Insights

IPM Insights empowers finance and operational users with data science optimized for multidimensional planning, and forecasting use cases.

IPM Insights analyzes data, helping you find patterns and insights into data that you might not have found on your own. Insights can be trends, anomalies, forecast bias, or variations. With IPM Insights, the insight discovery phase of the planning process is automated with data science and financial pattern recognition, enhancing your forecast effectiveness. Using IPM Insights, you can analyze and explore data across any account. IPM Insights automates processing large amounts of multidimensional data, so that as new actuals come into the system, you quickly detect patterns in your data or hidden correlations, streamlining reporting,

Copyright © 2022, 2026, Oracle and/or its affiliates.

improving your forecasting, and strengthening your decision making. You spend less time in analysis, saving time in the overall planning process.

IPM Insights offers these benefits:

- Reduces time spent in data analysis
- Minimizes hidden biases
- Improves forecast accuracy and reliability, enhancing forecast effectiveness with informed decision-making
- Encourages collaboration with your colleagues
- Helps you detect trends early to enhance strategic decision-making

IPM Insights provides these types of insights, using historical data:

- **Forecast variance and bias insights** reveal hidden bias in forecasts submitted by planners by analyzing historical data. This type of insight measures the variance or bias between two historical scenarios such as Forecasts and Actuals, and calculates the percentage of risk associated with the current forecast.
  Forecast variance indicates the level accuracy of the forecasts submitted by planners. Forecast bias indicates the tendency of the direction of forecast error. For example, a tendency to forecast in excess of the actuals is called the over-forecasting bias; a tendency to forecast below the actuals is called the under-forecasting bias.

  IPM Insights triggers an insight when either the variance or risk crosses the specified threshold.
- **Anomaly insights** detect unusual patterns in historical data that deviate from expected results. This type of insight detects outlier values that vary widely from other values, for example, a sudden volatility in actuals compared to the base level, or missing actuals data. Anomalies can result from key business actions or they could contain valuable information about a hidden trend.

  Anomalies in historical data can also result from events that historically led to spikes or declines in the data. You can choose to take these spikes or declines into consideration during insight generation.

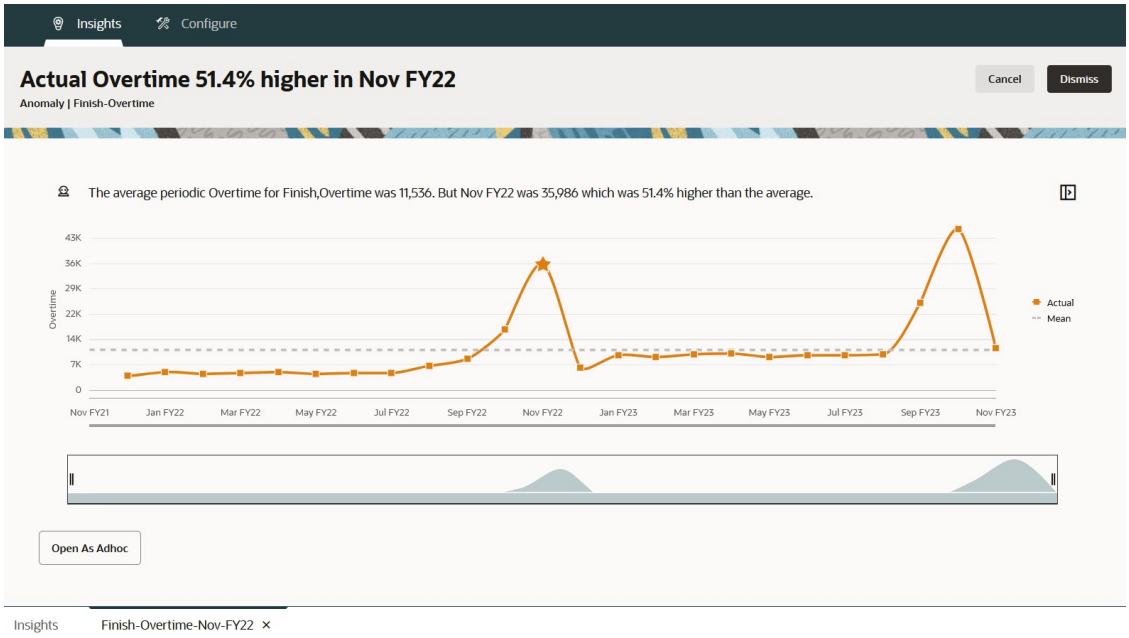
  IPM Insights triggers an insight when an outlier measure crosses the specified threshold.

To get started with IPM Insights, administrators configure insights and then run them, and can schedule them to run on a regular basis.

Planners can then review and analyze insights in a dashboard, and take appropriate action to improve the forecast.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 19-1 Anomaly Insight



Videos

Your Goal	Watch This
This overview introduces you to Insights. Insights empowers finance and operational users with data science optimized for multidimensional planning and forecasting use cases. Insights analyzes past data and predicted data, helping you find patterns and insights into data that you might not have found on your own. You can evaluate those insights and take action on them.	Overview: Insights in Cloud EPM

Considerations for IPM Insights

The following are some of the considerations for IPM Insights .

Considerations:

- IPM Insights requires an EPM Enterprise Subscription.
- IPM Insights works with these business processes:
  - Planning. IPM Insights works with these Planning application types:
    - Custom
    - Modules
    - FreeForm
    - Sales Planning
    - Strategic Workforce Planning
    - Cash Forecasting

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - FreeForm.
  - Oracle Sales Planning Cloud and Oracle Strategic Workforce Planning Cloud.
  - Enterprise Profitability and Cost Management.
  - Tax Reporting.
  - Financial Consolidation and Close.
- IPM Insights works only with applications with Hybrid mode enabled.
- IPM Insights honors both member level security and cell level security, so planners see insights only for slices of data to which they have access. However, note that insights are not generated for a user when cell level security is defined on Year/Period dimensions.
- If you add dimensions to the application after the job is created, you must reconfigure the IPM job to include the additional dimensions.
- Note the following considerations for the Insights Generative AI summary feature:
  - Insight summaries use GenAI. Output from GenAI may not always be factual, accurate, or appropriate. You are responsible for reviewing and using GenAI output at your discretion.
  - The Insights Generative AI summary feature requires an EPM Enterprise Cloud service subscription.
  - Narratives are generated in English only.
  - Summaries are available for all insight types.
  - Administrators need to re-run existing insights for users to be able to see the AI summary.
  - The GenAI feature is not yet available in all OCI regions. To view the regions where it is available, refer to Availability of Generative AI in the *Operations Guide*.

IPM Insights Support Matrix

Review the table for a summary of the supported SKUs, business processes, and application types for IPM Insights.

Table 19-1 IPM Insights Support

SKU	Business Process	Application Type	Supported?	Comments
EPM Enterprise Subscription	Planning	Modules	Supported	Hybrid Essbase must be enabled.
	Planning	Custom	Supported	Hybrid Essbase must be enabled.
	Planning	Freeform	Supported	Hybrid Essbase must be enabled.
	Planning	Sales Planning	Supported	Hybrid Essbase must be enabled.
	Planning	Strategic Workforce Planning	Supported	Hybrid Essbase must be enabled.
	Planning	Predictive Cash Forecasting	Supported	Hybrid Essbase must be enabled.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 19-1 (Cont.) IPM Insights Support

SKU	Business Process	Application Type	Supported?	Comments
	FreeForm		Supported	Hybrid Essbase must be enabled.
	Enterprise Profitability and Cost Management		Supported	
	Tax Reporting		Supported	Hybrid Essbase must be enabled.
	Financial Consolidation and Close		Supported	Hybrid Essbase must be enabled.
	Other business processes		Not supported	
Legacy SKU	Planning	Enterprise Planning and Budgeting Cloud	Not supported	
	Planning	Planning and Budgeting Cloud	Not supported	
	Other business processes		Not supported	
EPM Standard Subscription	Planning	Standard Module	Not supported	
	Other business processes		Not supported	
Sales Planning	Planning	Sales Planning	Supported	Hybrid Essbase must be enabled
Strategic Workforce Planning	Planning	SWP	Supported	Hybrid Essbase must be enabled

About Using Calendars and Events in IPM Insights

When defining IPM insights, you can specify a calendar and events to associate with the insight definition.

Events are typically one-off or recurring events that historically led to spikes or declines in the data. You can choose to take these spikes or declines into consideration during insight analysis, so that historical spikes or declines are also reflected in future analyses. For example, a North American calendar might include an event for Christmas, or an APAC calendar might include an event for Diwali, when sales would typically spike. By including the historical data spikes in the analysis, you see the spikes in the insight data, so you can plan ahead for volume or to make use of the opportunity.

Without events, spikes or falls in data are normalized and distributed over the analysis period, potentially leading to less accurate analyses. Using events helps you plan ahead for the events and take advantage of opportunities by allowing you to see anticipated spikes and falls in the

Copyright © 2022, 2026, Oracle and/or its affiliates.

insight data for specific events. Using events with IPM Insights simplifies analysis and significantly improves the insight accuracy for complex and volume based industry verticals such as air travel, public transportation, retail, E-commerce, brick and mortar stores, FMCG, and automobiles.

Alternatively, you can choose to skip the historical data spikes or falls, so that the data for the event is completely excluded from the analysis.

To associate calendars and events with insight definitions, configure calendars and events first. See Configuring Calendars and Events.

To use calendars and events with IPM Insights:

1. Define calendars.
2. Define events.
3. When configuring an IPM Insights job, associate a calendar with the insight. Then, select whether to include events in the analysis.

For details on these procedures, see Configuring Calendars and Events and Configuring IPM Insights.

Notes about calendars and events:

- Defining events and calendars is optional.
- Events are available only on the web, not in Oracle Smart View for Office.
- You can use calendars with each insight type. Events are an option for the Anomaly insight job type.

Configuring Calendars and Events

You can define calendars and events to associate with insights to improve the accuracy of the insights.

To use calendars and events with IPM Insights:

1. Define calendars. From the Home page, click **IPM**, then click **Configure**, and then click the **Calendar** tab. See Defining Calendars.
2. Define events. From the Home page, click **IPM**, then click **Configure** and then click the **Events** tab. See Defining Events.
3. When configuring an IPM Insights job, associate a calendar with the insight. Events are an option for the Anomaly insight job type. See Configuring IPM Insights.

Defining Calendars

A calendar defines the scope and range of the time series for selected cubes. For example, you can create a daily calendar, a weekly calendar, and an alternate calendar. You might want to create a calendar for a specific entity, because not all events are applicable to all entities. For example, Diwali applies to APAC and Thanksgiving applies to North America, so you can create an APAC calendar with its own events and a North America calendar with its own events.

You can use calendars on their own to quickly set up the time frame for insight definitions, or use calendars with events.

To define calendars:

1. On the **Calendar** tab, click **Add Calendar**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Enter a name and description for the calendar.
3. From the **Cube** column, select the cubes the calendar applies to.
4. From the **Time** column, specify the time definition for the calendar by selecting the year and period for the start of the calendar. You can select specific members or use substitution variables.

   Time includes the entire range of historical and future periods required for the predictions.
5. From the **Current** column, specify the start of the prediction period. The previous period is the end of historical data. You can select substitution variables so the prediction picks up the period and year based on substitution variable setup. This ensures that you don't have to change the calendar every month.
6. Enter the **Number of Historical Periods** and **Number of Future Periods**.
   The number of historical periods and the number of future periods you enter must result in member selections that are within the range defined for calendar. For example, if the calendar range is defined as FY20 to FY25, Lev0Descendants(YearTotal), and the current period is defined as Jan->FY24, then the maximum number of historical periods you can enter is 48 periods (4 years). Any number higher than 48 results in an error. Similarly, the maximum number of future periods you can enter is 24 periods (2 years). Any number higher than 24 results in an error, because Jan FY26 or higher is not part of the calendar range.
7. Click **Save** ✓.

Editing Calendars

To edit a calendar, from the **Calendar** list, double-click the row with the calendar you want to edit to make the options editable. Make any required changes, and then click **Save** ✓. To discard your changes, click **Cancel** ✕.

For example, you can change the **Number of Historical Periods** and **Number of Future Periods**.

Alternatively, click the Actions menu next to a calendar, and then select **Edit** or **Delete**.

To delete a calendar, from the **Calendar** list, click **Actions** ••• next to the calendar you want to delete, and then click **Delete Calendar**.

Defining Events

Events are associated with calendars.

To define events:

1. On the **Events** tab, click **Add Event**.
2. Enter a name and description for the event.
3. From the **Type** column, select the type of event:
   - **One-off**: An event you don't expect to be repeated, but you want to include it in your data.
   - **Repeat**: An event that is regularly repeated, where increases or decreases will also be repeated. For example, holidays such as Diwali or Thanksgiving are repeating events.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Skip**: Similar to a one-off event, it's an event you don't expect to be repeated, however, you don't want to include it in your data. Data for Skip events is removed from the series.

> **Note**
>
> If you define a Skip event that is shorter than your seasonality, it can affect the accuracy of the historical data. For example, you might define an event for Covid that is three months long, but your season is twelve months, so you have only nine months of data. You lose seasonality because the data is skewed. In these cases, it might be more effective to skip the entire season.

4. From the **Calendar** column, select the calendar that the event applies to.
5. From the **Starts on** column, specify the start date for the event.
6. From the **Duration** column, enter the event duration (the number of periods the event is valid). For example, in a daily calendar, if duration is 4, the event occurred for 4 days continuously from the start of the event. In a weekly calendar, if duration is 1, the event occurred for a week.
7. For regularly repeating events, from the **Interval** column, enter the interval for the repeat. For regularly repeating events, the interval should be a number that indicates after how many days, weeks, or months the event repeats. For example, in a weekly calendar, Christmas repeats after 52 weeks.
   You don't need to specify an interval for one-off or skip events.
8. For custom repeating events, from the **Occurrences** column, click + and enter specific details about when the event occurs. For example, US Thanksgiving occurs annually, but on a different date each year.
9. Click **Save** ✓.

Events are automatically set in **Active** status (indicated by the check mark in the **Active** column). You can clear the check box to make an event inactive. Only active events are taken into consideration during predictions.

To edit an event, from the **Events** list, double-click the row with the event you want to edit to make the options editable. Make any required changes, and then click **Save** ✓. To discard your changes, click **Cancel** ✕.

To delete an event, from the **Events** list, click **Actions** ••• next to the event you want to delete, and then click **Delete Event**.

Importing and Exporting Events

You can export events to a .csv that you download, and then add or modify events. You can then import the events from the csv file. This process is a fast way to add many events, and can be valuable for auditing and troubleshooting event definitions.

To export events, on the **Events** tab of IPM Configure, from the **Actions** menu, select **Export Events**.

To import events, on the **Events** tab of IPM Configure, from the **Actions** menu, select **Import Events**, select the file and then click **Import**. You can then review the **Import Events** job. From the Home page, click **Application**, then click **Jobs** and then click the **Import Events** job that was run.

Copyright © 2022, 2026, Oracle and/or its affiliates.

If you import an event with the same name as an existing event, the existing event is overwritten.

Configuring IPM Insights

Configure IPM Insights in Enterprise Profitability and Cost Management to define the insights that planners see on the Insights dashboard.

You configure IPM Insights by selecting the type of analysis to perform, specifying the slice definitions for analysis, configuring the analysis, and then defining the settings for the insights displayed on the Insights dashboard. You can define insights for as many data intersections as you need. Planners see insights only for slices of data to which they have access.

To associate calendars and events with insight definitions, configure calendars and events first. See Configuring Calendars and Events.

To configure IPM Insights:

1. From the Home page, click **IPM** and then click **Configure**.
2. Click **Create**.
3. In IPM Configurator, on the **Types** page, enter a name and description.
4. Select the types of insights to generate, and then click **Next**. You can select as many as you need.
   - **Forecast Bias Insights**. Reveals hidden bias in forecasts submitted by planners by analyzing historical data. Measures the variance or bias between two historical scenarios such as Forecasts and Actuals.
   - **Anomaly Insights**. Detects outlier values that vary widely from other values.
5. On the **Select Calendar** page, select a calendar to use, and then click **Next**. When you select a calendar, the **Historical Data** section is populated with details from the selected calendar.
   If you don't select a calendar, you can select these options yourself.
6. On the **Define Slice** page, define the slice of data to analyze for historical data (Actual and Forecast) , and then click **Next**.
   For considerations on using dynamic calc parent members in the slice definition, see Using Dynamic Calc Members in Insights.

   Note:
7. On the **Configure** page, configure the insights by defining the error tolerance and thresholds for insights, and then click **Next**. IPM Configurator selects default metrics for analysis.
   - **Forecast Variance & Bias Insights**: Select an error tolerance percentage, which defines the percentage variance between historical forecasts submitted by planners and actuals that lies within acceptable range. If the percentage variation crosses the error tolerance limit, it is considered for bias calculation.
     For example, if you enter .05, any difference of 5% or above between historical forecasts and historical actuals is considered a significant variance (and considered either under-forecasting or over-forecasting) and triggers an insight.

     You can select or modify the metric and threshold for deviation on the **Advanced Options** page. See Configuring Additional Insight Settings.

     An insight is generated when either deviation or bias crosses the specified threshold.
   - **Anomaly Insights**: Select whether to include events in the insights calculation.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Select a threshold, which defines the acceptable threshold for Z-score value (the standard deviation from the mean of the values). Anything that is too far from zero (the threshold is usually a Z-score of 3 or -3) should be considered an outlier.

An insight is generated when the specified outlier detection metric crosses the specified threshold.

For example, if you enter 3, anything that is three standard deviations or higher from the mean would be considered an outlier, and would trigger an insight.

If you want to configure additional options, such as selecting the metrics to use, click **Show Advanced Options**. See Configuring Additional Insight Settings.

8. On the **Settings** page, configure the settings that define how to display the insights to planners, and then click **Save**.
   - **Display Dimensions**: Select the dimensions that planners will use to navigate and analyze the insights. The dimensions you select will display on the Insights dashboard.
   - **Impact Magnitude Thresholds**: When insights are displayed on the Insights dashboard, this setting categorizes insights into High, Medium, and Low groups based on the percentage or absolute value impact calculated for each insight. This helps planners focus attention on the insights that have more extreme variations.
     - Anything less than the low value is in the Low category.
     - Anything higher than the high value is in the High category.
     - Anything between the low and high value is in the Medium category.

     For example, if you specify 30% as the Low threshold and 60% as the High threshold, any insight with a percentage impact less than 30% is in the Low category; any insight with a percentage impact greater than 60% is in the High category. Any insight with a percentage impact between 30% and 60% is in the Medium category.

     When entering an absolute value for impact magnitude thresholds, the currency defined in the slice definition applies to the absolute value. If you have multiple currencies defined, you can't apply an absolute value magnitude threshold; the option is not available.
9. Now you're ready to run the insights you configured. See Running and Scheduling Insights.

Insight definitions are saved as global artifacts (in the Auto Predict folder under Global Artifacts) and are backed up with the maintenance snapshot.

About Using Events with Insights

Note the following about using events:

Using events can impact the anomaly insights that are generated. For example, if you create a one-off or repeating event for a specific date where sales spike, and you generate an analysis, anomalies in data for that date are not reported as anomaly insights. Instead, the insight includes the sales spike for that date. If you generate an analysis without events, an anomaly insight is reported for that date.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Videos

Your Goal	Watch This Video
Learn how to configure insights to automate data analysis. Administrators configure insights to define the insights that planners see on the Insights page. You select the type of analysis to perform, specify the slice definitions for analysis, configure the analysis, and then define the settings for the insights displayed on the Insights page. You can run the insight or schedule it to run on a regular basis.	Oracle Fusion Cloud EPM - Configuring Insights

Tutorials

Tutorials provide instructions with sequenced videos and documentation to help you learn a topic.

Your Goal	Learn How
Learn how to configure IPM Insights by selecting the type of analysis to perform, specifying the slice definitions for analysis, configuring the analysis, and then defining the settings for the insights displayed on the Insights dashboard. You can define insights for as many data intersections as you need. Planners see insights only for slices of data to which they have access.	Configuring Insights

Using Dynamic Calc Members in Insights

Using Dynamic Calc members allows you to view insights at the parent level or any level in the hierarchy.

You can generate insights for **Dynamic Calc** parent and leaf members.

- Rather than having to sort through too many leaf level-insights, you can focus your analysis on parent-level or any level insights.
- Generating insights at the parent level improves accuracy, especially when data is missing or not accurate in lower levels of the hierarchy.

Generating Insights for Dynamic Calc Members

To generate insights for **Dynamic Calc** members for Forecast Variance & Bias and Anomaly insights, simply include the **Dynamic Calc** members in the insight slice definition.

> **Note**
>
> - This feature is supported only for **Dynamic Calc** members; it is not supported for **Dynamic Calc and Store** members.
> - **Dynamic Calc** parent level values can't be stored or exported.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Videos

Your Goal	Watch This Video
Learn how you can generate dynamic parent-level or any level predictions and insights to provide more accurate data analysis when subcategory data may be missing or inconsistent. Generate predictions and insights at a higher, aggregated level – whether it's a parent, a department, or any level in your hierarchy, to improve planning and forecasting accuracy.	Generating Dynamic Predictions and Insights in Cloud EPM

> **Note**
>
> The prediction-related content in this video applies only to FreeForm and Planning.

Tutorials

Your Goal	Learn How
This tutorial shows you how to generate dynamic predictions and insights in Oracle Fusion Cloud Enterprise Performance Management.	Generating Dynamic Predictions and Insights in Cloud EPM

Configuring Additional Insight Settings

Use IPM Configurator advanced options to define the metrics and trigger criteria for insights.

On the IPM Configurator **Configure** page, click **Show Advanced Options**.

- For **Forecast Variance & Bias Insights**:
  - **Deviation Metric**
    - **Metric**: Select the metric to use for analysis for the variations between the historical actuals and the historical forecasts submitted by planners.
    - **Threshold**: Select the deviation percentage at which to trigger an insight. For example, if you specify 15 as the threshold, any time the deviation between historical actuals and the historical forecasts submitted by planners is 15% or greater, an insight is generated.
  - **Bias Metric**
    - **Error Tolerance Limit**: Specify a percentage for the error tolerance limit. For example, if you enter 5%, any difference of 5% or greater between historical forecasts and historical actuals is considered a significant variance.
    - **Bias Metric**: Specify the metric to use to measure forecast bias.
    - **Bias Threshold**: Select the deviation percentage at which to trigger an insight.
- For **Anomaly Insights**:
  - **Method**: Select the anomaly detection metric to use for analysis.
  - **Threshold**: Select the threshold at which to trigger an insight.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For details on the metrics used in IPM Insights, see IPM Insights Metrics.

Running and Scheduling Insights

After configuring insights, you can run them any time. You can also set up a job to run insights at a regular interval, for example, when you have a new set of actuals.

When you run an insight, IPM Insights analyzes the data at each available intersection and looks for patterns and anomalies.

To run insights:

1. From the Home page click **IPM** and then click **Configure**.
2. From the **Actions** menu next to the insight you want to run, click **Run**.
3. To review the insight jobs, from the Home page, click **Application**, then click **Jobs**, and then select the insight. You can see the job status and the associated subjobs for each type of insight.

For information about scheduling IPM Insights jobs, see Managing Jobs.

IPM Insights has its own job type, called **Insights**.

The **Insights** job indicates details about insight generation:

- How many insights were generated for each insight type.
- How many new insights were generated since the last job.
- How many insights were excluded because they were dismissed. (Any insights that have been dismissed are not regenerated.)

Insights are available on the Insights dashboard for two years, after which they are purged the next time you run an IPM Insights job.

Tutorials

Tutorials provide instructions with sequenced videos and documentation to help you learn a topic.

Your Goal	Learn How
Learn how to run and schedule Insights in Oracle Fusion Cloud EPM	Running and Scheduling Insights

Managing Insight Definitions and Generated Insights

You can edit, delete, or duplicate existing insight definitions. Administrators can delete insights that have been generated.

To edit, delete, or duplicate an insight definition:

1. From the Home page, click **IPM** and then click **Configure**.
2. From the **Actions** menu next to an insight, click **Edit**, **Duplicate**, or **Delete**.

Administrators can delete insights that have been generated. To delete an insight, on the Insights dashboard, from the **Actions** menu for the insight you want to delete, click **Delete Insight**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Managing Tags

You can collaborate with your colleagues more effectively and leverage the power of automated analysis with IPM Insights using tags.

You can add tags in the **Comments** box for an insight:

- Use # to tag insights with a custom label. For example, you can tag a set of insights for team review by adding #TeamReview.
- Use @ to tag a user or group.

> **Note**
>
> A tag is automatically added to **Comments** when you dismiss an insight, including the dismissal reason, for example **#lowpriority** or **#duplicateInsight**, along with the associated remark.

Then, filter your Insights dashboard to see tagged insights. For more details about adding tags, and filtering and searching on tags, see Collaborating with Insights Using Tags.

As an administrator, you can manage tags by adding more tags or deleting tags that are no longer needed.

To manage tags:

1. From the Home page, click **IPM** and then click **Tags**.
2. To add a new tag, click **Add Tag** and then enter a tag name.
3. To delete a tag, click the **Actions** menu next to a tag and then click **Delete**.

Videos

Your Goal	Watch This
Learn about tagging insights to help your team collaborate and practice management by exception by bringing attention to insights that require attention.	Collaborating on Insights with Tags in EPM Planning

Using IPM Insights to Inform Your Decision-Making

Related Topics

- Analyzing Insights
- Searching and Filtering the Insights Dashboard Display
- Collaborating with Insights Using Tags

Analyzing Insights

IPM Insights in Enterprise Profitability and Cost Management helps you accomplish a data-driven approach to forecasting using data science.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Use the Insights dashboard to review the insights your administrator configured for you. The dashboard includes all available insights based on your user security. Each row on the Insights dashboard represents an insight, which can help you find patterns to analyze. Insights are displayed in the order of magnitude of the deviations to help you prioritize the order in which to evaluate them. For example, if the deviation is higher, it's more important for you to evaluate it.

1. From the Home page, click **IPM** and then click **Insights**.
2. Review your insights on the dashboard.
   Each row on the Insights dashboard represents an insight; the columns represent attributes for each insight. Unread insights are flagged with an indicator: ●. Your insights are listed in order of magnitude.

   > **Note**
   >
   > - **Priority** categorizes insights into **High**, **Medium**, and **Low** priority, using magnitude thresholds defined by your administrator.
   > - **Impact** indicates the relative amount of deviation. You can focus your attention on the insights that have more extreme variations, or a higher magnitude.
   > - **Value** displays the absolute value of the deviation for this insight.

3. To see details about an insight, from the **Actions** menu for the insight, click **View Details**. You can also click the link in the **Details** column on the Insights dashboard.
   You see the Analyzer view that includes a description of the insight, along with a graph of the values.

   Hover over any graph point to see details about the value.

   You can see up to 18 periods on a time on the graph. Use the slider bar to see more periods, or to zoom in on a timeframe or set of values.
4. Review the graph to help evaluate the data, and take action:
   - For **Forecast Bias** insights, review where variances are greatest between historical forecasts and actuals. This can help you recognize any hidden bias in forecasts. You can review the data in graph and in table form.
   - For **Anomaly** insights, outlier values are marked with a star ★ to make them easy to spot.
5. From the Analyzer view for an insight, take an action:
   - To see details about an insight or to enter comments, click (Explainability).
     - The **Insights AI** tab uses Generative AI (GenAI) to automatically generate narrative summaries for a single insight or group of insights. For more information, see Summarizing Insights with Generative AI.
     - The **Explainability** tab shows details about the insight including metrics and methods used in the insight. This detail makes the insight data more prominent and more transparent.
     - Click **Comments** to enter your comments about the insight, for example to explain a variance to a colleague, and then click (Save Insights Comments).

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> To delete a comment, on the **Comments** tab, hover over a comment, and then click (Delete). To delete a comment from the Insights dashboard, click the Comments box, hover over a comment, and then click (Delete). You can delete comments you have entered. Administrators can delete comments entered by any user.

- Collaborate with your peers about Insights using tags (# or @) in comments. For more information, see Collaborating with Insights Using Tags.
- Click **Open As Adhoc** to open the insight for further ad hoc analysis.
  To open the ad hoc grid in Oracle Smart View for Office, click the **Actions** menu ( ) and then click **Open in Smart View**.
- To dismiss an insight, click **Dismiss**, and then select a reason for the dismissal. You can optionally enter a remark so you can provide details about the dismissal. (Remarks are required if you select **Other** as the reason for the dismissal.) The insight status changes to **Closed**. This status is reflected on the Insights dashboard for all users.

> **Tip**
>
> **Add Comments**, and **Open As Adhoc** are also available from **Actions** menu on the Insights dashboard.

6. Click **Cancel**, or close the tab for the insight to close Analyzer view and return to the Insights dashboard.
7. When you've evaluated or taken action on an insight, you can change the status: On the Insights dashboard, from the **Actions** menu next to the insight, click **Dismiss Insight**, and then select a reason for the dismissal. You can optionally enter a remark so you can provide details about the dismissal. (Remarks are required if you select **Other** as the reason for the dismissal.) The insight status changes to **Closed**. This status is reflected on the Insights dashboard for all users.

Insights are available on the Insights dashboard for six months, after which they are purged the next time an administrator runs an IPM Insights job.

> **Note**
>
> A tag is automatically added to **Comments** when you dismiss an insight, including the dismissal reason, for example **#lowpriority** or **#duplicateInsight**, along with the associated remark. You can filter insights by these tags. See Searching and Filtering the Insights Dashboard Display.

Tutorials

Tutorials provide instructions with sequenced videos and documentation to help you learn a topic.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Your Goal	Learn How
Learn how to use the Insights dashboard to review the insights your administrator configured for you. The dashboard includes all available insights based on your user security. Each row on the Insights dashboard represents an insight, which can help you find patterns to analyze. Insights are displayed in the order of magnitude of the deviations to help you prioritize the order in which to evaluate them. For example, if the deviation is higher, it's more important for you to evaluate it.	Analyzing Insights and Taking Action

Summarizing Insights with Generative AI

Insights provides the ability to use Generative AI (GenAI) to automatically generate narrative summaries for a single insight or group of insights in Enterprise Profitability and Cost Management .

Utilizing the power of Generative AI to generate insight summaries allows you to share more meaningful detailed information about insights with colleagues. The summaries also make it easier to share summarized information about a set of insights with colleagues.

Insight summaries can be used in these ways:

- **For a single insight**, to provide additional context beyond the brief rule-based description in the insight.
- **For multiple insights, based on a parent member**, to generate a summary that evaluates the parent member and all of its children. This summary can help you zero in on the root cause for the insight, and makes it easy to share an analysis of a set of insights with colleagues.

Summaries are available for all insight types.

> **Note**
>
> Administrators must enable this feature. If the feature is not enabled, you won't see the **Insights AI** tab or the **Summarize** menu item.

Reviewing Narrative Summaries for a Single Insight

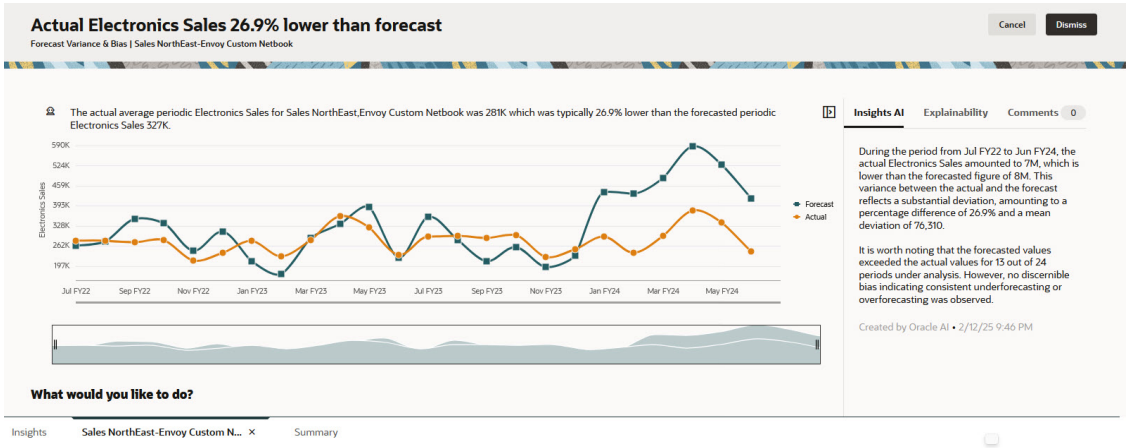
To see a narrative summary for a single insight:

1. From the Home page, click **IPM** and then click **Insights** to open the Insights dashboard.
2. Click the link in the **Details** column on the Insights dashboard. You see the Analyzer view that includes a description of the insight, along with a graph of the values.
3. To see a narrative summary of the insight, click (Explainability), and then click the **Insights AI** tab.

GenAI evaluates the existing analysis, metrics, methods, and rule-based summary, and using Large Language Models, generates a meaningful narrative description that describes the impact of the insight.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> This summary uses GenAI. Output from GenAI may not always be factual, accurate, or appropriate. You are responsible for reviewing and using GenAI output at your discretion.



Reviewing Narrative Summaries for a Set of Insights

To review a narrative summary of a set of insights based on a parent member:

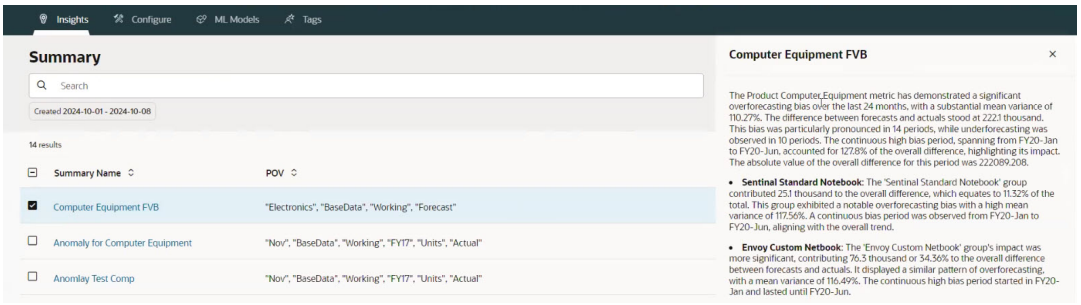
1. From the Home page, click **IPM** and then click **Insights** to open the Insights dashboard.
2. Select an insight or insights for a parent member, and then from the **Actions** menu, select **Summarize**. The parent members and POV are the starting point for the analysis.
   - If you select multiple insights and there are multiple accounts in the selection, **Account** is the anchor dimension, and the narrative summary is summarized by account. Note that the POV must be the same across all of the selected insights.
   - If you select multiple insights and the account member is the same but the members in other dimensions are different, then the narrative summary is summarized by the other dimension.
3. Enter a name for the summary.
4. Select the insight type.
   The analysis reviews and summarizes only a single insight type at a time. For example, you can't summarize both anomaly insights and forecast variance and bias insights.
5. Review the parent members and POV, which are based on your original insight selection, and if needed, use the Member Selector to select different members.
6. Click **Run**.
   GenAI evaluates all of the insights of the selected type for the parent members and their children for the specified POV and generates a meaningful summary description. For example, it can identify the child member or members that are contributing to the parent insight and describe the impact.

   The summary includes only members that the user has access to.
7. On the Insights dashboard, click the **Summary** tab, and then click the summary to review.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> This summary uses GenAI. Output from GenAI may not always be factual, accurate, or appropriate. You are responsible for reviewing and using GenAI output at your discretion.

In this example, the summary shows that the Forecast Variance and Bias insight is driven by two children of **Computer Equipment**—**Sentinel Standard Notebook** and **Envoy Custom Notebook** and describes their impact on the parent insight.



Videos

Your Goal	Watch This
Learn how you can utilize the power of Generative AI to generate Insight Summaries. You can use Insight Summaries in your reports and presentations to provide meaningful analysis of your financial performance.	Summarizing Insights with Generative AI in Cloud EPM

Searching and Filtering the Insights Dashboard Display

You can search and filter the Insights dashboard to focus your analysis.

To search for an insight, enter a search term in the **Search** box above the dashboard.

You can filter the Insights dashboard to show only the insights you want to evaluate.

1. Click a filter type. The default value for the filter is displayed but is not yet applied to the results on the page.
2. Enter parameters for the filter. The dashboard is updated with insights that meet the filter criteria.
   - **Created**: Enter start and end dates for insight creation.
   - **Type**: Select one or more insight types.
   - **Status**: Select from **Open** or **Closed**.
   - **Priority**: Select from **High**, **Medium**, or **Low**, based on thresholds defined by your administrator.
   - **Percentage of Impact**: Enter a range of percentage impact values.
   - **Absolute Impact**: Enter a range of absolute impact values.
3. Remove a filter by closing it (click the X) on the filter bar.

Copyright © 2022, 2026, Oracle and/or its affiliates.

You can also search and filter the insights display using tags. See Collaborating with Insights Using Tags.

> **Tip**
>
> To search for dismissed insights by dismissal reason, add filters for **Closed** Status and the dismissal reason, such as **#lowpriority** or **#duplicateInsight**.

Collaborating with Insights Using Tags

You can collaborate with your colleagues more effectively and leverage the power of automated analysis with IPM Insights using tags.

- Use # to tag insights with a custom label. For example, you can tag a set of insights for team review by adding #TeamReview.
- Use @ to tag a user or group.

Then, filter your Insights dashboard to see tagged insights.

You add tags in the Comments box for an insight.

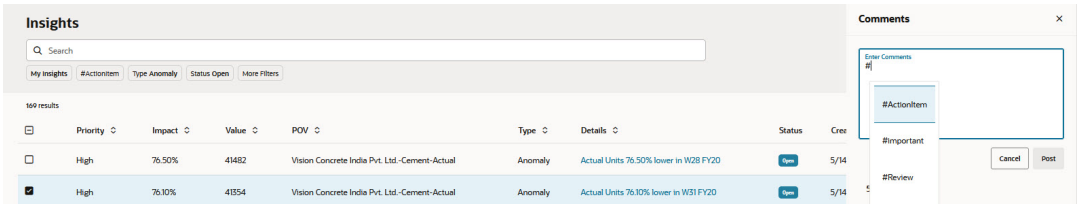
To add tags to an insight:

1. From the Home page, click **IPM** and then click **Insights**.
2. From the **Actions** menu for an insight, click **Add Comment**.
   Alternatively, from the **Actions** menu for an insight, click **View Details** and then from the Insights Details page, click the **Comments** icon.

   You can also click the link in the **Details** column on the Insights dashboard and then from the Insights Details page, click the **Comments** icon.
3. In the Comments box, add a tag # followed by your custom label. Or, to tag a user or group, add a tag @ followed by a user or group name.
   When you type #, a list of existing tags appears. You can select from the list or enter a new tag name.

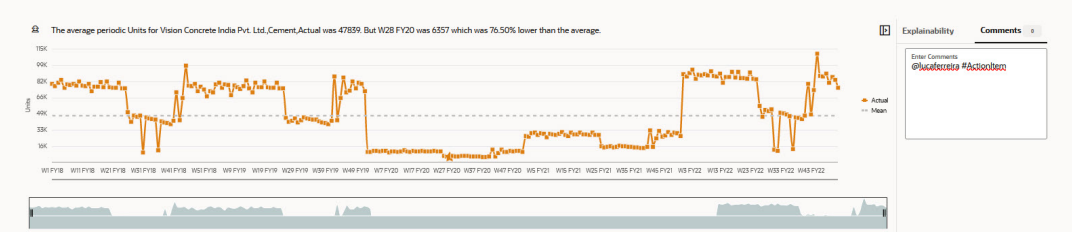
   When you type @, a list appears with the users and groups that have access to the members in the insight.

   Entering tags in the Comments box from the Insights dashboard:

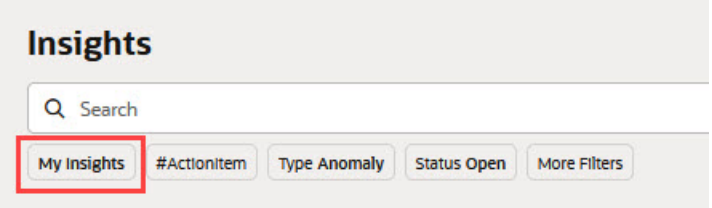


   Entering tags in the Comments box from the Insights Details page:

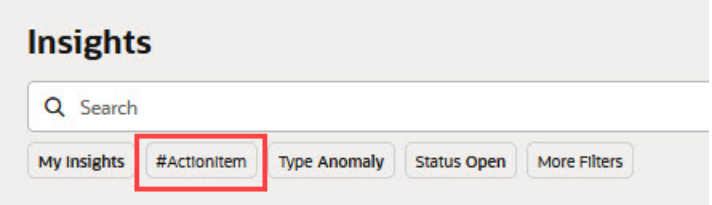
Copyright © 2022, 2026, Oracle and/or its affiliates.



To review insights tagged with your user name or group name, in the Insights dashboard, click **My Insights** in the Filter area.

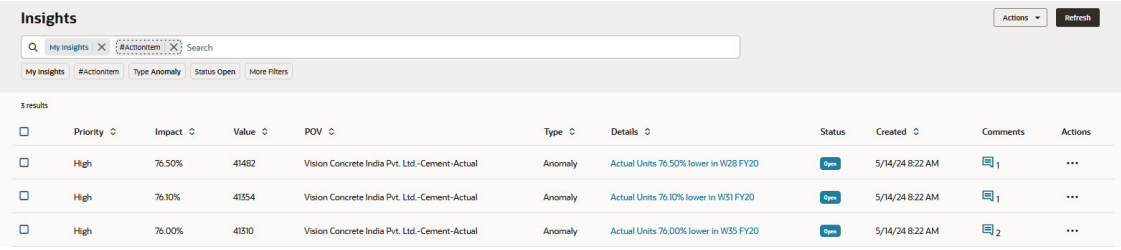


The most frequently-used tag is highlighted with a chip in the Filter area. Select it to see all insights associated with that tag.



To search for tagged insights, enter # or @ followed by the tag text in the Search box.

For example, the Insights dashboard is filtered to show **My Insights** and insights tagged with **#ActionItem**:



Notes about tags:

- Tags are case sensitive.
- Tags can appear anywhere in the Comments text.
- You can include any number of tags in the Comments.
- A tag is automatically added to **Comments** when you dismiss an insight, including the dismissal reason, for example **#lowpriority** or **#duplicateInsight**, along with the associated remark.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Videos

Your Goal	Watch This
Learn about tagging insights to help your team collaborate and practice management by exception by bringing attention to insights that require attention.	Collaborating on Insights with Tags in EPM Planning

IPM Insights Metrics

Related Topics

- IQR (Interquartile Range)
- MAD (Mean Absolute Deviation)
- MAPE (Mean Absolute Percentage Error)
  MAPE is the mean absolute percentage error, which is a relative measure that essentially scales MAD to be in percentage units instead of the variable's units.
- ME (Mean Error)
- Modified Z-Score
- MPE (Mean Percentage Error)
- RMSE (Root Mean Squared Error)
- RPD (Relative Percentage Difference)
- Standard Variance
- TOTD (Total Deviation)
- TOTPD (Total Percentage Difference)
- Z-Score
- Impact Magnitude Thresholds

IQR (Interquartile Range)

IQR is another robust method for labeling outliers. The IQR (interquartile range) method of outlier detection was developed by John Tukey, the pioneer of exploratory data analysis. This was in the days of calculation and plotting by hand, so the datasets involved were typically small, and the emphasis was on understanding the story the data told.

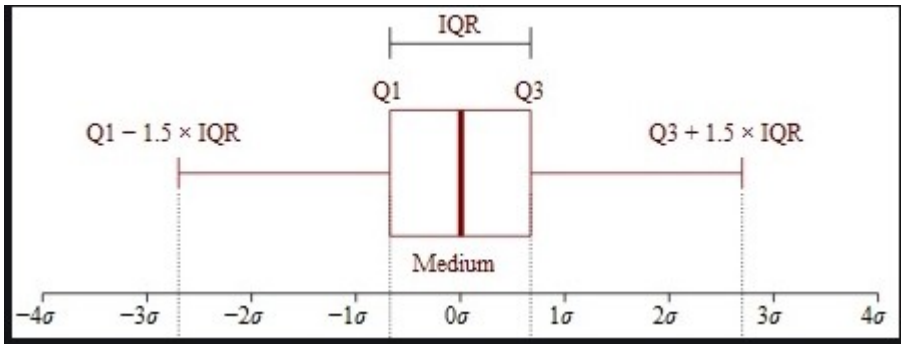
A box-and-whisker plot uses quartiles (points that divide the data into four groups of equal size) to plot the shape of the data. The box represents the 1st and 3rd quartiles, which are equal to the 25th and 75th percentiles. The line inside the box represents the 2nd quartile, which is the median.

The interquartile range, which gives this method of outlier detection its name, is the range between the first and the third quartiles (the edges of the box). Tukey considered any data point that fell outside of either 1.5 times the IQR below the first – or 1.5 times the IQR above the third – quartile to be outside or far out. In a classic box-and-whisker plot, the whiskers extend up to the last data point that is not outside.

The interquartile range (IQR) is a measure of variability, based on dividing a data set into quartiles. Quartiles divide a rank-ordered data set into four equal parts. Q1, Q2 & Q3. IQR is

Copyright © 2022, 2026, Oracle and/or its affiliates.

defined as Q3–Q1, and any data lying outside Q3+1.5*IQR or Q1-1.5*IQR is considered as an outlier.



MAD (Mean Absolute Deviation)

Description

Mean Absolute Deviation is a simple extension of the absolute variance. It sums up the absolute variances and divides the result by the number of records. Mean absolute deviation is an error statistic that averages the distance between each pair of actual and fitted data points.

Formula

$$MAD = \frac{\sum |x_i - \bar{x}|}{n}$$

Example

		A	F	A-F	% A-F		| A-F |
Month	**Year**	**Actual**	**Forecast**	**Diff**	**% Diff**		**Abs Diff**
April	2016	49458	44000	5458	11%		5458.3
May	2016	39905	46689	-6784	-17%		6784.3
June	2016	41088	50127	-9040	-22%		9039.8
July	2016	49708	52000	-2292	-5%		2292.1
August	2016	40103	48124	-8020	-20%		8020.5
September	2016	37886	44000	-6114	-16%		6113.7
						Mean Absolute Deviation (MAD)	6284.8

Copyright © 2022, 2026, Oracle and/or its affiliates.

MAPE (Mean Absolute Percentage Error)

MAPE is the mean absolute percentage error, which is a relative measure that essentially scales MAD to be in percentage units instead of the variable's units.

Description

Mean absolute percentage error is a relative error measure that uses absolute values to keep the positive and negative errors from canceling one another out and uses relative errors to enable you to compare forecast accuracy between time-series models.

Formula

$$M = \frac{1}{n}\sum_{t=1}^{n}\left|\frac{A_t - F_t}{A_t}\right|$$

MAPE = Average of (abs ((Actual – Forecast)/(Actual)))

Example

		A	F	A-F	% A-F	| A-F |	A-F ^2	| (A-F)/A |
Month	**Year**	**Actual**	**Forecast**	**Diff**	**% Diff**	**Abs Diff**	**Sq of Diff**	**Abs of Error by Actual**
April	2016	49458	44000	5458	11%	5458.3	29792888.7	0.1104
May	2016	39905	46689	-6784	-17%	6784.3	46026936.2	0.1700
June	2016	41088	50127	-9040	-22%	9039.8	81718244.7	0.2200
July	2016	49708	52000	-2292	-5%	2292.1	5253888.9	0.0461
August	2016	40103	48124	-8020	-20%	8020.5	64328075.2	0.2000
September	2016	37886	44000	-6114	-16%	6113.7	37376907.1	0.1614
						MAPE		15.1%

ME (Mean Error)

Description

Mean Error (ME) sums up the variances and divides the result by n. An error in this context is an uncertainty in a measurement, or the difference between the measured value and true/ correct value.

Formula

Mean Error = Sum of all error values/Number of records

Example

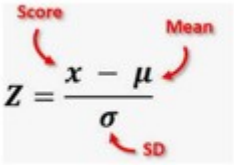
Copyright © 2022, 2026, Oracle and/or its affiliates.

		A	F	A-F
Month	**Year**	**Actual**	**Forecast**	**Diff**
April	2016	49458	44000	5458
May	2016	39905	46689	-6784
June	2016	41088	50127	-9040
July	2016	49708	52000	-2292
August	2016	40103	48124	-8020
September	2016	37886	44000	-6114
			Mean Error	-4465

Modified Z-Score

The Z-score method relies on the mean and standard deviation of a group of data to measure central tendency and dispersion. This is troublesome, because the mean and standard deviation are highly affected by outliers – they are not robust. In fact, the skewing that outliers bring is one of the biggest reasons for finding and removing outliers from a dataset! Another drawback of the Z-score method is that it behaves strangely in small datasets – in fact, the Z-score method will never detect an outlier if the dataset has fewer than 12 items in it.

This motivated the development of a modified Z-score method, which does not suffer from the same limitation. This method works well for skewed data or data that is not normally distributed & where the number of observations is less. MAD is Median Absolute Deviation. A further benefit of the modified Z-score method is that it uses the median and MAD rather than the mean and standard deviation. The median and MAD are robust measures of central tendency and dispersion, respectively.



$$M_i = \frac{0.6745(x_i - \tilde{x}_i)}{MAD}$$

MPE (Mean Percentage Error)

Description

MPE is the mean percentage error (or deviation). It is a relative measure that essentially scales ME to be in percentage units instead of the variable's units. The main advantage of MPE is that it lets you compare variances between differently scaled data.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Formula

$$\mathrm{MPE} = \frac{100\%}{n} \sum_{t=1}^{n} \frac{a_t - f_t}{a_t}$$

where at is the actual value of the quantity being forecast, ft is the forecast, and n is the number of different times for which the variable is forecast.

Example

		A	F	A-F	% A-F
Month	**Year**	**Actual**	**Forecast**	**Diff**	**% Diff**
April	2016	49458	44000	5458	11%
May	2016	39905	46689	-6784	-17%
June	2016	41088	50127	-9040	-22%
July	2016	49708	52000	-2292	-5%
August	2016	40103	48124	-8020	-20%
September	2016	37886	44000	-6114	-16%
				MPE	**-11.5%**

RMSE (Root Mean Squared Error)

Description

Root Mean Square Error (RMSE) is the standard deviation of the residuals (prediction errors). Residuals are a measure of how far from the regression line data points are; RMSE is a measure of how spread out these residuals are. In other words, it tells you how concentrated the data is around the line of best fit.

Formula

Copyright © 2022, 2026, Oracle and/or its affiliates.

$$RMSE = \sqrt{\sum_{i=1}^{n} \frac{(\hat{y}_i - y_i)^2}{n}}$$

$\hat{y}_1, \hat{y}_2, \ldots, \hat{y}_n$ are predicted values

$y_1, y_2, \ldots, y_n$ are observed values

n is the number of observations

Where f = forecasts (expected values or unknown results) and o = observed values (known results).

Example

Month	Year	Actual	Forecast	Abs Diff	Sq of Diff
April	2016	49458	44000	5458	29789764
May	2016	39905	46689	6784	46022656
June	2016	41088	50127	9039	81703521
July	2016	49708	52000	2292	5253264
August	2016	40103	48124	8021	64336441
September	2016	37886	44000	6114	37380996
				Sum of Sq of Diff	264486642
				RMSE (SQRT(Sum of Sq of Diff)/No of rows))	**6639.360436**

RPD (Relative Percentage Difference)

Description

The relative percentage difference between two points is calculated by first finding the relative difference between two quantities across different measurements or samples. Subtract one measurement from the other and take the absolute value of this difference.

Formula

Copyright © 2022, 2026, Oracle and/or its affiliates.

$$RPD = \frac{|R1 - R2|}{\left(\frac{R1 + R2}{2}\right)} \times 100,$$

where

R1 is sample 1, and
R2 is sample 2.

Example

		A	F	(A+F)/2	(A-F)/AVG	
Month	**Year**	**Actual**	**Forecast**	**Average**	**RPD**	**% RPD**
April	2016	49458	44000	46729	0.11681	12%
May	2016	39905	46689	43297	-0.1567	-16%
June	2016	41088	50127	45607	-0.1982	-20%
July	2016	49708	52000	50854	-0.0451	-5%
August	2016	40103	48124	44113	-0.1818	-18%
September	2016	37886	44000	40943	-0.1493	-15%

Standard Variance

Description

Standard Variance measures how significantly a metric deviates from its configured threshold, offering a normalized measure of variation. It helps you assess the severity of deviations across different insights by standardizing the impact relative to the threshold. A higher value indicates a greater deviation.

Formula

% Standard Variance = ABS((Insight Metric – Threshold)/ (Insight Metric + Threshold))

Where,

- Insight Metric is the numerical value used to measure deviation for a given insight.
- Threshold is the reference value against which the insight metric is evaluated.

The definition of Insight Metric and Threshold varies based on the insight type.

For example, in Anomaly Insights, the metric is the Anomaly Value and the threshold is the Historical Mean.

Example

For a given Forecast Variance & Bias Insight, if MAPE = 10% and Threshold = 8%, then:

Standard Variance = ABS ((10-8) / (10+8)) = ABS (2/18) = 0.11 or 11%

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> In the Insights list, **Impact** is equal to Standard Variance.

TOTD (Total Deviation)

Description

It is the total deviation across all the time periods. It is the sum of the first series minus the sum of the second series.

Formula

Difference = A - F

Where F = forecasts (expected values or unknown results) and A = observed values (known results).

Example

Month	Year	Actual	Forecast	Diff
Jan	FY19	174,957	216,947	-41990
Feb	FY19	141,884	153,234	-11351
Mar	FY19	147,111	126,515	20596
Apr	FY19	97,549	89,745	7804
May	FY19	123,094	91,090	32004
Jun	FY19	137,830	124,047	13783
		Total Deviation		**20846**

TOTPD (Total Percentage Difference)

Description

It is the total deviation across all the time periods. It is the total percentage difference between the first series minus the second series.

Formula

% Difference = (SUM(A) – SUM(F))/SUM(A)

Where F = forecasts (expected values or unknown results) and A = observed values (known results).

Example

Copyright © 2022, 2026, Oracle and/or its affiliates.

--

Month	Year	Actual	Forecast	Diff
Jan	FY19	174,957	216,947	-41990
Feb	FY19	141,884	153,234	-11351
Mar	FY19	147,111	126,515	20596
Apr	FY19	97,549	89,745	7804
May	FY19	123,094	91,090	32004
Jun	FY19	137,830	124,047	13783
		822,425	**801,579**	**2.6%**

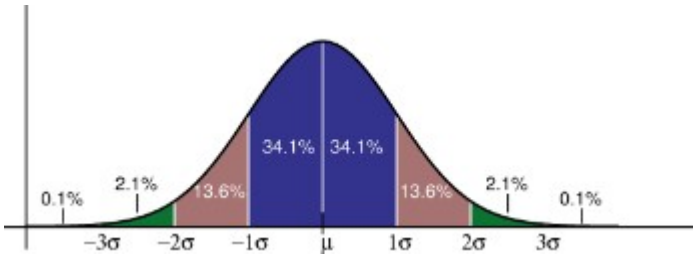
Z-Score

Description

The Z-score, or standard score, is a way of describing a data point in terms of its relationship to the mean and standard deviation of a group of points. Taking a Z-score is simply mapping the data onto a distribution whose mean is defined as 0 and whose standard deviation is defined as 1.

The goal of taking Z-scores is to remove the effects of the location and scale of the data, allowing different datasets to be compared directly. The intuition behind the Z-score method of outlier detection is that, once we have centered and rescaled the data, anything that is too far from zero (the threshold is usually a Z-score of 3 or -3) should be considered an outlier.

Assuming data is distributed normally (bell shaped curve), Mean + 3*SD (Standard Deviation) will capture 99.7% of the observations. Statistically, any value, which is falling outside this range, is considered as an anomaly.



Impact Magnitude Thresholds

Description

When insights are displayed on the Insights dashboard, the **Impact Magnitude Thresholds** setting categorizes insights into High, Medium, and Low groups based on the percentage or absolute value impact calculated for each insight. This helps planners focus attention on the insights that have more extreme variations.

- Anything less than the low value is in the Low category.
- Anything higher than the high value is in the High category.
- Anything between the low and high value is in the Medium category.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example, if you specify 30% as the Low threshold and 60% as the High threshold, any insight with a percentage impact less than 30% is in the Low category; any insight with a percentage impact greater than 60% is in the High category. Any insight with a percentage impact between 30% and 60% is in the Medium category.

Copyright © 2022, 2026, Oracle and/or its affiliates.

20

Using Ad Hoc for Data Entry and Analysis

Using ad hoc grids, you can quickly drill into data slices that are important to you.

Examples of how ad hoc grids can help you focus your attention:

- Change drivers for a set of products that you work with due to changes in actuals.
- Quickly review profit margins in your regions.
- Change the set of accounts in an ad hoc grid that someone else set up.
- Drill into a variance number to understand the source of the variance.
- Analyze a specific Allocation or Custom rule's data elements while working with the rule in the Rule Designer
- Analyze a specific rule's results in Rule Balancing reports
- Use an ad hoc grid in Oracle Smart View for Office that you set up in your business process. To learn more, see *Oracle Smart View for Office User's Guide*.

Videos

Your Goal	Watch This Video
Learn how to perform EPM grid operations such as entering line item details, comments, attachments, sorting and filtering grid members, adjusting grid data, and using shortcut keys. You can use EPM grids, or ad hoc grids, to personalize focused data slices that you frequently use for analysis.	Performing New EPM Grid Operations
Learn how to perform ad hoc operations such as selecting members, moving dimensions, and saving grid data and definition. You can use ad hoc grids to personalize focused data slices that you frequently use for analysis.	Designing Ad hoc Grids in Cloud EPM Platform
Learn how to create ad hoc grids using forms, cubes, and dashboards.	Creating Ad Hoc Grids in Cloud EPM Platform

Get Started Performing Ad Hoc

In ad hoc grids, you can enter data and then analyze and change data in many ways by slicing and dicing the data from various angles.

Table 20-1 Actions You Can Take with Ad Hoc Grids

Your Goal	Learn More
Get started with ad hoc	See Creating an Ad Hoc Grid.
Design the grid for ad hoc	See Designing Ad Hoc Grids.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 20-1 (Cont.) Actions You Can Take with Ad Hoc Grids

Your Goal	Learn More
Look at the data from various angles (slice and dice)	Use **Pivot** to refine your analysis by moving dimensions to the POV, column, or row. See Pivoting Dimensions.
Quickly move around an ad hoc grid and enter data using shortcut keys	See Ad Hoc Grid Keyboard Shortcuts and Quick Data Entry Commands.
Further focus the data	• Use **Keep Selected** and **Remove Selected** to customize your grid. • Use **Zoom In** to view the next level of detail in a dimension or **Zoom Out** to a summary level.
Work with different data	Select different members using the versatile **Member Selector**. For example, you can select members based on their attributes, children, level, or branch. See Opening the Member Selector in Ad Hoc Grids.
View source details associated with the underlying data	Drill through to Data Integration. See Using Drilling Through to Source in *Administering Data Integration*.
Change a value by a specific amount	Use **Adjust**. See Adjusting Values.
View context menus that were enabled for ad hoc	Use ad hoc menus. See Using Ad Hoc Action Menus.
Build logic into a data value	Use **Line Item Details**. See About Using Line Item Details.
Explain assumptions behind data	Add a comment or attach an external file. See Adding Comments and Attachments.
Control the display and behavior of ad hoc grids	Click (Property Panel), then (Adhoc) tab to manage the display and behavior of ad hoc grids. See Setting Properties for Ad Hoc Grids.
Perform free form ad hoc	Type member names into a blank grid and retrieve values. See Using Free-Form Ad Hoc.
Run business rules after performing ad hoc data changes	Click **Rules** to search for and launch business rules. See Applying Rules to Ad Hoc Grids.
Switch to Oracle Smart View for Office	Click **Actions**, and then **Open in Smart View**. See Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide 23.100*.

Creating an Ad Hoc Grid

You can create an ad hoc grid to slice and dice data in several ways.

> **Note**
>
> To be able to create an ad hoc grid, your administrator must give you the role Ad Hoc - Create. If you don't have this role, you can work only with existing ad hoc grids.

You can create ad hoc grids from stand-alone forms or from forms within dashboards. Ad hoc opened from a dashboard or a form opens in a dynamic tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To create an ad hoc grid from scratch:

1. On the Home page, click **Data**.
2. On the **Data** page, click ••• (More Actions) at the top of the page, then **Create Ad Hoc**, and then in **Select Cube**, select a cube for the grid.

   By default, Account and Entity are on the row, and Years and Period are on the column. The other dimensions are on the POV (Point of View) above the grid. Select the members you want to work with in the ad hoc grid. See Opening the Member Selector in Ad Hoc Grids.

   > **Note**
   >
   > If its cube is aggregate storage and has no Year dimension, then only the Period dimension is on the column.

3. Alternatively, you can perform ad hoc analysis on existing forms with these options:
   - To create an ad hoc grid from a stand-alone form, open the form, click **Actions**, and then **Analyze**. Ad hoc functionality is now available, and your initial grid is based on the form's layout.
   - For forms in Dashboard 1.0 dashboards, maximize the dashboard form so that it fills the workspace, click **Actions**, and then **Analyze**, or you can right-click the cell you want to analyze, and then select **Analyze on Cell**.
   - For forms in Dashboard 2.0 dashboards, right-click the cell you want to analyze, and then select **Analyze on Cell**.
   - For charts built on forms in Dashboard 2.0 dashboards, right-click a chart element such as a bar in a Bar chart, and then select **Analyze** to view the chart intersection in ad hoc.

     To understand the analyze behavior by chart type, see Drilling into Ad Hoc from a Dashboard 2.0 Chart.
4. Save the ad hoc grid by selecting **Save Grid Definition**. See Submitting Ad Hoc Data and Saving the Grid Definition.

   You can now use ad hoc functionality to focus and analyze data. See Get Started Performing Ad Hoc.

   > **Tip**
   >
   > To see high-level information about the grid, click **Property Panel**
   >
   >
   >
   > (Property Panel). On the **General** tab, you can set how to display member names and select an alias table. See Setting Properties for Ad Hoc Grids.

Submitting Ad Hoc Data and Saving the Grid Definition

You can update data in the cube by submitting changed data from ad hoc grids.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Formatting isn't supported in Web ad hoc and formatting within saved ad hoc grids from Oracle Smart View for Office native mode may not be persisted if opened in Web ad hoc.

Submit data options include:

- **Submit Data Only**: Submits the data for the cells you've explicitly modified (made dirty) but not the grid design.
- **Submit Data Without Refresh**: Submits all data cells that you have explicitly modified (made dirty) and those that were not modified. All data cells are marked dirty and submitted. After the submit operation is completed, the entire grid will be refreshed.
- **Submit Data Range**: Submits only the cell data from selected cells. If there are dirty cells on the grid outside the range of the selected cells, the modified values aren't submitted and those cells will revert back to the value that was last stored.

To save the ad hoc grid, click **Save Grid Definition**.

Performing Calculations Without Having to Submit Your Changes (Calc on the Fly)

Use calc on the fly to change data values and see calculated changes instantly without submitting the updated values.

When working with Forms 2.0, or during ad hoc analysis, you can perform calc on the fly without having to submit changes to the database and refresh. This capability saves you time and enables you to do multiple changes to the grid at once.

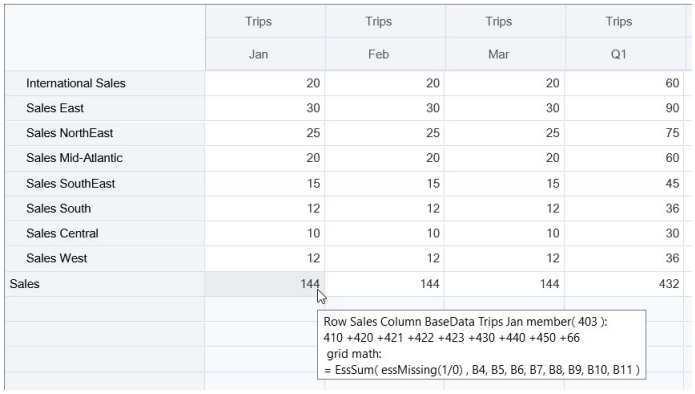
For Forms 2.0, this option is available if your administrator enabled this feature for the form. When this feature is enabled, in a 2.0 version of a form, when you hover over a cell with a member formula attached, you see the member formula associated with the cell and you can perform calc on the fly.

For ad hoc analysis, your administrator might have enabled this feature for you. Or, you can set a display preference for calc on the fly by selecting **Yes** for **Enable User Formulas in Ad Hoc** on the **Display** tab in **User Preferences**. When this setting is enabled, in an ad hoc grid, when you hover over a cell with a member formula attached, you see the member formula associated with the cell and you can perform calc on the fly.

To perform calc on the fly:

1. Open a 2.0 version of a form or an ad hoc grid, and hover over cells to see members with formulas attached, for both member formulas and consolidation operators.
   In this example, you can see the formula for **Sales** for **Jan**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



	Trips Jan	Trips Feb	Trips Mar	Trips Q1
International Sales	20	20	20	60
Sales East	30	30	30	90
Sales NorthEast	25	25	25	75
Sales Mid-Atlantic	20	20	20	60
Sales SouthEast	15	15	15	45
Sales South	12	12	12	36
Sales Central	10	10	10	30
Sales West	12	12	12	36
Sales	144	144	144	432

There must be enter-able cells (level zero members) in the form or ad hoc grid in order for formulas to appear.

2. Perform calculations as needed, and then move the cursor from the cell:
   - Modify values that contribute to a calculated cell. The calculated cell value is updated.
   - Modify a calculated value. The cells that are on the form or ad hoc grid that contribute to the calculated cell are updated.
     For formula spreading to work correctly, all source cells for the calculated value must be visible on the form or ad hoc grid.

   A color change indicates a modified cell. Cells refresh immediately to display the newly calculated values, without submitting the changes to the database.

> **Note**
>
> Cell formatting (including color changes) using data validation and format-only rules based on data values will not be applied to cells calculated on the client for forms, even when **Enable Calc On the Fly** is selected.

In this example of modifying values that contribute to a calculated cell, modify the value of **Sales West** for **Jan**:

	Trips Jan	Trips Feb	Trips Mar	Trips Q1
International Sales	20	20	20	60
Sales East	30	30	30	90
Sales NorthEast	25	25	25	75
Sales Mid-Atlantic	20	20	20	60
Sales SouthEast	15	15	15	45
Sales South	12	12	12	36
Sales Central	10	10	10	30
Sales West	15	12	12	36
Sales	144	144	144	432

When you press Tab, calc on the fly calculates updated values for **Sales** for **Jan**, **Q1** for **Sales West**, and **Q1** for **Sales**. Note the color change for the newly calculated values.

Copyright © 2022, 2026, Oracle and/or its affiliates.

	Trips	Trips	Trips	Trips
	Jan	Feb	Mar	Q1
International Sales	20	20	20	60
Sales East	30	30	30	90
Sales NorthEast	25	25	25	75
Sales Mid-Atlantic	20	20	20	60
Sales SouthEast	15	15	15	45
Sales South	12	12	12	36
Sales Central	10	10	10	30
Sales West	15	12	12	39
Sales	147	144	144	435

In this example of modifying a calculated value, modify the calculated value **Sales** for **Feb**:

	Trips	Trips	Trips	Trips
	Jan	Feb	Mar	Q1
International Sales	20	20	20	60
Sales East	30	30	30	90
Sales NorthEast	25	25	25	75
Sales Mid-Atlantic	20	20	20	60
Sales SouthEast	15	15	15	45
Sales South	12	12	12	36
Sales Central	10	10	10	30
Sales West	12	12	12	36
Sales	144	288	144	432

When you press Tab, the values that contribute to the calculated cell are updated. Note the color change for the newly calculated values.

	Trips	Trips	Trips	Trips
	Jan	Feb	Mar	Q1
International Sales	20	40	20	80
Sales East	30	60	30	120
Sales NorthEast	25	50	25	100
Sales Mid-Atlantic	20	40	20	80
Sales SouthEast	15	30	15	60
Sales South	12	24	12	48
Sales Central	10	20	10	40
Sales West	12	24	12	48
Sales	144	288	144	576

3. When you've completed all of your modifications and are satisfied with the calculations, you can submit the modified values to the server, or you can discard your changes without submitting them.

You can also perform calc on the fly in Oracle Smart View for Office in 2.0 versions of forms or in ad hoc grids. See Performing Calculations Without Having to Submit Your Changes in *Working with Oracle Smart View for Office*.

Review the supported formula functions and operators. See Supported Functions and Operators for Calc on the Fly in *Working with Oracle Smart View for Office*.

Not all formula functions support calc on the fly. See Unsupported Functions and Formulas for Calc on the Fly in *Working with Oracle Smart View for Office*.

For additional considerations when performing calc on the fly, see Guidelines and Considerations in *Working with Oracle Smart View for Office*.

Tutorials

Tutorials provide instructions with sequenced videos and documentation to help you learn a topic.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Your Goal	Learn How
In this tutorial, you learn how to perform calc on the fly during ad hoc analysis using member formulas. You can work with calc on the fly either in the web or with Smart View.	Performing Calc on the Fly in Cloud EPM

Accessing an Ad Hoc Grid

Open an ad hoc grid to personalize your view of and analyze data in a form.

You can access ad hoc from a stand-alone form, from a form within a dashboard, or from a chart built on a form within a Dashboard 2.0 dashboard. Ad hoc opened from a dashboard or a form opens in a dynamic tab.

Accessing a Saved Ad Hoc Grid

To access a saved ad hoc grid:

1. On the Home page, click **Data**.

   Ad hoc grids on the **Data Entry** listing page display the ad hoc grid icon .
2. Click the name of the ad hoc grid.

Performing Ad Hoc on a Stand-Alone Form

To perform ad hoc on a stand-alone form, open the form, click **Actions**, and then click **Analyze**.

Performing Ad Hoc on a Dashboard Form

To perform ad hoc on a form within a dashboard:

- For forms in Dashboard 1.0 dashboards, maximize the dashboard form so that it fills the workspace, click **Actions**, and then click **Analyze**, or you can right-click the cell you want to analyze, and then select **Analyze on Cell** to open ad hoc in a dynamic tab.
- For forms in Dashboard 2.0 dashboards, right-click the cell you want to analyze, and then select **Analyze on Cell** to open ad hoc in a dynamic tab.

Performing Ad Hoc on a Dashboard 2.0 Chart Element

To perform ad hoc on a chart element within a Dashboard 2.0 dashboard:

1. Open a Dashboard 2.0 dashboard.
2. Right-click a chart element; for example, right-click on a bar within a Bar chart.
3. Click **Analyze** to open ad hoc in a dynamic tab. **Analyze** launches that chart intersection in ad hoc.

   To understand the analyze behavior by chart type, see Drilling into Ad Hoc from a Dashboard 2.0 Chart.

Designing Ad Hoc Grids

Customize your ad hoc grids so that you can quickly access the relevant data.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Easy-to-use features enable you to design and refine your focused data slices.

Table 20-2 Customize You Ad Hoc Grid with These Features

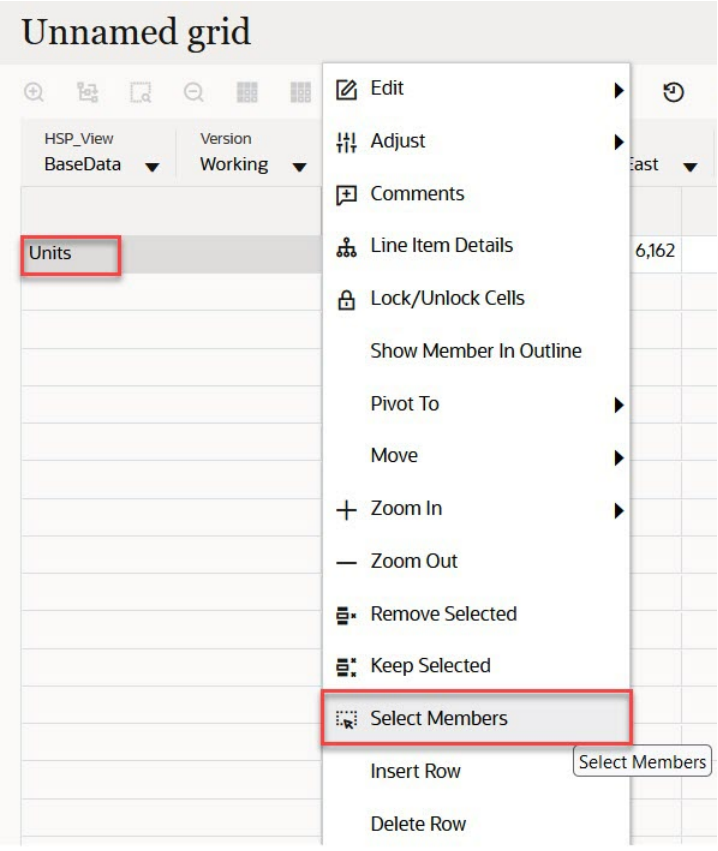
Your Goal	See this Topic
Refining the data to work with	Opening the Member Selector in Ad Hoc Grids
Moving dimensions from one axis to another	Pivoting Dimensions
Setting options such as how member hierarchy levels are indented	Setting Properties for Ad Hoc Grids
Defining logic to calculate cell data	About Using Line Item Details

Opening the Member Selector in Ad Hoc Grids

As you analyze data, you may want to manipulate the data you're working with. Selecting members for the POV, rows, and columns enables you to quickly set up and change the data you're analyzing. To select members in ad hoc grids, use the member selector.

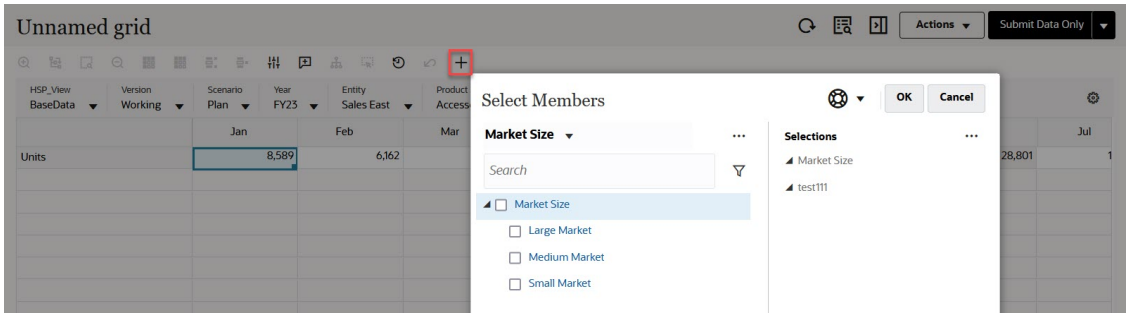
The member selector enables you to set the user variables, substitution variables, and attributes in the ad hoc grid definition. To open the member selector from an ad hoc grid:

Right-click a member, and then select **Select Members**.



If attributes are available, click **Insert Attributes** icon on the toolbar.

Copyright © 2022, 2026, Oracle and/or its affiliates.



You can also click (POV Settings) and then select **Member Selector**.

For more information about using the member selector, see Using the Member Selector.

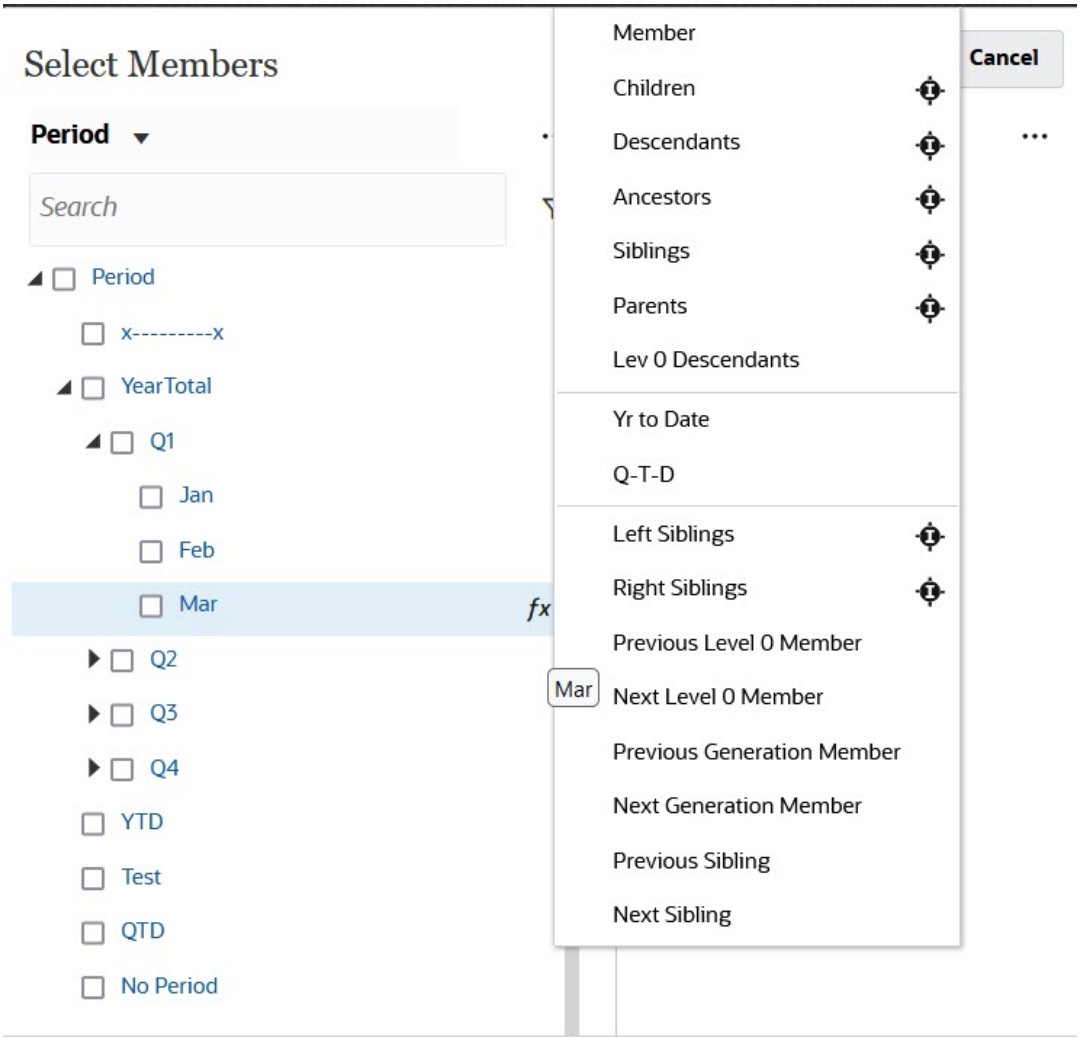
Selecting Period-to-Date Members

If the administrator set up Dynamic Time Series members for the Period dimension, you can select members that show period-to-date data. For example, to show data for year-to-date expenses, you could select a Dynamic Time Series member that includes data for January through August.

To select a Dynamic Time Series member:

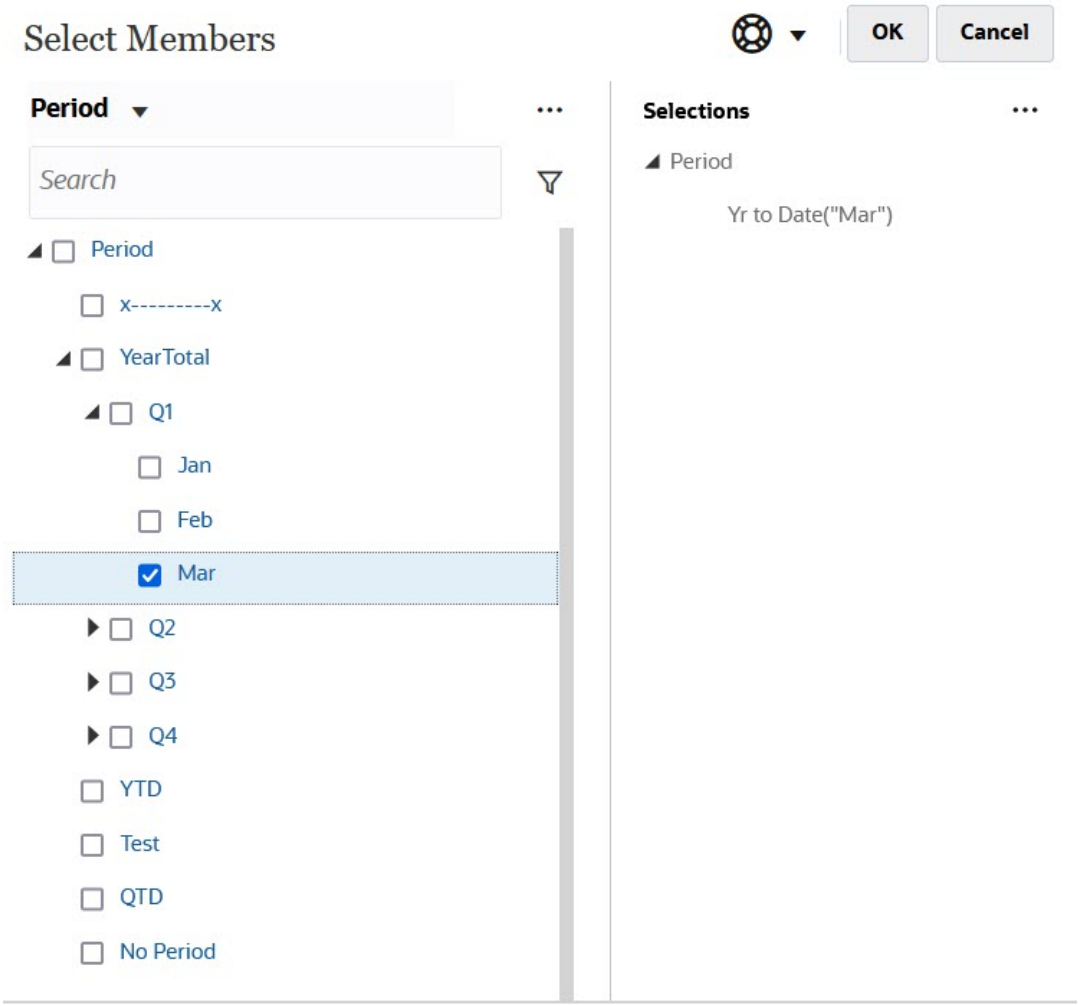
1. Right-click the Period dimension on the ad hoc grid, and select **Member Selector**.
2. Click
   f_x
   (Function Selector) next to a member to display available time series members; for example, Q-T-D.

Copyright © 2022, 2026, Oracle and/or its affiliates.



3. Select a time series member from the list. In this example, with **March** selected, if you select **Yr to Date**, then **Yr to Date("Mar")** is added to the **Selections** pane.

Copyright © 2022, 2026, Oracle and/or its affiliates.



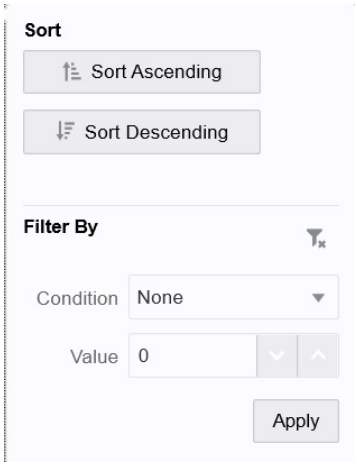
4. Click **OK**.

For more information about the member selector, see Using the Member Selector.

Filtering Column Members

Robust filter options enable you to control the display of column members in the ad hoc grid. Hover over the column name, click the funnel to the right of the column name, and then select an action.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Sort options enable you to sort by ascending or descending order and ignore the member hierarchy. **Filter By** options enable you to filter by **Condition** (such as Greater Than or Less Than) or by a **Value**. To remove sort and filter options, click

(Remove Filter).

Pivoting Dimensions

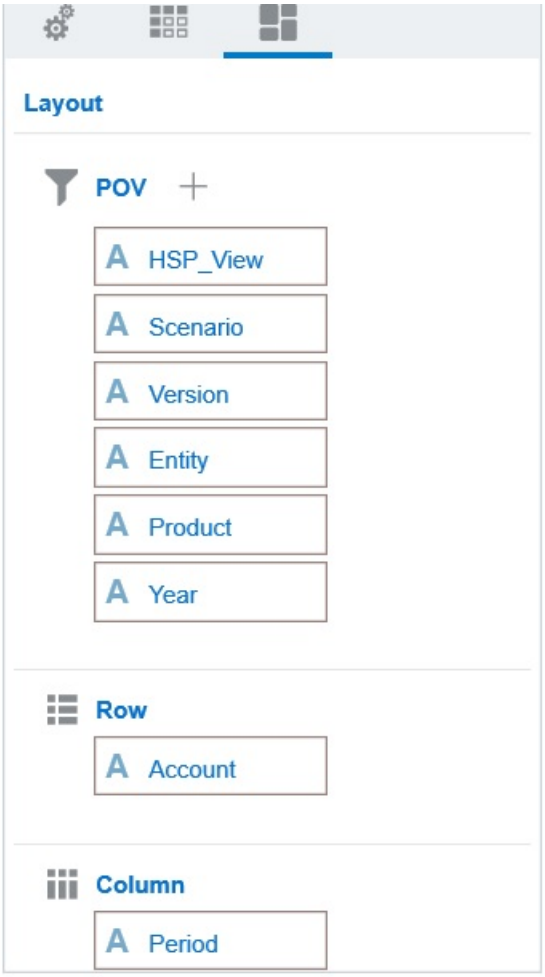
Pivoting a dimension changes the orientation of data on the grid so you can view data from another angle, or slice and dice information.

You pivot a dimension by dragging it from one axis to another.

For example, you can:

- Drag a dimension from a row to a column or from a column to a row.
- Drag a dimension between the POV and a row or column.
- Reorder members by dragging them on the same axis.
- Drag dimensions to and from the **Layout** tab on the **Property Panel**:

Copyright © 2022, 2026, Oracle and/or its affiliates.



A single dimension must exist on the row and column axis. You can't pivot the last remaining dimension in a row or column.

About Shared Members

A shared member shares storage space with another member of the same name, preventing duplicate calculation of members that occur multiple times in a cube. Shared members are available for Entity, Account, and user-defined custom dimensions.

Sharing members allow alternate rollup structures within an application. A base member must exist before an administrator can create a shared member. Administrators can create multiple shared members for the base member. A base member must display before its shared members in position from top to bottom.

You can drill on shared members in an ad hoc grid, but an administrator must first enable a system setting called **Allow drill down on shared members in ad hoc**.

Shared members are displayed similarly to base members in the dimension hierarchy for member selection in Oracle Smart View for Office.

Zooming in on Shared Members

Shared members are supported in ad hoc grids and the system recognizes whether a member is a base member or a shared member. If your administrator enables the application setting, **Allow drill down on shared members in ad hoc**, then zooming in on shared members is

Copyright © 2022, 2026, Oracle and/or its affiliates.

supported. In this case, zooming in on shared members is effectively the same as zooming in on the corresponding base members. You can zoom in on shared members one level at time.

If your administrator enables the application setting, **Drill to All Levels in Base**, you can zoom in beyond just the shared members into all levels or only the bottoms levels within the base hierarchy using the Zoom In options, **All Levels** and **Bottom Level**.

Example Shared Member Zoom In

This example describes the results you will see when **Allow drill down on shared members in ad hoc** is set to **Yes** and **Drill to All Levels in Base** is enabled.

Figure 1 shows three hierarchies under the Entity dimension. In the `entity_10` hierarchy, all members descend from `entity_10`. In the `entity_12` hierarchy, all members descend from `entity_12`. In the `entity_14` hierarchy, there are descendent members of `entity_14` as well as the shared members, `entity_10` and `entity_12`. The shared members include their descendents.

Figure 20-1 Entity Dimension Showing Its Hierarchies

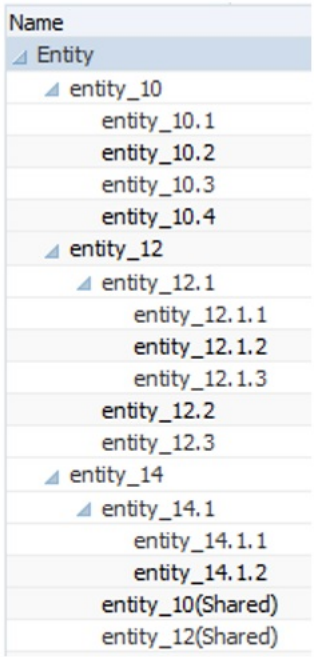


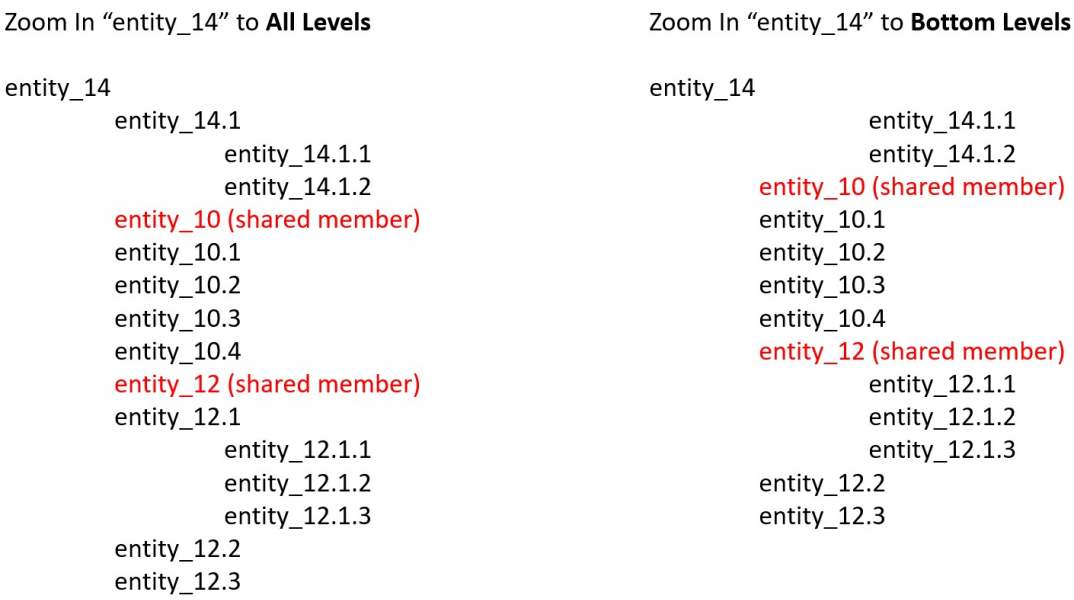
Figure 2 shows the difference between zooming in on `entity_14`:

- Using the Zoom In to All Levels command
- Using the Zoom In to Bottom Levels command

In both cases, in Oracle Smart View for Office, **Member Options**, **Ancestor Position** is set to **Top**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 20-2 Results of Zooming in on entity_14, with Ancestor Position=Top



> **Note**
>
> In a Native mode application, you can achieve the results shown in the Zoom In to All Levels example, if **Allow drill down on shared members in ad hoc** set to **Yes**, and **Drill to All Levels in Base** disabled; however, you will need to zoom in one level at a time on the shared members till you reach the bottom level of each hierarchy. You will not be able to zoom in directly to the botton level of the shared members.

Setting Properties for Ad Hoc Grids

You can control the display and behavior of ad hoc grids by setting your preferences using the **Property Panel**.

Setting General Ad Hoc Properties

To set general ad hoc options:

1. In an ad hoc grid, click the **Property Panel** icon

   , and then click **General**.
2. Under **Grid**, set these options:
   - **Name**
   - **Description**
   - **Cube**
   - For **Display Member Label**, choose from the following options:
     - **Distinct Member Name Only**

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - **Member Name Or Alias**
- **Alias Table**

Setting Ad Hoc User Options

To set ad hoc user options:

1. In an ad hoc grid, click the **Property Panel** icon , and then click **Adhoc Options**.
2. Under **Grid**, set how members are displayed:
   - **Member Inclusion**:
     - **Include Selection**: Select **Yes** to display both the selected member and the members retrieved as a result of the operation. For example, zooming in on the selected member Qtr1 displays data for Qtr1, Jan, Feb, and Mar.
     - **Within Selected Group**: Select **Yes** to perform an operation such as Zoom only on the selected group of members, leaving unselected cells as is. This setting is meaningful only when there are two or more dimensions down the grid as rows or across the grid as columns. This option pertains to **Zoom**, **Keep Only**, and **Remove Only**.
   - **Zoom in**: Select the level at which to zoom in:
     - **Next Level**: Get data for the children of the selected members.
     - **All Levels**: Get data for all descendants of the selected members.
     - **Bottom Level** : Get data for the lowest level of members in a dimension.
   - **Ancestor Position**: Set how to display ancestors in the hierarchy:
     - **Top**: Display member hierarchies from highest to lowest level.
     - **Bottom**: Display member hierarchies from lowest to highest level.
   - **Indentation**: Set how member hierarchy levels are indented:
     - **None**: Do not indent members.
     - **Subitems**: Indent descendants. Ancestors are left-justified in the column.
     - **Totals**: Indent ancestors. Descendants are left-justified in the column.
   - **Navigate without refreshing data**: Selecting **No** improves performance as you navigate around the grid, for example pivoting and zooming. Just click **Refresh** when you want to update the data. (If you select **Yes** for this option, data is refreshed as you work in ad hoc.)
3. Under **Suppression**, to simplify your view of the data, select options to suppress elements of the grid. For example, you can hide rows or columns with zero values.
   - **Zero Values**:
     - **None**: Select to display rows and columns that contain only zeros.
     - **Row**: Select to hide rows containing only zeros.
     - **Column**: Select to hide columns containing only zeros.
     - **Row and Column**: Select to hide rows and columns containing only zeros.
   - **Repeated Members**: Select **Yes** to hide rows that contain repeated member names, regardless of the grid orientation.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Missing Data**: Select to hide rows or columns with zeros or that have no data:
  - **None**: Display rows and columns with zeros or that have no data.
  - **Row**: Hide rows with zeros or that have no data.
  - **Column**: Hide columns with zeros or that have no data.
  - **Row & Column**: Hide rows and columns with zeros or that have no data.
- **Missing Blocks on Rows**: Select **Yes** to hide blocks of cells in rows that have no data.
- **No Access**: Select to hide rows or columns that you don't have access to:
  - **None**: Display rows and columns that you don't have access to.
  - **Row**: Hide rows that you don't have access to.
  - **Column**: Hide columns that you don't have access to.
  - **Row & Column**: Hide rows and columns that you don't have access to.

> **Note**
>
> When trying to open an ad hoc grid, if you see the "Ad hoc grid cannot be opened as there are no valid rows of data" error, clear the **Suppression** options.

4. Under **Precision Values**, set the minimum and maximum number of decimal positions to display in a cell for the **Currency** values, **Non-currency** values, and **Percentage** values. For example, if the cell value is 100, and you select the **Minimum** precision "2", the value displays as "100.00". If you select a Maximum precision of "3 " and the cell value is 100.12345, the value displays as "100.123". Select **Use Currency member precision** to apply the precision setting of the **Currency** member.
5. Under **Replacement**, set labels to display for cells that are missing data, cells that you don't have access permission to view, or cells that have invalid data:
   - **No Data**: Enter the text that you want displayed for cells that have #Missing or #NoData as their value.
   - **No Access**: Enter the text that you want displayed for cells that you don't have access to.
   - **Submit Zeros**: Select **Yes** if you specified #NumericZero as the text for the **No Data** or **No Access** replacement option and you want to submit zeros to the application.
6. Click **Refresh**.

Setting Layout Options

You can use the **Layout** tab to remove attributes that are used within the ad hoc grid. This is the only place where attributes can be removed from the grid.

To set layout options for ad hoc grids:

1. In an ad hoc grid, click the **Property Panel** icon , and then **Layout**.
2. See Pivoting Dimensions.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Ad Hoc Grid Keyboard Shortcuts and Quick Data Entry Commands

Keyboard Shortcuts

You can quickly move around an ad hoc grid with these shortcut keys:

Key or Key Combination	Result
Tab	Moves to the next cell in the row. When focus is on the last cell of a row, Tab moves to the first cell of the next row.
Shift+Tab	Moves to the previous cell in the row. When focus is on the first cell of a row, Shift+Tab moves to the last cell of the previous row.
Up Arrow, Down Arrow	Moves up or down within the same column to the previous or next row.
Right Arrow, Left Arrow	Moves to the next cell or previous cell in the row.
Ctrl+Home	Moves to the first cell in the grid.
Shift+End	Moves to the last cell of the first row of the grid.
Ctrl+End	Moves to the last cell in the grid.
Ctrl+Right Arrow	Moves to the last cell in the current row.
Ctrl+Left Arrow	Moves to the first cell in the current row.
Shift+Space	Selects the row.
Ctrl+Space	Selects the column.
Ctrl+Up Arrow	Moves to the top row of the column.
Ctrl+Down Arrow	Moves to the bottom row of the column.
Ctrl+Shift+Up Arrow	Selects the cells in the column starting from the current cell to the top row of the column.
Ctrl+Shift+Down Arrow	Selects the cells in the column starting from the current cell to the bottom row of the column.
Shift+Left Arrow	Selects a cell to the left of the current cell in the row each time Left Arrow is pressed until it reaches the start of the row.
Shift+Right Arrow	Selects a cell to the right of the current cell in the row each time Right Arrow is pressed until it reaches the end of the row.
Shift+Up Arrow	Selects a cell above the current cell in the column each time Up Arrow is pressed until it reaches the top of the column.
Shift+Down Arrow	Selects a cell below the current cell in the column each time Down Arrow is pressed until it reaches the bottom of the column.
Shift+Click	Selects multiple cells by holding the Shift key and then using the mouse to select cells from different columns or rows in the grid.

Commands for Quickly Entering Data

You can use these shortcuts to quickly enter data in ad hoc grids. Enter the keys or symbols, and then press Enter or Tab.

Keys or Symbol	Result	Example
K	Enters the value in thousands.	Enter `5K` for 5,000.
M	Enters the value in millions.	Enter `5M` for 5,000,000.
Add or +	Adds a number to the cell value.	If the cell value is 100, entering `Add10` after 100 results in 110.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Keys or Symbol	Result	Example
/	Divides the cell value by a number.	If the cell value is 100, entering `/2` after 100 results in 50.
Sub or ~	Subtracts a number from the cell value.	If the cell value is 100, entering `Sub10` after 100 results in 90.
Percent or per	Multiplies the cell value by the percentage you enter.	If the cell value is 100, entering `per10` after 100 results in 10% of the current cell value, or 10.
Increase or inc	Increases the cell value by the percentage you enter.	If the cell value is 200, entering `inc10` after 200 increases the cell value by 10% of 200 (20), to 220.
Decrease or dec	Decreases the cell value by the percentage you enter.	If the cell value is 200, entering `dec10` after 200 decreases the cell value by 10% of 200 (20), to 180.
Power or pow	Changes the cell value to the number, added as an exponent.	If the cell value is 100, entering `pow2` after 100 multiplies the cell value by an exponent of 2, to 10,000.
gr	Grows a cell by a percentage.	If the cell value is 200, entering `gr50` after 200 increases the cell value by 100, to 300.

Applying Rules to Ad Hoc Grids

After you submit new or changed data, you can run business rules that will calculate the data.

To apply a rule:

1. Open an ad hoc grid.
2. Click **Rules** .
3. If presented with a runtime prompt, enter or select the required information, and then click **Launch**.

   If the rule runs successfully, a message displays and data is updated.

Adding Comments and Attachments

To explain data or provide background, you can add comments and attachments to a cell.

Valid attachment file types are:

- Image types permitted: `.jpg`, `.gif`, `.png`, `.7z`
- Non-image file types permitted: `.csv`, `.xls`, `.xlsx`, `.txt`, `.zip`, `.jlf`, `.doc`, `.docx`, `.ppt`, `.pptx`, `.rtf`, `.pdf`, `.gdoc`, `.gsheet`, `.gslides`, `.msg`

To add a comment or attachment:

1. Click in a cell, then select

   (Comments).

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Enter your comment. To attach a file, click

(Add Attachment) and browse to the file.

3. Click **Post**.
A blue triangle in the upper right of the cell indicates it has a comment or attachment. To read a comment or view an attachment, perform Step 1.

> **Note**
>
> Forms 2.0 does not support adding comments or attachments to formula cells.

Adjusting Values

You can quickly adjust cell values in an ad hoc grid.

To adjust a cell's value:

1. Click in the cell.
2. Click **Adjust**

.

3. In **Adjust By**, enter a positive, negative, or percentage value, and then click **OK**.

Using Ad Hoc Action Menus

Administrators can create action menus, called ad hoc menus, that are enabled globally for all ad hoc grids. An ad hoc menu works within the context of one of more cubes. Administrators associate the ad hoc menu with one or more cubes, and then the menu can be viewed by users in all ad hoc grids that use those cubes.

For example, an administrator can define an ad hoc menu that launches a business rule. When you right-click a data cell (you can select a dimension, or select an option for where the menu item displays: Point of View, Page, Row, Column, Members Only, Cell Only) in any ad hoc grid that uses the selected cube, the business rule menu option displays, and you can then run the rule.

To view ad hoc action menu items:

1. Right-click on a cell in the grid. You can select a dimension, or select an option for where the menu item displays: Point of View, Page, Row, Column, Members Only, Cell Only
2. Select the menu item to perform the action.

About Using Line Item Details

To build logic into how a cell value is calculated, you can use the application's built-in calculator, called Line Item Details.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Line Item Details is replacing Supporting Detail and they are functionally the same. Detail can be added at the cell level or across multiple cells in the same row.

Line Item Details enables you to develop a cell value and save your assumptions behind the value. For example, you can add Line Item Details for Pens: ballpoint, fountain, marker, and so on. The Pen member can then display the total for all pen types. Or say you want to plan for a travel expense for an upcoming quarter using your own logic. This example shows how you can use line item details to plan travel expenses. The details are displayed below the grid:

	Jan
acc2	2850
Air Fare	2,400.00
Customer Visits	2.00
Average Rate	1,200.00
Hotel	450.00
Number of Nights	3.00
Rate per Night	150.00

To create line item details, click a row header, then click
(Line Item Details). Click the Down Arrow in the top middle of the Line Item Details grid to collapse it.

About Line Item Details:

- You can include text, numbers, and operators that define how data is calculated.
- Hover over a cell to see if it has Line Item Details.
- Line Item Details don't add members to the ad hoc grid or change its organization.
- You must have write permission to cells that you create Line Item Details for.
- To protect the Line Item Details, the aggregate values in cells having Line Item Details are read-only.
- You can add Line Item Details only to base time periods (level-0 members). You can’t add Line Item Details to Summary Time Periods, such as Quarters.
- You can't add Supporting Details or Line Item Details for formula row cells.
- Number and precision formatting is not reflected in the **Line Item Details** window.
- The sequence of operators follows the same logic as is used to process multiple operators in a complex calculation. See Order of Line Item Details.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Adding Line Item Details

Use Line Item Details to set how detail items aggregate to cell values.

For an introduction to Line Item Details, see About Using Line Item Details.

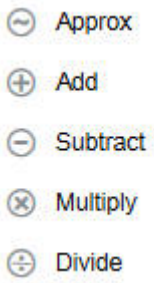
To work with Line Item Details:

1. Click a row header, and then click

   (Line Item Details).
2. A new grid displays below the ad hoc grid. In this grid, add rows that reflect the structure you want.

   For example, click

   (Add Line Item Detail), and then click **Add Child** to add a row directly below the selected row. See Working with the Structure of Line Item Details.
3. In the text box, you can enter a description of up to 1,500 characters.
4. Click the default plus sign by each row, and then select the operator to set the mathematical relationships among the rows. Select from these operators:

5. When you've created the Line Item Details structure, enter the data to set or calculate.

   Enter numbers using the same scaling that was set up for the form. You can copy and paste data into Line Item Details.
6. Click **Apply**.

   The values are dynamically calculated and aggregated before the data is saved.

> **Note**
>
> Adding Supporting Details or Line Item Details for formula row cells is not allowed.

For more information, see Working with the Structure of Line Item Details.

Working with the Structure of Line Item Details

Learn how to work with the elements in Line Item Details.

To create or change the structure of Line Item Details:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Select the row for which you want to add Line Item Details and click
(Line Item Details).
2. Click
(Add Line Item Detail) and then click **Add Child**. Click **Untitled** and provide a name.
3. Add rows that reflect the structure you want. For example, click **Add Sibling** or **Duplicate**. Use these options from the toolbar before the **Line Item Details** grid:

Table 20-3 Options for Line Item Details

Option	Result
	Refresh: Refreshes the Line Item Details grid. Click **Yes** to discard unsaved data, otherwise click **No**.
	Add Line Item Detail: Adds a child or sibling one level below the selected cell. You can add unlimited children, but consider the potential performance impact.
	Promote: Moves the selected row to the next-higher level.
	Demote: Moves the selected row to the next-lower level.
	Move Up: Moves the selected row before its sibling predecessor.
	Move Down: Moves the selected row after its sibling successor.
	Delete: Enables you to select a delete action: • **Delete Row** removes the selected row. • **Delete All Rows** removes all rows.

4. Click **Apply**.

Order of Line Item Details

The order of Line Item Details affects the resulting value that is saved.

Understanding the calculation order helps you correctly enter Line Item Details. Line Item Details leverage the calculation order of + (addition), - (subtraction), * (multiplication), and / (division). A simple Unit times Rates example demonstrates how to correctly enter Line Item Details.

See Incorrectly Entering Line Item Details and Correctly Entering Line Item Details.

Incorrectly Entering Line Item Details

This example shows the order of rows in Line Item Details that generate incorrect data.

In the following table, Rate is set to the unary operator +. Hence, the calculation order first adds the Rate and then multiplies by the Unit, resulting in incorrect data for Feb and Mar.

Copyright © 2022, 2026, Oracle and/or its affiliates.

	Jan	Feb	Mar
Rate +	250	250	250
Unit *	10		
Total:	2500	250	250

Correctly Entering Line Item Details

This example shows the order of Line Item Details generating correct values.

In the following table, the calculation order is Units multiplied by Rates, resulting in correct values.

When you add Line Item Details, verify the order of the rows to ensure that correct values are calculated and saved.

	Jan	Feb	Mar
Unit +	10		
Rate *	250	250	250
Total:	2500		

Totaling When Line Item Details Cells are Blank

If a cell in Line Item Details is blank, it's ignored when values are aggregated (instead of assuming that a blank cell means zero).

For example, you might define Line Item Details to calculate the daily rate of hiring an instructor ($250) times the number of days per month for which you plan to hire an instructor (4 in January, but none in February). The Instructor total for Feb is 250, even though you don't intend to hire an instructor in Feb.

	Jan	Feb
Instructor	1000	250
Rate +	250	250
Days	4	

To correctly total values that are aggregated by the * multiplier when some cells are blank, you can leave the Rate cell blank, or enter a zero in the Days cell, instead of leaving it blank. This causes the rate (250) to be multiplied by 0 (zero), resulting in a value of zero for Feb.

Copyright © 2022, 2026, Oracle and/or its affiliates.

	Jan	Feb
Instructor	1000	0
Rate +	250	250
Days	4	0

Printing Ad Hoc Grids

If you require printing, you can print ad hoc grids using the browser's print feature or the Excel Print feature in Oracle Smart View for Office.

To work with an ad hoc form in Smart View, open a form, click **Actions**, and then select **Open in Smart View**.

See Opening Forms and Ad Hoc Grids from Web Applications in *Smart View for Office User's Guide 23.100*.

Using Free-Form Ad Hoc

If you are familiar with the dimensions and members of your database, you can use free-form ad hoc by typing dimension and member names directly into cells of an ad hoc grid.

You can still use the POV, member selection, and other ad hoc operations in free-form grids.

Free-Form Ad Hoc Guidelines

Consider these guidelines when working in free-form ad hoc.

- A grid must have at least one row dimension and one column dimension.
- Each row dimension can contain members of only one dimension. Each column dimension can contain members of only one dimension.
- Members of one dimension can be entered only in *one* of the following regions:
  - In the same row
  - In the same column
- Precede member names that contain spaces between words with a single quotation mark.
- Aliases from the current alias table are permitted in free-form grids, but aliases from other alias tables are treated as comments.

Copyright © 2022, 2026, Oracle and/or its affiliates.

21

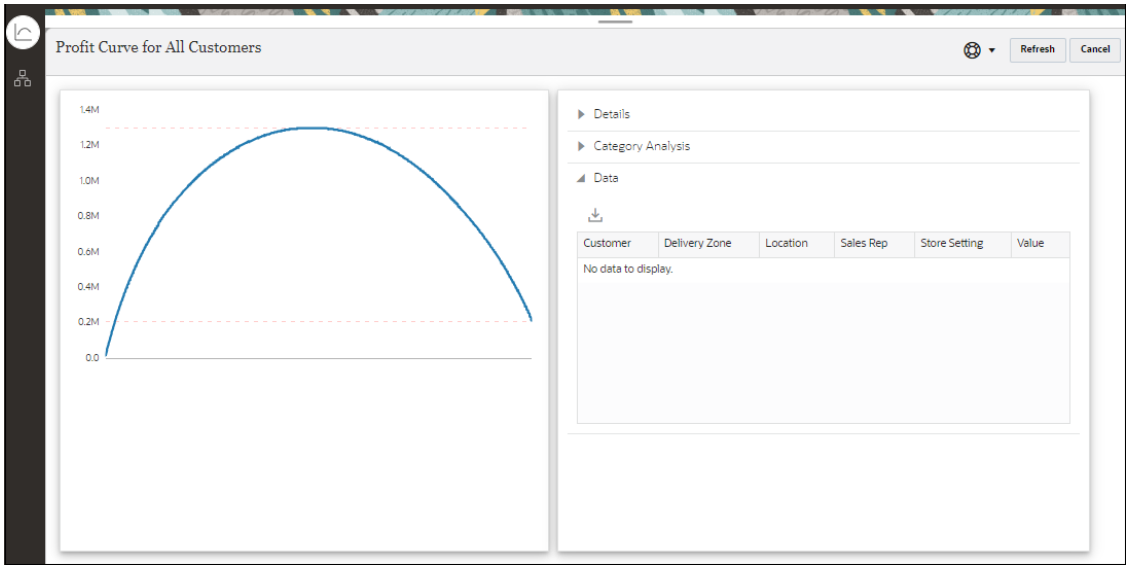
Working with Profit Curves

Related Topics

- About Profit Curves
- Designing Data Forms for Profit Curves
- Creating a Profit Curve
- Managing Profit Curves
- Generating Profit Curves

About Profit Curves

A profit curve is a graphical representation of data, which shows the extent to which a population dimension (such as customers or products) contributes to or detracts from overall profitability.



Profit curves are used for profitability analysis. They enable a simplified visualization of a large amount of data. You can select a portion of the profit curve and perform a category analysis for a selected attribute. You can also download the snippet of data pertaining to that category analysis. (For more information, see Generating Profit Curves).

For example, a population dimension (such as Customers or Products) displays along the x-axis of the profit curve in descending order by profit yields.

With customers, the most profitable customer is at the far left and the least profitable at the far right. The y-axis shows cumulative values for the account dimension, such as net profit. The most profitable customer's profit is the first y plot. The second y plot is the second customer's profit added to the first, and so on.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The first part of the curve is the steepest and shows the largest gains in profit. As less profitable customers are added to the curve, it flattens. If profitability goes negative for the least profitable customers, the curve moves downward.

> **Note**
>
> As with other Enterprise Profitability and Cost Management analytics features, virtually all users can generate and view profit curves, but only administrators and others with sufficient security provisioning can define them.

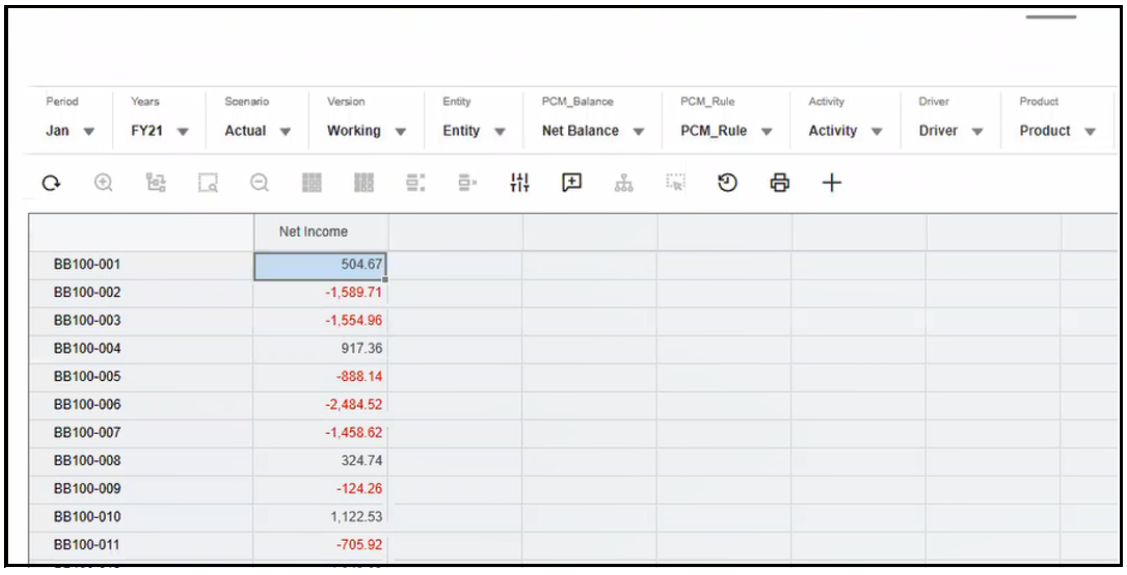
Designing Data Forms for Profit Curves

When designing a data form for a profit curve, you need a dimension member of the population (for example, customers) and a metric (for example, net income). This generates a profit curve with the corresponding values plotted on it.

You can change the point of view dimensions (Period, Year, Scenario, and Version) in a data form. If required, narrow it down to a product group or some other segmentation to generate multiple profit curves (for example, profit curves for bikes and accessories by region). You can have multiple types of profit curves based on such segmentations.

> **Note**
>
> For information on creating data forms, see Creating Forms.

For example, in the data form below, population is the row dimension, and net income is the column dimension.



	Net Income
BB100-001	504.67
BB100-002	-1,589.71
BB100-003	-1,554.96
BB100-004	917.36
BB100-005	-888.14
BB100-006	-2,484.52
BB100-007	-1,458.62
BB100-008	324.74
BB100-009	-124.26
BB100-010	1,122.53
BB100-011	-705.92

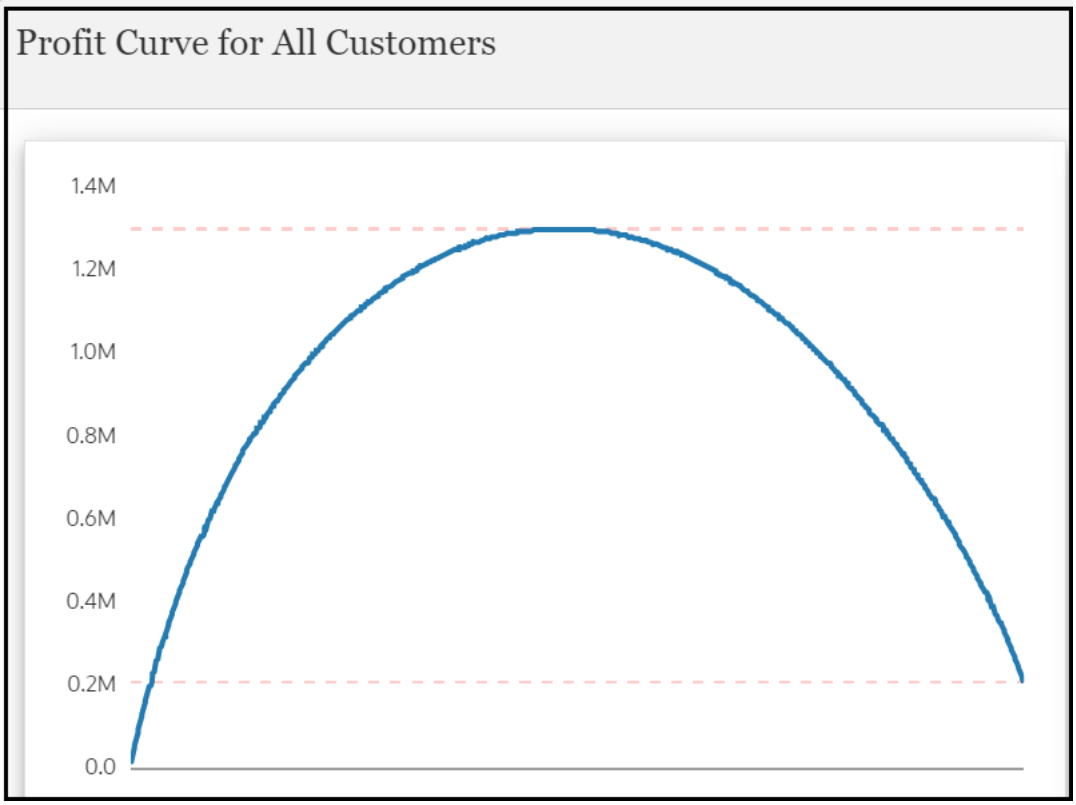
In this example, the profit curve sorts the data by the net income value with the highest number in the first row (plotted on the leftmost part of the profit curve). Here, the data form generates a calculated column, cumulating the net income values. This cumulative values are the values plotted on the profit curve.

Copyright © 2022, 2026, Oracle and/or its affiliates.

If you sort the net income column with the largest value first, the first cumulated value is same as the Net Income value in the first row. The second row in the cumulated value column is the summation of the first row and the second row of the net income value column. The third row is the first three rows of net income added together and so on.

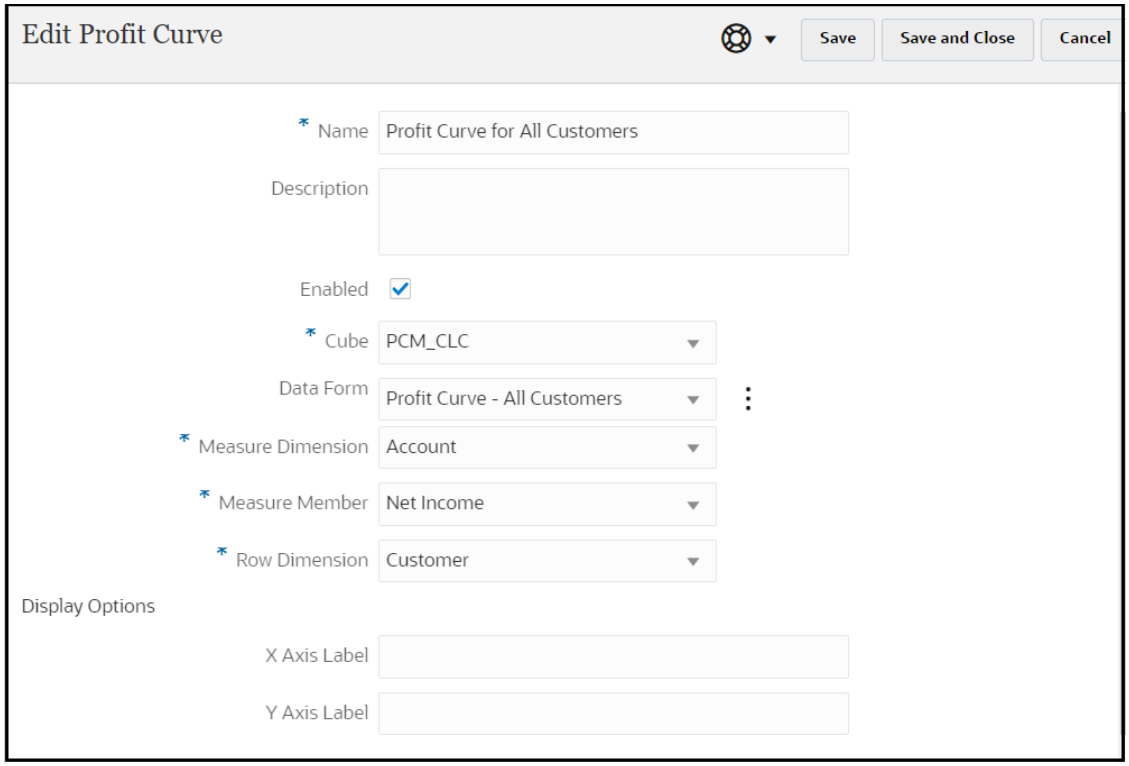
As long as the net income values are positive, the cumulative values will be growing. If you sort it from the largest to smallest, eventually you will be getting negative net income values. So, the cumulative values start decreasing and the curve starts sloping downward.

The following profit curve is generated from the data form above:



The profit curve above is created with **Account** selected as the **Measure Dimension**, **Net Income** selected as the **Measure Member**, and **Customer** selected as the **Row Dimension**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Tip

As a best practice, it is recommended to design your data form as simple as possible.

Creating a Profit Curve

To create a profit curve:

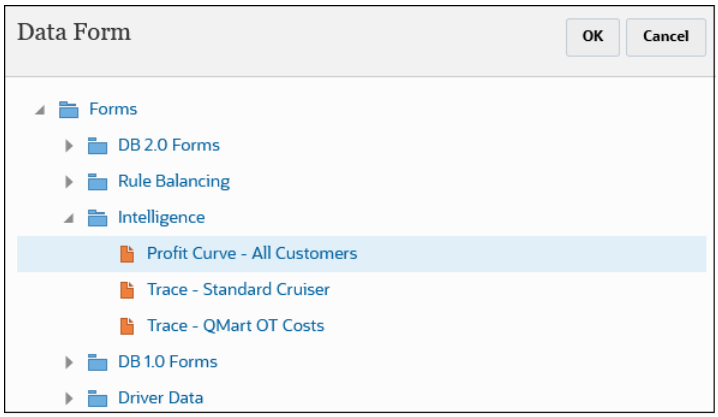
1. From the Home page, select **Intelligence**.
2. On the **Profit Curves** page, click **Create** ( ).
3. In the **Create Profit Curve** dialog box, enter the following information:
   - **Name**: The name of the profit curve.
   - **Description (Optional)**: A note that describes the profit curve.
   - **Enabled**: If selected, it allows you to generate a profit curve.
   - **Cube**: Stores data and metadata. Select either the **PCM_CLC** calculation cube or the **PCM_REP** reporting cube. The profit curve pulls data from the cube you select. For more information on cubes, see Managing Cubes.
   - **Data Form**: The data form used to generated the profit curve.

     To select a data form:

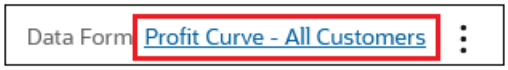
     – Click the **Select Data Form** link.

Copyright © 2022, 2026, Oracle and/or its affiliates.

– In the **Data Form** dialog box, navigate to the desired form, select the form, and then click **OK**.



The form you selected is displayed.



After you select a data form, you can click ⋮ next to the form to analyze or edit the form.

- **Measure Dimension**: A dimension in the data form. The profit curve pulls value from the dimension you select.
- **Measure Member**: A member in the data form from which the profit curve pulls value.
- **Row Dimension**: The row dimension in the data form from which the profit curve pulls value.
- **X Axis Label (Optional)**: A name for the horizontal axis (for example, customers, products, and so on.)
- **Y Axis Label (Optional)**: A name for the vertical axis (for example, profits, revenue, and so on).

4. Click **Save and Close**.

Managing Profit Curves

From the **Profit Curves** page, you can edit, delete, and copy profit curves. You can also refresh the profit curves displayed on this page.

To manage profit curves:

1. From the Home page, select **Intelligence**.

   By default, the **Profit Curves** page is displayed.

2. **Optional**: To search or sort profit curves, perform an action:

   - Enter text in the **Search** field, and then press **Enter** or click **Search** (🔍).
   - Click the drop-down to select any of the following to sort profit curves:
     – Name
     – Cube
     – Created By

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - Creation Date
  - Modified By
  - Modified Date

- To sort profit curves in ascending order, click **Sort by Ascending** ( ).
- To sort profit curves in descending order, click **Sort by Descending** ( ).

3. Complete a step:

- To edit a profit curve, select the desired profit curve, and click .
- To delete a profit curve, select the desired profit curve, and click .
- To copy a profit curve, select the desired profit curve, and click .
- To refresh the profit curves list, click .

Generating Profit Curves

To generate a profit curve:

1. From the Home page, select **Intelligence**.
2. On the **Profit Curves** page, click the name of the profit curve you want to generate.

   The profit curve is generated and displayed on the left panel of the page. Click **Refresh** to display the latest data. In the right panel of the page, you can click the expansion nodes to view the following information:

   - **Details**: Display the distribution of values associated with the profit curve.
   - **Category Analysis**: If the row dimension has attributes, you can select a portion of the curve (by dragging the mouse curser), and analyze the corresponding breakdown of member contributions for a selected attribute category.

     For example, in the figure below, the rightmost part of the curve (the least performing customers) is selected, and the attribute category selected is **Region**. The Category Analysis chart shows that 26.6% of the least performing customers are in the region USA E SE.

   - **Data**: Displays a snippet of data allocations on the selected attribute category. You can also download data by clicking **Download** ( )

Copyright © 2022, 2026, Oracle and/or its affiliates.

Copyright © 2022, 2026, Oracle and/or its affiliates.

22

Tracing Allocations

Related Topics

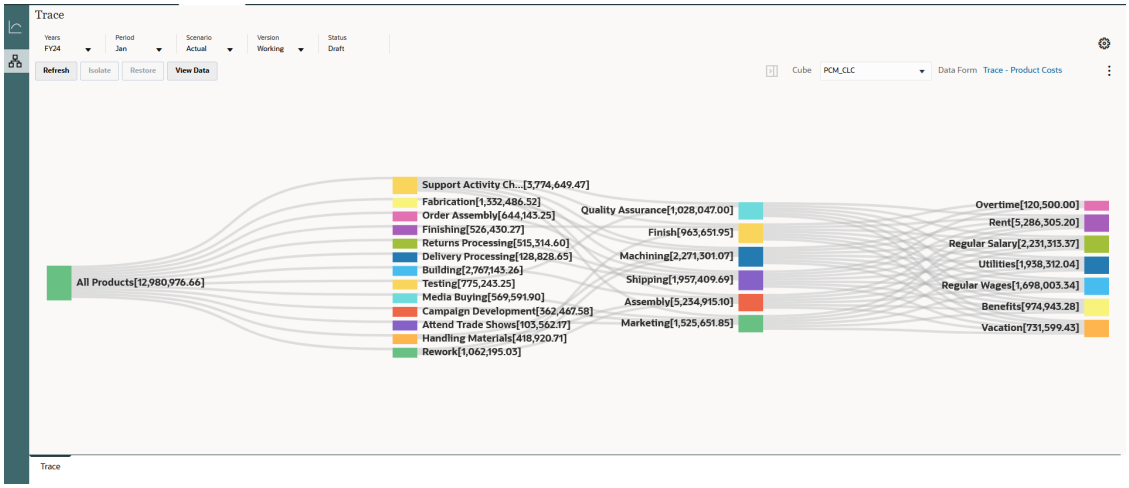
- About Trace
- Designing Data Forms for Trace
- Viewing Allocation Trace Results

About Trace

The Trace is a diagramatic representation of data forms. It enables:

- Visualizing relationship of data in forms using sankey diagrams.
- Tracing allocation amounts flowing through a model. For example, where money is spent, how you spent it, and how much is consumed by each segments involved in production.
- Re-alligning expenses from where they were spent, through which department, function, and which utilities have consumed those functions.
- Evaluation and validation of the flow of expenses against profits.

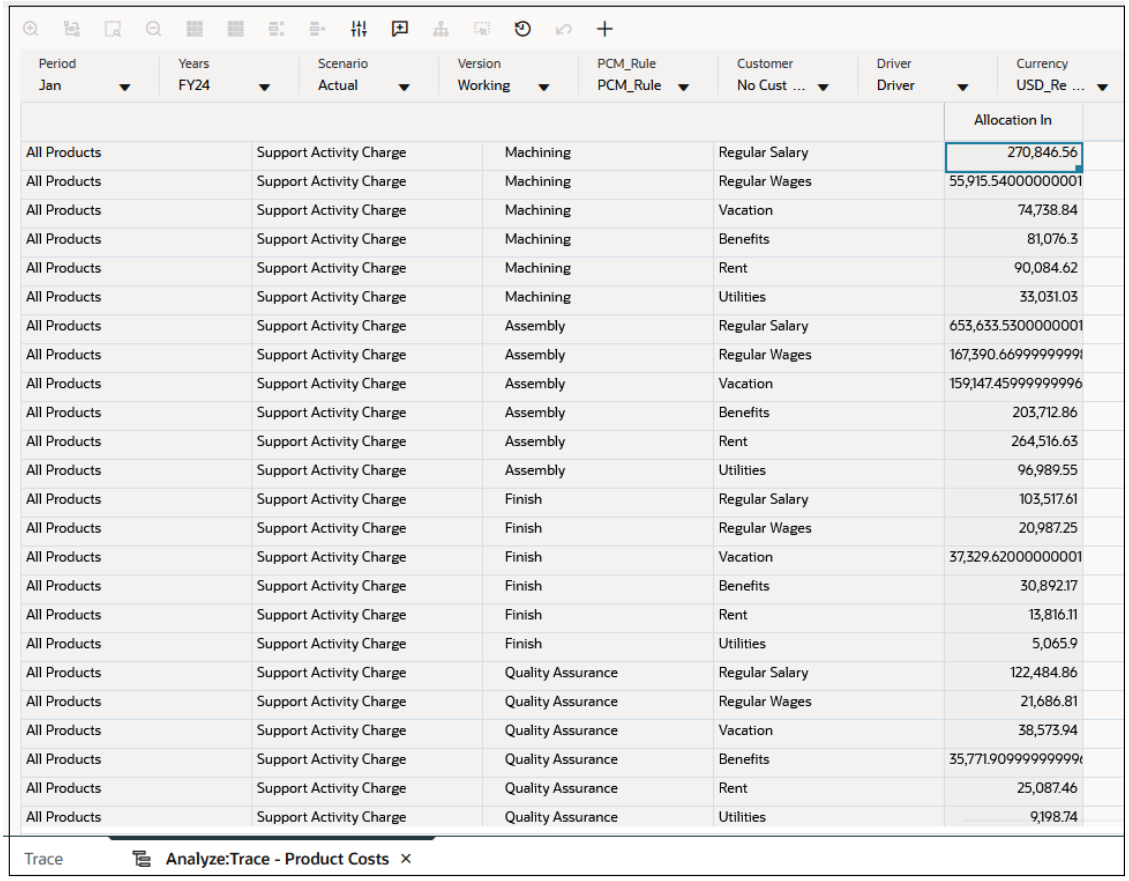
The following diagram shows the product costs for the "Bikes" company in the BKsML50 sample application provided with Enterprise Profitability and Cost Management. (See Creating the Sample Application.) The right-most nodes of the diagram show the costs involved in the manufacturing of all products. These costs are associated with the products through the various departments, and the departments use these things in some of the functions they perform. The diagram shows how costs are aligned to the product.



Designing Data Forms for Trace

A Trace data form contains the dimension values that you want to trace using the sankey diagram. In a Trace data form, the first dimension in the row is your starting point in the trace diagram, and the subsequent dimensions are additional ones you can trace the amounts through. Here, the money flows from the rightmost dimension to the leftmost dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Period	Years	Scenario	Version	PCM_Rule	Customer	Driver	Currency
Jan	FY24	Actual	Working	PCM_Rule	No Cust ...	Driver	USD_Re ...

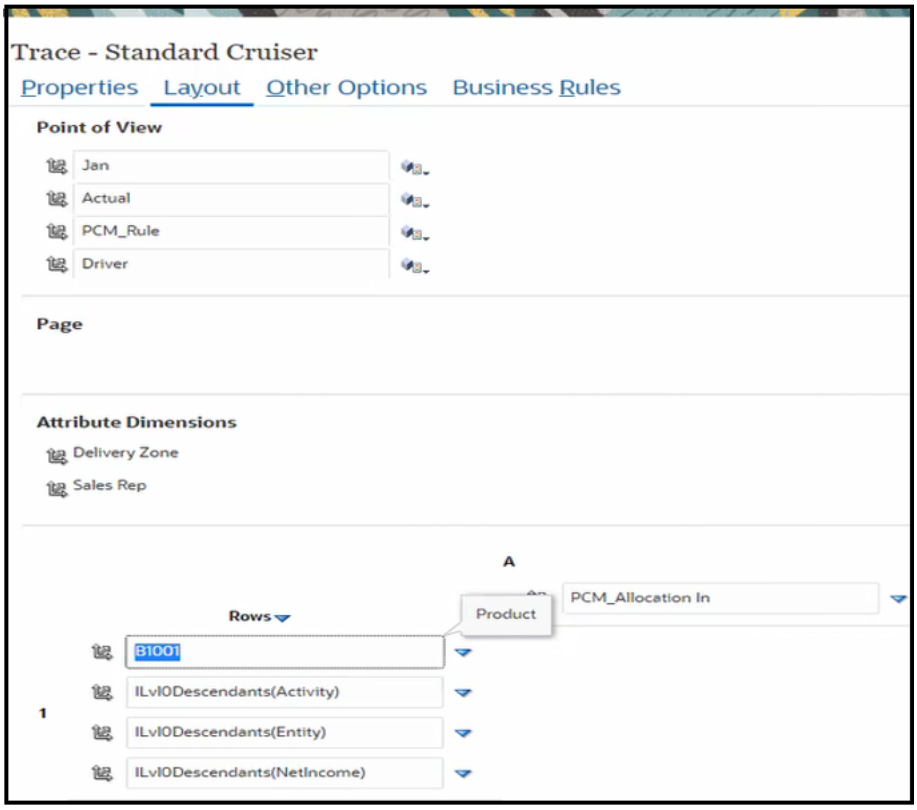
				Allocation In
All Products	Support Activity Charge	Machining	Regular Salary	270,846.56
All Products	Support Activity Charge	Machining	Regular Wages	55,915.54000000001
All Products	Support Activity Charge	Machining	Vacation	74,738.84
All Products	Support Activity Charge	Machining	Benefits	81,076.3
All Products	Support Activity Charge	Machining	Rent	90,084.62
All Products	Support Activity Charge	Machining	Utilities	33,031.03
All Products	Support Activity Charge	Assembly	Regular Salary	653,633.5300000001
All Products	Support Activity Charge	Assembly	Regular Wages	167,390.669999999
All Products	Support Activity Charge	Assembly	Vacation	159,147.45999999996
All Products	Support Activity Charge	Assembly	Benefits	203,712.86
All Products	Support Activity Charge	Assembly	Rent	264,516.63
All Products	Support Activity Charge	Assembly	Utilities	96,989.55
All Products	Support Activity Charge	Finish	Regular Salary	103,517.61
All Products	Support Activity Charge	Finish	Regular Wages	20,987.25
All Products	Support Activity Charge	Finish	Vacation	37,329.62000000001
All Products	Support Activity Charge	Finish	Benefits	30,892.17
All Products	Support Activity Charge	Finish	Rent	13,816.11
All Products	Support Activity Charge	Finish	Utilities	5,065.9
All Products	Support Activity Charge	Quality Assurance	Regular Salary	122,484.86
All Products	Support Activity Charge	Quality Assurance	Regular Wages	21,686.81
All Products	Support Activity Charge	Quality Assurance	Vacation	38,573.94
All Products	Support Activity Charge	Quality Assurance	Benefits	35,771.909999999996
All Products	Support Activity Charge	Quality Assurance	Rent	25,087.46
All Products	Support Activity Charge	Quality Assurance	Utilities	9,198.74

Trace Analyze:Trace - Product Costs ×

Allocation In (the column dimension in the last cell) is where you track the movement of money. The money flows from the rightmost dimension to the leftmost dimension. You can narrow down the data tracing by making selections in the point of view dimensions (for example, in the figure above, **No customer** is selected for the **Customer** point of view dimension). This enables tracking the flow of money before it's pushed out to the customers.

In the data form designer below, **PCM_Allocation In** is the default member. **PCM_Allocation In** is a member in the PCM_Balance dimension in which you track amounts posted by the allocation rule. **Allocation In** is an inward flow of amounts. Here, you can track the PCM_Allocation In member and decide across which dimensions you want to track. In a Trace data form, those dimensions are displayed in rows.

Copyright © 2022, 2026, Oracle and/or its affiliates.



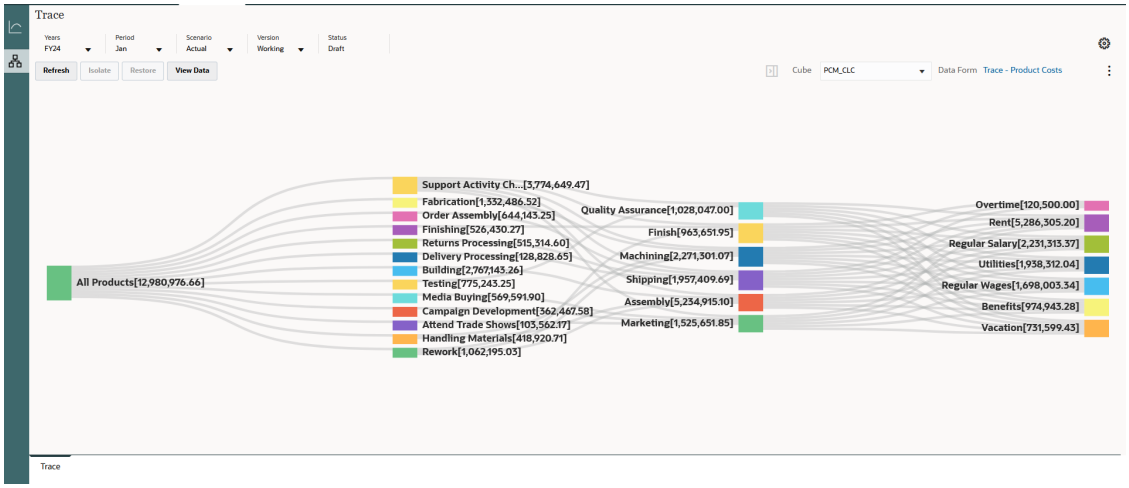
In this example, for the first row dimension, a specific product **B1001** (Standard Cruiser) is selected. This is your starting point in the Trace diagram. As a best practice, select a specific value for the first row dimension, so that the Trace diagram generated will not be huge and complex.

For functions (in the Activity dimension) that are performed for the product, **ILvl0Descendants (Activity)** is selected. **ILvl0Descendants (Entity)** is selected for departments or cost centers in the Entity dimension which perform those functions. **ILvl0Descendants (NetIncome)** is selected for actual funds traced.

As a best practice, you can design a data form in such a way that it limits the number of points (nodes) in the diagram. This enables generating a simplified trace diagram. You can do this by selecting a narrow range of dimensions. For example, select level 0 decendents of all activities (row dimension displayed in the second column of the data form), or select dimensions with limited members, or select dimensions where you can limit the number of level 0 rows you see. It allows scaling the results of the data form, enabling a more realistic visualization. For more information on selecting members, see Using the Member Selector.

The following diagram is generated from the data form designed above:

Copyright © 2022, 2026, Oracle and/or its affiliates.

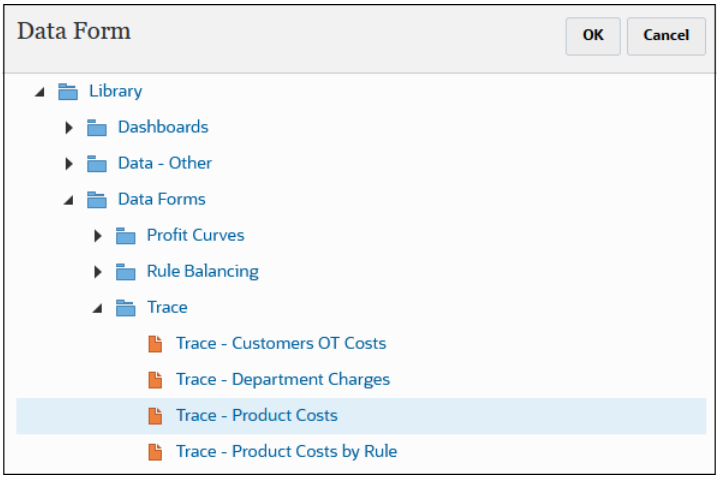


Viewing Allocation Trace Results

To view allocation trace results:

1. From the Home page, select **Intelligence**.
2. On the left navigation bar, select **Trace** ( ).
3. On the **Trace** page, click the drop-down and select a **Cube**.
4. Select the data form that will be used to generate the trace results.
   - Click the **Select Data Form** link.

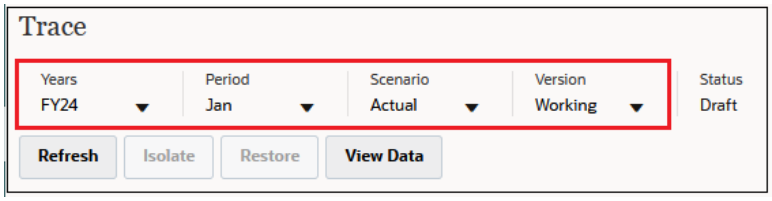
   - In the **Data Form** dialog box, navigate to the desired form, select the form, and then click **OK**.



The form you selected is displayed on the **Trace** page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. Select a point of view for which to display the data. To do this, select members for the **Years**, **Period**, **Scenario**, and **Version** dimemsions. (See Understanding Points of View.)

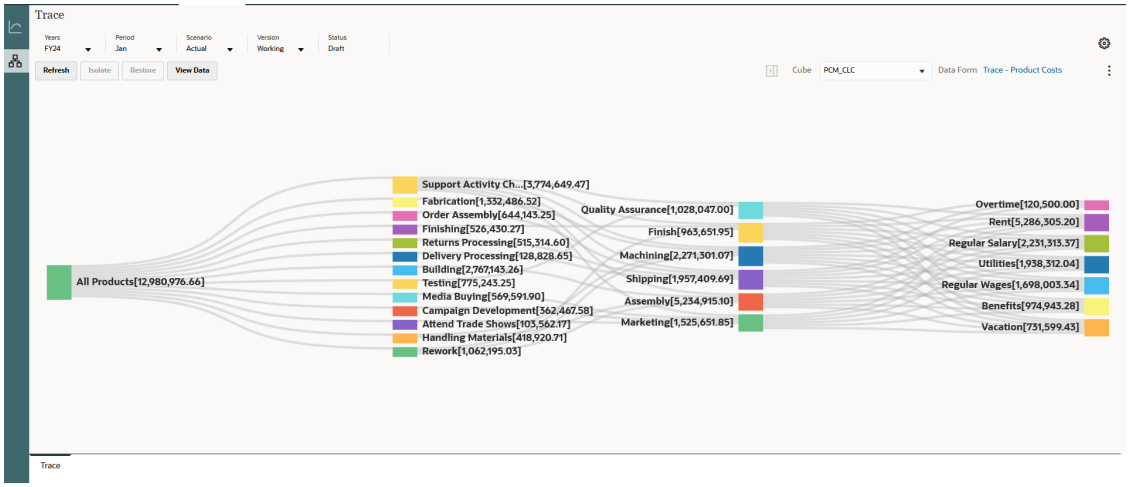


You must select a point of view that has already been defined on the **Calculation Contol** page. If you select a point of view that has not already been defined, you will get an error message to "Select a valid Point of View" when you click **Refresh**. (See Creating a Point of View.)

Note that the point of view you select overrides the fields selected in the data form definition. (See Designing Data Forms for Trace).

6. Click **Refresh** to display the trace results.

Figure 22-1 Sample Allocation Trace



Tip

Other things you can do with a trace diagram:

- Isloate and restore specific nodes (see Filtering Trace Data by Focusing on Specific Nodes)
- View the data results of the trace (see Viewing Trace Data)
- Analyze or edit the data form used to create the trace (see Editing a Trace Data Form and Analyzing the Resulting Trace Data)

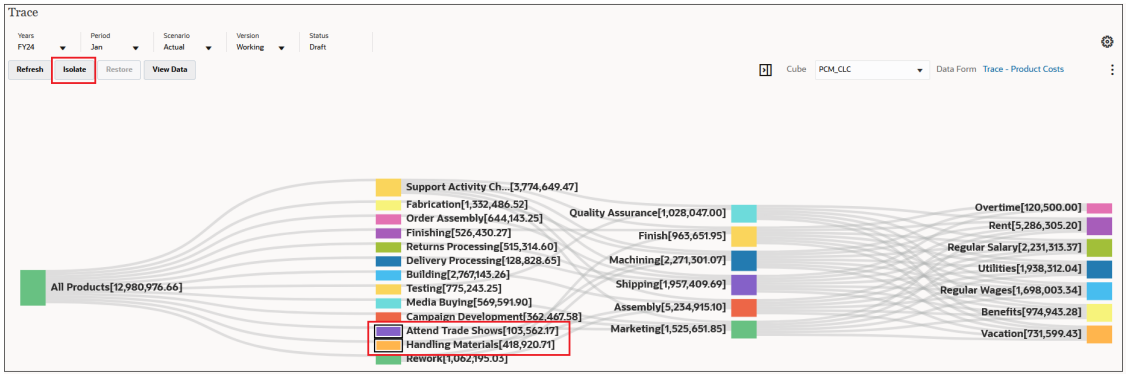
Filtering Trace Data by Focusing on Specific Nodes

You can filter the data in a trace diagram by focusing on specific nodes. Isolating portions of the diagram helps you to better understand the trace data and provides a wider range of analysis with the same base diagram.

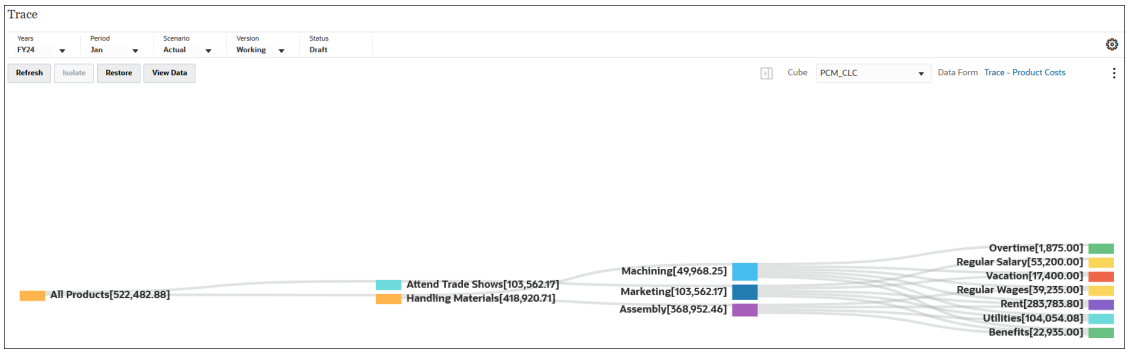
Copyright © 2022, 2026, Oracle and/or its affiliates.

To isolate a node or nodes and view the resulting allocation flow, click the desired node or nodes, and then click **Isolate**. To select multiple nodes, hold down the Ctrl key and click the desired nodes.

For example, in a trace diagram for All Products, assume you want to filter the data to see the allocation flow for only attending trade shows and handling materials. In this example, you would hold down the Ctrl key and click the nodes for "Attend Trade Shows" and "Handling Materials".



In this example, the data in the trace diagram is filtered as follows:

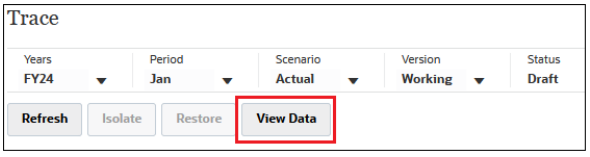


To restore all the nodes in the trace, click **Restore**.

> **Tip**
>
> To view the data for the current trace view, click **View Data**. See Viewing Trace Data.

Viewing Trace Data

To view the data for the current trace view, click **View Data**.



Copyright © 2022, 2026, Oracle and/or its affiliates.

The trace data result is for the current filtered trace view. If you haven't narrowed down the trace by selecting specific nodes, the resulting data includes all the nodes in the trace allocation. If you filtered the trace data by focusing on a specific node or nodes, the resulting data will be for only those nodes. (See Filtering Trace Data by Focusing on Specific Nodes.)

Figure 22-2 Allocation Trace for All Nodes

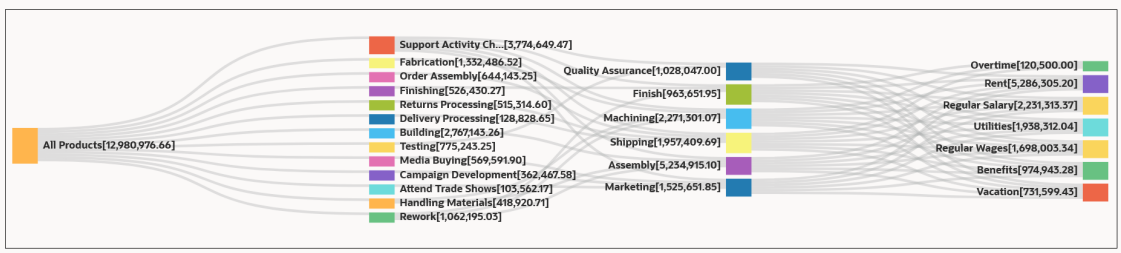
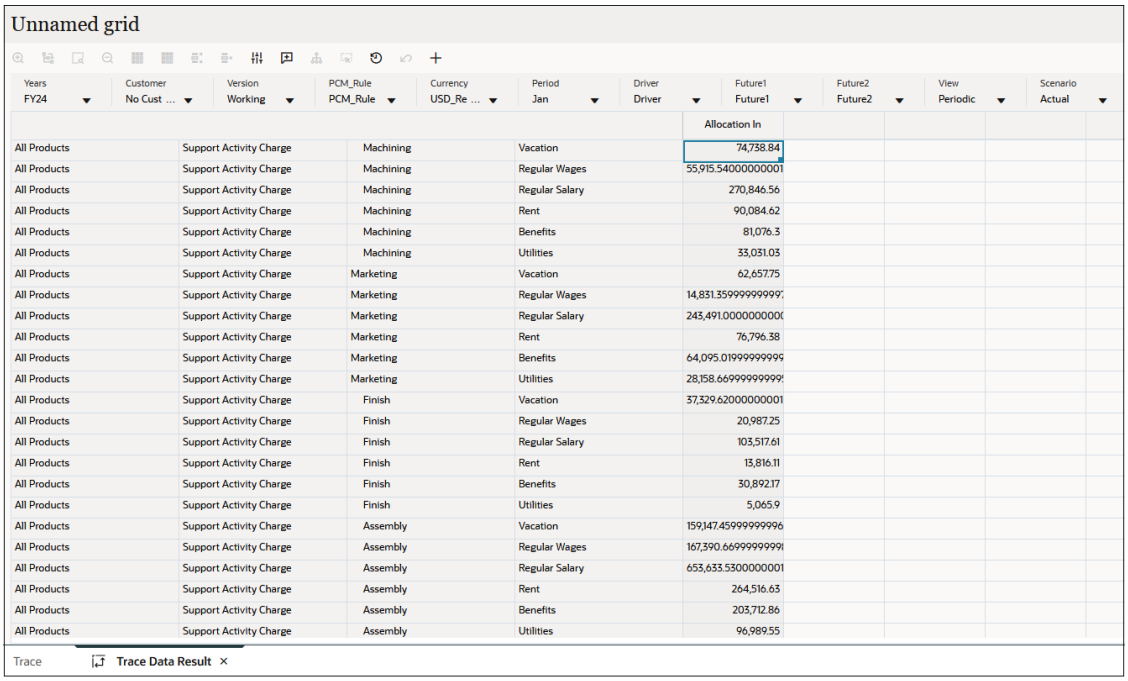


Figure 22-3 Trace Data Result for All Nodes



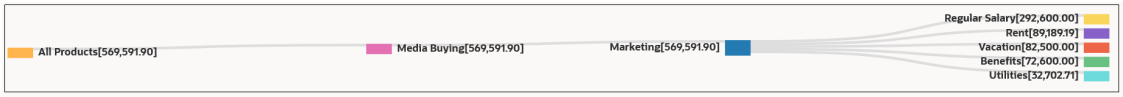
Unnamed grid

Years	Customer	Version	PCM_Rule	Currency	Period	Driver	Future1	Future2	View	Scenario
FY24	No Cust ...	Working	PCM_Rule	USD_Re ...	Jan	Driver	Future1	Future2	Periodic	Actual

				Allocation In
All Products	Support Activity Charge	Machining	Vacation	74,738.84
All Products	Support Activity Charge	Machining	Regular Wages	55,915.54000000001
All Products	Support Activity Charge	Machining	Regular Salary	270,846.56
All Products	Support Activity Charge	Machining	Rent	90,084.62
All Products	Support Activity Charge	Machining	Benefits	81,076.3
All Products	Support Activity Charge	Machining	Utilities	33,031.03
All Products	Support Activity Charge	Marketing	Vacation	62,657.75
All Products	Support Activity Charge	Marketing	Regular Wages	14,831.359999999997
All Products	Support Activity Charge	Marketing	Regular Salary	243,491.000000000(
All Products	Support Activity Charge	Marketing	Rent	76,796.38
All Products	Support Activity Charge	Marketing	Benefits	64,095.01999999999
All Products	Support Activity Charge	Marketing	Utilities	28,158.669999999995
All Products	Support Activity Charge	Finish	Vacation	37,329.62000000001
All Products	Support Activity Charge	Finish	Regular Wages	20,987.25
All Products	Support Activity Charge	Finish	Regular Salary	103,517.61
All Products	Support Activity Charge	Finish	Rent	13,816.11
All Products	Support Activity Charge	Finish	Benefits	30,892.17
All Products	Support Activity Charge	Finish	Utilities	5,065.9
All Products	Support Activity Charge	Assembly	Vacation	159,147.45999999996
All Products	Support Activity Charge	Assembly	Regular Wages	167,390.669999999991
All Products	Support Activity Charge	Assembly	Regular Salary	653,633.5300000001
All Products	Support Activity Charge	Assembly	Rent	264,516.63
All Products	Support Activity Charge	Assembly	Benefits	203,712.86
All Products	Support Activity Charge	Assembly	Utilities	96,989.55

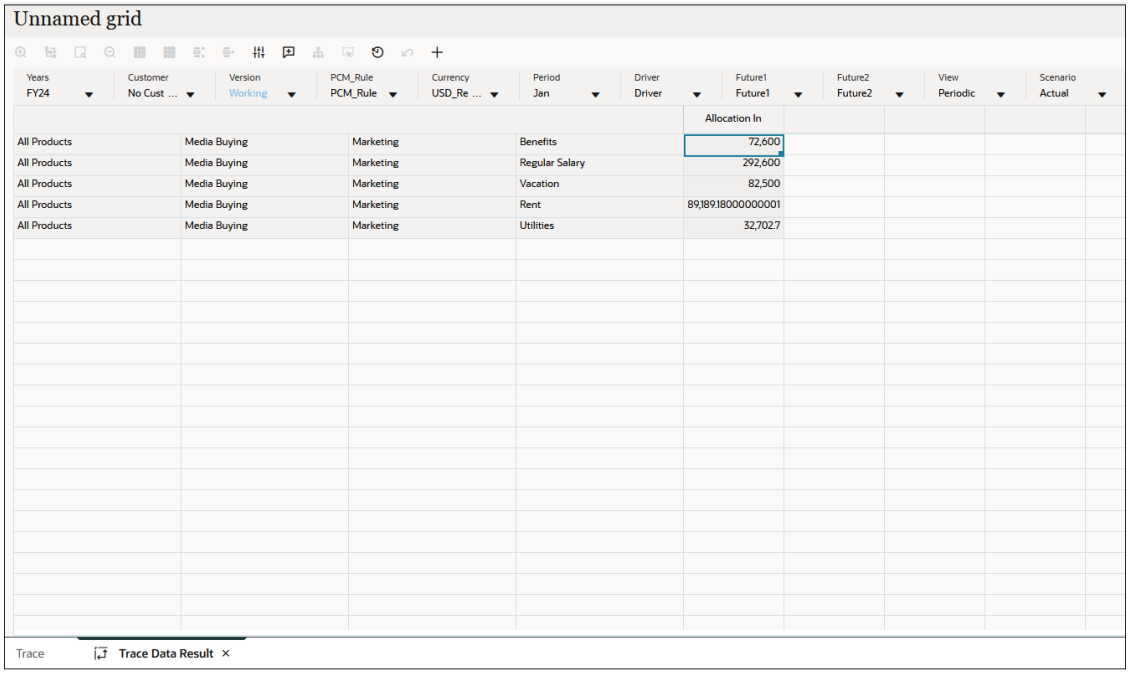
Trace | Trace Data Result ×

Figure 22-4 Allocation Trace for the Media Buying Node



Copyright © 2022, 2026, Oracle and/or its affiliates.

Figure 22-5 Trace Data Results for the Media Buying Node



Editing a Trace Data Form and Analyzing the Resulting Trace Data

After you create a data form, you can later edit the data form and analyze the resulting data.

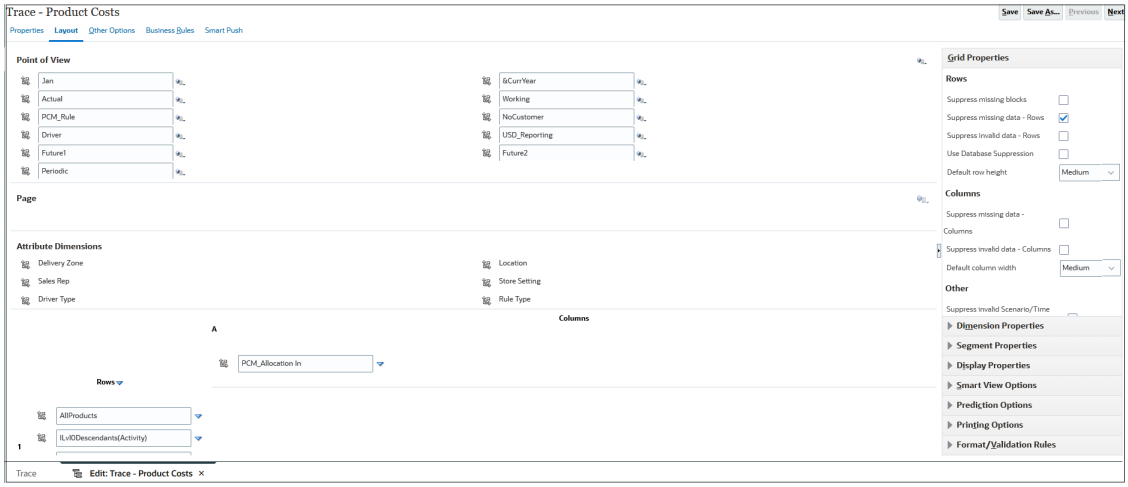
> **Note**
>
> For information on how to create the data form, see Designing Data Forms for Trace.

Editing a Data Form

To edit a data form, click ⋮ next to **Data Form** and select **Edit Data Form**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

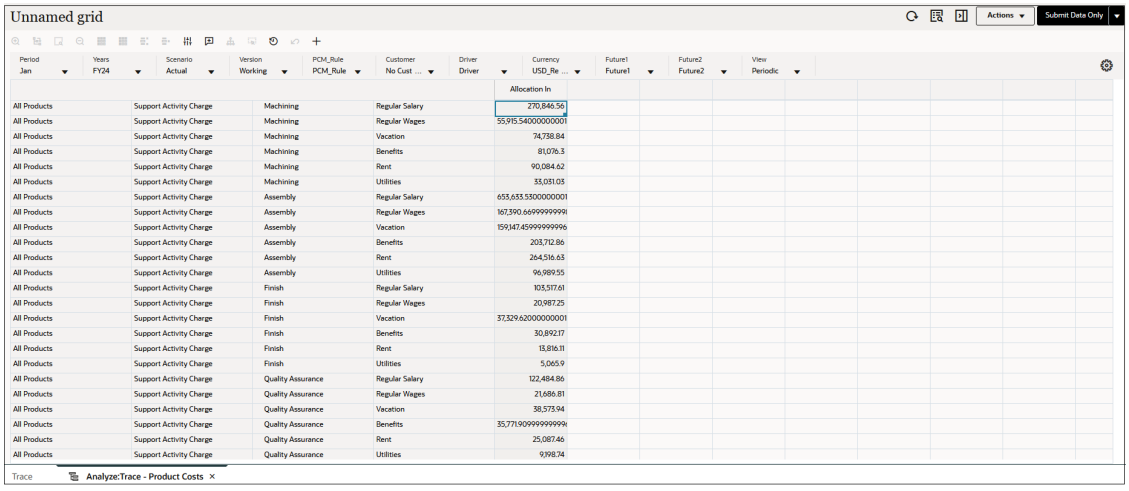
Figure 22-6 Data Form to Create the Trace for Product Costs



Analyzing the Resulting Trace Data

To analyze the data generated by the data form, click ⋮ next to **Data Form** and select either **Analyze Data Form**.

Figure 22-7 Data Generated by the Data Form for Product Costs



Copyright © 2022, 2026, Oracle and/or its affiliates.

23

Using Smart View to Import and Edit Application Metadata

Related Topics

- About Using Smart View to Work with Application Metadata
- Using Smart View Grids to Import and Edit Application Metadata
- Importing Dimensions in Smart View
- Editing Members in Smart View
- Adding Application Members in Smart View
- Moving Members in Smart View
- Working with Attribute Dimensions
- Designating Shared Members in Smart View
- Refreshing Databases
- Planning Admin Extension and Office AutoCorrect

About Using Smart View to Work with Application Metadata

Applies to: Enterprise Profitability and Cost Management, Financial Consolidation and Close, FreeForm, Planning, Tax Reporting

Service Administrators can use the Planning Admin Extension with Oracle Smart View for Office and Oracle Smart View for Office (Mac and Browser) to quickly import and edit dimension and member metadata.

> **Note**
>
> - You must have Service Administrator privileges to import and edit dimensions in Smart View and Smart View (Mac and Browser).
> - All procedures described in this appendix are performed within Smart View using the Planning Admin Extension.
>   - To use the Windows client-based version of Smart View, see *Getting Started Guide for Administrators* for instructions on installing the extension.
>   - To use the Mac- or browser-based version of Smart View, see the *Deploying and Administering Oracle Smart View for Office (Mac and Browser)* for instructions on deploying the extension.

Using Smart View Grids to Import and Edit Application Metadata

The Smart View grid allows you to rapidly add, edit, and move the members of a dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- About the Smart View Grid
- The Smart View Grid and Ribbon Display
- Guidelines for Using the Smart View Grid
- Default Metadata Dimension Member Properties

About the Smart View Grid

In Oracle Smart View for Office and in Oracle Smart View for Office (Mac and Browser), the grid consists of two dimensions:

- A Oracle Fusion Cloud Enterprise Performance Management dimension on one axis (Planning, Financial Consolidation and Close, Tax Reporting)
- A metadata dimension on another axis

A metadata dimension represents a flat list of metadata members. For each dimension, a predefined set of metadata members is presented by default. Each metadata member corresponds to a specific member property valid for the dimension that was imported onto the grid. Instead of containing numeric values, the metadata grid data cells hold the specific property values. To add metadata dimension member properties that are not on the grid by default, use the **Member Selection** dialog in Smart View.

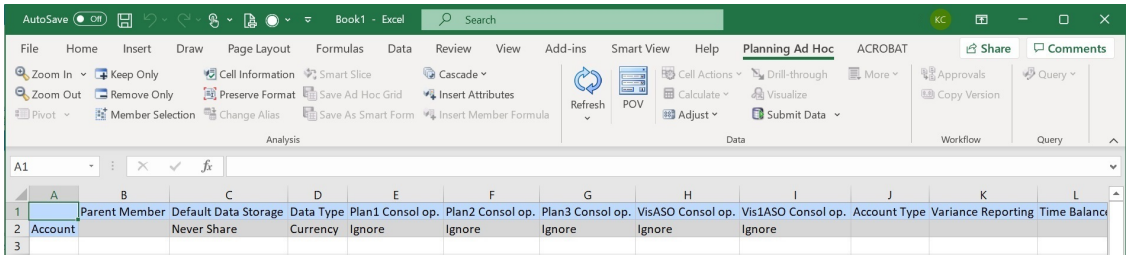
The Smart View Grid and Ribbon Display

The Smart View grid displays the dimension with member names in rows and member properties in columns. When you first import a dimension for editing, a predefined set of member properties is displayed by default in the grid.

Dimension Grid in Smart View

In Figure 1, you can see an example of the default member properties for the Vision Account dimension in Oracle Smart View for Office.

Figure 23-1 Dimension Imported into Smart View for Office Grid with the Planning Ad Hoc Ribbon Displayed



Note that in Figure 1, the Planning Ad Hoc ribbon is displayed. Depending on the data source to which you are connected, the provider ad hoc ribbon for that data source is displayed. For example, if you are connected to an Enterprise Profitability and Cost Management data source, then the EPCM Ad Hoc ribbon is displayed.

The ad hoc ribbon that is displayed is the same as the provider ad hoc ribbon displayed for a conventional Smart View ad hoc grid, only with fewer options enabled.

For all dimensions, including attribute dimensions, these are the valid options in the provider ad hoc ribbon:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Zoom In
- Zoom Out
- Keep Only
- Remove Only
- Member Selection
- Refresh
- Submit Data

The following options may appear enabled, but are not valid for metadata grids: Preserve Format, Cascade, Insert Attributes, POV, and Adjust.

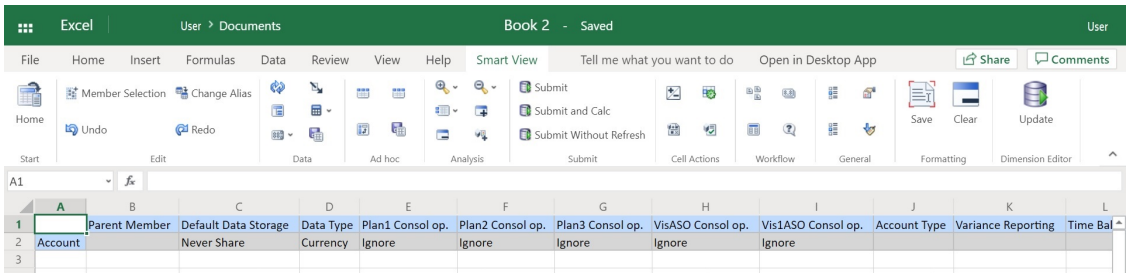
You can add metadata dimension member properties using the **Member Selection** dialog box, accessed from the ribbon, or accessed by right-clicking a property in the grid, then selecting **Smart View**, and then **Member Selection**.

For information on using the **Member Selection** dialog box in Smart View, see Selecting Members from the Member Selector in *Working with Oracle Smart View for Office 22.100*.

Dimension Grid in Smart View (Mac and Browser)

In Figure 2, you can see an example of the default member properties for the Vision Account dimension in Oracle Smart View for Office (Mac and Browser), running in the Chrome browser.

Figure 23-2 Dimension Imported into Smart View (Mac and Browser) Grid with the Smart View Ribbon Displayed



Note that in Figure 2, the Smart View ribbon is displayed. This is the default ribbon name for an Oracle Smart View for Office (Mac and Browser) deployment. You may specify a different name for the ribbon. When importing a dimension on to a grid, all ribbon options appear enabled, but only a subset are applicable to a dimension grid.

For all dimensions, including attribute dimensions, these are the valid options in the ribbon:

- Zoom In
- Zoom Out
- Keep Only
- Remove Only
- Member Selection
- Refresh
- Update

Copyright © 2022, 2026, Oracle and/or its affiliates.

You can add metadata dimension member properties using the **Member Selection** dialog box, accessed from the ribbon.

For information on using the **Member Selection** dialog box in Oracle Smart View for Office (Mac and Browser) to add metadata member properties to the grid, see Selecting Members from the Member Selector in *Working with Oracle Smart View for Office (Mac and Browser)*.

Guidelines for Using the Smart View Grid

The following guidelines will assist you in using the Smart View grid to edit dimension metadata:

- Use the Planning Admin Extension to add dimension members, and to edit and update dimension and member properties.
- The Planning Admin Extension cannot be used to:
  - Delete or remove dimensions (that is, the dimension root member) or members.
  - Edit dimension or member names.
- Data cell values can be textual or enumeration or numerical.
- The Parent Member is used to specify or modify the parent/child relationship.
- The position of a member in a grid doesn't necessarily represent the actual position of siblings in the outline.
- Each metadata grid must be linked to a corresponding dimension.
- Columns for each dimension are based on the corresponding set of member properties available in the dimension editor.

  When you first import a dimension, a predefined set of metadata dimension member properties is displayed. See Default Metadata Dimension Member Properties for a list of those member properties.
- After a metadata grid is opened, it can't be relinked to a different dimension.
- The corresponding valid set of metadata members is specific to each dimension.
- Dimension members are valid for corresponding dimensions only.
- In Oracle Smart View for Office, the properties available in the dimension grid and in the **Member Selection** dialog for a selected dimension list only the Plan type- or cube-specific properties enabled for the cube. This includes properties such as consolidation operator, member formula, data storage, and others. When a dimension is not enabled for Plan types (or cubes), then dimension-specific properties are not listed on the grid or in the **Member Selection** dialog.

  For example, the Product dimension is not enabled for the Plan3 cube. Properties (such as Plan3 Data Storage, Plan3 Consol Op, Plan3 Formula, Plan3 Member Formula Description, Plan3 Solve Order) will not be listed in the grid or in the **Member Selection** dialog as they are not used for the cube.
- For the Time Period dimension, Data Storage is the only editable property.
- The following functionality isn't available in Smart View grids with dimension metadata:
  - Pivot
  - Pivot to POV
  - Cell Text
  - Cell Notes

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Supporting Details

Default Metadata Dimension Member Properties

When you first import a dimension in the Planning Admin Extension, a predefined set of dimension metadata member properties is displayed by default. Use the Member Selection dialog box to add other metadata member properties to the grid.

The sections below list the default member properties for the Planning dimensions.

For information on using the Member Selection dialog box in Oracle Smart View for Office to add other member properties to the grid, see "Selecting Members from the Member Selector" in *Oracle Smart View for Office User's Guide*.

Account Dimension

- Parent Member
- Default Data Storage
- Data Type
- Consol op. for all Cubes
- Account Type
- Variance Reporting
- Time Balance
- Default Alias Table
- Default Formula

Entity Dimension

- Parent Member
- Default Data Storage
- Data Type
- Consol op. for all Cubes
- Base Currency
- Default Alias Table

Custom Dimensions

- Parent Member
- Default Data Storage
- Data Type
- Consol op. for all Cubes
- Default Alias Table

Scenario Dimension

- Parent Member
- Default Data Storage
- Data Type

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Consol op. for all Cubes
- Start Yr.
- End Yr.
- Start Period
- End Period
- Default Alias Table
- Default Formula

Version Dimension

- Parent Member
- Default Data Storage
- Data Type
- Consol op. for all Cubes
- Type
- Default Alias Table
- Default Formula

Period and Years Dimensions

- Leave as is or limit to Parent Member
- Default Data Storage – Note that for the Time Period dimension, Data Storage is the only editable property
- Data Type
- Default Alias Table

Currency Dimension

- Parent Member
- Default Data Storage
- Data Type
- Symbol
- Predefined Symbol
- Scale
- Precision
- Triangulation Currency
- Reporting Currency
- Thousands Separator
- Decimal Separator
- Negative Sign
- Negative Color
- Default Alias Table
- Default Formula

Copyright © 2022, 2026, Oracle and/or its affiliates.

HSP_View Dimensions (Sandbox dimensions)

- Parent Member
- Default Data Storage
- Data Type
- Consol op. for all Cubes
- Default Alias Table

Importing Dimensions in Smart View

Importing dimensions into the Smart View grid refers to placing the dimension and its members, and their respective properties, on the grid in preparation for editing.

By importing a dimension into Oracle Smart View for Office or Oracle Smart View for Office (Mac and Browser), you can rapidly add, edit, and move the members of the dimension.

> **Note**
>
> You must have Service Administrator privileges to import dimensions in Smart View.

See:

- Importing Dimensions in Smart View for Office
- Importing Dimensions in Smart View (Mac and Browser)

Importing Dimensions in Smart View for Office

> **Note**
>
> You must have Service Administrator privileges to import dimensions in Oracle Smart View for Office.

To import a dimension into a Smart View grid:

1. From the Smart View ribbon, click Panel.
2. In the Smart View Panel, click Shared Connections or Private Connections, and provide your user name, and password in the login windows.

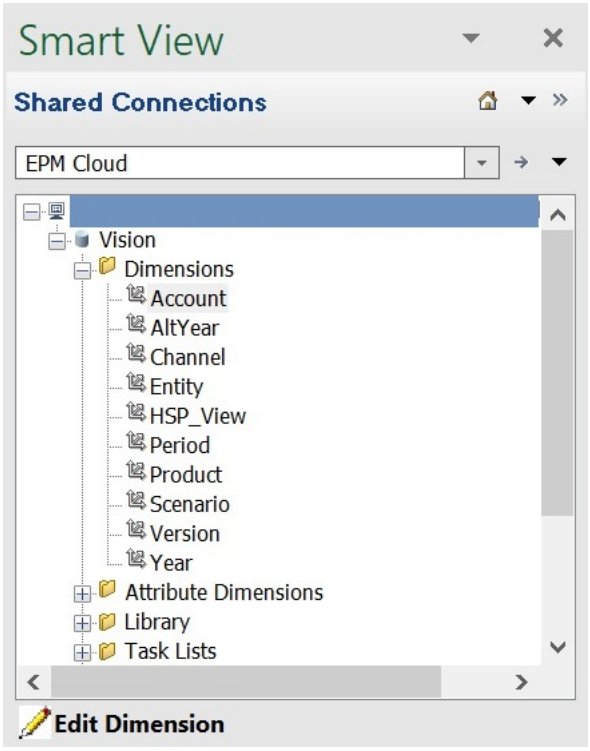
   If you chose Private Connections, select the private connection in the drop-down list of connections, then provide your login credentials.
3. From the drop-down list in the Smart View Panel, select your business process (for example, **Planning**) or **EPM Cloud**.
4. In the tree in the Smart View Panel, expand the **Dimensions** folder to view the application dimensions in the folder.

   If attribute dimensions are defined, they are displayed in the **Attribute Dimensions** folder.

Copyright © 2022, 2026, Oracle and/or its affiliates.

If a Time Period dimension is defined, it's displayed in the Dimensions folder. Note that for the Time Period dimension, Data Storage is the only editable property.

In the following example, the Dimensions folder is expanded and contains 10 dimensions.



5. Right-click a dimension name and select **Edit Dimension**.

   Alternatively, select a dimension and then, in the Action Panel, select **Edit Dimension**.

   See Dimension Grid in Smart View for an illustration of the initial grid for the Account dimension.

Importing Dimensions in Smart View (Mac and Browser)

Before you begin to work with dimensions in Oracle Smart View for Office (Mac and Browser), you should either sideload or deploy Smart View in your environment. Instructions are in *Deploying and Administering Oracle Smart View for Office (Mac and Browser)*:

- Sideloading and Logging In
- Deploying the Manifest File to Office 365 Users

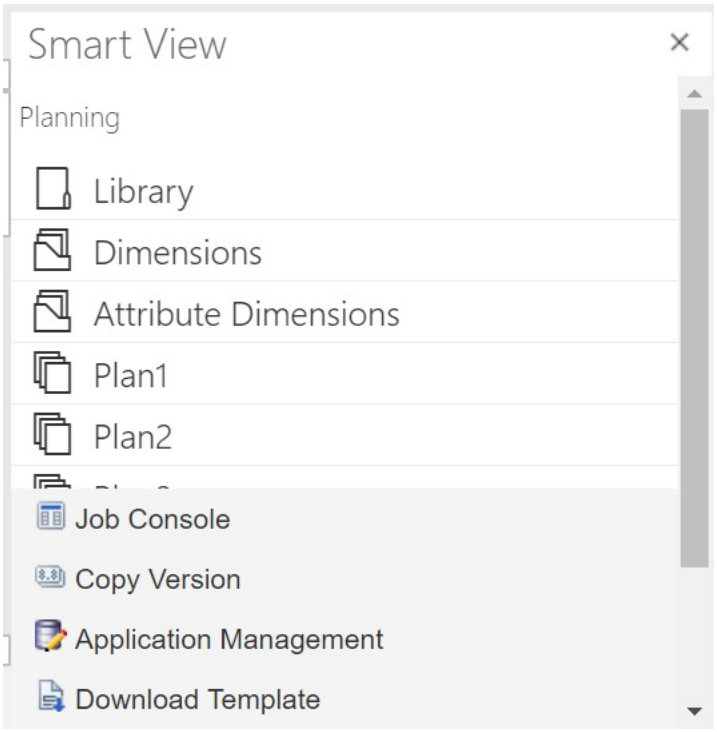
To import a dimension into an Oracle Smart View for Office (Mac and Browser) grid:

1. From the Smart View ribbon, click **Home**.

   In the **Home** panel, dimensions are displayed in the **Dimensions** folder. If attribute dimensions are defined, they are displayed in the **Attribute Dimensions** folder.

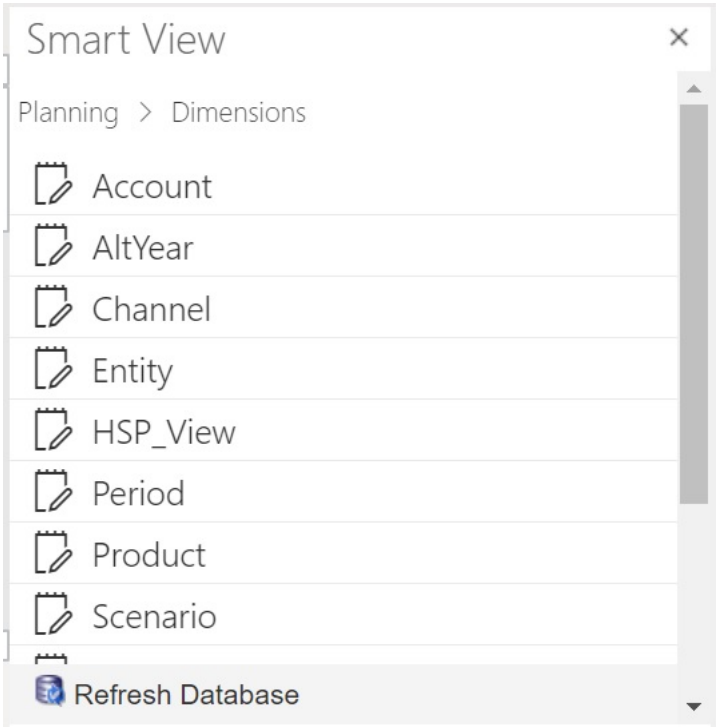
   If a Time Period dimension is defined, it's displayed in the Dimensions folder. Note that for the Time Period dimension, Data Storage is the only editable property.

Copyright © 2022, 2026, Oracle and/or its affiliates.



2. In the **Smart View Home** panel, click the **Dimensions** folder to expand it and view the application dimensions in the folder.

   In the following example, the Dimensions folder is expanded and shows eight of the 10 dimensions in the Vision application.



3. Click a dimension name to import the dimension on to the grid.

Copyright © 2022, 2026, Oracle and/or its affiliates.

See Dimension Grid in Smart View (Mac and Browser) for an illustration of the initial grid for the Account dimension.

4. **Optional:** Click the provider link in the path at the top of the panel to return to the main page of the Home panel

   For example, in the figure in step 2, you would click **Planning** to return to the main page of the Home panel.

Editing Members in Smart View

The Smart View grid allows you to rapidly edit the properties of members of a dimension.

To edit member properties in Smart View:

1. Within Oracle Smart View for Office or Oracle Smart View for Office (Mac and Browser), import a dimension into a Smart View grid (see Importing Dimensions in Smart View).
2. Highlight a member property in the grid.

   Note that for the Time Period dimension, Data Storage is the only editable property.
3. In the drop-down menu, select a value.

> **Note**
>
> Modified cells are displayed in a different color.

4. To save the grid, perform a task:
   - Oracle Smart View for Office: In the Planning Ad Hoc ribbon, click **Submit Data**.
   - In Oracle Smart View for Office (Mac and Browser), in the Smart View ribbon, click **Update**.

> **Note**
>
> You can save changes to multiple members and properties in the same **Submit Data** or **Update** operation. If the operation fails for one member, the application server will stop the operation and not save any changes.

Adding Application Members in Smart View

The Smart View grid allows you to rapidly add members to a dimension.

- Adding Members in Smart View
- Guidelines for Adding Members in Smart View

Videos

Your Goal	Watch This Video
Learn about adding Entity dimension members in Oracle Smart View for Office.	Managing Entity dimension members in Oracle® Smart View for Office

Copyright © 2022, 2026, Oracle and/or its affiliates.

Your Goal	Watch This Video
Learn about adding Account dimension members in Smart View.	Managing Account dimension members in Oracle® Smart View for Office
Learn about adding Scenario dimension members in Smart View.	Managing Scenario dimension members in Oracle® Smart View for Office

Adding Members in Smart View

The Smart View grid allows you to rapidly add members to a dimension.

To add members in Smart View:

1. Within Oracle Smart View for Office or Oracle Smart View for Office (Mac and Browser), import a dimension into a Smart View grid (see Importing Dimensions in Smart View).

   Note that Oracle Smart View for Office does not support adding members to the Time Period dimension.

2. Enter the name of a new member in the name column.

   > **Note**
   >
   > To add a member with a numeric name, place a single quote (') in front of the numeric member name to inform the system that the number is a member name and not data. For example, to add a member named 123, enter '123.

3. From the ribbon, click **Refresh**.

   New members are marked by an asterisk (*) in the grid after you perform the Refresh. A default set of properties is automatically applied to the new member. The default Parent Member is the root member of the dimension.

4. **Optional:** To change any property from the default value (the root member), highlight the appropriate cell in the grid, and then from the drop-down menu, select another value. (See Editing Members in Smart View.)

   > **Note**
   >
   > Perform a Refresh *before* you modify any properties in your new member. The Refresh operation will replace any changed values with default values from the server.

5. To save the grid, perform a task:

   - Oracle Smart View for Office: In the Planning Ad Hoc ribbon, click **Submit Data**.
   - In Oracle Smart View for Office (Mac and Browser), in the Smart View ribbon, click **Update**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - To modify the properties of the new member, see Editing Members in Smart View.
> - In Oracle Smart View for Office, member properties, including member names, can be localized based on the particular Locale set by in the Smart View add-in.
> - You can save changes to multiple members and properties in the same **Submit Data** or **Update** operation. If the operation fails for one member, the application server will stop the operation and not save any changes.

Guidelines for Adding Members in Smart View

- A new member is added as the last sibling under the specified parent.
- Parent-child relationships are determined by the Parent Name column property.
- The relative position of a new member in the grid is insignificant.
- The relative position of a new member in the grid will not be changed after performing the **Submit Data** or **Update** operation. To see the actual position of a new member in the outline reflected in the ad hoc grid, perform **Zoom Out**, then **Zoom In**.
- A full validity check of a new member name, including a check for invalid characters and a check for duplicate names, is performed during the **Submit Data** or **Update** operation.
- Default properties are automatically applied by the application to a new member. The specific default properties are based upon those of the dimension.
- When adding new currency members to a Currency dimension in a simplified application, the parent member for the new currency defaults to the "`Currency`" dimension member. It should default to the "`Input Currencies`" member. You can correct this by doing the following:
  1. Replace "`Currency`" with "`Input Currencies`" in the `Parent Member` column for each new currency member that you added.
  2. Perform a **Submit Data** or **Update**.
  3. Click **Refresh**.
  4. Verify that for each new currency you added, the entry for the `Parent Member` column is "`Input Currencies`."

Moving Members in Smart View

The Smart View grid allows you to rapidly move members from one parent to another within a dimension.

To move a member in Oracle Smart View for Office:

1. Within Smart View or Oracle Smart View for Office (Mac and Browser), import a dimension into a Smart View grid (see Importing Dimensions in Smart View for Office.)
2. Highlight the member in the **Parent Member** column in the grid.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> An empty Parent Member property causes the value of the Parent Member to default to the root member.

3. Enter a parent name at the intersection of the **member name** and **Parent** column.
4. Click **Submit Data** to save the grid.

> **Note**
>
> You can save moves of multiple members or subtrees in the same **Submit Data** operation. If the **Submit Data** operation fails for one member, the application server stops the operation and doesn't save changes.

Guidelines for Moving Members in Smart View

- An empty Parent Member in the grid denotes a root member in the dimension.
- The value of a Parent Member follows the rules applicable to the corresponding value in the metadata load file used by Smart View.

Working with Attribute Dimensions

Related Topics

- Adding Attribute Dimension Members in Smart View

Adding Attribute Dimension Members in Smart View

You create attribute dimensions in the web interface. You can then add members to attribute dimensions using the Admin Extension in Oracle Smart View for Office or Oracle Smart View for Office (Mac and Browser).

- Adding Attribute Dimension Members in Smart View for Office
- Adding Attribute Dimension Members in Smart View (Mac and Browser)

Adding Attribute Dimension Members in Smart View for Office

You create attribute dimensions in the web interface. You can then add members to attribute dimensions using the Admin Extension in Oracle Smart View for Office.

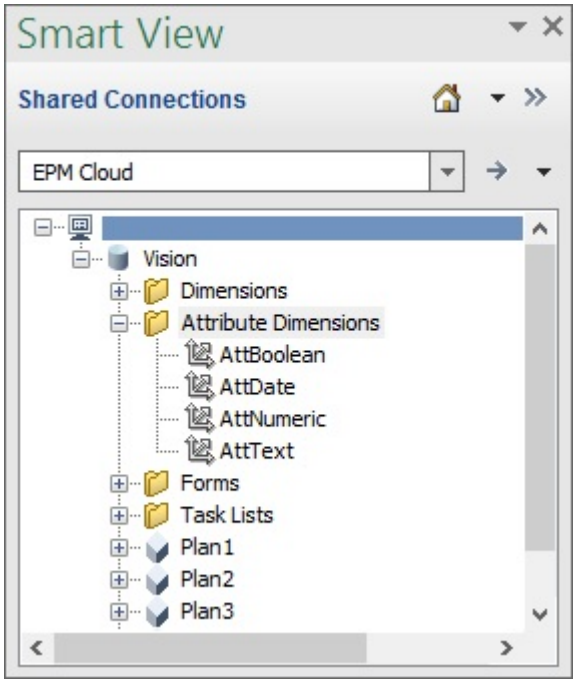
To add members to attribute dimension members:

1. From the Smart View ribbon, click Panel.
2. In the Smart View Panel, click Shared Connections or Private Connections, and provide your user name, and password in the login windows.

   If you chose Private Connections, select the private connection in the drop-down list of connections, then provide your login credentials.
3. From the Smart View Panel, select **EPM Cloud**.
4. In the tree in the Smart View Panel, expand the Attribute Dimensions node.

Copyright © 2022, 2026, Oracle and/or its affiliates.

In the following example, the Attribute Dimensions node contains four attribute dimensions, one for each attribute type: text, date, Boolean, and numeric.



5. Select an attribute dimension, and then select **Edit Dimension**.

   To illustrate, we selected the AttText attribute dimension to edit. An example of the initial grid for the attribute dimension is shown. This dimension has no members yet, and just two properties, Parent member and Default Alias Table.

	A	B	C
1		Parent Member	Default Alias Table
2	AttText		

6. Type the attribute member names to add; for example:

	A	B	C
1		Parent Member	Default Alias Table
2	AttText		
3	Gold		
4	Silver		
5	Platinum		

7. From the Smart View ribbon, click **Submit**.

   The attribute members are submitted to the application.

Copyright © 2022, 2026, Oracle and/or its affiliates.

	A	B	C
1		Parent Member	Default Alias Table
2	AttText		
3	Gold	AttText	
4	Silver	AttText	
5	Platinum	AttText	

8. **Optional:** Continue editing the attribute members, entering data for other properties by typing directly in the grid, and then submit your changes.

Adding Attribute Dimension Members in Smart View (Mac and Browser)

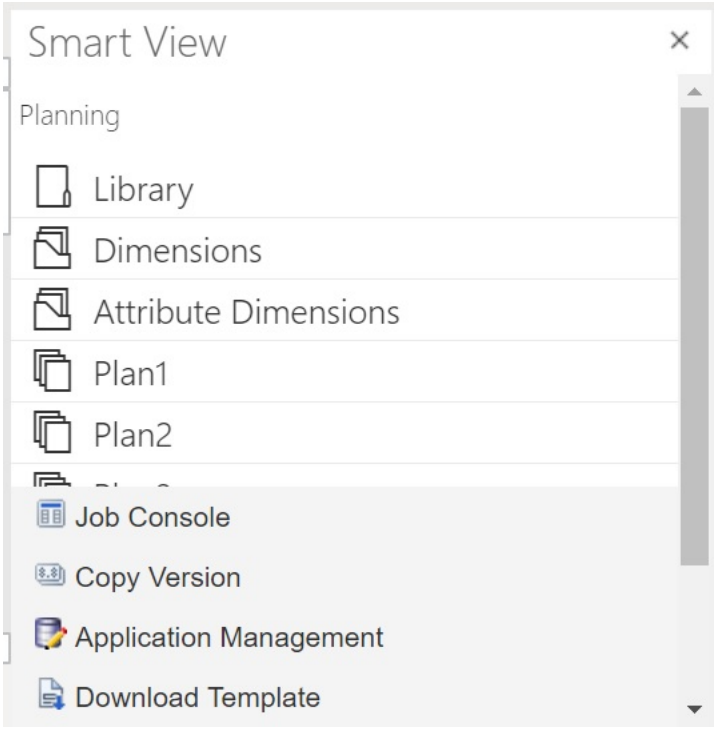
Before you begin adding attribute dimension members in Oracle Smart View for Office (Mac and Browser), you should either sideload or deploy Smart View in your environment. Instructions are in *Deploying and Administering Oracle Smart View for Office (Mac and Browser)*:

- Sideloading and Logging In
- Deploying the Manifest File to Office 365 Users

To add a member to an attribute dimension in a Oracle Smart View for Office (Mac and Browser) grid:

1. From the Smart View ribbon, click **Home**.

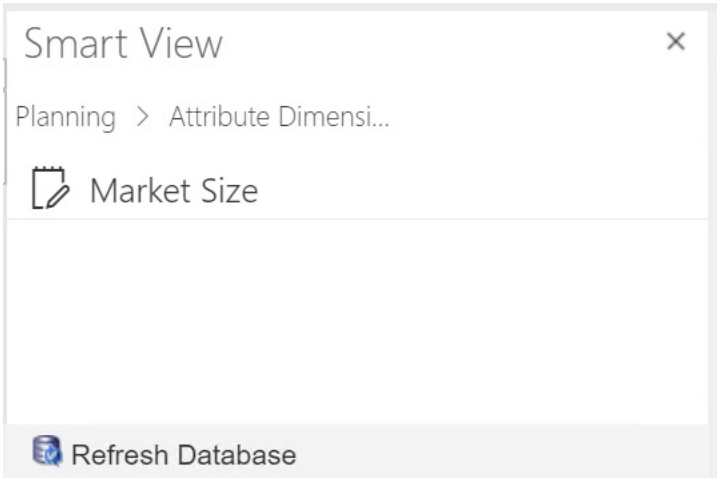
   In the **Home** panel, dimensions are displayed in the **Dimensions** folder. If attribute dimensions are defined, they are displayed in the **Attribute Dimensions** folder.



Copyright © 2022, 2026, Oracle and/or its affiliates.

2. In the **Smart View Home** panel, click the **Attribute Dimensions** folder to expand it and view the attribute dimensions in the folder.

   In the following example, the Attribute Dimensions folder is expanded and shows one attribute dimension, Market Size, in the Vision application.



3. Select an attribute dimension to import it onto the grid.

   To illustrate, we selected the Market Size attribute dimension to edit. An example of the initial grid for the attribute dimension is shown. This dimension has no members yet, and just two properties, Parent member and Default Alias Table.

	A	B	C
1		Parent Member	Default Alias Table
2	Market Size		

4. In the attribute name column, under the attribute name, type the attribute member names to add.

	A	B	C
1		Parent Member	Default Alias Table
2	Market Size		
3	Large		
4	Medium		
5	Small		

5. From the Smart View ribbon, click **Submit**.

   The attribute members are submitted to the application.

Copyright © 2022, 2026, Oracle and/or its affiliates.

	A	B	C
1		Parent Member	Default Alias Table
2	Market Size		
3	Large	Market Size	
4	Medium	Market Size	
5	Small	Market Size	

6. **Optional:** Continue editing the attribute members, entering data for other properties by typing directly in the grid, and then submit your changes.

Designating Shared Members in Smart View

The Smart View grid allows you to rapidly designate members for sharing within a dimension.

> **Note**
>
> In Smart View, the Shared data storage option isn't available for members of the Currency dimension or any attribute dimensions.

To designate a shared member in Oracle Smart View for Office:

1. Verify that the base member exists.
2. Highlight the base member in the **Parent Member** column in the grid.
3. Change the parent name value for the base member.
4. Highlight the base member in the **Data Storage** column.
5. In the drop-down menu, select **Shared**.
6. Click **Submit Data** (Windows) or **Submit** (Mac and Browser) to save the grid.

The submit operation will refresh the base member with its original Parent Member and Data Storage properties. The shared member will be added under the specified parent on the server. You must zoom in on the parent to see the newly added shared member.

> **Note**
>
> The new shared member will *not* be automatically added to the Smart View grid. The list of members displayed in the grid remains unchanged.

Refreshing Databases

Related Topics

- Refreshing Databases in Smart View for Office
- Refreshing Databases in Smart View (Mac and Browser)

Copyright © 2022, 2026, Oracle and/or its affiliates.

Refreshing Databases in Smart View for Office

The Oracle Smart View for Office grid allows you to quickly refresh a database.

To refresh a database in Smart View:

1. From the Smart View ribbon, click **Panel**.
2. From the Smart View Panel, select **Planning**.
3. Expand the **Dimensions** folder to view the application dimensions in the folder.

   If attribute dimensions are defined, they are displayed in the **Attributes** folder.
4. Right-click the *root* **Dimension** or **Attributes** folder and select **Refresh Database**.

   The Smart View **Refresh Database** dialog box is displayed.

   > **Tip**
   >
   > The database refresh cannot be completed while a rule type job is running or in progress. Check the Job Console, either in the web or in Smart View, for any jobs running against the database. When all jobs are complete, then perform the database refresh.
5. Click **Refresh**.

   A progress bar is displayed, indicating the percentage of steps completed for the refresh or create operation.

Refreshing Databases in Smart View (Mac and Browser)

The Smart View grid allows you to quickly refresh a database or create a new one.

To refresh a database in Oracle Smart View for Office (Mac and Browser):

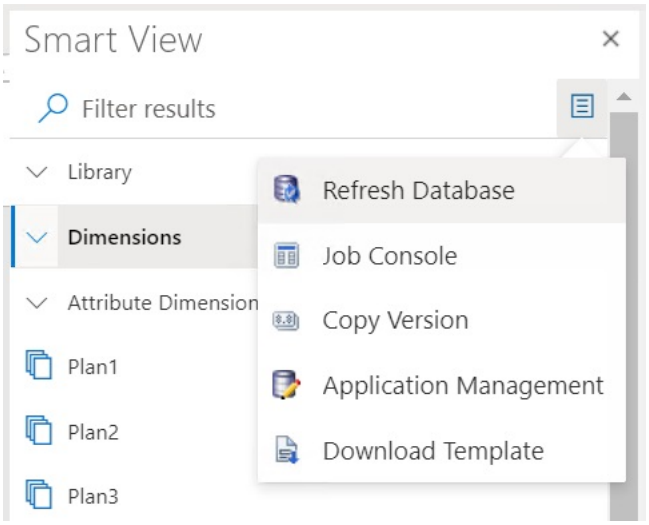
1. From the Smart View ribbon, click **Home**.
2. From the Smart View Home panel, navigate to the root application **Dimensions** folder.

   If attributes are defined in the application, to refresh attribute dimensions, navigate to the **Attribute Dimensions** folder.
3. Select the *root* **Dimension** or **Attribute Dimensions** folder, click the **Actions** button, , and then select **Refresh Database** from the drop-down menu.

   The **Refresh Database** dialog box is displayed.

   In the following example, the **Dimensions** folder is selected, and in the **Actions** drop-down menu, **Refresh Database** is selected.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Tip

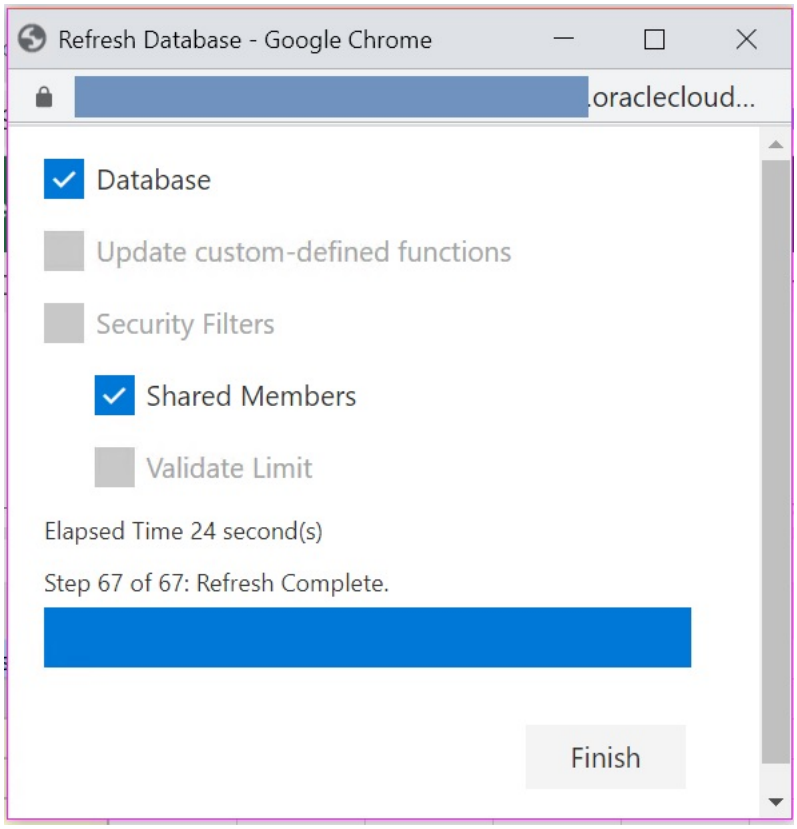
The database refresh cannot be completed while a rule type job is running or in progress. Check the Job Console, either in the web or in Oracle Smart View for Office (Mac and Browser), for any jobs running against the database. When all jobs are complete, then perform the database refresh.

4. Select the **Database** check box, and then click **Refresh**.

   In the following illustration, the **Database** and **Shared Members** check boxes are selected. Other options that can be selected for refresh are:

   - Update custom-defined functions
   - Security filters
   - Validate limits

Copyright © 2022, 2026, Oracle and/or its affiliates.



A progress bar is displayed, indicating the percentage of steps completed for the refresh or create operation.

5. Click **Finish** to close the dialog.

Planning Admin Extension and Office AutoCorrect

> **Note**
>
> The information in this topic applies to the Planning Admin Extension on the Windows-based version of Oracle Smart View for Office; this information does not apply to the Planning Admin Extension in Oracle Smart View for Office (Mac and Browser).

In the Planning Admin Extension on Windows-based versions of Excel, Office AutoCorrect can affect member editing in Smart View.

When editing member properties, such as member names, member descriptions, aliases, or member formulas of the data type Text, you may have names that begin with two initial capital letters; for example

```
DGreen
```

Excel will autocorrect this name to one initial capital; for example:

```
Dgreen
```

In Excel, you can set an AutoCorrect option to retain two initial capital letters in a name.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To retain two initial capital letters in a name:

1. In Excel, access the **Excel Options** dialog.
2. Select **Proofing**, and then click the **AutoCorrect Options** button.
3. In the **AutoCorrect** dialog, clear the **Correct TWo INitial CApitals** check box.
4. Click **OK** to close the **AutoCorrect** dialog, and then click **OK** to close the **Excel Options** dialog.

The change takes effect immediately. There is no need to restart Excel.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part V
Using Tools

Related Topics

- Customizing Your Display
- Working with Variables
- Announcing Upcoming Events
- Managing Access Control
- Setting the Daily Maintenance Process Time
- Using Migration
- Cloning Your Environment
- Auditing Tasks and Data
- Setting User Preferences

Customizing Your Display

To customize your Enterprise Profitability and Cost Management display:

1. From the Home page, select **Tools**, and then **Appearance**.
2. Choose from the following customization options:
   - **Logo Image**: You can replace the default Oracle logo with your own image. Select **File** to choose a locally-stored custom image file, or select **URL** to choose a custom image URL. Only secured URLs are supported. The URL must begin with "https" rather than "http." Supported graphic formats are .jpg, .png, or .gif, and the file upload is limited to 5MB. To avoid distortion, the logo image must be 113px by 32px or an equivalent ratio. Select **Predefined** to use the default Oracle logo.
   - **Background Image**: You can replace the default watermark with appears in the background with your own image. Select **File** to choose a locally stored custom image file, or select **URL** to choose a custom image URL. Only secured URLs are supported. The URL must begin with "https" rather than "http." Supported graphic formats are .jpg, .png, or .gif, and the file upload is limited to 5MB. Select **Predefined** to use the default background image.

     The default size for the background image is 1024x768. You can use a larger background image; however, the image is scaled to fit the resolution setting of your display and the image is centered horizontally. If you want your background image to fit both a browser and a mobile device, Oracle recommends that you size the image so that it fits your biggest screen (or highest resolution device).
   - **Display Business Process Name**: By default, **Enterprise Profitability and Cost Management** is displayed next to the logo on the Home page and on the tab when a browser tab is opened. If No is selected, the business process name is hidden on the Home page and Oracle Applications is displayed on browser tabs.
3. Click **Save** to save your selections.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Working with Variables

Related Topics

- Working with Substitution Variables
- Working with User Variables

Working with Substitution Variables

Related Topics

- About Substitution Variables
- Creating and Assigning Values to Substitution Variables
- Deleting Substitution Variables

About Substitution Variables

Substitution variables act as global placeholders for information that changes regularly. For example, you could set the current month member to the substitution variable `CurMnth` so that when the month changes, you need not update the month value manually in the form or the report script. You create and assign values to substitution variables within the application. These substitution variables are then available in the application when you select members for a form.

> **Note**
>
> If you migrated an application that uses Global variables, you can view, but not edit, them in the application.

Creating and Assigning Values to Substitution Variables

To create a substitution variable and assign values to it:

1. From the Home page, select **Tools**, and then **Variables**.
2. Select the **Substitution Variables** tab.
3. Click .

   A new variable is added to the bottom of the list.
4. Scroll to the bottom of the list, click the down arrow next to the **Cube** name for the newly added variable, and then select the cube.
5. For **Name**, enter the name of the substitution variable (up to 80 characters).
6. For **Value**, enter a value for the substitution variable (up to 255 characters).

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - You can specify a range of values when defining substitution variables; for example, `FY16:FY18`.
>
> You can define a substitution variable range for base members and parent members. For base members, you can use a single colon (`:`) or a double colon (`::`) as delimiters; for example, `SunEnT 110::111`. However for parent members, you can only use a single colon (`:`).
> - If the substitution variable will be used in data export job definitions for block storage cubes and the member name is numeric only, the member name must be placed in double quotation marks in the **Value** field; for example, `"1100"` or `"000"`. The double quotation marks aren't necessary for alphanumeric member names; for example, `a1110`. However if this variable will be selected in data export job definitions for aggregate storage cubes, you can't place the member name in double quotation marks in the **Value** field. Therefore if you need to use the same member name in substitution variables for data export jobs defined for both types of cubes, you must define two different substitution variables; one with quotes and one without

7. Click **Save**.

Deleting Substitution Variables

To delete substitution variables:

1. From the Home page, select **Tools**, and then click **Variables**.
2. Select the **Substitution Variables** tab.
3. Next to the substitution variable you want to delete, click .
4. To confirm deletion, click **Yes**.

Working with User Variables

Related Topics

- About User Variables
- Creating User Variables
- Managing User Variables
- Setting Limits for User Variables on Forms
- Deleting User Variables

About User Variables

User variables act as filters in forms, enabling users to focus only on certain members, such as a department. Before you can associate a user variable with a form, you must create the user variable. When you create forms with user variables, users must first select values in preferences for the variable before opening forms. Afterward, users can change the variable on the form only if it's a dynamic user variable. Otherwise, they must continue to set the variable

Copyright © 2022, 2026, Oracle and/or its affiliates.

in preferences. For example, if you create a user variable called Division, users must select a division before working in the form.

> **Tip**
>
> Attributes are another way to filter forms. But instead of explicitly filtering by an attribute (like Red), you can create a user variable for the attribute dimension, and then use the user variable as the filter. Then you can enable the user variable as a dynamic user variable which allows users to change the value of the filter at runtime. This is a useful technique that allows for dynamic filtering.

The first time users select a variable for a form, they must do so in preferences. After that, they can update the variable in preferences or in the form.

Creating User Variables

To create user variables:

1. From the Home page, select **Tools**, and then **Variables**.
2. Select the **User Variables** tab.
3. Click .

   A new variable is added to the bottom of the list.
4. Scroll to the bottom of the list and click the down arrow next to the **Dimension** name for the newly added variable. For **Select Dimension**, select the dimension for which to create a user variable (including attribute dimensions).
5. In the **User Variable Name** column, enter the name of the user variable.
6. Click to select dimension members.

   > **Note**
   >
   > The **Use Context** setting means the value can't be chosen by the user from user preferences. Instead, the value is passed from another form based on its Point of View context and the value will change dynamically based on the context of the form. However if the user variable is used elsewhere, such as in rows and columns, you must create a different user variable so the user can set its own value for it because it won't be set dynamically.
7. Click **OK**.

   You can now associate the user variable with a form, and you can also set limits for user variables on forms. See Setting Limits for User Variables on Forms. Afterward, users can select members for the user variable.

Managing User Variables

You can set user variables to limit the number of members displayed on a form, helping users focus on certain members. For example, if you create a user variable called Division for the Entity dimension, users can select a member for their own division. You can create any number

Copyright © 2022, 2026, Oracle and/or its affiliates.

of user variables for each dimension (including attribute dimensions), and select user variables for any axis in the form.

The typical sequence of steps:

1. If necessary, create the appropriate parent-level members in the dimension outline.
2. Define user variables for each dimension you want users to be able to filter (including attribute dimensions).
3. When designing the form, associate the user variable with the form.
4. Instruct users to select a member for the user variable associated with the form.

   Before users can open forms that have user variables, they must select a member for User Variable Options in preferences. After selecting an initial value, they can change it in the form or in preferences.

Setting Limits for User Variables on Forms

You can limit which members users can see or select on individual forms by limiting their member selections for a user variable. The user variable limit applies the restriction to all users at the form level, regardless of their access permissions. In addition to setting the limits by members, Service Administrators can select limits by function (for example, "IChildren(Existing Employees)".

To set up user variable limits:

1. During form design, select **Enable Dynamic User Variables** to allow dynamic user variables in the form.
2. Create a user variable.

   See Creating User Variables.
3. In the **User Variable Definition** field on the **Variables** page under the **User Variables** tab, click , and add or remove members to set limits.

   To select members by function, click and select from the available options.
4. In the form designer, assign the user variable to the page axis.

Deleting User Variables

You can delete user variables if they are not associated with a form. If you attempt to delete a user variable that is used in a form, you'll see an error message saying it cannot be deleted. The message will also provide the names of the forms where the user variable is used.

To delete user variables not associated with forms:

1. From the Home page, select **Tools**, and then **Variables**.
2. Select the **User Variables** tab.
3. Next to the user variable you want to delete, click .
4. To confirm deletion, click **Yes**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Announcing Upcoming Events

Create and send announcements to alert users about upcoming events, such as system maintenance or the running of jobs. Announcements are displayed in the Announcements area on the Enterprise Profitability and Cost Management Home page.

To create an announcement:

1. From the Home page, select **Tools**, and then **Announcements**.
2. Click **Create**, and enter the following information:
   - A subject that summarizes the purpose of the announcement.
   - The start date (when to send the announcement). The end date is optional.
   - The content. You may need to select an editing mode (Rich Text or Source Code) first.
3. Click **Save and Close**.

Managing Access Control

Assign application-specific roles to groups and users.

To open Access Control:

1. From the Home page, select **Tools**, and then **Access Control.**
2. In **Manage Groups**, click **Create**.
3. In **Create Group**, complete these steps:
   a. In **Name**, enter a unique group name (maximum 256 characters).

      Group names are not case-sensitive. Oracle Fusion Cloud Enterprise Performance Management does not allow you to create groups with names identical to predefined role names (Service Administrator, Power User, User or Planner, and Viewer).

   b. **Optional**: Enter a group description.
4. **Optional**: Add groups to create a nested group.
   a. In **Available Groups**, search for groups.

      Groups that match the search criterion are listed under **Available Groups**.

   b. From **Available Groups**, select the member groups for the new group.
   c. Click **Move**.

      The selected groups are listed under **Assigned Groups**. To remove assigned groups, from **Assigned Groups**, select the group to remove, and then click **Remove**.
5. **Optional**: Add Cloud EPM users as members of the group. Only users who are assigned to a predefined role can be added as group members.
   a. Click **Users.**
   b. In **Available Users**, search for users
   c. From **Available Users**, select the users to add to the group.

Copyright © 2022, 2026, Oracle and/or its affiliates.

d. Click **Move**.

6. Click **Save,** and then click **OK**.

> **Note**
>
> See Overview of Access Control in *Administering Access Control*.

Designing Custom Navigation Flows

Customize the business process interface using navigation flows. Navigation flows enable designers to control how roles or groups interact with the business process.

Related Topics

- Understanding Navigation Flows
- Viewing and Working with Navigation Flows

Understanding Navigation Flows

Navigation flows give business process designers control over how various roles, or groups, interact with the business process. The Navigation Flow Designer enables you to customize the business process interface. For example, you can change the names of the cards and clusters that display on the Home page and the order in which they are displayed. You can hide cards, create new cards, and group cards into clusters. You can also customize the vertical and horizontal tabs that display on a card.

Videos

Your Goal	Watch This Video
View the highlights of customizing workflows for connected environments.	Overview: Configure Navigation Flows to Integrate Cloud EPM Business Processes

Related Topics

- What Can Be Customized in the Business Process Interface?
- Navigation Flow Customization Categories
- Navigation Flow Permissions
- Predefined Navigation Flows
- Understanding Navigation Flow Status after Import
- Viewing and Working with Navigation Flows

What Can Be Customized in the Business Process Interface?

Navigation flows are made up of cards. Each card contains content with information that is displayed as one or more tabbed pages. The content included on cards can be URLs or artifacts such as forms, dashboards, and reports. Cards can be grouped into clusters.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If Dashboard 2.0 and Forms 2.0 are enabled in your business process:
>
> - Navigation flows support the features included in Dashboard 2.0 and Forms 2.0, including the ability to edit a form from within the runtime dashboard, and editing it with or without data. Dashboard 2.0 component actions such as **Open Form** and **Edit Form** also work directly within the navigation flow.
> - If a dashboard contains multiple components, when you edit a dashboard from within a navigation flow, the focus will be set to the last component in the dashboard.

Navigation flows can be customized in the following ways:

- Labels for cards or tabs
- Icons that are used for cards or tabs
- Hide and unhide cards and tabs
- Display order of cards and tabs
- Add new cards
- Add existing cards
- Add new horizontal or vertical tabs
- Remove navigation flows, cards, and tabs
- Group cards into clusters
- Add existing clusters

See Viewing and Working with Navigation Flows.

Navigation Flow Customization Categories

Navigation flows are categorized as follows for customization:

1. Global: Navigation flows are seen by all users
2. Role: Navigation flows are seen only by users in a specific role; for example, Service Administrator or Power User
3. Group: Navigation flows are seen only by users belonging to a specific group; for example, Sales

Navigation flows can be defined at any of these levels. In cases where navigation flows exist at multiple levels, updates are applied in the order of highest (global) to lowest (groups).

For example, if you create a navigation flow that displays an icon on the Home page named "My Tasks", and then another Service Administrator duplicates the navigation flow, makes the following changes to the card, and then associates the navigation flow with a group:

- At the global level, they rename "My Tasks" to "Company Tasks"
- At the group level, for a group named Sales, they rename "My Tasks" to "Sales Tasks"

Users who belong to the group called Sales will see the label "Sales Tasks" in the navigation flow instead of "My Tasks," and all other users will see the label "Company Tasks".

Copyright © 2022, 2026, Oracle and/or its affiliates.

Navigation Flow Permissions

The business process offers three levels of permissions for navigation flows:

- Role-based: Permissions are granted to users or groups assigned to a specific role; for example, a User will see different cards displayed on the Home page than a Service Administrator
- Artifact-based: Permissions are granted to users or groups who can see certain artifacts; for example, a User will see only the forms to which they have been assigned permission
- Global: Permissions are granted to all users

Predefined Navigation Flows

The business process comes with one predefined navigation flow, called Default. The Default navigation flow is read only; therefore, you can't make any modifications to it.

These are the operations you can and cannot perform on the Default navigation flow:

- Name: You can't modify the name.
- Delete: You can't delete the navigation flow.
- Edit: You can view the navigation flow details, but you can't change anything.
- Activate or Deactivate: You can activate or deactivate the navigation flow.
- Duplicate: You can make a copy of the navigation flow.

Understanding Navigation Flow Status after Import

When you import a snapshot containing an active navigation flow into an environment containing an active navigation flow of the same category (role, group, or global), then the new navigation flow being imported is deactivated.

For example, the following navigation flows are currently active on your system:

- NF Sales Q2 (Sales group)
- NF Administrator (Service Administrator role)
- NF Custom Default (global)

Let's say you import a navigation flow called NF Sales Q3, which uses the same Sales group as NF Sales Q2. The NF Sales Q3 navigation flow will be imported as inactive and the existing NF Sales Q2 will remain active for the Sales group. If you want the new NF Sales Q3 to be active, you must manually activate it (which will inactivate the old NF Sales Q2). We deactivate the imported Q3 navigation flow because the import might occur ahead of the Q3 start date, and we want to ensure the Q3 navigation flow isn't activated before the Q3 start date.

If a new application is created from a Migration snapshot that includes an active custom global navigation flow (for example, NF Custom), the NF Custom global navigation flow will become inactive after Migration import. The same is true if the application is cloned. The Default global navigation flow will become the active global navigation flow and you'll need to ensure you activate the global NF Custom navigation flow after the new application is created. If all users are using the NF Custom global navigation flow, they might experience a service interruption until the NF Custom navigation flow is activated.

When designing navigation flows:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Create navigation flows for specific groups or classes of users. Then associate the navigation flow to corresponding user groups.
- Avoid creating one global navigation flow for all users.

Viewing and Working with Navigation Flows

Users assigned the Service Administrator role can view all navigation flows, including the predefined navigation flow, on the Navigation Flows page. Users assigned to other roles and groups will only see the navigation flows to which they have access.

The Navigation Flow page lists each navigation flow by name, indicates the role or the group that has access to the navigation flow (if assigned), and provides a description of the navigation flow (if provided). The listing also indicates whether the navigation flow is active or not.

Viewing Navigation Flows

To view the Navigation Flow page:

1. On the Home page, click **Tools**.
2. Click **Navigation Flows**.

Working with Navigation Flows

To work with a navigation flow, perform an action:

- For design best practices and considerations, see Navigation Flow Design Best Practices and Naming Considerations.
- To create and duplicate navigation flows, see Creating and Duplicating Navigation Flows.
- To edit a navigation flow, see Editing a Navigation Flow.
- To activate or deactivate a navigation flow, see Activating and Deactivating Navigation Flows.
- To preview the runtime view of a navigation flow for a user, see Previewing the Runtime View of a Navigation Flow for a User.
- To validate navigation flows and to learn how to find and resolve navigation flow elements with missing artifacts, see Using Validate to Find Missing Artifacts in Navigation Flows.
- To resolve a navigation flow in the listing that is displaying a warning icon , see Resolving Navigation Flows that Display a Warning Icon.
- To rename cards and tabs, see Customizing Labels for Cards, Tabs, and Clusters.
- To customize the graphics used for cards and tabs, see Customizing Icons for Cards and Vertical Tabs.
- To hide and unhide cards and tabs, see Hiding and Unhiding Clusters, Cards, and Tabs.
- To change the display order of cards on the Home page, see Changing the Display Order of Cards on the Home Page.
- To add cards, see Adding Cards.
- To add tabs, see Adding Tabs.
- To embed third-party pages in navigation flows, see About Using URLs to Embed Third-Party Pages in Cloud EPM Applications.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- To remove navigation flows, cards, and tabs, see Removing Navigation Flows, Cards, and Tabs.
- To group cards into clusters, see Grouping Cards into Clusters.
- To reload a navigation flow, see Reloading a Navigation Flow.
- To switch navigation flows at runtime, see Switching Navigation Flows at Runtime.
- To copy the current page URL for sharing, see Sharing the Current Page URL for Cards, Tabs, and Sub Tabs.

Troubleshooting

For help with resolving navigation flow issues, see Handling Issues with Navigation Flows in *Operations Guide*.

Navigation Flow Design Best Practices and Naming Considerations

Design Best Practices

To provide an optimal user experience and to avoid excessive scrolling on the Home page and within cards and tabs, you must adhere to the following guidelines when designing navigation flows:

- Keep the top-level items (cards and clusters) to no more than 20 visible items.
- Add no more than 16 visible cards to a cluster.
- Add no more than 10 visible vertical tabs within a card.
- Add no more than 20 visible sub tabs (horizontal tabs) within a vertical tab.
- Label names on sub tabs (horizontal tabs) display only the first 30 characters at runtime. Hovering your cursor over the tab reveals the entire label.

> **Note**
>
> If you attempt to exceed the visibility limits, you will see a warning message telling you that you've exceeded the limit.

Naming Considerations

There are naming restrictions for navigation flows, cards, clusters, tabs, and infolets (if your business process uses infolets) in navigation flows. You cannot use these special characters:

- ampersand (&)
- less than sign (<)
- greater than sign (>)
- quotation mark (")
- backslash (\ )
- plus sign (+)

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating and Duplicating Navigation Flows

To create a navigation flow, you must first select an existing navigation flow and make a copy of it. Then edit the duplicate navigation flow details and save them.

To create and duplicate a navigation flow:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.
2. In the upper right-hand corner of the page, click (Actions), and then select **Create Copy**.
3. Enter a name for the navigation flow, and then click **OK**.

> **Note**
>
> Ensure that you adhere to the navigation flow naming restrictions outlined in Navigation Flow Design Best Practices and Naming Considerations.

4. Edit details for the navigation flow. See Editing a Navigation Flow.

> **Note**
>
> New flows are marked **Inactive** until they are activated by the Service Administrator. To activate a navigation flow, see Activating and Deactivating Navigation Flows.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Editing a Navigation Flow

To edit a navigation flow:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.
2. Click the name of the navigation flow you want to edit.

> **Note**
>
> The predefined navigation flow isn't editable. However, you can create a copy of a predefined navigation flow and edit the copy. See Predefined Navigation Flows.

You'll see a page listing the cards and clusters in the navigation flow. On this page you can edit the role or goup assignation, designate which clusters and cards are visible on the Home page, change the order in which the navigation flow clusters and cards are displayed, add cards to clusters or remove them, and remove clusters and cards from the navigation flow.

- **Assign To**: Click (Select) to assign the navigation flow to a group of users or to a role.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Visible**: Edit the visibility of the navigation flow clusters and cards on the Home page by selecting or deselecting them in the **Visible** column.

  > **Note**
  >
  > Ensure that you adhere to the navigation flow guidelines for visibility outlined in Navigation Flow Design Best Practices and Naming Considerations.

- **Order**: Clusters and cards are listed in the order in which they are displayed on the Home page, if visible. Selecting an up or down arrow option repositions the clusters and cards in the listing and changes the display order of the clusters and cards on the Home page. Selecting the right arrow moves a card into a cluster.
- **Remove**: Removes the cluster or card from the navigation flow.

3. Click a cluster or card to edit details. For descriptions of card details, see the following topics:
   - Adding Cards
   - Adding Tabs

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Activating and Deactivating Navigation Flows

You can create multiple navigation flows for each category (global, role, or group), but only one navigation flow can be active in each category. Whenever you make a navigation flow active, the other navigation flows in the same category will become inactive.

> **Note**
>
> Each business process requires one active global navigation flow. To make a different global navigation flow active, select another global navigation flow and activate it.

For information about categories, see Navigation Flow Customization Categories.

These are the operations users can and cannot perform on an active navigation flow:

- Name: Users can't modify the name.
- Delete: Users can't delete the navigation flow.
- Edit:
  - Users can view the navigation flow definition, but they can't change anything.
  - If the business process is in administration mode, then users can save any modifications.
- Activate or Deactivate: Users can activate or deactivate a navigation flow.
- Duplicate: Users can make a copy of a navigation flow.

To activate or deactivate a navigation flow:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. In the **Active** column, click **Active** or **Inactive**. An active flow will be marked inactive. Conversely, an inactive flow will be marked active.

Previewing the Runtime View of a Navigation Flow for a User

Navigation flow designers can use the **User Access View** option to preview the runtime view for any user assigned to a group associated with a navigation flow.

This preview option is only available when the navigation flow is associated with a group. The **User Access View** option is not enabled for the Default navigation flow or for any navigation flow that is not associated with a group.

To preview the runtime view of a navigation flow for a user:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.
2. Select the row for the navigation flow you want to preview.

> **Note**
>
> The navigation flow must be associated with a group and it cannot be the Default navigation flow.

3. In the upper right-hand corner of the page, click (Actions), and then select **User Access View**.

   The navigation flow opens and displays the name of the navigation flow followed by **(User Access View)**.
4. Select from the following options:
   - **Users**: Select a user to preview the runtime view for that user. By default, the **Users** box displays the first name in the user list for the group associated with the navigation flow. To select a different user, click (Users), select another user, and then click **OK**.
   - **Display**: Select **All nodes** or **Visible nodes**. **All nodes** is the default option and it displays all the nodes for the navigation flow in the **Navigation** list. If some of the nodes are not visible to the user (possible reasons being they don't have access to an artifact within the node or an artifact within a node was removed or renamed), an error icon will indicate which nodes include artifacts that are not visible for that user. **Visible nodes** displays only the nodes that are visible for that user in the **Navigation** list.
5. If **All nodes** is selected, the **Navigation** list displays error icons next to the nodes that are fully or partially inaccessible to the user:
   - (No Access): This entire node is not accessible to the user. Possible reasons for limited access: the user doesn’t have access to the page or to the referenced node, the navigation flow might’ve been deleted or renamed, the connection might be unavailable or deleted.
   - (Partial Access): One or more nodes are not accessible to the user. Possible reasons for limited access: the user doesn’t have access to the page or to the referenced node, the navigation flow might’ve been deleted or renamed, the connection might be unavailable or deleted.

Copyright © 2022, 2026, Oracle and/or its affiliates.

If a node displays a (Partial Access), expand the node to view the artifacts within each node that are inaccessible to the user.

6. Click **Close** to exit **User Access View**.

Using Validate to Find Missing Artifacts in Navigation Flows

While viewing the Navigation Flow listing, you might see navigation flow nodes or artifacts displaying an error icon. This error occurs because artifacts that were associated with the navigation flow were either renamed or removed and they are now considered missing. You'll need to edit the navigation flow to associate it with either a renamed artifact or with a different artifact before you can activate the navigation flow. You might not realize that artifacts are considered missing, so it's recommended that you validate your navigation flows before setting them to Active status.

> **Note**
>
> To resolve a navigation flow displaying a warning icon, see Resolving Navigation Flows that Display a Warning Icon.

To validate navigation flows to find missing artifacts and reassociate them:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.
2. If they aren't already deactivated, set the navigation flows you want to validate to **Inactive** status. See Activating and Deactivating Navigation Flows.
3. Highlight the row or rows of the navigation flows you want to validate.
4. Click (Actions), and then select **Validate**.

   If artifacts are missing, you'll see an error message indicating which navigation flows are referencing artifacts that cannot be found.
5. Click the name of each navigation flow with the error, and then expand the nodes which display the error icon until you reach the Manage page which displays the missing artifact.
6. For **Artifact**, click (Choose Artifact) to select the renamed artifact or a different artifact in the Artifact Library.
7. Click **Save and Close**.
8. Repeat the validation on your navigation flows and drill down to make corrections, as needed, until you see a message indicating the navigation flows are valid.
9. Activate the navigation flows. See Activating and Deactivating Navigation Flows.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Resolving Navigation Flows that Display a Warning Icon

While viewing the Navigation Flow listing, you might see a navigation flow displaying a warning icon. This occurs because the group that was associated with the navigation flow was

Copyright © 2022, 2026, Oracle and/or its affiliates.

deleted. You'll need to edit the navigation flow to associate it with a group or role before you can activate the navigation flow.

> **Note**
>
> To resolve navigation flows displaying an error icon , see Using Validate to Find Missing Artifacts in Navigation Flows.

To resolve the navigation flow:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.
2. Click the name of the navigation flow displaying the warning icon .
3. For **Assign To**, click (Select) to assign the navigation flow to a group of users or to a role, then click **Save and Close**.
4. Activate the navigation flow. See Activating and Deactivating Navigation Flows.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Customizing Labels for Cards, Tabs, and Clusters

You can customize the labels for cards (the icons that display on the Home page), tabs, and clusters. Labels are limited to 25 characters or less. For vertical tabs, there is no character limitation since the label for vertical tabs displays as hover text.

> **Note**
>
> Do not update the labels for cards, tabs, or clusters against the Default navigation flow. Only customize labels for custom navigation flows.

To customize labels for cards, tabs, and clusters:

1. Open the **Navigation Flow** page and click the name of the navigation flow you want to edit. See Viewing and Working with Navigation Flows.
2. If customizing the label for a card or cluster:
   a. Click the name of the card or cluster you want to edit.
   b. Enter a new name and save it.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - You can edit the label here. However, if the label is defined in the **Artifact Labels** page on the **Tools** cluster, that definition will take precedence and will display during runtime. To change a label permanently, redefine it in the **Artifact Labels** page.
>
> See Specifying Artifact Labels.
> - Ensure that you adhere to the naming restrictions outlined in Navigation Flow Design Best Practices and Naming Considerations.

3. If customizing the label for a tab:
   a. Click the name of the card you want to edit.
   b. In the tab listing on the **Manage Tab** page, click the name of the tab you want to edit.
   c. Enter a new name for the tab and save it.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Customizing Icons for Cards and Vertical Tabs

You can change the icons used for cards and vertical tabs. You must pick from the available icons provided in the icon library.

To customize the icons for cards and vertical tabs:

1. Open the **Navigation Flow** page and click the name of the navigation flow you want to edit. See Viewing and Working with Navigation Flows.
2. If customizing the icon for a card:
   a. Click the name of the card you want to edit.
   b. Click the icon for the card, select a new icon from the library, and then save it.
3. If customizing the icon for a tab:
   a. Click the name of the icon you want to edit.
   b. In the tab listing on the **Manage Tab** page, click the name of the tab you want to edit.
   c. Click the icon for the tab, select a new icon from the library, and then save it.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Hiding and Unhiding Clusters, Cards, and Tabs

You cannot hide the following navigation elements:

- The **Application** cluster and the **Settings** icon in the **Application** cluster.
- The **Tools** cluster and these icons in the **Tools** cluster:
  - **Access Control**
  - **Navigation Flows**
  - **Daily Maintenance**
  - **Migration**

Ensure that you adhere to the navigation flow guidelines for visibility outlined in Navigation Flow Design Best Practices and Naming Considerations.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To hide and unhide clusters, cards, and tabs:

1. Click the **Navigation Flow** icon and click the name of the navigation flow you want to edit. See Viewing and Working with Navigation Flows.
2. Edit the Home page visibility of the navigation flow clusters and cards by selecting or deselecting them in the **Visible** column.
3. If hiding or unhiding a tab:
    a. Click the name of the card you want to edit.
    b. In the tab listing on the **Manage Tab** page, select or deselect the check box in the **Visible** column.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Changing the Display Order of Cards on the Home Page

You can change the display order of cards in the Navigation Flow Designer. Cards display on the Home page in the order they appear within the listing

To change the display order of the cards on the Home page:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.
2. In the listing, use the up and down arrows in the **Order** column to move cards up or down in the navigation flow order.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Adding Cards

The icons you see on the Home page represent cards. Cards are specific to each functional area of the business process. Each card navigates users to the corresponding area, where other information is displayed as one or more tabbed pages. You can create single page or multiple page (tabular) cards.

To ensure an optimal user experience, review the navigation flow design best practices. See Navigation Flow Design Best Practices and Naming Considerations.

You can also group cards into clusters. See Grouping Cards into Clusters.

To add cards to a navigation flow:

1. Open the **Navigation Flow** page and click the name of the navigation flow you want to edit. See Viewing and Working with Navigation Flows.
2. To add an existing card to the navigation flow, right-click a card or cluster in the list or click (Actions), click **Add Existing Card/Cluster**, and then select a card. If there is an existing card you want to add from another environment, right-click a card or cluster in the list or click (Actions), click **Add Existing Card/Cluster**, select the target environment under **My Connections**, and then choose the card you want to add to your navigation flow.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - Cards can't be directly selected from Narrative Reporting and Profitability and Cost Management using the **Add Existing Card/Cluster** option.
> - Cards that are added from another navigation flow or from another environment will display the localized labels that were defined in the source navigation flow. To update the card labels in your navigation flow, on the Home page, click **Tools**, and then click **Artifact Labels**.
>
>   See Specifying Artifact Labels.
> - A reference card is a card that is already referenced from another navigation flow. References to already referenced cards are not supported in navigation flows and will not be available for selection in the Object Library when adding an existing card; for example:
>   - A card referring to a remote artifact or remote tab will not be available from the Object Library when adding an existing card.
>   - A card referring to a tab from another navigation flow will not be available from the Object Library when adding an existing card.

A card is added to the list as a sibling under the card or cluster that is currently selected. To add a card to a cluster, see Grouping Cards into Clusters.

> **Note**
>
> Cards that are added without first selecting a card or cluster are added to the end of the list.

3. To add a new card to the navigation flow, right-click a node in the list or click + (Actions), click **Add Card**, and then select details for the new card:

Table 1 New Card Details

Label	Description
Name	Enter a label for the card. Ensure that you adhere to the naming restrictions outlined in Navigation Flow Design Best Practices and Naming Considerations.
Visible	Select whether the card is visible to users on the Home page.
Cluster	If clusters exist, select a cluster for the card or select **None**.
Icon	Select the graphic that will be displayed for the card you're creating. Choose from the available graphics provided in the graphics library.
Page Type	Select **Single Page** or **Tabular Page** format.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 1 (Cont.) New Card Details

Label	Description
Content Source	If you selected the **Single Page** format, select **Artifact** or **URL**: • For **Artifact**, click (Choose Artifact) to select an artifact in the Artifact Library; for example, if the artifact is a form, then select the specific form from the artifact listing. Available artifacts include forms (including hidden forms), dashboards, and reports. To select an artifact from another environment, select the target environment under **My Connections**, and then choose the artifact you want to add. • For **URL**, enter a complete URL; for example, a URL to embed an Oracle Analytics Cloud dashboard in a card, then click **Preview** to validate the URL in a popup window. Insert only external site URLs starting with the `https://` security protocol. Don't use internal or relative URLs or URLs for unconsenting third-party sites. See About Using URLs to Embed Third-Party Pages in Cloud EPM Applications.
Orientation	If you selected the **Tabular Page** format, select **Vertical** or **Horizontal**, and then add new or existing tabs and sub tabs. See Adding Tabs.

A card is added to the list as a sibling under the card or cluster that is currently selected. To add a card to a cluster, see Grouping Cards into Clusters.

> **Note**
>
> Cards that are added without first selecting a card or cluster are added to the end of the list.

4. Click **Save and Close**.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Adding Tabs

Tabs can be horizontal or vertical. For example, the **Valid Intersections** card (under the **Application** cluster) is a tabular page with two horizontal tabs: **Setup** and **Reports**.

> **Note**
>
> The horizontal tabs are at the bottom of the page.

You can also create tabular pages with vertical tabs. Vertical tabs display a graphic and text appears when the cursor is hovered over the tab. Horizontal tabs display labels with text only or text with icons.

To ensure an optimal user experience, review the navigation flow design best practices. See Navigation Flow Design Best Practices and Naming Considerations.

To add tabs to a tabular page:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Open the **Navigation Flow** page and click the name of the navigation flow you want to edit. See Viewing and Working with Navigation Flows.
2. Edit an existing card by clicking the name of the card you want to edit, or add a new card by right-clicking a card or clicking (Actions), and then clicking **Add Card**.
3. On the **Manage Card** page, select the following options:
   - For **Page Type**, select **Tabular Page**.
   - For **Orientation**, select **Vertical** or **Horizontal**.

   A tab listing displays at the bottom of the **Manage Card** page.
4. To edit an existing tab, click a tab name from the tab listing, and edit tab details.
5. To add a new or existing tab:
   a. To add an existing tab, right-click a tab in the listing at the bottom of the **Manage Card** page, click **Add Existing Tab** (or click the **Add Existing Tab** button), select a tab from the Object Library, and then click **OK**.

      > **Note**
      >
      > A reference tab is a tab that is already referenced from another navigation flow. References to already referenced tabs are not supported in navigation flows and will not be available for selection in the Object Library when adding an existing tab; for example:
      >
      > - A tab referring to a remote artifact or remote sub-tab will not be available from the Object Library when adding an existing tab.
      > - A tab referring to a sub tab from another navigation flow will not be available from the Object Library when adding an existing tab.

   b. To add a new tab, right-click a tab, click **Add New Tab** (or click the **Add New Tab** button), and then edit tab details.
   c. Select the content for the new tab:
      - For **Artifact**, click (Choose Artifact) to select an artifact in the Artifact Library; for example, if the artifact is a form, then select the specific form from the artifact listing. Available artifacts include forms (including hidden forms), dashboards, and reports. To select an artifact from another environment, select the target environment under **My Connections**, and then choose the artifact you want to add.
      - For **URL**, enter a complete URL; for example, a URL to embed an Oracle Analytics Cloud dashboard in a tab, then click **Preview** to validate the URL in a popup window.

        Insert only external site URLs starting with the `https://` security protocol. Don't use internal or relative URLs or URLs for unconsenting third-party sites. See About Using URLs to Embed Third-Party Pages in Cloud EPM Applications.

      A tab is added to the list as a sibling under the tab that is currently selected.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Tabs that are added without first selecting a tab are added to the end of the list.

6. To add new or existing sub tabs to a tab:
   a. Click the name of a tab in the in the tab listing.
   b. For **Page Type**, select **Tabular Page**.
   c. Right-click a tab, and click **Add New Sub Tab** or **Add Existing Sub Tab** (or click the **Add New Sub Tab** or **Add Existing Sub Tab** button), and then edit sub tab details.
   d. Select the content for the new sub tab:

      - For **Artifact**, click (Choose Artifact) to select an artifact in the Artifact Library; for example, if the artifact is a form, then select the specific form from the artifact listing. Available artifacts include forms (including hidden forms), dashboards, and reports. To select an artifact from another environment, select the target environment under **My Connections**, and then choose the artifact you want to add.
      - For **URL**, enter a complete URL; for example, a URL to embed an Oracle Analytics Cloud dashboard in a sub tab. Click **Preview** to validate the URL in a popup window.

        Insert only external site URLs starting with the `https://` security protocol. Don't use internal or relative URLs or URLs for unconsenting third-party sites. See About Using URLs to Embed Third-Party Pages in Cloud EPM Applications.

      A sub tab is added to the list as a sibling under the tab that is currently selected.

> **Note**
>
> Sub tabs that are added without first selecting a tab are added to the end of the list.

7. Click **Save and Close**.

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

> **Note**
>
> - For cards with multiple tabs or sub tabs, the last tab accessed by a user will be retained the next time the user accesses the card in the same session. If the user logs out and then logs back in, the default tab will be displayed.
> - Tabs or sub tabs that are added from another navigation flow or from another environment will display the localized labels that were defined in the source navigation flow. To update the tab labels in your navigation flow, on the Home page, click **Tools**, and then click **Artifact Labels**.
>
>   See Specifying Artifact Labels.

Copyright © 2022, 2026, Oracle and/or its affiliates.

About Using URLs to Embed Third-Party Pages in Cloud EPM Applications

Oracle Fusion Cloud Enterprise Performance Management uses IFrame to embed third-party URLs. IFrame requires that the page that is being embedded must give approval to the page that is embedding it. For example, if we want to embed a page from sharepoint.com into a Cloud EPM application, then sharepoint.com must allow oraclecloud.com to embed the page from sharepoint.com.

This can be achieved by adding oraclecloud.com in the Content Security Policy of the web application whose page you need to embed.

When embedding a third-party page you also must consider if the page is available to the public or if it requires a login. For example, pages from wikipedia.org do not need any authentication.

If you are embedding a page that requires authentication, you need to see if SSO can be enabled for the page. If not, then your page may not load inside IFrame. As a workaround, log in to that web application in another browser tab, and then if you access the same page from the Cloud EPM application, it will open.

This URL support feature allows you to embed the following types of pages:

- Other Oracle products (would need to enable SSO)
- Web applications owned by customer (would need to allow the Cloud EPM application by updating the Content Security Policy and enabling SSO, or likewise)
- Pages from the public domain (for example, wikipedia.org)

> **Note**
>
> - Do not use this feature to embed a URL for an entire other Cloud EPM instance; for example, do not embed a URL for Narrative Reporting into Planning Modules.
> - Though not supported by Oracle, you can embed links to the following resources within navigation flow cards, tabs, and sub tabs:
>   - Google Sheets
>   - Files stored in Google Drive (for example, PDF and Excel)
>   - Files stored in Microsoft Office 365
>
> Use the instructions provided by the third-party sites to generate a URL which can then be used in your Cloud EPM application.

Removing Navigation Flows, Cards, and Tabs

You can't remove the following navigation elements:

- The **Application** cluster and the **Settings** icon in the **Application** cluster.
- The **Tools** cluster and these icons in the **Tools** cluster:
  - **Access Control**
  - **Navigation Flows**
  - **Daily Maintenance**

Copyright © 2022, 2026, Oracle and/or its affiliates.

– **Migration**

To remove navigation flows, cards, and tabs:

1. Open the **Navigation Flow** page. See Viewing and Working with Navigation Flows.
2. If removing a navigation flow:
   a. Select the navigation flow you want to remove.
   b. In the upper right-hand corner of the page, click (Actions), and then select **Delete**.

> **Note**
>
> You can't delete the predefined navigation flow, called Default.

3. If removing a card:
   a. Click the name of the navigation flow you want to edit.
   b. In the **Remove** column for the card you want to remove, click (Remove).
4. If removing a tab:
   a. Click the name of the navigation flow you want to edit.
   b. Click the name of the card you want to edit.
   c. In the tab listing at the bottom of the **Manage Tab** page, in the **Remove** column for the tab you want to remove, click (Remove).

To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Grouping Cards into Clusters

A cluster is a grouping of cards. You must first create a cluster and then you can assign cards to it. You can also add existing clusters to navigation flows.

To ensure an optimal user experience, review the navigation flow design best practices. See Navigation Flow Design Best Practices and Naming Considerations.

To assign cards to clusters:

1. Create a new cluster or add an existing cluster:
   a. Open the **Navigation Flow** page and click the name of the navigation flow in which you want to add a cluster. See Viewing and Working with Navigation Flows.
   b. To create a new cluster, right-click a card or cluster in the list or click (Actions), click **Add Cluster**, enter or select the cluster details, and then choose a graphic for the cluster.

> **Note**
>
> Ensure that you adhere to the visibility and naming restrictions outlined in Navigation Flow Design Best Practices and Naming Considerations.

A cluster is added to the list as a sibling under the cluster that is currently selected.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Clusters that are added without first selecting a card or cluster are added to the end of the list.

c. To add an existing cluster, right-click a card or cluster in the list or click (Actions), click **Add Existing Card/Cluster**. If there is an existing cluster you want to add from another environment, right-click a card or cluster in the list or click (Actions), click **Add Existing Card/Cluster**, select the target environment under **My Connections**, and then choose the cluster you want to add to your navigation flow.

> **Note**
>
> - Clusters can't be directly selected from Narrative Reporting and Profitability and Cost Management using the **Add Existing Card/Cluster** option.
> - Clusters that are added from another navigation flow or from another environment will display the localized labels that were defined in the source navigation flow. To update the cluster labels in your navigation flow, on the Home page, click **Tools**, and then click **Artifact Labels**.
>
>   See Specifying Artifact Labels.
> - A reference cluster is a cluster that is already referenced from another navigation flow. References to already referenced clusters are not supported in navigation flows and will not be available for selection in the Object Library when adding an existing cluster.

A cluster is added to the list as a sibling under the card or cluster that is currently selected.

> **Note**
>
> Clusters that are added without first selecting a card or cluster are added to the end of the list.

d. Click **Save and Close**.

2. Select the cards to include in the cluster using one of these options:

   a. Navigate to the card you want to add. If the card is within another environment, first select the environment under **My Connections**, and then navigate to the card in that environment. Assign the card to a cluster using one of these options:

   - To the right of the card in the **Order** column, click (Move to Cluster), select the cluster, and then click **OK**.
   - Click the name of the card to view the card details, then for **Cluster** select a cluster for the card, and then click **OK**.

   b. Navigate to the cluster in which you want to add a card, then right-click the cluster or click (Actions), click **Add Card In Cluster**, and then select an option:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Select **Add Existing Card**, to select an existing card or to add existing cards from another cluster to the selected cluster.
- Select **Add Card**, and then enter card details to add a new card to the selected cluster.

> **Note**
>
> You cannot add a card to a cluster if the card or the cluster is already referenced from another navigation flow.

c. Click **Save and Close**.

The cards will appear in the listing as children of the cluster. Use the up and down arrows next to the cards to reorder the cards within the cluster, if needed.

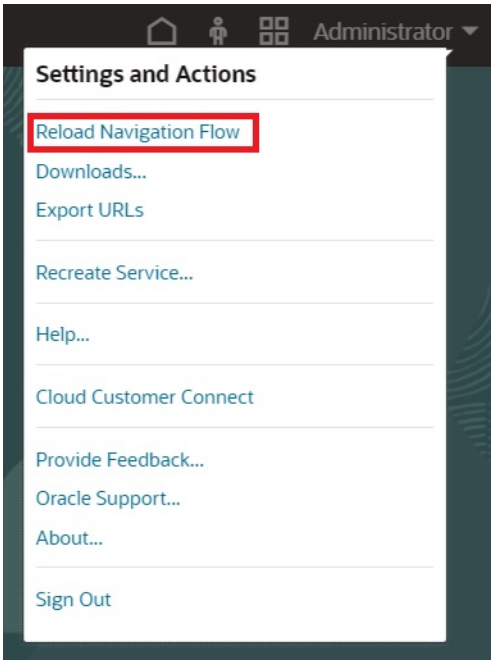
To reload a navigation flow to view design time changes, see Reloading a Navigation Flow.

Reloading a Navigation Flow

To display design changes while you're working with a navigation flow, you can reload the navigation flow.

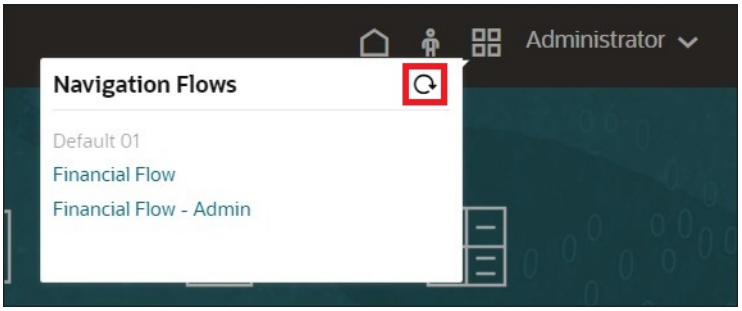
There are two ways to reload a navigation flow after making design changes. From the Home page:

1. Click the down arrow next to the user name (upper right corner of the screen). Then on the **Settings and Actions** menu, click **Reload Navigation Flow**.



2. Click (Navigation Flows). Then on the **Navigation Flows** menu, click (Reload Navigation Flow).

Copyright © 2022, 2026, Oracle and/or its affiliates.



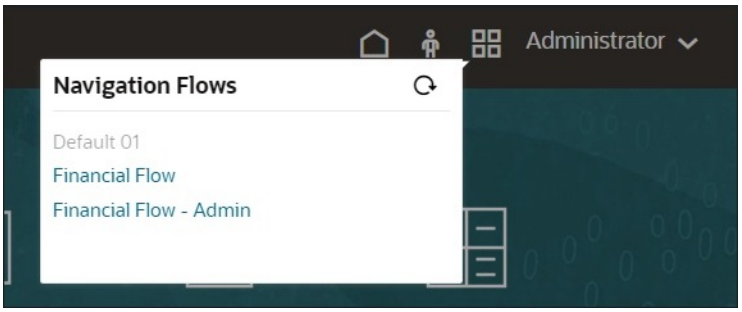
Switching Navigation Flows at Runtime

If you belong to multiple groups or if a navigation flow is assigned to a role, you might have access to more than one navigation flow.

> **Note**
>
> Users assigned the Service Administrator role can access all navigation flows.

To switch navigation flows at runtime:

1. From the Home page, click (Navigation Flows).
2. Select the navigation flow you want to view.



> **Note**
>
> Click (Reload Navigation Flow) to refresh the list of navigation flows.

Sharing the Current Page URL for Cards, Tabs, and Sub Tabs

Copy the URL for the currently displayed card, tab, or sub tab and share it with other users who have access.

Use the **Share Current Page URL** option on the **Settings and Actions** menu to copy the URL for the currently displayed card, tab, or sub tab in your Oracle Fusion Cloud Enterprise Performance Management business process.

Copyright © 2022, 2026, Oracle and/or its affiliates.

URLs can be copied and then shared with other users in an email, Slack, or any other messaging application. Also, copied URLs can be used in a slide show presentation such as PowerPoint. Note that users can only access cards, tabs, or sub tabs if they are authorized to access them.

When the copied URL is launched the page will be rendered with the full header, meaning they will be able to navigate to all of the pages to which they have access within the navigation flow. If the user launching the URL is not logged in, they will be redirected to a login page, then after login the URL page will open.

To copy a URL for sharing:

1. Navigate to the page (card, tab, or sub tab) in your application that you want to copy.

   For example, from the Home page, click Dashboards to view the Dashboards page.
2. Click the down arrow next to your user name (upper right corner of the screen).
3. On the **Settings and Actions** menu, select **Share Current Page URL**.

   Note: The **Share Current Page URL** menu option only displays if you're currently viewing a card, tab, or sub tab. If you're currently viewing the Home page, the **Share Current Page URL** menu option won't display on the **Settings and Actions** menu.
4. Select the displayed URL and copy it by pressing Ctrl+C.

   After pasting it into a browser, the URL will enable direct access to the current page in the application.

Considerations

Note the following considerations when using the **Share Current Page URL** option:

- The page specified in the URL will not open if the navigation flow was deleted, modified, or made inactive. Instead, you'll be redirected to the home page of the currently active navigation flow.
- If you're using a classic environment, you cannot share URLs. URLs are not supported for classic pages.
- URLs cannot be embedded into dashboards as the content source.
- URLs cannot be embedded into navigation flows as the content source.
- URLs cannot be shared for pages with dynamic tabs. Dynamic tabs are local and limited to the current user session, and therefore cannot be shared.
- URLs cannot be shared for infolets. URLs are not supported for infolets.

Setting the Daily Maintenance Process Time

Enterprise Profitability and Cost Management requires one hour every day to perform routine maintenance. Service Administers can select (and change) the most convenient time to start the hour-long daily maintenance process. In addition to routine maintenance, Oracle applies required patches to the Enterprise Profitability and Cost Management instance during the maintenance process.

Because Enterprise Profitability and Cost Management is not available during the maintenance process, the Service Administer should identify a one-hour period when no one uses the business process. Any connected user will be logged off and will lose unsaved data.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The default maintenance start time is midnight Pacific Standard Time (PST). If you don't reset the default start time for your instance, Oracle resets it to a random time between 10:00 p.m. and 2:00 a.m. PST to reduce the business process maintenance duration.

If you want the maintenance time to start at midnight PST, you should select it using this procedure. In such cases, Oracle will not change your selection.

To manage the automated maintenance window:

1. From the **Home** page, select **Tools**, and then **Daily Maintenance**.
2. On the **Daily Maintenance** tab, in **Start Time** field, select the time at which the daily maintenance process should start, and select your time zone from the drop-down list.
3. On the **Content Update Setting** tab, specify how long after the scheduled maintenance you want to update the content. To automatically update the content, select the checkbox next to **In the future, automatically update the application content**.
4. Click **Save**.

Scheduling Daily Maintenance

For information about daily maintenance operations and scheduling the maintenance start time for an environment, see Managing Daily Maintenance in *Getting Started Guide for Administrators*.

> **Note**
>
> There is a system setting called **Export EPM Cloud Smart List textual data during daily maintenance for incremental data import** that, depending on if this setting is enabled, could impact the duration of the export. For more information and for recommendations about using this setting, see Exporting Smart List Textual Data During Daily Maintenance for Incremental Data Import in *Oracle Enterprise Performance Management Cloud Operations Guide* .

To prevent automatic backup from failure due to scheduled jobs, Oracle Fusion Cloud Enterprise Performance Management disallows certain scheduled jobs to start while the daily maintenance process is running.

The following jobs are prevented from starting during the daily maintenance:

- Import Data
- Import Metadata
- Export Data
- Export Metadata
- Refresh Database
- Clear Cube
- Restructure Cube
- Compact Outline
- Merge Data Slices
- Optimize Aggregation

Copyright © 2022, 2026, Oracle and/or its affiliates.

If the system prevents a job from starting, the reason will be stated in the Job Details. If you've enabled email notifications for the Job Console, you'll receive an email notification when a job does not start. If you have a job that is scheduled to start during the daily maintenance process, it is recommended that you reschedule your job to start outside of the daily maintenance window. See Scheduling Jobs.

Connecting Environments in Cloud EPM

Learn how to connect environments so users who have access across Oracle Fusion Cloud EPM can use a single access point with one login. Understand use cases, scenarios, and considerations, and learn how to connect to external web services and use direct URLs to integrate environments.

Related Topics

- About Connecting Cloud EPM Environments
- Considerations for Migrating Cloud EPM Connections
- Creating, Editing, and Deleting Connections to Other Cloud EPM Environments
- Connecting to External Web Services
- Specifying Advanced Options for External Connections
- Navigating Across Cloud EPM Environments
- Customizing Navigation Flows to Access Other Cloud EPM Environments
- Using Direct URLs to Integrate Connected Environments

About Connecting Cloud EPM Environments

Overview

Service Administrators can connect multiple Oracle Fusion Cloud EPM environments of the following types:

- Account Reconciliation
- Enterprise Profitability and Cost Management
- Financial Consolidation and Close
- FreeForm
- Narrative Reporting
- Planning
- Planning Modules
- Profitability and Cost Management
- Sales Planning
- Strategic Workforce Planning
- Tax Reporting

Once Service Administrators set up the connections, users who have access across Cloud EPM environments can navigate across them from a single access point with one login. Also artifacts such as forms and dashboards, from across environments can be co-mingled within a

Copyright © 2022, 2026, Oracle and/or its affiliates.

cluster or within tabs on a card in navigation flows. Artifacts in the target environment are accessible based on the user's role.

> **Note**
>
> You can also connect directly Oracle Analytics Cloud Enterprise Edition or Professional Edition 5.6 to Cloud EPM Platform, provided you have both services. When you've configured the connection, you can visualize data from Cloud EPM business processes in Oracle Analytics Cloud. You no longer have to model EPM data in a metadata repository (RPD) file to create visualizations and dashboards in Oracle Analytics Cloud. For more information, see the Oracle Analytics Cloud documentation.
>
> Additionally, you can connect Oracle® NetSuite Account Reconciliation and Oracle NetSuite Planning and Budgeting.

Which environments can I connect?

The source environment is the environment from which you're creating the connection. The target environment is the environment to which you're connecting from the source environment.

You can connect these source environments (these environments can also be target environments):

- Enterprise Profitability and Cost Management
- FreeForm
- Financial Consolidation and Close
- Oracle NetSuite Planning and Budgeting
- Planning
- Planning Modules
- Sales Planning
- Strategic Workforce Planning
- Tax Reporting

Source environments can also connect to these target environments (these environments can't be source environments):

- Account Reconciliation
- Narrative Reporting
- Oracle NetSuite Account Reconciliation
- Profitability and Cost Management

What are the ways I can connect to other Cloud EPM environments?

- Toggle between the source environment and the target environment on the **Navigator** menu. See Navigating Across Cloud EPM Environments.
- Customize navigation flows in the source environment to access clusters, cards, and artifacts in other target environments from the Home page. See Customizing Navigation Flows to Access Other Cloud EPM Environments.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Use direct URLs to seamlessly integrate connected environments. See Using Direct URLs to Integrate Connected Environments.

Considerations

- Only Service Administrators create cross-environment connections.

  Users click a navigation link to open the linked environment. Access within the linked environment is determined by the predefined role and access permissions, if any, assigned to the user.

- For cross-environment navigation to be seamless, all environment instances to which cross-environment navigation flows are setup must belong to the same identity domain.

  > **Note**
  >
  > If the target and source environment instances are not on the same identity domain, then you'll not be able to establish a connection between them.

- Service Administrators cannot configure cross-environment connections using corporate SSO (identity provider) credentials.

  If your environments are configured for SSO, ensure that identity domain credentials are maintained for the Service Administrators who configure cross-environment connections. For information about how to maintain the identity domain credentials for these Service Administrators, see Managing User Credentials in SSO-Enabled Cloud EPM Environments in *Getting Started Guide for Administrators*.

- Migrating cross-environment connections between test and production environments can cause issues in certain use case scenarios. For more information, see Considerations for Migrating Cloud EPM Connections.

- Vanity URLs are not supported in cross-environment connections.

Troubleshooting

For help with information on fixing common errors while connecting environments, see Handling Issues with Navigation Flows in *Operations Guide*.

Videos

Your Goal	Watch This Video
Watch this video to learn how to customize a Cloud EPM workflow.	Overview: Configure Navigation Flows to Integrate Cloud EPM Business Processes

Considerations for Migrating Cloud EPM Connections

Oracle recognizes that it's common practice for Service Administrators to try out new features, such as connecting environments, on test environments and then migrate to production environments. However, in doing so, it could cause some issues after migration. Here are some use case scenarios that you need to be aware of.

In the following scenarios, assume you have environments for Financial Consolidation and Close and Planning.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Use Case Scenario 1: Test to Production

When migrating connections from test environments to production environments, ensure that connections that were defined in the test environment are changed to point to the corresponding production environments.

For example, a Service Administrator has defined a connection between the test environments of Planning and Financial Consolidation and Close. The Service Administrator then uses this connection to build a navigation flow in Planning that refers to a card in the Financial Consolidation and Close. The snapshot that the Service Administrator creates for migrating the Planning test environment will include connections and navigation flows, including the connection to Financial Consolidation and Close test environment.

On migrating the snapshot into the Planning production environment, Planning will have an undesirable connection to the Financial Consolidation and Close test environment. You must manually change undesirable connections to point to the corresponding production environment either before or after migrating the environment.

Use Case Scenario 2: Production to Production or Test to Test

This scenario doesn't have any caveats.

Use Case Scenario 3: Production to Test

In this scenario, the Service Administrator might be trying to migrate a snapshot from a production environment into a test environment to resolve an issue. Because the connections created in the test environment still points to a production environment, it is important for the Service Administrator to modify connections so that they point to a test environment. Connections in test environments that point to a production environment may inadvertently tamper with the production environment.

Creating, Editing, and Deleting Connections to Other Cloud EPM Environments

Before you can create connections to other Oracle Fusion Cloud EPM environments, you must ensure you have access to the source and target environments you're connecting. You must also provide URLs for the other environments you're connecting and login details for each environment such as user ID (Service Administrator) and password.

> **Note**
>
> Oracle requires the secure HTTPS protocol (`https://`) for new connections. Existing connections may continue to use the HTTP (`http://`) protocol. Also, attempts to import a non-secure HTTP connection using Migration will be blocked and the connection artifact will not be imported.

To create, edit, duplicate, and delete connections:

1. Login to the source environment.
2. From the Home page, click **Tools**, and then click **Connections**.
3. Choose an action:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- To add a connection:
  a. On the **Manage Connections** page, click **Create**.
  b. On the **Select Provider to Create Connection** page, select the target environment you want to add.
  c. Enter the target environment connection details:
     – Click **Change Provider** to select a different target environment.
     – In **Connection Name** enter name for this navigation link; for example, `Consolidation Application`.
     – Enter an optional description for the link.
     – In **URL**, enter the URL of the target environment instance; for example, `https://your-target-host-url.com`. This is the URL that you normally use to sign in to the target environment instance.

       > **Note**
       >
       > Oracle requires the secure HTTPS protocol (`https://`) for new connections. Verification is performed to ensure that the provided URL is allowed.

     – Use **Service Administrator** and **Password** to specify the credentials of a Service Administrator.

       > **Note**
       >
       > * These credentials are used only to define and validate the navigation link. When a user logs in, their own role and access will be applied to access the target environment.
       > * Do not prefix user names with the domain name for connections to other Cloud EPM environments. However, the domain name is still needed for connections to other external Web services. See Connecting to External Web Services.

     – The **Domain** field is automatically populated based on the URL you enter. If there is no domain in the URL, then the **Domain** field is left blank.
  d. Click **Validate**.
  e. If the validation is successful, click **Save and Close**.
- To edit connections:
  a. On the **Manage Connections** page, click the name of a connection.
  b. Edit connection details.

     > **Note**
     >
     > If you edit the URL to connect to a new service type, you could cause navigation flows to break. If you want to connect to a different service, Oracle recommends creating a new connection instead.

Copyright © 2022, 2026, Oracle and/or its affiliates.

c. Click **Validate**.

d. If the validation is successful, click **Save and Close**.

- To duplicate a connection:

  a. On the **Manage Connections** page, in the **Action** column next to the connection you want to duplicate, click ••• (Action).

  b. Click **Duplicate**.

  c. Enter a name for the duplicate connection, then click **OK**.

- To delete a connection:

  a. On the **Manage Connections** page, in the **Action** column next to the connection you want to delete, click ••• (Action).

  b. Click **Delete**.

When target environments are connected to a Cloud EPM source environment, they are listed in the **My Connections** pane on the **Navigator** menu of the source environment. The **My Connections** pane on the **Navigator** menu is where you can navigate across environments. See Navigating Across Cloud EPM Environments.

Troubleshooting

For troubleshooting assistance, see Handling Issues with Navigation Flows in *Operations Guide*.

Connecting to External Web Services

Service Administrators can also connect to external Web services for the purpose of reading data from and writing to an external Web service.

This connection can be referenced or used in a Groovy script to create a communications link between the Groovy script and the external HTTP/HTTPS resource. For more details and examples of how this connection can be used in a Groovy script, see the EPM Groovy Rules documentation for the Connection and the HttpRequest objects in the EPM Groovy object model.

> **Note**
>
> The **Other Web Service Provider** connection type is only available for use with those business processes that allow Groovy Rules to be created. See the Oracle Enterprise Performance Management Cloud, Groovy Rules Java API Reference.

Before you can create connections to external Web services, you must ensure you have access to the Web service you're connecting. You must also have a secure URL for the Web service and any login details, if required.

To create a connection to an external Web service:

1. Login to the source environment.
2. From the Home page, click **Tools**, and then click **Connections**.
3. On the **Manage Connections** page, click **Create**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Click **Other Web Service Provider**.
5. Enter a **Connection Name** and a **Description** for the connection.
6. Enter the secure **URL** for the target connection.

> **Note**
>
> - Oracle requires the secure HTTPS protocol (`https://`) for new connections.
> - Only port number 443 is allowed for secure URLs. Either provide a URL with port number 443 or provide no port number at all.
> - Attempts to import a non-secure HTTP connection using Migration will also be blocked and the connection artifact will not be imported.

7. Enter optional advanced options for the URL.

> **Note**
>
> The optional advanced options enable you to specify query or header parameters when defining an external connection. See Specifying Advanced Options for External Connections.

8. Enter **User** and **Password** login credentials for the connection, if required. In some cases, such as connecting to Oracle Fusion Cloud EPM services, the domain name may need to be prefixed to the user name; for example, `<Identity Domain>.<User Name>`.

   To understand basic authentication for Cloud EPM REST APIs and for instructions on finding your identity domain, see Basic Authentication - for Classic and OCI in *Oracle Fusion Cloud EPM REST APIs*.
9. Click **Save and Close**.

Specifying Advanced Options for External Connections

The optional advanced options enable you to specify query or header parameters when defining an external connection.

> **Note**
>
> The ability to define query parameters for an external connection is only available for use with those business processes that allow Groovy Rules to be created. See the Oracle Enterprise Performance Management Cloud, Groovy Rules Java API Reference.

To specify advanced options for external connections:

1. Create an external connection or open an existing external connection.

   See Connecting to External Web Services.
2. Enter connection details, and then click **Show Advanced Options**.
3. Specify query details as follows:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- (Add): Add query
- (Delete): Delete query
- **Type**: Select **Header** or **Parameter**.

  Header sets a default header that will be sent on every request made for this connection. **Parameter** sets a default query parameter that will be sent on every request made for this connection.
- **Secure**: If selected, the value entered in the **Value** field will be encrypted. Clearing the **Secure** check box for a query will remove the value.

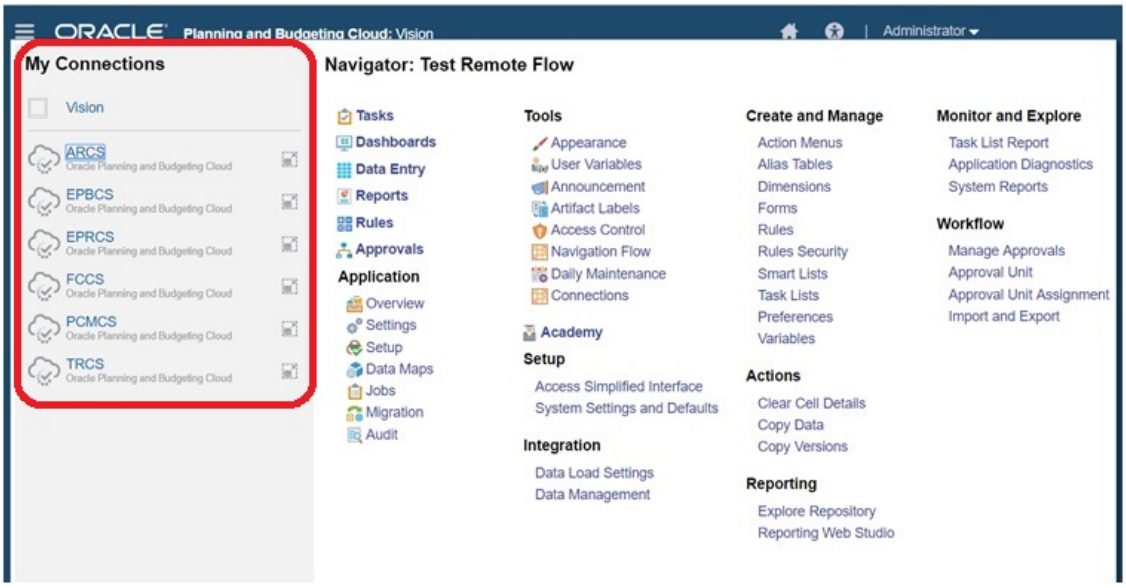
  An example header that one would secure is the Bearer Token for external Web services that supports Bearer Authentication, or the API Key query parameter for external Web services that supports API keys for authentication.

  > **Note**
  >
  > Queries that are marked **Secure** for **Other Web Service Provider** connection types cannot be exported or imported.

- **Name**: Enter a name for the header or query parameter.
- **Value**: Enter the value for the header or query parameter.

Navigating Across Cloud EPM Environments

Once a Service Administrator creates connections to other Oracle Fusion Cloud EPM environments, the connections are listed in the **My Connections** pane on the **Navigator** menu.



You can toggle between the environments from this location. You must have access to the other environments in order to open them. Artifacts are accessible based on the user's role.

To open another Oracle Fusion Cloud Enterprise Performance Management environment:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. From the Home page, click **Navigator** .
2. If environments are connected and you have access to those environments, you'll see a list of connected environments in the **My Connections** pane. Click an environment to open it.

> **Note**
>
> Click the icon to the right of the environment name to open the environment in a new window.

Customizing Navigation Flows to Access Other Cloud EPM Environments

You can customize the business process interface to access other Oracle Fusion Cloud EPM environments from the Home page of a source environment. For example, you can add artifacts to the Home page, such as forms or reports, from other Cloud EPM environments. You can group these artifacts (called cards) into clusters by customizing navigation flows. Clusters and cards from target Cloud EPM environments can be directly included in the navigation flows of source Cloud EPM environments. You can also use the Navigation Flow Designer to customize cards to have tabular pages where each tab is an artifact from a different environment.

These two use cases describe in detail how to customize navigation flows to access other Cloud EPM environments:

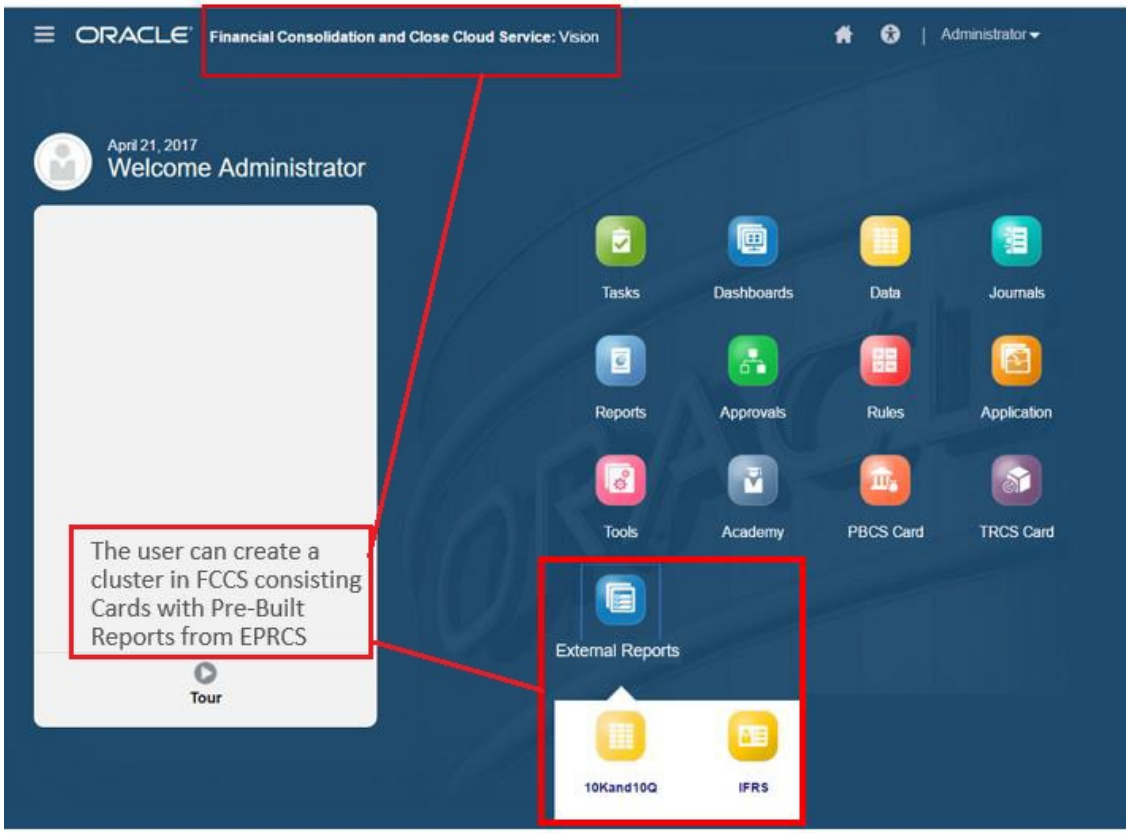
- Grouping Cards from Other Cloud EPM Environments into Clusters
- Configuring Cards with Tabs from Multiple Cloud EPM Environments

To learn more about designing navigation flows, see Designing Custom Navigation Flows.

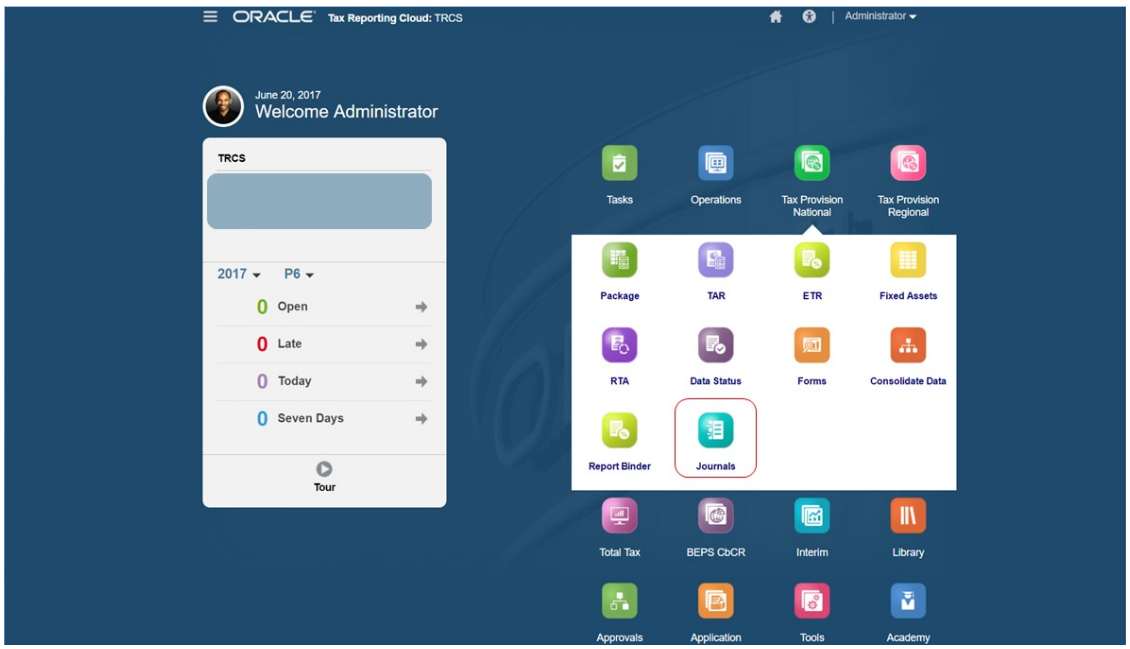
Grouping Cards from Other Cloud EPM Environments into Clusters

You can group cards from various Oracle Fusion Cloud EPM environments into a cluster that is accessible from the Home page of a source environment. For example, you can create a cluster within Financial Consolidation and Close consisting of cards with pre-built external reports from Narrative Reporting.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Cards from multiple environments can also be included within the same cluster on a source environment. For example, a Tax Reporting user can launch a Journals icon from Financial Consolidation and Close without leaving Tax Reporting.



You create clusters and add cards to clusters by customizing navigation flows.

For general information about navigation flows, see Designing Custom Navigation Flows.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To create a cluster made up of cards from other Cloud EPM environments:

1. Launch the Navigation Flow page and create a navigation flow or edit an existing navigation flow:

   > **Note**
   >
   > To create a navigation flow, you must first select an existing navigation flow and make a copy of it. Then edit the duplicate navigation flow details and save them.

   a. Click **Tools**, and then click **Navigation Flows**.

   b. To create a navigation flow, select the navigation flow you want to duplicate, then in the upper right-hand corner of the page, click (Actions), and then select **Create Copy**. Enter a name for the navigation flow, and then click **OK**.

      > **Note**
      >
      > New flows are marked **Inactive** until they are activated by the Service Administrator. To activate or deactivate a navigation flow, in the **Active** column, click **Active** or **Inactive**. Only one navigation flow at a time can be active.

   c. To edit an existing navigation flow, click the name of the navigation flow you want to edit.

      > **Note**
      >
      > Editing is only possible if the navigation flow is inactive. If the navigation flow you want to edit is active, ensure you mark it **Inactive** before editing.

2. Create a cluster or add an existing cluster:

   a. If it isn't already open, from the **Navigation Flow** page, click the name of the navigation flow in which you want to add a cluster.

   b. To create a new cluster, right-click a card or cluster or click (Actions), click **Add Cluster**, enter or select the cluster details, and then choose an icon for the cluster.

   c. If there is an existing cluster you want to add from another environment, right-click a card or cluster (or click **Add Existing Card/Cluster**), select the target environment under **My Connections**, and then choose the cluster you want to add to your navigation flow.

      Note the following:

      - Clusters can't be directly selected from Narrative Reporting and Profitability and Cost Management using the **Add Existing Card/Cluster** option.
      - Clusters that are added from another navigation flow or from another environment will display the localized labels that were defined in the source navigation flow. To update the cluster labels in your navigation flow, on the Home page, click **Tools**, and then click **Artifact Labels**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

See Specifying Artifact Labels.

3. Select the cards to include in the cluster using one of these options:

   - Navigate to the card you want to add to the cluster. If the card is within another environment, first select the environment under **My Connections**, and then navigate to the card in that environment. Assign the card to a cluster using one of these options:

     – To the right of the card that you want to move, in the **Order** column, click (Move). Select the cluster, and then click **OK**.

     – Click the name of the card to view the card details, then for **Cluster** select a cluster for the card, and then click **OK**.

   - Navigate to the cluster in which you want to add the new card. If the cluster is within another environment, first select the environment under **My Connections**, and then navigate to the cluster in that environment. Right-click the cluster or click (Actions), click **Add Card In Cluster**, and then select an option:

     – Select **Add Existing Card**, to select an existing card or to add existing cards from another cluster to the selected cluster.

     – Select **Add Card**, and then enter card details to add a new card to the selected cluster.

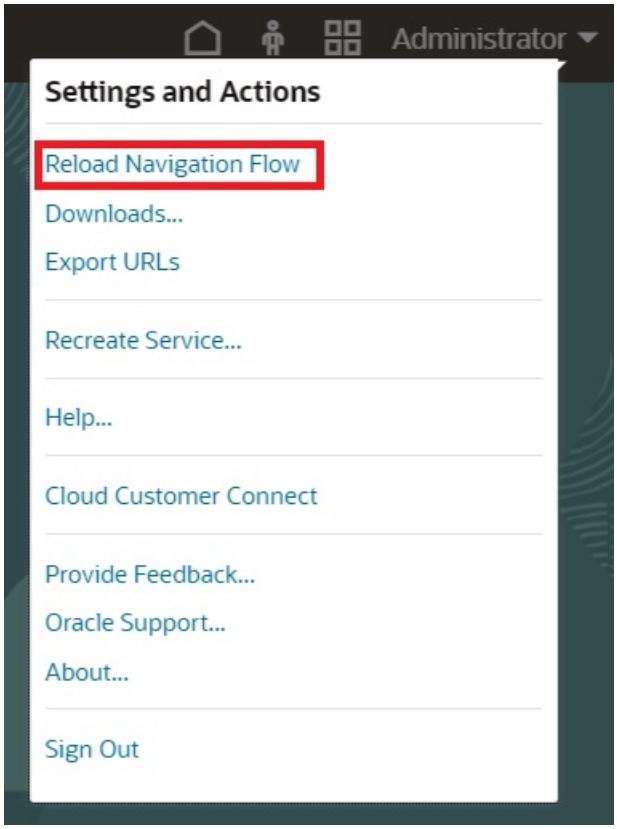
   > **Note**
   >
   > You cannot add a card to a cluster if the card or the cluster is already referenced from another navigation flow.

   The cards will appear in the listing as children of the cluster. Use the up and down arrows next to the cards to reorder the cards within the cluster, if needed.

4. Click **Save and Close**.

You must activate the navigation flow and reload it to view your design time changes. To reload a navigation flow, click the down arrow next to your user name. Then on the **Setting and Actions** menu, click **Reload Navigation Flow**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



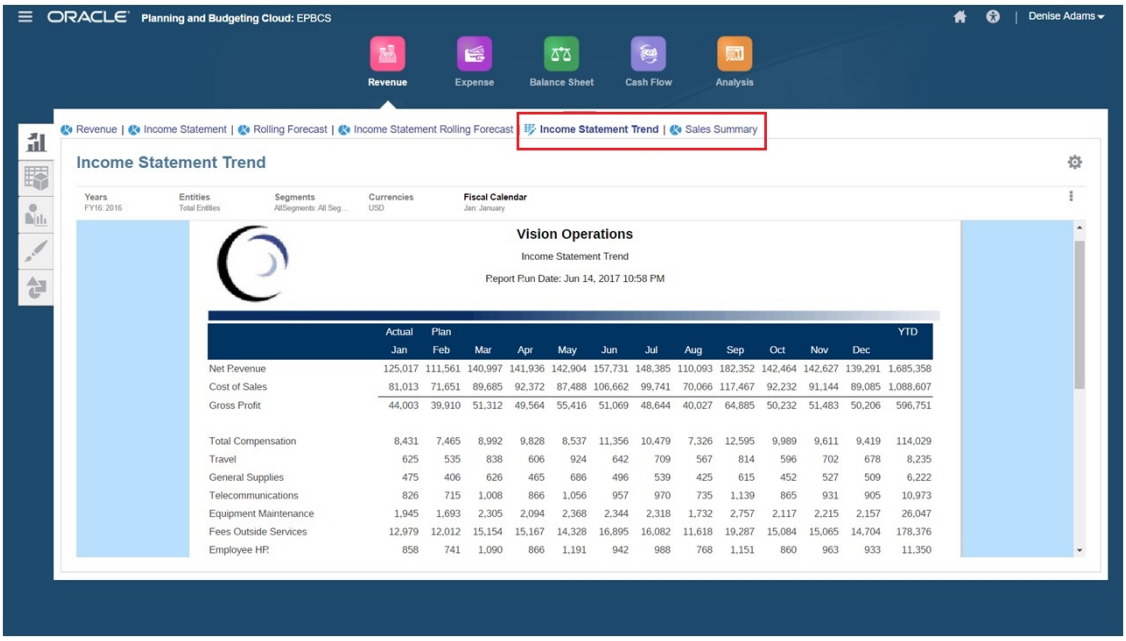
Troubleshooting

If you can't see your referenced artifacts after activating and reloading the navigation flow, see Handling Issues with Navigation Flows in *Operations Guide*.

Configuring Cards with Tabs from Multiple Cloud EPM Environments

You can also customize cards in navigation flows to have tabular pages where each tab is an artifact from a different environment. For example, a Planning user can click a Revenue icon which launches a card with horizontal tabs showing reports from Narrative Reporting.

Copyright © 2022, 2026, Oracle and/or its affiliates.



You create tabular cards by customizing navigation flows.

For general information about navigation flows, see Designing Custom Navigation Flows.

To configure a card made up of tabs and sub tabs from other Oracle Fusion Cloud EPM environments:

1. Launch the **Navigation Flow** page and create a navigation flow or edit an existing navigation flow:

   > **Note**
   >
   > To create a navigation flow, you must first select an existing navigation flow and make a copy of it. Then edit the duplicate navigation flow details and save them.

   a. Click **Tools**, and then click **Navigation Flows**.

   b. To create a navigation flow, select the navigation flow you want to duplicate, then in the upper right-hand corner of the page, click (Actions), and then select **Create Copy**. Enter a name for the navigation flow, and then click **OK**.

      > **Note**
      >
      > New flows are marked **Inactive** until they are activated by the Service Administrator. To activate or deactivate a navigation flow, in the **Active** column, click **Active** or **Inactive**. Only one navigation flow at a time can be active.

   c. To edit an existing navigation flow, click the name of the navigation flow you want to edit.

2. Add a tabular card with artifacts from various target environments:

Copyright © 2022, 2026, Oracle and/or its affiliates.

a. If there is an existing card you want to add from another environment, from the **Navigation Flow** page, right-click a card or cluster or click (Actions), click **Add Existing Card/Cluster**, select the target environment under **My Connections**, and then choose the card you want to add to your navigation flow.

   Note the following:

   - Cards can't be directly selected from Narrative Reporting and Profitability and Cost Management using the **Add Existing Card/Cluster** option.
   - Cards that are added from another navigation flow or from another environment will display the localized labels that were defined in the source navigation flow. To update the card labels in your navigation flow, on the Home page, click **Tools**, and then click **Artifact Labels**.

     See Specifying Artifact Labels.

b. To add a new tabular card to the navigation flow, from the **Navigation Flow** page, right-click a card or cluster or click (Actions), click **Add Card**, and then select details for the card:

   - **Name**: Enter a label for the card.
   - **Visible**: Select whether the card is visible to users on the Home page.
   - **Cluster**: If clusters exist, select a cluster for the card or select **None**.
   - **Icon**: Select the icon that will be displayed for the card you're creating. Choose from the available icons provided in the icon library.
   - **Content**: Select from the following options:
     - **Page Type**: Select a multiple page (tabular) format.
     - **Orientation**: Select **Vertical** or **Horizontal**.

3. Add tabs and sub tabs to the tabular card:

   a. To add an existing tab, right-click a tab, click **Add Existing Tab** (or click the **Add Existing Tab** button), and then select a tab from the Object Library.

   b. To add a new tab, right-click a tab, click **Add New Tab** (or click the **Add New Tab** button), and then edit tab details.

   c. Right-click a tab, click **Add New Sub Tab** or **Add Existing Sub Tab** (or click the **Add New Sub Tab** or **Add Existing Sub Tab** buttons), and then choose a sub tab from the Object Library or edit sub tab details.

   d. For **Artifact**, click (Choose Artifact) to select an artifact in the Artifact Library; for example, if the artifact is a form, then select the specific form from the artifact listing. Available artifacts include forms, dashboards, and reports. To select an artifact from another environment, select the target environment under **My Connections**, and then choose the artifact you want to add to your sub tab.

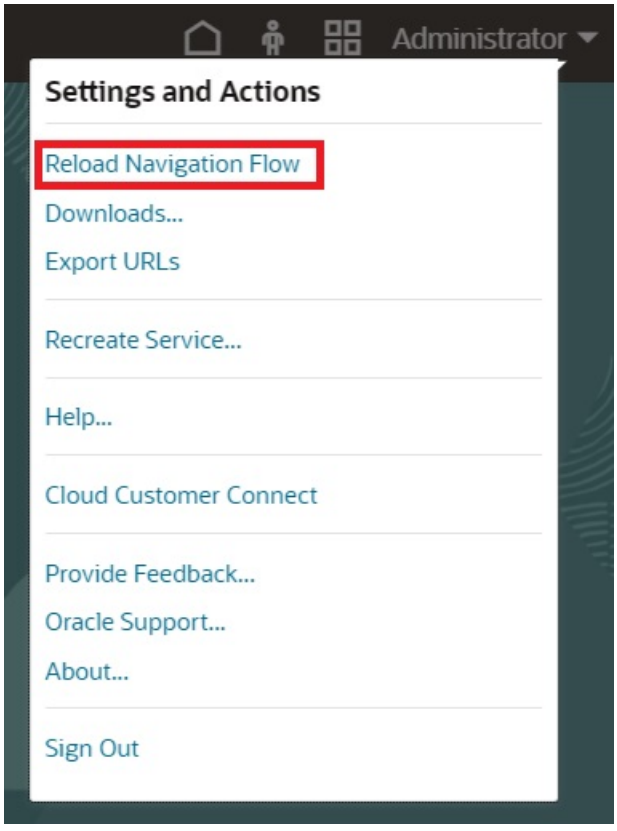
   e. Repeat adding tabs and sub tabs until the card is complete.

4. Click **Save and Close**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - For cards with multiple tabs or sub tabs, the last tab accessed by a user will be retained the next time the user accesses the card in the same session. If the user logs out and then logs back in, the default tab will be displayed.
> - Tabs or sub tabs that are added from another navigation flow or from another environment will display the localized labels that were defined in the source navigation flow. To update the tab labels in your navigation flow, on the Home page, click **Tools**, and then click **Artifact Labels**.
>
>   See Specifying Artifact Labels.

You must reload the navigation flow to view your design time changes. To reload a navigation flow, click the down arrow next to your user name. Then on the **Setting and Actions** menu, click **Reload Navigation Flow**.



If you can't see your referenced artifacts after reloading the navigation flow, see Handling Issues with Navigation Flows in *Operations Guide*.

Using Direct URLs to Integrate Connected Environments

Other source systems like Oracle ERP Cloud can embed URLs to directly link to artifacts contained in cards, tabs, and sub-tabs within connected Oracle Fusion Cloud Enterprise Performance Management environments.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Other Cloud environments like ERP use direct URL links to open connected Cloud EPM content like forms, dashboards, infolets, and reports. To make the integration between Cloud EPM and other systems seamless, you can copy the unique URLs for the artifacts within a connected Cloud EPM business process. You can copy the unique URLs in one of two ways:

- Copy the individual URL for an artifact in the business process. See Copying Direct URLs for Artifacts.
- Export all of the URLs in the business process to a CSV file, then find and copy the unique URLs. See Exporting All URLs to a CSV File.

Videos

Your Goal	Watch This Video
Learn how to use direct links to embed Oracle Fusion Cloud EPM content in other systems such as Cloud ERP and NetSuite.	Overview: Embed Content Using Direct Links

Copying Direct URLs for Artifacts

Use the **Copy URL** option on the artifact listing page to copy the unique URL for an artifact (dashboards, forms, infolets, and reports) in your Oracle Fusion Cloud Enterprise Performance Management business process.

> **Note**
>
> **Copy URL** is available to all users so that direct URLs to artifacts can be shared. However, only users with access to the targeted artifact can perform actions on it.

To copy the unique URL for an artifact:

1. From the Home page, open the listing page for the artifact.

   For example, click **Dashboards**, **Data**, **Infolets**, or **Reports**.
2. From the listing page, click ••• (Actions) next to the artifact, and then select **Copy URL**.
3. The **Copy URL** dialog displays the unique URL for the artifact. Copy the URL.

Copied URLs can, at times, become invalid. Possible reasons for invalid URLs include:

- The artifact is deleted.
- User access for the artifact is revoked.
- The artifact is renamed, which breaks the URL.
- The artifact is moved to a new folder, resulting in a new URL, which breaks the URL.

Exporting All URLs to a CSV File

Use the **Export URLs** option to create a CSV file that provides the unique URLs for each card, tab, or sub-tab within a connected Oracle Fusion Cloud Enterprise Performance Management business process. URLs are grouped by navigation flow and cluster, so the URLs are easier to find within the CSV file. You can open the CSV file with a text editor or Microsoft Excel and embed the relevant URL within the source system pages to serve as a launch point into Cloud EPM.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To export Cloud EPM URLs to a CSV file:

1. Log into a Cloud EPM environment.
2. From the Home page, click the down arrow next to the user name (upper right corner of the screen).
3. On the **Settings and Actions** menu, click **Export URLs**, and then click **Save**.

The system saves a CSV file to the default download folder on your local machine, and the filename is automatically generated with the current date and time of the server; for example, `19_Feb_2021 13_15_38 Navigation Flow URLs.csv`. Find the file in your download folder, and open it with a text editor or with Microsoft Excel.

Viewing the Exported URLs File

The CSV file lists all of the URLs in the business process. Each card, tab (vertical tab), and sub-tab (horizontal tab) has a unique URL. When viewed in a text editor like Notepad or in Microsoft Excel, it identifies the unique URL for each card, tab, and sub-tab, so the URLs for each artifact can be more easily found. URLs are grouped by navigation flow and by cluster.

> **Note**
>
> Only cards, tabs, and sub-tabs have URLs. Navigation flows and clusters don't have URLs.

Table 2 Direct URLs Export File Headers

Header	Description
Navigation Flow Name	The name of the navigation flow; for example, Default or Financial Flow.
Status	Status of the navigation flow; for example, Active or Inactive.
Type	Type of entry; for example, cluster, card, tab, or sub tab
Name	The cluster, card, tab or sub-tab name where the artifact is contained. This entry will be empty for clusters or cards which do not contain an artifact directly.
Artifact Type	The type of artifact; for example, Form, Dashboards, Financial Reports, and URL type artifacts.
Artifact Name	The name of the artifact or, in the case of an URL type artifact, the direct URL of the target page. **Caution:** If a direct URL is displayed, do not confuse this URL with the unique URL you'll use to integrate the connected environments.
URL	This is the unique URL you will use to integrate connected environments.
Visible	Indicates whether the artifact in the navigation flow is visible on the Home page to users or groups; for example, Y or N.
Role/Group	The role or group who can view the navigation flow. If a navigation flow is Global, then it can be seen by all users.
Description	The description of the navigation flow, if provided.

The URLs export file provides the information separated by a vertical bar or pipe (|) delimiter character. See the following example direct URLs export file as viewed in Notepad:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Navigation Flow Name	Status	Type	Name	Artifact Type	Artifact Name	URL	Visible	Role/Group	Description
Dashboard 2.0 Test	Inactive	cluster	Strategic Modeling				Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Model View			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Consolidation View			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Templates			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Tasks			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Dashboards			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Infolets			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Data			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Reports			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	tab	Reports			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	tab	Financial Reports			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	tab	Documents			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Rules			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Approvals			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	cluster	Application				Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Overview			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Settings			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Valid Intersections			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	sub tab	Setup			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	sub tab	Reports			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Data Exchange			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	sub tab	Data Integration			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	sub tab	Data Maps			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Jobs			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow
Dashboard 2.0 Test	Inactive	card	Cell Level Security			http://slcar261.usdv1.oraclecloud.com:10151/HyperionPlanning?E	Y	Global	Default Navigation Flow

To view the URLs export file in Microsoft Excel:

1. Open Excel, and then click the **Data** menu.
2. Click **New Query**, then **From File**, and then click **From CSV**.
3. Find and select the CSV file you exported, and then click **Import**. A new window displays the data in the CSV file.
4. To make the first row of the CSV file the header row, click **Edit**, click **Use First Row as Headers**, and then click **Close and Load**.

The resulting Excel file will look like the following example:

Find and copy the unique URL (found in the URL column) for the card, tab, or sub-tab that you wish to have integrated into the other connected environment. Only the URL target will open and users with access to the targeted artifact can perform the same actions as if they're working within the target business process.

Using Migration

You export artifacts to create backups that can be used to restore the service or to migrate applications across environments; for example, from a test environment to a production environment or to help set up a new service instance. You can export or import all the artifacts in the service or a combination of the artifacts.

Videos

Your Goal	Watch This Video
Learn about migration.	Migrating Artifacts

See Using Migration for EPM Cloud Services in *Administering Migration* for more information,

Copyright © 2022, 2026, Oracle and/or its affiliates.

Cloning Your Environment

The Clone Environment feature is a screen-based way to clone an environment and, optionally, identity domain artifacts (users and predefined role assignments), and contents of the inbox, outbox, and stored snapshots.

This feature is an alternative to using the Clone Environment EPM Automate command.

To clone your Enterprise Profitability and Cost Management enviroment:

1. Sign in to Enterprise Profitability and Cost Management as a Service Administrator or as a Service Administrator, who also has the Identity Domain Administrator predefined role.
2. From the Home page, select **Tools**, and then **Clone Evironment**.
3. In **Target URL**, enter the URL of the environment that will become the cloned environment; for example, `https://testExample-idDomain.pbcs.us1.oraclecloud.com`.
4. In **Username**, enter the user name of a Service Administrator who may also have the Identity Domain Administrator predefined role. For Oracle Cloud Classic to OCI cloning, you must enter the user name of a user who has Service Administrator and Identity Domain Administrator predefined roles in the target environment. This user must be able to log into the target environment using identity domain credentials.
5. In **Password**, enter the identity domain password of the user specified in Username.
6. **Optional**: Deselect the **Data Management** check box if you do not want to clone Data Management records. Cloning of Data Management records may take a long time if the staging tables contain a very large number of records.
7. **Optional**: Select the **Stored Snapshots and Files** check box if you want to clone the contents of inbox and outbox, and stored snapshots. This process may take a long time depending on the number and size of stored snapshots and files in inbox and outbox.
8. Click **Clone** to initiate the process.

For more information, see Cloning EPM Cloud Environments in *Administering Migration*.

Auditing Tasks and Data

Related Topics

- Auditing Overview
- Enabling Audit Tracking
- Viewing Audit Details

Auditing Overview

Use the Audit feature to view tasks performed by users. You can filter audited tasks by audit type (for example, Data or Clear Cell Details), date range (for example, Yesterday or Last 60 Days), and user name.

You must be a Service Administrator to enable audit tracking, and to view and export audit information.

These are the types of user activities the system can log in the task audit:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 3 Tasks That Can Be Audited

Audit Types	Tracked Changes
Dimension Administration	• Dimension hierarchy: Adding a member or dimension; moving, deleting, and changing properties; renaming a member and dimension • Performance settings: Resetting a dimension's dense or sparse setting, changing the order of dimensions
Alias Table Administration	Changes to alias tables: Creating, copying, renaming, deleting, and clearing
Data	• Cell values • Supporting detail • Account annotations • Cell-level documents **Note:** The audit log only captures modifications if the data change occurs within a data form. If a modification occurs as part of, for example, a business rule calculation, a data map, or a direct data load to Oracle Essbase, it will not be captured in the audit log.
Launch Business Rules	Updates from calculation scripts and business rules (including runtime prompts)
Form Definition	Forms: Creating, moving, deleting forms (The audit record doesn't record how the design changed.)
Form Folder Administration	Folders: Created, moved, and deleted
Security	Access permissions to dimension members, forms, form folders, business rules, and task lists
Users Administration	Users added, changed, and deleted **Note:** Information on Users Administration is not included in audit reports. You can get this information using EPM Automate and Oracle Fusion Cloud Enterprise Performance Management REST APIs. See the following topics: • roleAssignmentAuditReport in *Working with EPM Automate* • Role Assignment Report in *Oracle Fusion Cloud EPM REST APIs* • Role Assignment Audit Report for OCI in *Oracle Fusion Cloud EPM REST APIs*
Groups Administration	Groups added, changed, and deleted; users added and removed **Note:** Information on Groups Administration is not included in audit reports. You can get this information using EPM Automate and Cloud EPM REST APIs. See the following topics: • groupAssignmentAuditReport in *Working with EPM Automate* • Group Assignment Audit Report in *Oracle Fusion Cloud EPM REST APIs*
Copy Data	Users' selections for Static Dimensions, Source Dimension, and Destination Dimension, including supporting detail, cell text, cell attachments, and data without any details
Clear Cell Details	Users' selections for clearing supporting details, comments, and attachments
Variables	Variables (substitution variables and user variables): Added, changed, and deleted

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 3 (Cont.) Tasks That Can Be Audited

Audit Types	Tracked Changes
Application Administration	• Changes to the login level for an application, including: – Running the **Administration Mode** job – Changing the system setting for **Enable Use of the Application for** (both when it's changed manually and when it's changed automatically during a database refresh) – Running the EPM Automate command `setApplicationAdminMode` – Using REST API to execute the **Administration Mode** job • Changes to the hybrid mode (**Enable Hybrid Mode** or **Disable Hybrid Mode**) for Planning Custom applications and FreeForm.
Report Artifacts	For Report, Shared Reports, Snapshot, Book, and Bursting Definition types: • Create: Name, Parent Name • Modify: Name, Parent, Content • Delete: Name
Documents	Documents added, modified, and deleted
EPCM Model	Changes to models: • Add, delete, and copy actions: Only the Name and Description fields are audited • Modify action: All fields in the corresponding pages are audited
EPCM Rule Set	Changes to rule sets: • Add, delete, and copy actions: Only the Name and Description fields are audited • Modify action: All fields in the corresponding pages are audited
EPCM Rule	Changes to rules: • Add, delete, and copy actions: Only the Name and Description fields are audited • Modify action: All fields in the corresponding pages are audited
EPCM Point of View	Changes to the point of view: • Add, delete, and copy actions: Only the Name and Description fields are audited • Modify action: All fields in the corresponding pages are audited
EPCM Profit Curve	Changes to profit curves: • Add, delete, and copy actions: Only the Name and Description fields are audited • Modify action: All fields in the corresponding pages are audited

The Audit page displays the following information:

- Audit (task)
- Source
- Action
- User
- Name
- Date
- Details

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Property
- Old Value
- New Value

All columns can be sorted in ascending or descending order.

Enabling Audit Tracking

Audit tracking isn't enabled by default. Service Administrators must enable auditing so data changes can be tracked.

To enable auditing:

1. On the Home page, click **Tools**, and then click **Audit**.
2. From the **Audit** page, click **Enable Auditing**.
3. From the **Enable Auditing** page, select the audit types, and then click **Save and Close**.

   For a list of audit types and descriptions, see Auditing Overview.

Viewing Audit Details

You can view and export up to 180 days of audit details in the business process interface.

To view audit details:

1. On the Home page, click **Tools**, and then click **Audit**.

   If auditing is enabled, by default the **Audit** page displays the audit records for **Data** tasks for the **Last 7 Days**. To enable auditing, see Enabling Audit Tracking.

2. To filter, click (Filter), and select filter criteria:
   - **Audit Types**: Select one or more, or **All**.

     For a list of audit types and descriptions, see Auditing Overview.
   - **Date Range**: Select **Today**, **Yesterday**, **Last 7 Days**, **Last 30 Days**, **Last 60 Days**, or **Last 180 Days**.

     > **Note**
     >
     > – You can't select a date range prior to 180 days from today. The date range you select must occur between today and 180 days prior to today (including today).
     >
     > – The business process retains up to 365 days of audit details from the current system date. To export more than 180 days of audit details, you can use the EPM Automate `exportAppAudit` command or the REST API Export Audit job. See *Working with EPM Automate* or *REST APIs for Oracle Fusion Cloud EPM*.

   - **User Name**: Enter a user name or click (Search) to search for the user.
3. When you're done selecting filter criteria, click **Apply**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The grid displays the first 200 records from the audit table that match the filter criteria. You can view a legend at the bottom of the table if the filter criteria has more than 200 records in it.

4. To export the audit information to a Microsoft Excel spreadsheet, click **Export**, and follow the download instructions.

   When you select the **Export** option, the system exports all of the records matching the filter criteria to an `xlsx` file (format for Microsoft Excel versions 2007 and later).

> **Note**
>
> If data auditing is enabled, users can see what data has changed by selecting **Actions**, and then **Change History**.

Setting User Preferences

Related Topics

- About Setting User Preferences
- General Preferences
- Display Preferences
- Notifications
- Ad Hoc Options
- User Variables
- Report Preferences
- Form Printing Preferences

About Setting User Preferences

You can set preferences to control many aspects of function and display, including how reports and forms are printed.

To set user preferences:

1. From the Home page, select **Tools**, and then **User Preferences**.
2. Click the tabs on the left to set your preferences.

> **Note**
>
> User preferences take precedence over the preferences set by administrators (see About Managing Application and System Settings). To restore administrator settings, select **Use Administrator's Settings** on any tab on the **Preferences** page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

General Preferences

Table 4 General Preferences

Preference	Description
Profile	
Time Zone	Your time zone. **Note:** The default time zone for new users is (UTC) Reykjavik - Greenwich Mean Time.
Language	The language used to display labels and buttons. If you don't select a language, then your browser's locale is used.
Profile Image	You can set your profile to display on the Announcements panel of the Home page. Click **Profile Image** to select and open an image file. The image can be of type `.png`, `.jpg`, `.jpeg`, or `.gif`. If the uploaded picture exceeds 100 x 100 pixels, it will automatically be resized. **Note:** Automatic resizing only impacts new profile images that are uploaded in User Preferences. Existing profile pictures will not be resized. Your profile picture displays after you sign out and then sign back in.
Alias Setting	
Alias Table	Which alias table to use in the Enterprise Profitability and Cost Management application. An *alias* is another, often more descriptive, name for a member. Sets of aliases are stored in alias tables. For example, you may have an alias table for English member names, another alias table for German member names.
Display Member Label As	How you want the member name or alias displayed. If you select **Default**, then the form, grid, or dimension settings determine how member names are displayed.

Display Preferences

Table 5 Display Preferences

Preference	Description
Number Formatting	Set how numbers are formatted. Your selections apply to all currencies, in all forms that you have access to. You cannot select the same option for the **Thousands Separator** and the **Decimal Separator**.
Page Options	
Indentation of Members	How members are indented on the page. If you select **Do not indent**, the members are displayed as a flat, sequential list.
Number of Items on the Page Drop Down	How many items are listed on the Page drop-down. If the Page drop-down displays so many items that you have to scroll through the list, you may want to let a lower number of items to display.
Other Options	

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 5 (Cont.) Display Preferences

Preference	Description
Show Consolidation Operators	Whether to show consolidation operators.
Date Format	Date format to use throughout the Enterprise Profitability and Cost Management application. **Automatically Detect** sets the date format based on your browser locale. The format you select is used throughout the user interface, including in reports.
Enable User Formulas in Ad Hoc	Whether to enable User Formulas in Ad Hoc. Selecting **Yes** allows you to perform calculations on the fly without having to submit changes to the database. See Using Ad Hoc for Data Entry and Analysis.
Currency Code	If you have a multi-currency application, select a currency code. The selected currency determines the precision, scale, and currency symbol settings used through the Enterprise Profitability and Cost Management application. See Setting Up Currencies.

Notifications

If the administrator has allowed you to customize your email notification settings, then you can set an email to notify you about the application activities when there is a change in task lists and the job console. Notifications are sent to users as a batch the day after the event that triggers the notification.

A new user inherits the default email notification settings defined by the Service Administrator. This includes settings for late notifications, status change notifications, and due date reminder notifications. If the Service Administrator has allowed users to define their own email notification settings, any user can do one of the following:

- Continue to use the default settings defined by the Service Administrator. Any updates that the Service Administrator subsequently makes to email notifications settings will be reflected in the user's settings.
- Customize one or more of their email notification settings. If no value is set for a particular preference, it will continue to use the default value set by the Service Administrator.

Notifications are sent in these circumstances:

- **Late Notifications:** A late notification is sent to users the day after the due date of the task.
- **Status Change Notifications:** A notification that the task is ready to be worked on is sent when the task status changes.
- **Due Date Reminders:** A reminder is sent to users a specified number of days before the due date of the task.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> All the settings are disabled if the Administrator hasn't allowed customization of the user email notification preferences. Optionally, you can select **Use Administrator's Settings** to prevent any user customizations to the email notification settings. In both these cases, the user will inherit the preferences set by the administrator.

To set up and enable email notifications, enter the requested information under **Notifcations** and **Operational Notifications**.

Notifications

1. For **Email Address**, enter the email address where notifications will be sent.
2. For **Notifications**, select which activities you want to be notified of by email when there is a change.

   For Enterprise Profitability and Cost Management, the following acitivities are available to receive email notifications:

   - **Task Lists**
   - **Job Console**

   Note: Approvals are not applicable in Enterprise Profitability and Cost Management.

Operational Notifications

1. Select an **Email Start Time** and **Email End Time**.
2. Under **Notification Type**, expand the type of notification, and then expand **Task Manager** to select who should receive the notification. For example, "You are the task approver and task approver is late".
3. Under **Notify Me**, from the drop-down list, select the frequency with which the notification will be sent.
4. After you have entered the notifcation information, click **Save**.

   You get a notification that the user preferences have been set.

Ad Hoc Options

You can set preferences to control the display and behavior of ad hoc grids. See Using Ad Hoc for Data Entry and Analysis for more information on ad hoc grids.

Table 6 Ad Hoc Options

Preference	Description
Ad Hoc Options	

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 6 (Cont.) Ad Hoc Options

Preference	Description
Member Inclusion	How members are displayed. • **Include selection**: Displays both the selected member and the members retrieved as a result of the operation. For example, zooming in on the selected member Qtr1 displays data for Qtr1, Jan, Feb, Mar. • **Within selected group**: Performs an operation such as Zoom only on the selected group of members, leaving unselected cells as is. This setting is meaningful only when there are two or more dimensions down the grid as rows or across the grid as columns. This option pertains to Zoom, Keep Only, and Remove Only.
Zoom In	Level at which to zoom in: • **Next level**: Retrieve data for the children of the selected members. • **All levels**: Retrieve data for all descendants of the selected members. • **Bottom level:** Retrieve data for the lowest level of members in a dimension.
Ancestor Position	How to display ancestors in the hierarchy: • **Top**: Display member hierarchies in order from highest to lowest level. • **Bottom**: Display member hierarchies in order from lowest to highest level.
Display Member Label As	Whether member names, aliases, or both are displayed.
Alias Table	Which alias table to use. An *alias* is another, often more descriptive, name for a member. Sets of aliases are stored in alias tables. For example, you may have an alias table for English member names, another alias table for German member names.
Indentation	How member hierarchy levels are indented: • **None**: No indentation. • **Subitem**: Indent descendants. Ancestors are left-justified in the column. • **Totals**: Indent ancestors. Descendants are left-justified in the column.
Navigate without refreshing data	Selecting this option improves performance as you navigate around the grid, for example pivoting and zooming. Click **Refresh** to update the data. If you don't select this option, data is refreshed as you work in ad hoc.
Suppression	
Zeros	• **Row**: Select to hide rows containing only zeros. • **Column**: Select to hide columns containing only zeros.
Suppress	• **Repeat members**: Select to hide rows that contain repeated member names, regardless of the grid orientation. • **Missing blocks on rows**: Select to hide blocks of cells in rows that have no data.
Missing Data	Select to hide rows or columns with zeros or that have no data.
No Access	Select to hide rows or columns that you don't have access to. **Note**: If you get an error when you try open an ad hoc grid that says "Ad hoc grid cannot be opened as there are no valid rows of data", then clear the above **Suppression** options.
Precision	

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 6 (Cont.) Ad Hoc Options

Preference	Description
Use Currency Member Setting	Select to apply the precision setting of the Currency member. Set the minimum and maximum number of decimal positions to display in a cell for **Currency Values**, **Non-Currency Values**, and **Percentage Values**. For example, if the cell value is 100, and you set the Minimum precision to "2", then the value displays as "100.00"
Replacement	
No Data	Text to display for cells that have #Missing or #NoData as their value.
No Access	Text to display for cells that you don't have access permission to view.
Submit Zeros	Select if you specified #NumericZero as the text for the **No Data** or **No Access** replacement option, and you want to submit zeros.

User Variables

User variables help you to focus on members that you are interested in, such as your department's expenses. For example, you can create a form with entities on the rows and a user variable called Department. You can limit the number of rows displayed on the form by selecting a member for the Department user variable, such as Sales, Later, you can select another member for Department, such as Marketing. Before you can open a form, you must set your preferences for the user variables.

The **User Variables** page lists the user variables that have been set up for each dimension and the currently selected member for each variable. To select a member for a variable, click .

> **Note**
>
> The **Dimension** column honors the **Alias Setting** defined in General Preferences. So if an alias name is defined for a dimension, the **Dimension** column displays that dimension's alias based on the **Alias Table** selected. If no alias is defined for the dimension, then the dimension name is displayed.

> **Note**
>
> To learn more about user variables, see Working with User Variables and Selecting User Variables as Members.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Report Preferences

Table 7 Report Preferences

Preference	Description
Preview POV	When enabled, opening or previewing a report requires you to click to refresh data.
Unit of Measurement	Select **Inch** or **Centimeter** as the unit of measure to use in reports.

Form Printing Preferences

Set preferences for how forms and their data are printed as PDF files.

> **Note**
>
> To print to a PDF file, you must have Adobe Acrobat Reader installed.

Table 8 Form Printing Preferences

Preference	Description
Page Settings	Set preferences for paper size, layout, fit, and flow. You can also select whether to print in black and white.
Options	Select the options that you want to apply to your forms and data.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part VI

Creating and Managing Business Rules

Related Topics

- About Business Rules
- Using Business Rules
- Resources for Designing Groovy Business Rules

About Business Rules

Enterprise Profitability and Cost Management supports the creation of business rules in Calculation Manager.

You can create business rules in Calculation Manager using the Groovy scripting language. Groovy scripting allows you to design sophisticated rules that solve use cases that normal business rules can't solve. For example, you could create rules to prevent users from saving data in forms if the data value is above a predefined threshold, update a global driver by returning a calc script, move and rename members, and create metadata and data with validations. See Resources for Designing Groovy Business Rules.

Business rules created in Calculation Manager can be launched in Enterprise Profitability and Cost Management from any place that you can execute a calculation script; for example, from the Business Rules page, within the context of a form, in the Job Scheduler, and in dashboards. To launch business rules, the rules must first be deployed in Calculation Manager. See Launching Business Rules.

You can diagnose performance issues with business rules and pinpoint and address any issues using activity reports. Activity reports identify which business rules are taking the longest to execute. You can then open the rules in Calculation Manager, review the log, and optimize the steps within the rule to improve performance. See Viewing Rules Usage.

> **Note**
>
> - Business rules in the **PCM_CLC** and **PCM_REP** cubes are created in Script mode using the Groovy scripting language. (The Graphical view in Calculation Manager is *not* available for business rules created in the **PCM_CLC** and **PCM_REP** cubes.) Any additional cubes allow you to use both the Graphical and Script modes to create business rules.
> - The ASO Calculation and ASO Allocation functions, `executeASOcustomcalculation` and `executeASOallocation` are *not* supported for **PCM_CLC** and **PCM_REP** cubes.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Tip

For help with designing business rules to avoid common execution errors and optimizing slow rules, see Troubleshooting Business Rule Errors and Performance in *Oracle Enterprise Performance Management Cloud Operations Guide*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

24

Using Business Rules

Related Topics

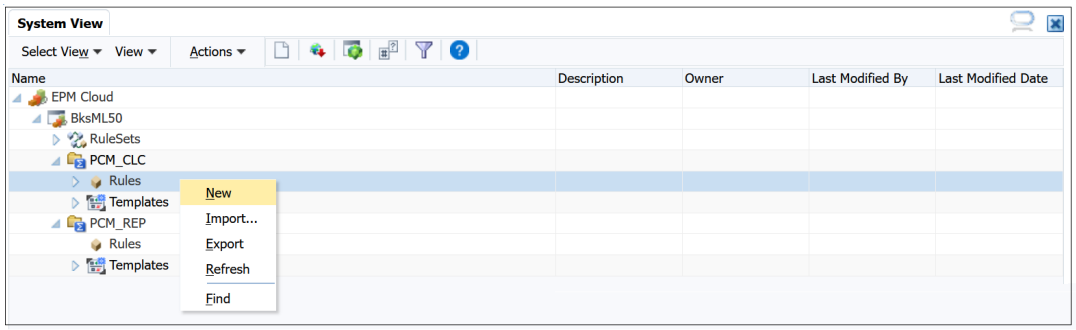
- Creating, Validating, and Deploying Business Rules
- Managing Business Rule Security
- Enabling Business Rules Notifcation
- Launching Business Rules
- Viewing Rules Usage

Creating, Validating, and Deploying Business Rules

To create validate, and deploy a business rule:

1. From the Enterprise Profitability and Cost Management Home page, click **Navigator** .
2. Under **Create and Manage**, click **Business Rules**.

   This opens Calculation Manager.
3. In Calculation Manager, navigate to the desired cube, then right-click **Rules**, and select **New**.



4. In the **New Rule** dialog box, enter the information about the rule, and then click **OK**.

   Note that the following characters are not allowed in the rule name: '\r', '\n', '\t', '\f', '\b', '<', '>', '(', ')', "'", '\\', '{', '}', '[', ']', '*', '?'
5. Begin designing your rule.
   - If you are creating a rule in the **PCM_CLC** and **PCM_REP** cube, the rule editing page opens in Script mode. The Designer (graphical) mode is not available, and the drop-down menu option that allows you to switch between Designer and Script mode is disabled. Select the **Script** tab, and begin entering your script.

     Do not use the following keywords when editing in script mode:

     – `/*STARTCOMPONENT*/`
     – `/*STARTCOMPONENT:SCRIPT*/`
     – `/*STARTCOMPONENT:FORMULA*/`

Copyright © 2022, 2026, Oracle and/or its affiliates.

- /*ENDCOMPONENT*/
- /*STARTRULE*/
- /*ENDRULE*/
- /*STARTTEMPLATE*/
- /*ENDTEMPLATE*/

The script that you enter is automatically saved in Groovy.

See Options Available When Editing in Script Mode in *Designing with Calculation Manager* for information on the options available when creating the script for a business rule.

- If you are creating a rule in cube other than the **PCM_CLC** and **PCM_REP** cube, the rule editor opens in Graphical mode, and you can use the drop-down menu to switch between graphical and script mode. See Creating a Business Rule in *Designing with Calculation Manager* for information on creating a business rule in Graphical mode.

6. Click , or click the **Actions** drop-down, and select **Save**.
7. Right-click the rule, and select **Validate**.
8. Right-click the rule, and select **Deploy**.

Managing Business Rule Security

Related Topics

- Assigning Access to Individual Business Rules
- Assigning Access to Folders Containing Several Business Rules

Assigning Access to Individual Business Rules

Service Administrators can assign access to business rules.

To assign access to an individual business rule:

1. From the Home page, select **Business Rules**.
2. Select a business rule, click , and select **Assign Permission**.

> **Note**
>
> You can assign permissions to only one business rule at a time.

3. In the **Assign Permission** dialog box, click the **Permissions** tab.

   Any previously selected users and groups are displayed. To add additional users or groups, click **Add User/Group**, select a user or a group, and click **OK** and then **Close**.
4. For each user or group displayed, select an option:
   - **Launch** allows the user or group to launch the selected business rule.
   - **No Launch** prevents the user or group from launching the selected business rule.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> See Types of Access Permissions for additional information on Launch/No Launch settings.

5. Click **Save**.

> **Note**
>
> The rules that are displayed on the **Business Rules** page are the business rules created in Calculation Manager. Any Allocation and Custom rules created Enterprise Profitability and Cost Management are *not* displayed on this page.

Assigning Access to Folders Containing Several Business Rules

You can organize your rules under folders, and then assign access at the folder level. When you assign access to a folder, all of the rules in the folder inherit the access assigned.

To assign access to folders containing several business rules:

1. From the Home page, click **Navigator** , and then under **Create and Manage,** click **Business Rules Security**.
2. Under **Business Rule Folders**, select the folder containing the business rules, and then click
3. In the **Assign Access** dialog box, any previously selected users and groups are displayed. Do one of the following:
   - To assign access to business rules for additional users or groups, click the **Users** or **Groups** folder, click , and then select from the list of available users and groups.

     For **Type of Access**:

     – Select **Launch** to allow the users or groups to launch the business rules in the selected folder.

     – Select **No Launch** to prevent the users or groups from launching the business rules in the selected folder.

     Click **Add** and then **Close**. The users or groups to which you assigned access now display in the **Users** or **Groups** folder.

     > **Note**
     >
     > See Types of Access Permissions for additional information on Launch/No Launch settings.

   - To edit access, select the users or groups you want to edit, and then click .
   - To remove access, select the users or groups for which to remove access, and then click .
4. Click **Close**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Enabling Business Rules Notifcation

You can specify whether to send an email notification to a user or group when business rules that are created and enabled for notification in Calculation Manager are completed or encounter errors.

To enable business rules notification:

1. From the Home page, select **Application**, and then **Settings**.
2. In **System Settings**, for **Business Rules Notification**, select **Yes**.
3. For **Notify These Users**, click , and select the user or group to notify.

> **Note**
>
> You can select only one user or group to notify.

4. Click **Save**.

> **Note**
>
> You specify whether to enable a business rule for notifcation when you create the rule in Calculation Manager using the **Enable Notifcations** option in the rule's properties. See Creating a Business Rule in *Designing with Calculation Manager*.

Launching Business Rules

Related Topics

- Launching Business Rules From the Business Rules Page
- Launching Business Rules From a Form
- Launching Business Rules From the Job Scheduler
- Launching Business Rules from Dashboards 1.0

Launching Business Rules From the Business Rules Page

To launch a business rule from the **Business Rules** page:

1. From the Home page, select **Business Rules**.
2. On the **Business Rules** page, select the desired business rule, and click **Launch** .

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Business rules must be deployed in Calculation Manager before they can be launched. If a business rule has not been deployed, it will not display on the **Business Rules** page. To deploy a business rule, right-click the rule in Calculation Manager, and select **Deploy**. If the deployment is successful, a "Deployment was successful" message is displayed.

> **Note**
>
> Allocation and Custom rules created in Enterprise Profitability and Cost Management are not displayed on the **Business Rules** page. Only business rules created and deployed in Calculation Manager are available to launch on this page.

Launching Business Rules From a Form

Adding and Removing Rules in Forms

You can associate one or more rules with a form, by cube. Users can launch associated rules from the form to calculate and allocate values. You can set whether each rule associated with a form automatically launches when the form is opened or saved. You can also change the order in which the rules are launched or remove rules from a form.

Note the following:

- Rules must be deployed to the business process from Calculation Manager before you can add rules to business process forms.
- Likewise, if a rule is deleted in Calculation Manager, the rules must be redeployed to the business process in order for them to no longer be used in the business process. Optionally, you can manually remove a rule from a form using the procedure in this topic.
- Rules that are set to automatically run when a form is loaded or saved never run in the background.

To add, update, or remove business rules in forms:

1. Take an action:
   - To update the current form, click **Actions**, and then click **Business Rules**.
   - To open a form for editing so you can associate rules, go to the Home page and click the **Navigator** icon, and then under **Create and Manage**, click **Forms**. Select the form, click (Edit), and then click **Business Rules**.
2. From the **Cube** drop-down menu, select the cube.
3. From the **Business Rules** list, select the rules to associate with the form, and add them to **Selected Business Rules**. To remove associated rules, select the rules under **Selected Business Rules** and remove them.

   By default, the Calculate Form rule is selected. Calculate Form is automatically created for forms to calculate subtotals. You can remove Calculate Form to prevent users from calculating data in forms.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. To change the order of selected business rules (the order in which rules display and launch), select a business rule in **Selected Business Rules** and click the up or down arrow to move it up or down in the list. The rule listed first displays and launches first; the rule at the bottom of the list displays and launches last.

> ⚠ **Caution**
>
> The order in which business rules launch is important and may affect data.

5. To set business rule properties, click **Properties**.

   See Setting Business Rule Properties.

6. Click **Save** to save your work and continue creating or editing the form, or click **Finish** to save your work and close the form.

Setting Business Rule Properties

You can specify whether business rules associated with forms launch automatically when users load (open) or save the form. If business rules have runtime prompts, you can set whether the default members in the runtime prompt match the members selected in the page and Point of View axes.

To set business rule properties:

1. Do one of the following:
   - To update the current form, click **Actions**, and then click **Business Rules**.
   - To open a form for editing, from the Home page, click **Navigator** , and then under **Create and Manage**, click **Forms**. Select the form, click , and then click **Business Rules**.
2. There are four phases in a form where a rule can be assigned and each may have information relevant to that phase. Under the **Business Rules Properties** section, select from the following:
   - **Run Before Load**
   - **Run After Load**
   - **Run Before Save**
   - **Run After Save**

> ⓘ **Note**
>
> - **Run After Load** and **Run Before Save** are enabled only for Groovy rules. You can't select these options for calc scripts or graphical rules.
> - Some actions such as saving the grid, changing the page, or launching an action menu item will also reload the page after the operation completes. This ensures the grid contains the newest data. When this happens, the before and after load actions will run as they do in normal page loads.
> - While hidden runtime prompts are not supported for calc script rules on the before and after load options, they are supported for Groovy rules.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. **Optional**: If a business rule has runtime prompts, select **Use Members on Form** to match the default member selection on the runtime prompt window to the current members in the page and Point of View axes of the open form.

   To hide runtime prompt values, select **Hide Prompt**. You can hide runtime prompts if:

   - All runtime prompt member values are filled in (appropriate dimension members can be read from form's Page/Point of View)
   - No dimensions are repeated in the runtime prompt

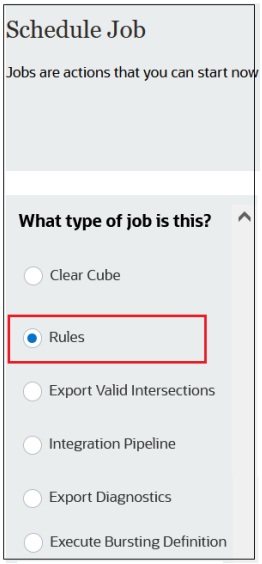
4. Click **OK**.

Launching Business Rules From the Job Scheduler

Business rules are launched when scheduling a job to run.

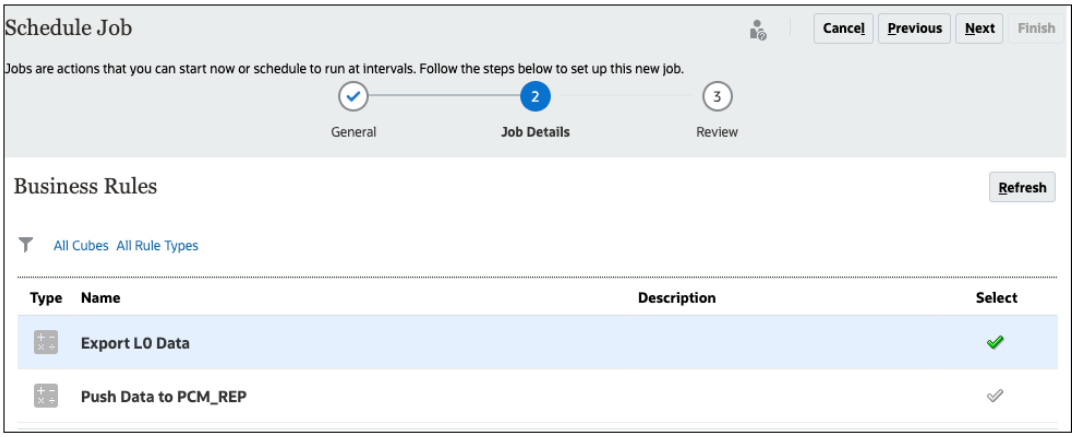
To schedule and launch a business rule:

1. From the Home page, select either **Application** or **Modeling**, and then **Jobs**.
2. On the **Jobs** page, click the **Actions** drop-down, and select **Schedule**.
3. On the **General** tab, under **What type of job is this?**, select **Rules**.



4. The **Job Details** tab lists all the business rules that have been created. Select the desired businses rule.

Copyright © 2022, 2026, Oracle and/or its affiliates.



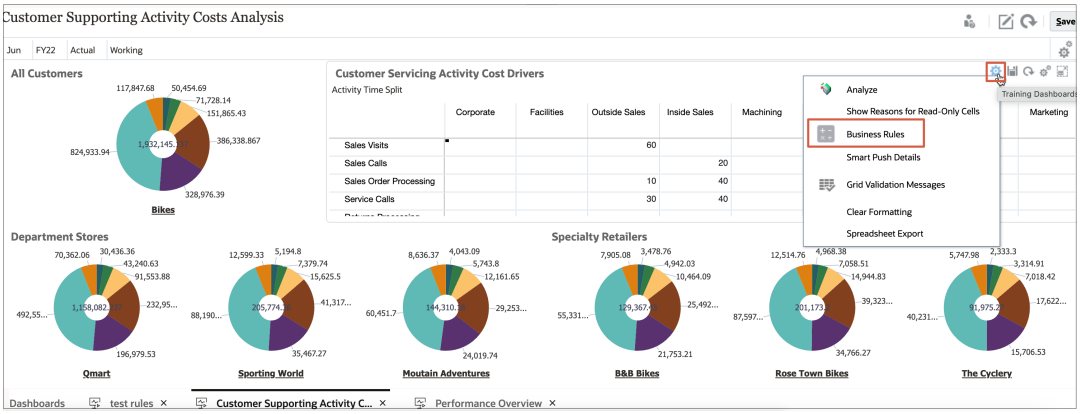
5. Review the information and click **Finish**.

Launching Business Rules from Dashboards 1.0

In Dashboards 1.0, you can select business rules attached to a form.

To launch businses rules from Dashboards 1.0:

1. From the **Home** page, select **Dashboards**.
2. On the **Dashboards** page, **expand Dashboards 1.0**, and select a dashboard.
3. Hover over a data grid component, and click (**Actions** icon), and select **Businses Rules**.



4. In the **Business Rules** dialog box, select the desired businses rule.

Viewing Rules Usage

Service Administrators can generate a report, called the Rules Usage Report, that details where rules are used. Filters enable you to refine the details by rule name, rule type, and cube.

> **Note**
>
> The only rules listed in the Rules Usage Report are those rules that are deployed in the business process.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To view rules usage:

1. Click the **Navigator** icon , and then under **Monitor and Explore**, click **System Reports**.
2. Click the **Rules Details** tab.
3. If filtering, select filter criteria, and then click **Apply Filter**:
   - **Rule Type**: Choose one or more options: **All**, **Rules**, and **Rulesets**
   - **Cube**: Choose from a list of available cubes.
   - **Name Filter**: Enter a rule or ruleset name. Optionally, you can use wildcard characters.

   The **Rules** list displays the rules that are deployed in the business process and that match the filter criteria.
4. For **File Format**, select one of the following formats:
   - **XLSX** (default)
   - **PDF**
   - **HTML**
   - **XML**

   > **Note**
   >
   > Choosing XML format enables you to configure the Rules Usage Report with the help of Oracle BI Publisher Add-in for MS Office. You can have greater control over which columns to display in your report, the order in which the columns are displayed, whether to apply sorting, and so on.

5. Click **Create Report**.

The Rules Usage Reports provides the following information:

- Rule Name
- Rule Type
- Cube
- Primary Association (Type and Name)
- Secondary Association (Type and Name)

Primary association refers to the rule that is associated with the artifact directly; for example, a rule linked to a form or to a task. Secondary association refers to the rule that is associated with an artifact indirectly; for example, a rule that is linked to a menu item, and the menu item is linked to a form, or a rule that is linked to a task for a given task list.

Rules in the generated report are displayed in alphabetical order as follows:

- Rule name
- Primary association type
- Primary association name

Copyright © 2022, 2026, Oracle and/or its affiliates.

Example 24-1 Sample Rules Usage Report Showing Primary Associations (PDF Format)

ORACLE EPM Cloud

Rules Usage Report

Rule Name	Rule Type	Cube	Primary Association		Secondary Association	
			Type	Name	Type	Name
Act_Agg_Ek	Rules	PSPPlan1				
Adhoc - Clear 5+7	Rules	PSPPlan1				
Agg	Rules	PSPPlan1	Form	_XX_Agg		
Agg - Roll up E and O from drop down, Customer in row, all others at none	Rules	PSPPlan1	Form	1 - Corp Prof Fees		

Page 1 of 82

1/10/2018 18:00 PM

Example 24-2 Sample Rules Usage Report Showing Primary and Secondary Associations (PDF Format)

ORACLE EPM Cloud

Rule Name	Rule Type	Cube	Primary Association		Secondary Association	
			Type	Name	Type	Name
psp_Agg_budget	Rules	PSPPlan1				
psp_Agg_Fcst_All Dims	Rules	PSPPlan1	Task	Aggregation	Task List	Execute Royalty Calc
psp_Agg_FC @AER_All Dims	Rules	PSPPlan1				
psp_Agg_budget_All Dims	Rules	PSPPlan1				
psp_Rowfocused_Agg	Rules	PSPPlan1	Form	1.0 psp_Agg		
psp_Agg_Actuals_All Dims	Rules	PSPPlan1				

Page 81 of 82

1/10/2018 18:00 PM

Copyright © 2022, 2026, Oracle and/or its affiliates.

25

Resources for Designing Groovy Business Rules

Related Topics

- About Groovy Business Rules
  Groovy business rules allow you to design sophisticated rules that solve use cases that normal business rules can't solve; for example, rules to prevent users from saving data on forms if the data value is above a predefined threshold.
- Java API Reference for Groovy Rules
  For Enterprise applications, a Java API Reference is available to use as you create Groovy rules.
- Validating Groovy Scripts
  Validate Groovy business rule scripts to ensure that your application's Groovy scripts can pass the stricter validation rules.
- Groovy Business Rule Examples
- Groovy Business Rule Tutorial Videos
  Watch these tutorial videos for details and best practices when implementing and using Groovy Business Rules.
- Groovy Business Rule Tutorials
  Complete these tutorials for hands-on examples on implementing Groovy Business Rules.
- Groovy Rule Business Scenarios
  This section provides examples of business scenarios where you can use Groovy business rules.

About Groovy Business Rules

Groovy business rules allow you to design sophisticated rules that solve use cases that normal business rules can't solve; for example, rules to prevent users from saving data on forms if the data value is above a predefined threshold.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Groovy is an advanced customizable rules framework that comes with Cloud EPM Platform and is available with Enterprise Performance Management Enterprise Cloud Service along with Enterprise PBCS and PBCS Plus One. You can create and edit Groovy rules in:
>
> - Planning (including these application types: Custom, Module, FreeForm, Sales Planning, Strategic Workforce Planning, and Cash Forecasting)
> - Enterprise Profitability and Cost Management
> - Financial Consolidation and Close
> - FreeForm
> - Tax Reporting

You create Groovy rules in Calculation Manager and execute them from any place that you can execute a calc script rule in an application; for example, on the Rules page, within the context of a form, in the job scheduler, in dashboards, in task lists, and so on.

Groovy rules are also supported in rulesets. You can have a combination of calc script rules and Groovy rules within a ruleset.

Groovy rules are not supported in composite forms.

You can execute jobs of type rules, rulesets, and templates synchronously from a Groovy rule.

You can write Groovy scripts to run select EPM Automate commands directly in Oracle Fusion Cloud EPM, without installing EPM Automate client on a client machine. Refer to Running Commands without Installing EPM Automate and Supported Commands in *Working with EPM Automate* for information on which EPM Automate commands can be run using Groovy and example scripts.

Oracle supports two types of Groovy rules:

- Rules that can dynamically generate calc scripts at runtime based on context other than the runtime prompts and return the calc script which is then executed against Oracle Essbase.

  For example, you could create a rule to calculate expenses for projects only for the duration (start and end dates) of the project.

  Another example is a trend-based calculation that restricts the calculation to the accounts available on the form. You could use this calculation for various forms in Revenue, Expense, Balance Sheet, and Cash Flow. This allows for optimization and reuse.
- Pure Groovy rules that can, for example, perform data validations and cancel the operation if the data entered violates company policies.

Video

Your Goal	Watch This Video
Learn about training options for creating Groovy rules in Oracle Fusion Cloud Enterprise Performance Management.	Learning Groovy in Oracle Cloud EPM

Copyright © 2022, 2026, Oracle and/or its affiliates.

Java API Reference for Groovy Rules

For Enterprise applications, a Java API Reference is available to use as you create Groovy rules.

The Java API Reference includes examples that demonstrate the syntax and power of the EPM Groovy object model.

To view the Java API Reference, see the Java API Reference for Oracle Enterprise Performance Management Cloud Groovy Rules on the Cloud Help Center. You can also access this reference from the Oracle Enterprise Planning and Budgeting Cloud Academy. To access the Academy, sign in, and then click **Academy**.

Validating Groovy Scripts

Validate Groovy business rule scripts to ensure that your application's Groovy scripts can pass the stricter validation rules.

As you migrate to an upgraded version of Groovy, you might encounter certain issues that need to be addressed. A program called the **Groovy Script Validator** aids in finding the rules that need to be adjusted and provides a report so you can fix any issues.

> **Note**
>
> The **Groovy Script Validator** is only available only when your application contains user-created Groovy business rules.

To validate Groovy scripts:

1. Sign into your application as a Service Administrator.
2. From the Home page, select **Application**, and then **Overview**.
3. Click **Actions**, and then select **Groovy Script Validator**.

   The **Groovy Script Validator** option is only available when your application contains user-created Groovy business rules.

After the program completes verification of the Groovy scripts, you can view the Groovy validation report and fix any errors it finds. If no errors are found, no additional action is required.

To view the Groovy validation report:

1. From the Home page, select **Application**, and then **Jobs**.
2. Under **Recent Activity**, click the **Groovy validation report Job**.
3. Next to **Groovy Script Validator Report**, click (Download File).
4. Optionally, you can download the `GroovyValidationReport.html` file from the **Inbox/Outbox Explorer** by selecting **Application**, then **Overview**, click **Actions**, and then select **Inbox/Outbox Explorer**.

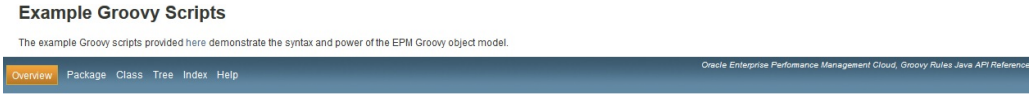
Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> For a list of validation errors and recommended resolutions, see Resolving Groovy Business Rule Validation Issues in *Designing with Calculation Manager*.
>
> To learn more about Groovy business rules, see Creating a Groovy Business Rule in *Designing with Calculation Manager*.

Groovy Business Rule Examples

To see example Groovy scripts:

1. See the Oracle Enterprise Performance Management Cloud Groovy Rules Java API Reference.
2. Do one of the following:
   - Under **Example Groovy Scripts** on the main page, click the word "here" to view sample scripts:

   - Under **All Classes** in the left pane, click a class to see the examples for that class.

     For example, to see Strategic Modeling examples, click the StrategicModel class in the left pane.

Groovy Business Rule Tutorial Videos

Watch these tutorial videos for details and best practices when implementing and using Groovy Business Rules.

Your Goal	Watch this Video
See the training options for creating Groovy rules in Oracle Fusion Cloud Enterprise Performance Management:	Learning Groovy in Oracle Cloud EPM
Use Groovy rules to calculate incrementally loaded data in Data Management.	Calculating Incrementally Loaded Data in Data Management Using Groovy Rules
Use Groovy templates to improve usability and calculation performance for user actions.	Customizing Actions to Improve Performance Using Groovy Templates

Copyright © 2022, 2026, Oracle and/or its affiliates.

Groovy Business Rule Tutorials

Complete these tutorials for hands-on examples on implementing Groovy Business Rules.

Implement Groovy: Basic Tasks

Your Goal	Learn How
Learn about the Groovy scripting language and how to create a Groovy script for your business process in Oracle Fusion Cloud Enterprise Performance Management.	Introduction to Groovy Business Rules
Implement Groovy scripts to work with data grids and data grid iterators. • Use conditional logic to set the background colors in a data grid • Implement performance benchmarking • Set default data values in a grid	Working with Data Grids and Iterators in Groovy
Create a Groovy script to work with business process metadata, in this case, moving a member from one parent to another. The script includes RTPs to prompt users for input. You'll also learn how to create a right-click action menu with a menu item to call the script, and how to associate the action menu with a data form.	Moving Dimension Members with Groovy
Push data from a source location to a target location using Groovy rules and Smart Push.	Moving Modified Data Using Groovy and Smart Push

Implement Groovy: Advanced Tasks

Your Goal	Learn How
Implement a Groovy script that validates data entry against allowed ranges stored in a driver cube.	Validating Data Entry Rules with Groovy

Copyright © 2022, 2026, Oracle and/or its affiliates.

Your Goal	Learn How
Create a Groovy script to work with business process metadata, in this case, adding a member to a dimension. The script includes RTPs to prompt users for input. You'll also learn how to create a right-click action menu with a menu item to call the script, and how to associate the action menu with a data form.	Adding Dimension Members with Groovy
Generate focused calculation scripts in your business process to calculate only data that has been edited, instead of the entire data entry form.	Calculating Modified Data Using Groovy
Understand Strategic Modeling concepts and learn how to integrate data between strategic models and business process applications using Groovy scripts.	Integrating Data between Planning and Strategic Models Using Groovy
Create a Groovy template with interactive Design Time Prompts (DTPs).	Creating Groovy Templates
Learn how to use a Groovy business rule in the business process to export dimension metadata from Cloud EPM, and then import the metadata into the business process.	Integrating Dimension Metadata from Enterprise Data Management Cloud with Planning Using Groovy Rules

Implement Groovy: REST API

Your Goal	Learn How
Call a Data Management REST API to execute a data load rule that will load the latest product volumes for the user's entity into the business process.	Calling an Internal REST API Using Groovy

Copyright © 2022, 2026, Oracle and/or its affiliates.

Your Goal	Learn How
Call an external Rest API from a Groovy script in your business process. You'll also learn how to create a right-click action menu with a menu item to call the script, and how to associate the action menu with a data form.	Calling an External REST API Using Groovy

Groovy Rule Business Scenarios

This section provides examples of business scenarios where you can use Groovy business rules.

These topics contain scenarios that show you how to use Groovy rules to perform focused data movement and smart calculations on business process data:

- Moving Modified Data Using Groovy Rules and Smart Push
- Calculating Modified Data Using Groovy Rules

Moving Modified Data Using Groovy Rules and Smart Push

In this topic, we'll show you best practices on how you can use Groovy rules and Smart Push to move modified data into a reporting cube.

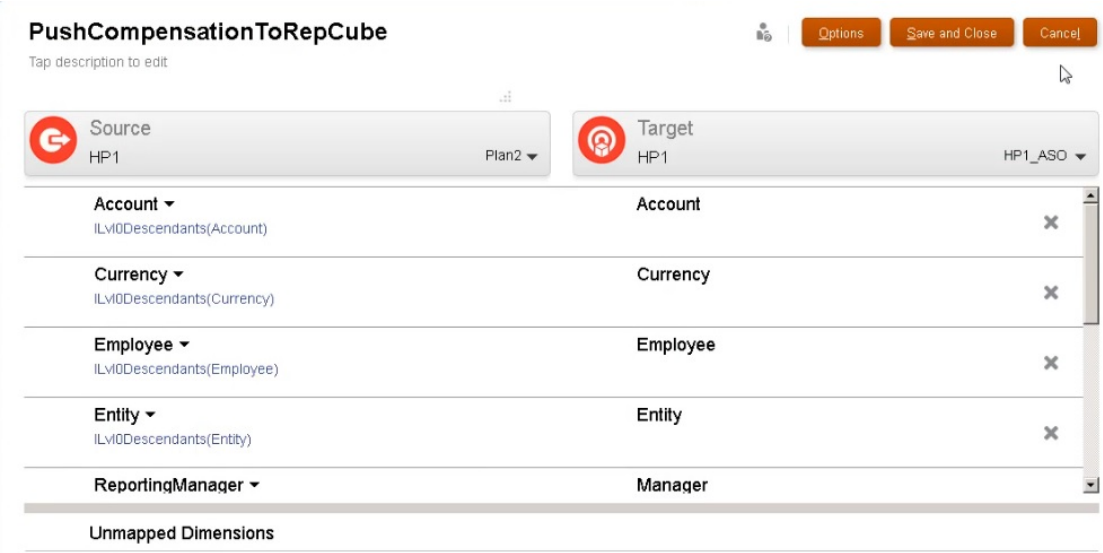
On a data form, users can modify employee salary and assign a Reporting Manager. After the form data is saved, Smart Push is run to copy data to the reporting cube for analysis. Then, dimensions are also consolidated, if necessary, as the data is being copied.

If the form contains hundreds of rows of data, all of that data is checked against the configured data map, processed for dimension consolidation, if any is set, and then pushed to the reporting cube. Depending on the amount of data on your form, this process may take a while to complete.

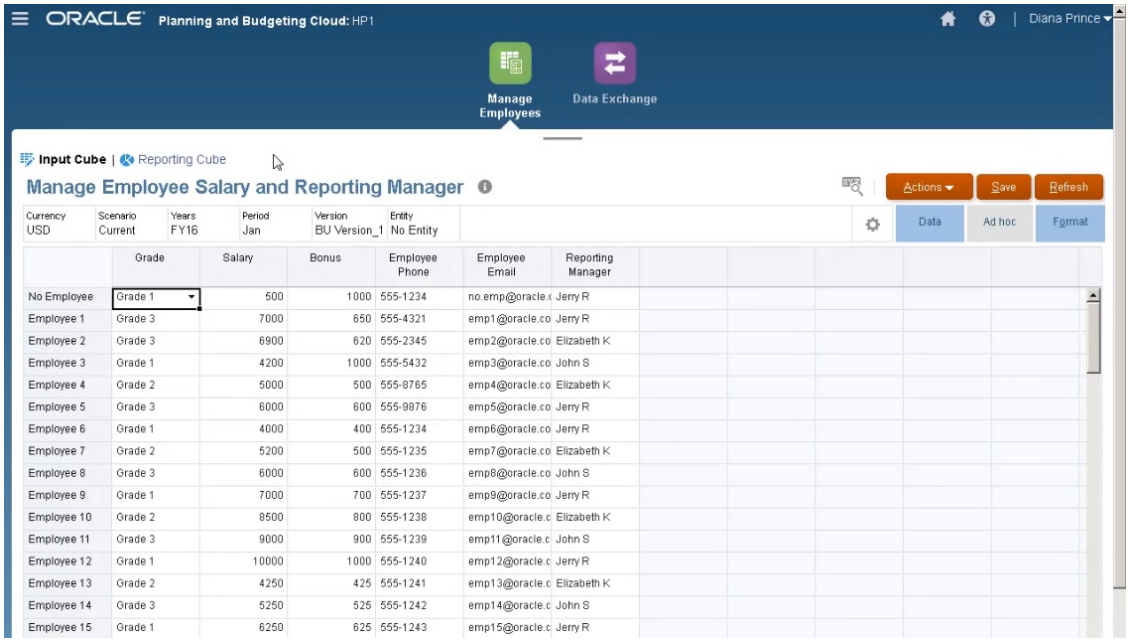
You can improve the performance of data synchronization between your input and reporting cubes by designing a Groovy rule that identifies and isolates the data you modified, and pushes only the isolated data into your reporting cube.

For example, we configured a simple data map for Smart Push that maps dimension members from our input cube to our reporting cube.

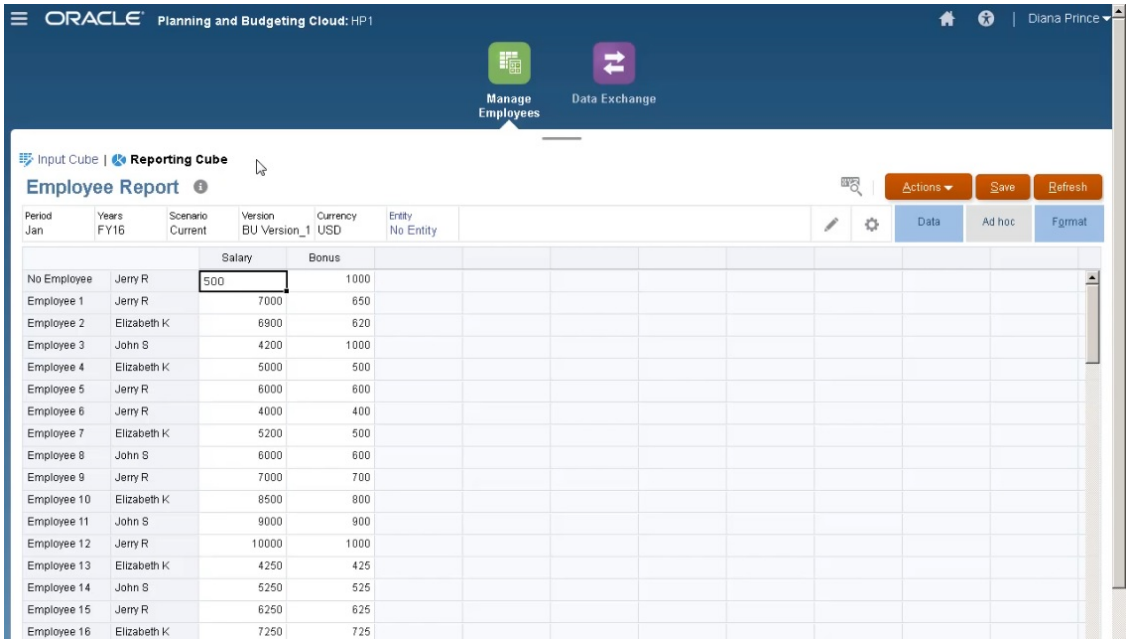
Copyright © 2022, 2026, Oracle and/or its affiliates.



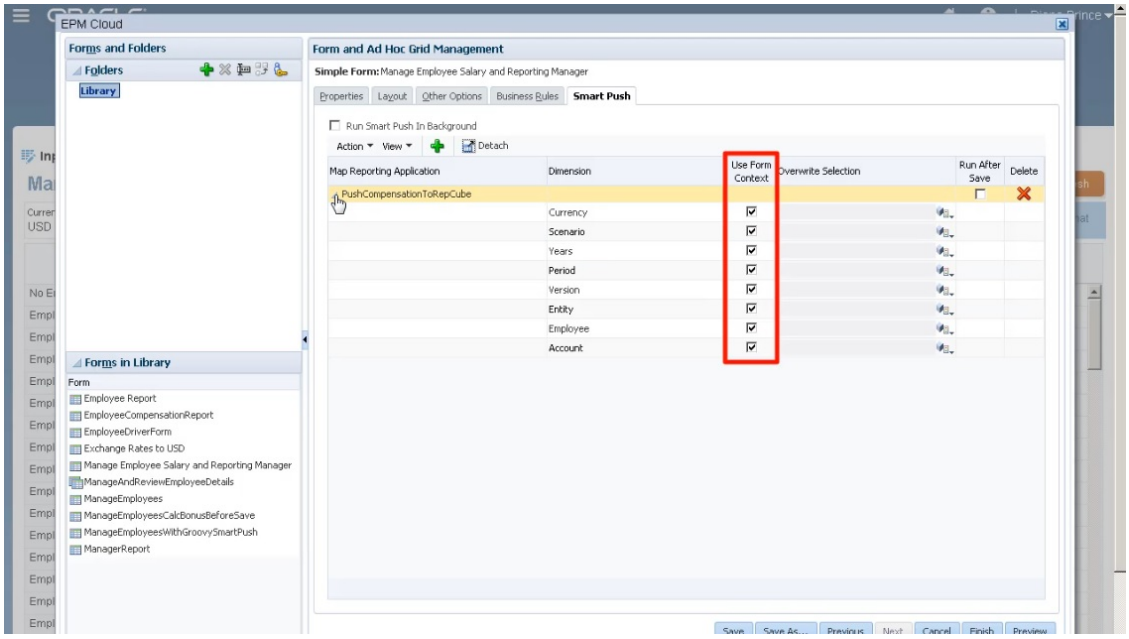
Then we prepared forms that display data from our input and reporting cubes.



Copyright © 2022, 2026, Oracle and/or its affiliates.

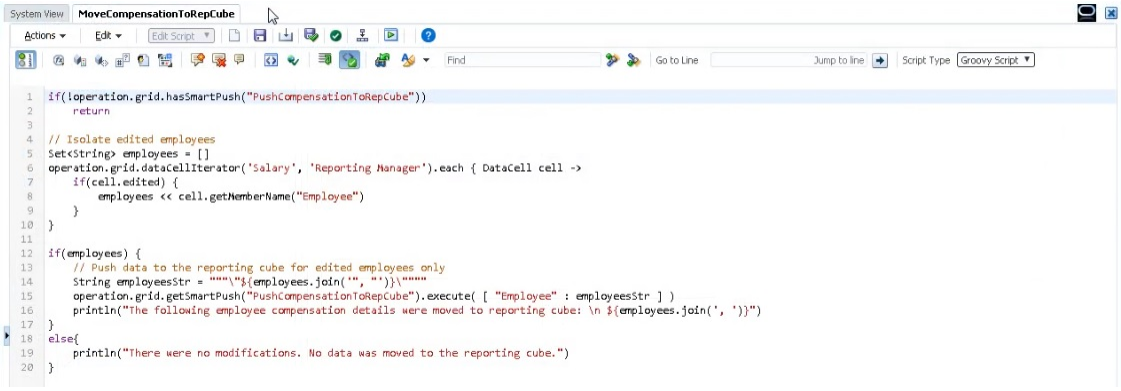


The form used for data entry has Smart Push enabled and uses the form's context to push data for all the members selected for the dimensions defined on the form.



For the Groovy rule, here's the entire script.

Copyright © 2022, 2026, Oracle and/or its affiliates.



The script starts by identifying the associated data map for smart push.

```
if(!operation.grid.hasSmartPush("PushCompensationToRepCube"))
    return

// Isolate edited employees
Set<String> employees = []
operation.grid.dataCellIterator('Salary', 'Reporting Manager').each { DataCell cell ->
    if(cell.edited) {
        employees << cell.getMemberName("Employee")
    }
}

if(employees) {
    // Push data to the reporting cube for edited employees only
    String employeesStr = """\"${employees.join('", "')}\"""
    operation.grid.getSmartPush("PushCompensationToRepCube").execute( [ "Employee" : employeesStr ] )
    println("The following employee compensation details were moved to reporting cube: \n ${employees.join(', ')}")
}
else{
    println("There were no modifications. No data was moved to the reporting cube.")
}
```

This section of the script uses the `dataCellIterator` method to identify edited cells and isolates them.

```
if(!operation.grid.hasSmartPush("PushCompensationToRepCube"))
    return

// Isolate edited employees
Set<String> employees = []
operation.grid.dataCellIterator('Salary', 'Reporting Manager').each { DataCell cell ->
    if(cell.edited) {
        employees << cell.getMemberName("Employee")
    }
}

if(employees) {
    // Push data to the reporting cube for edited employees only
    String employeesStr = """\"${employees.join('", "')}\"""
    operation.grid.getSmartPush("PushCompensationToRepCube").execute( [ "Employee" : employeesStr ] )
    println("The following employee compensation details were moved to reporting cube: \n ${employees.join(', ')}")
}
else{
    println("There were no modifications. No data was moved to the reporting cube.")
}
```

Then, this section takes the isolated data and runs the focused data movement using Smart Push and the data map configured and associated with the form. A message displays when modified data is moved to the reporting cube.

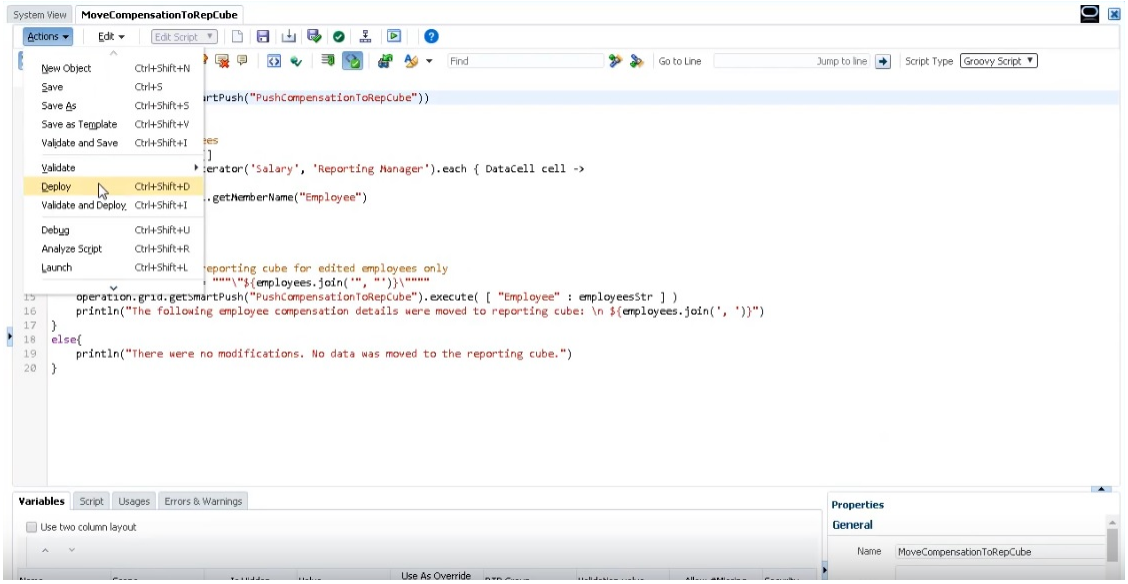
Copyright © 2022, 2026, Oracle and/or its affiliates.

```
if(!operation.grid.hasSmartPush("PushCompensationToRepCube"))
    return

// Isolate edited employees
Set<String> employees = []
operation.grid.dataCellIterator('Salary', 'Reporting Manager').each { DataCell cell ->
    if(cell.edited) {
        employees << cell.getMemberName("Employee")
    }
}

if(employees) {
    // Push data to the reporting cube for edited employees only
    String employeesStr = """\"${employees.join('", "')}\""""
    operation.grid.getSmartPush("PushCompensationToRepCube").execute( [ "Employee" : employeesStr ] )
    println("The following employee compensation details were moved to reporting cube: \n ${employees.join(', ')}")
}
else{
    println("There were no modifications. No data was moved to the reporting cube.")
}
```

If there are no modifications, a message displays when there are no changes and data was not moved to the reporting cube.

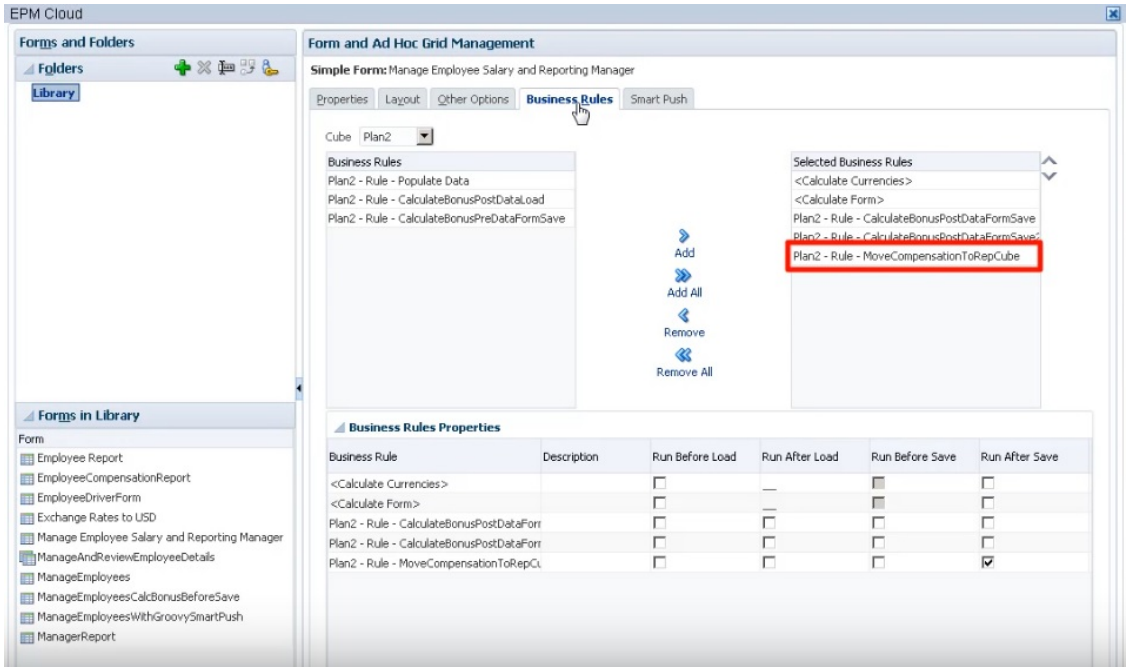
```
if(!operation.grid.hasSmartPush("PushCompensationToRepCube"))
    return

// Isolate edited employees
Set<String> employees = []
operation.grid.dataCellIterator('Salary', 'Reporting Manager').each { DataCell cell ->
    if(cell.edited) {
        employees << cell.getMemberName("Employee")
    }
}

if(employees) {
    // Push data to the reporting cube for edited employees only
    String employeesStr = """\"${employees.join('", "')}\""""
    operation.grid.getSmartPush("PushCompensationToRepCube").execute( [ "Employee" : employeesStr ] )
    println("The following employee compensation details were moved to reporting cube: \n ${employees.join(', ')}")
}
else{
    println("There were no modifications. No data was moved to the reporting cube.")
}
```

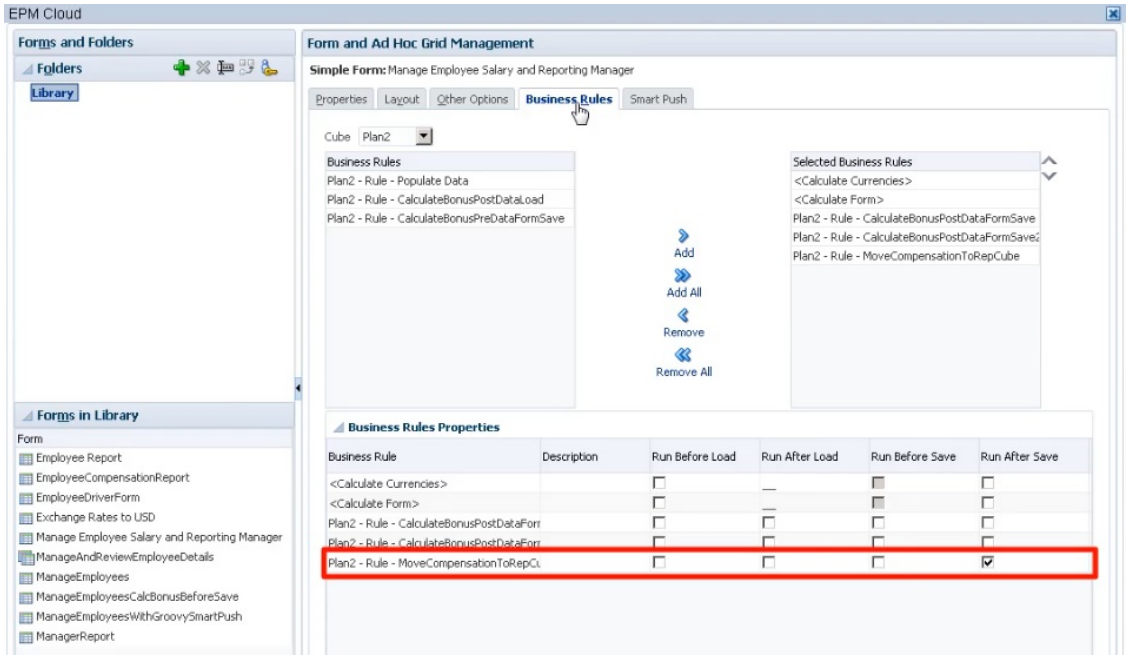
After we created this Groovy rule, we deployed it the same way we deploy business rules.



Then, in form management, associated it with the form. The Groovy rule runs after the form data is saved.

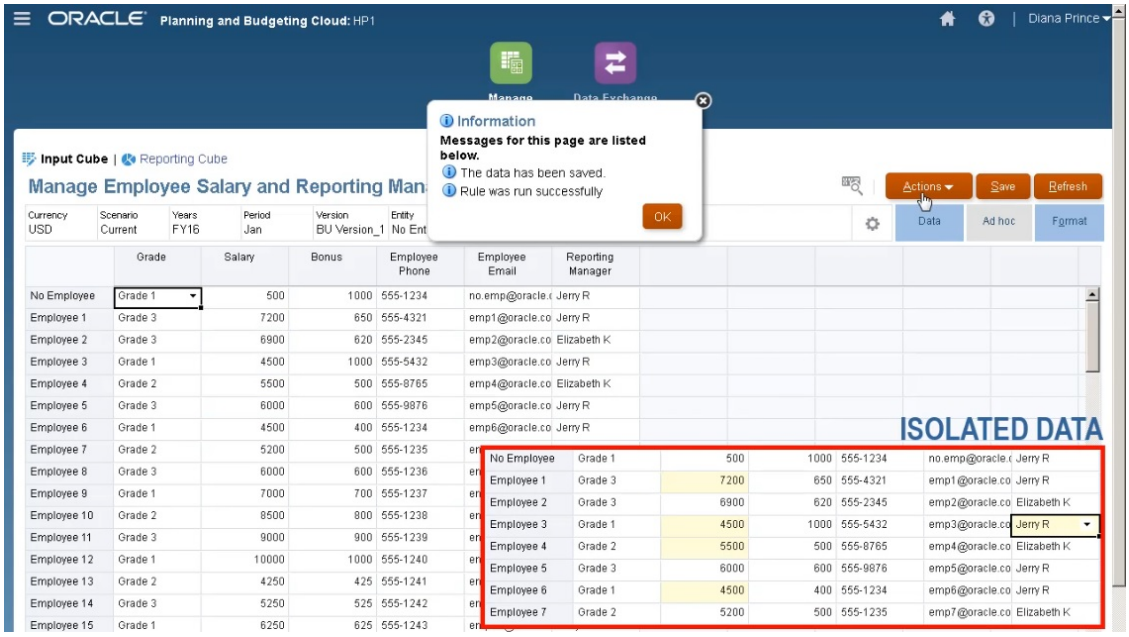
Copyright © 2022, 2026, Oracle and/or its affiliates.





To run the Groovy rule, open the form in **Input Cube**, make some changes, and then click **Save**.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Once saved, the updated data will display in the reporting cube.

Calculating Modified Data Using Groovy Rules

In this topic, we'll show you how to improve business process calculation performance by using Groovy rules to calculate only the data that's been modified.

After you update data in a form, it needs to be calculated. When you use a business rule to calculate a standard calculation script, all the data for the form is calculated. With large forms or calculations that affect large areas of the database, you might see slower calculation performance.

You can manually calculate one row at a time by right-clicking on the row. This can provide faster calculation performance, but isn't a good option when making changes to multiple rows of data.

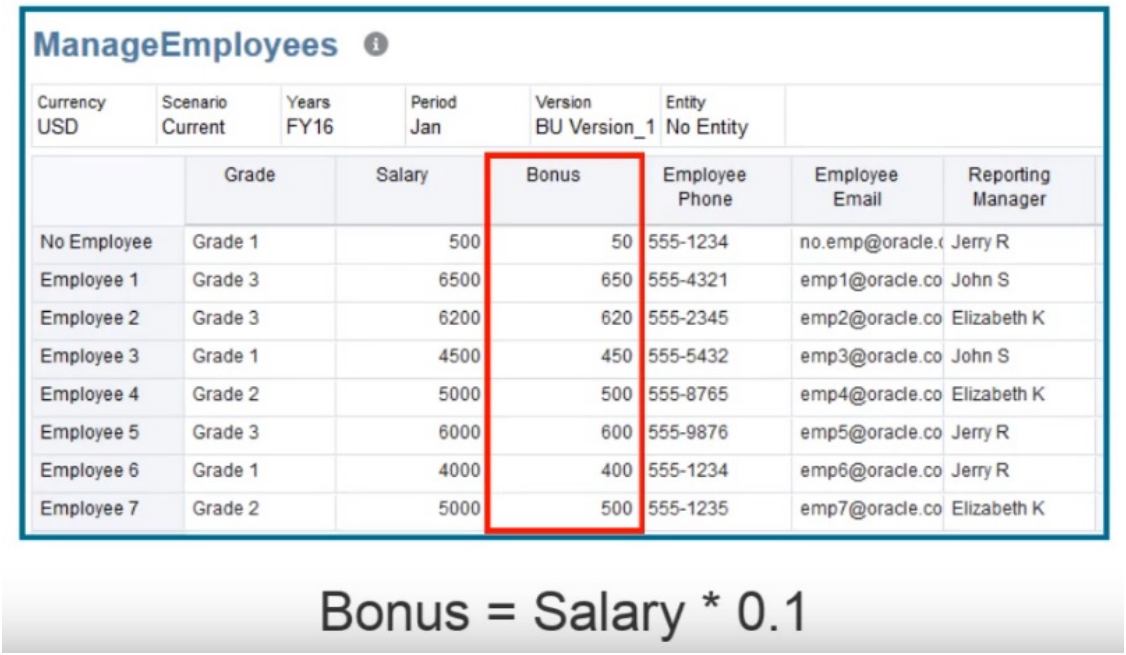
Groovy rules can dynamically focus on the cells that you update.

You can use Groovy rules on forms in two ways:

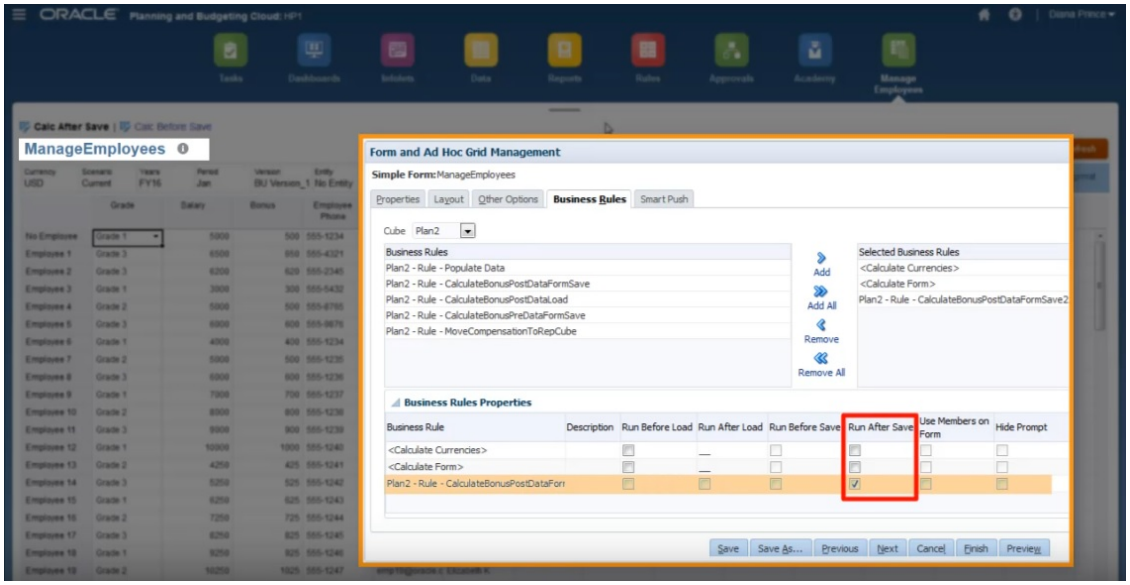
- When you calculate data on save, the Groovy rule generates a calculation script with a FIX statement based on the cells you updated. Then the calculation is run on the server against the modified data instead of all records on the form. As a best practice, use this option with larger forms where you are updating a lot of data.
- When you calculate data before saving, the Groovy rule calculates modified data in memory and displays the results on the form before saving them to the database. As a best practice, use this option when you have a small number of calculations to perform, or when you want to perform complex procedural calculations that are difficult to build into the outline.

In this example, bonus calculations are calculated as a percent of salary.

Copyright © 2022, 2026, Oracle and/or its affiliates.

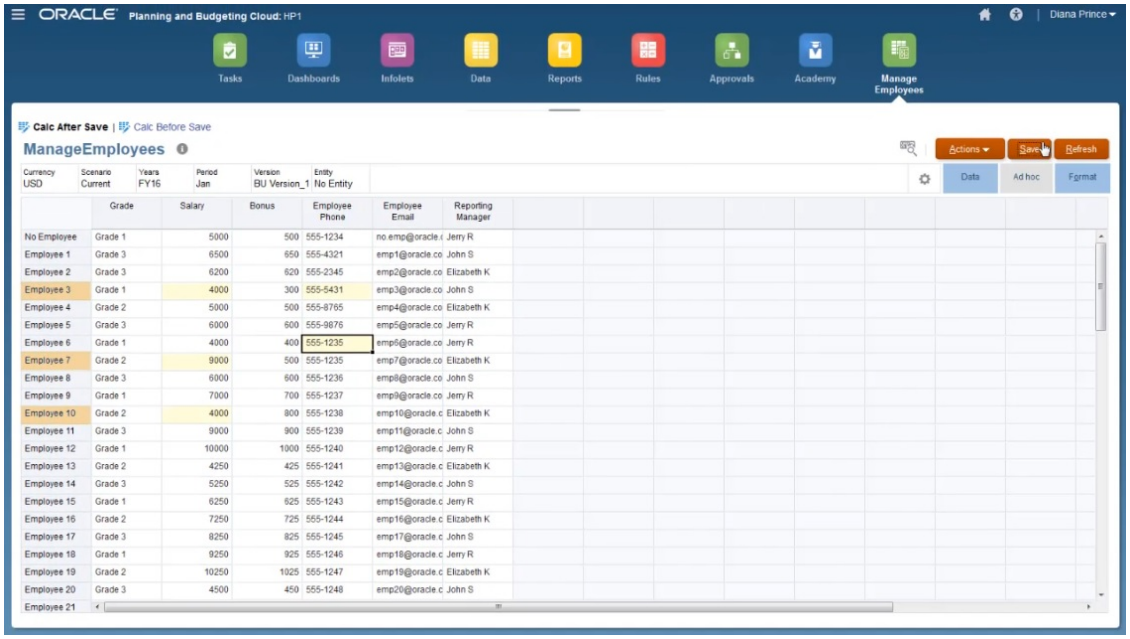


Let's look at calculating on save. Notice that this form is defined with a Groovy rule to calculate on save.

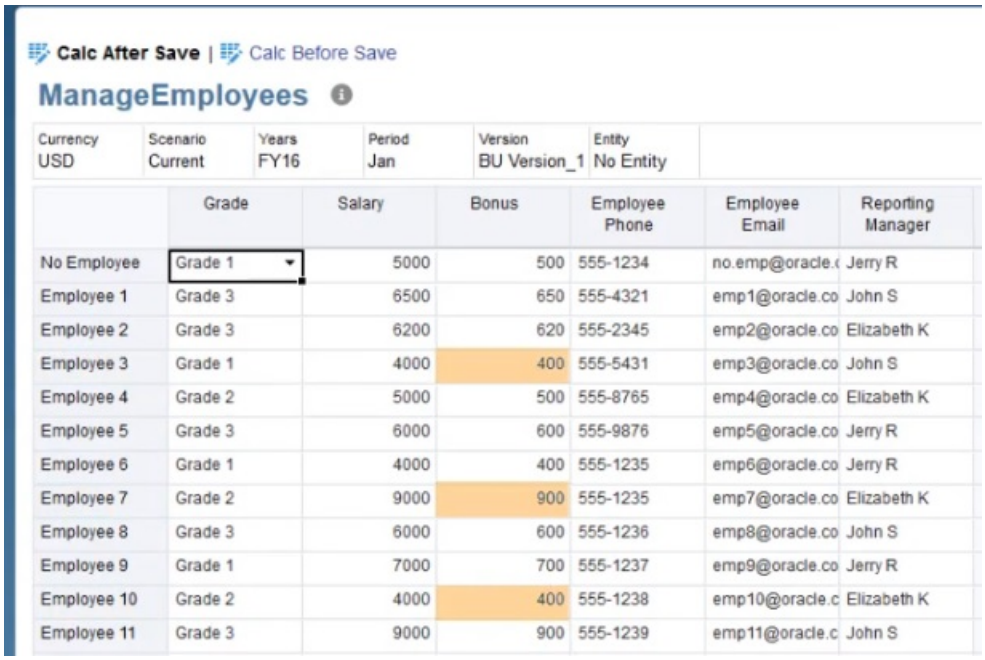


After updating some of the salary data and some of the phone numbers on the form, the phone numbers are saved but don't affect the calculation.

Copyright © 2022, 2026, Oracle and/or its affiliates.



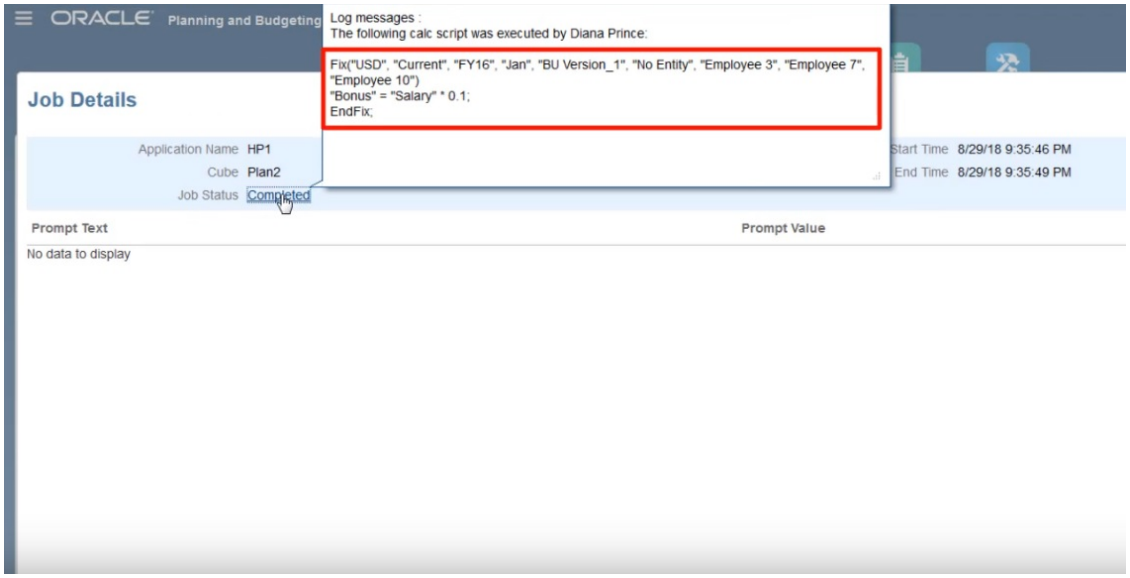
When you save the form to run the associated Groovy rule, the calculated bonus data is displayed on the form.



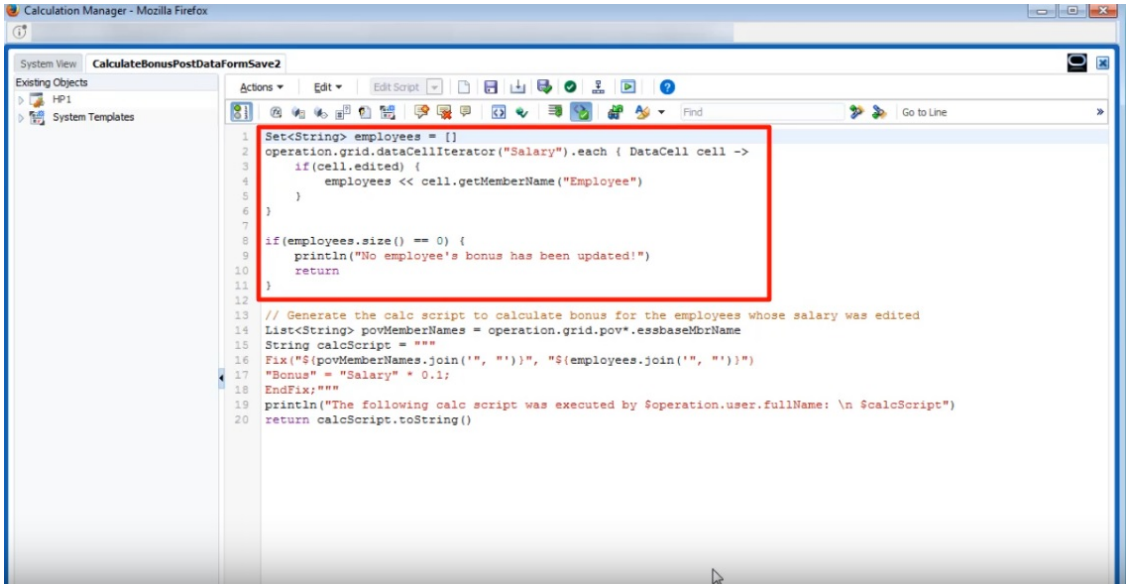
	Grade	Salary	Bonus	Employee Phone	Employee Email	Reporting Manager
No Employee	Grade 1	5000	500	555-1234	no.emp@oracle.c	Jerry R
Employee 1	Grade 3	6500	650	555-4321	emp1@oracle.co	John S
Employee 2	Grade 3	6200	620	555-2345	emp2@oracle.co	Elizabeth K
Employee 3	Grade 1	4000	400	555-5431	emp3@oracle.co	John S
Employee 4	Grade 2	5000	500	555-8765	emp4@oracle.co	Elizabeth K
Employee 5	Grade 3	6000	600	555-9876	emp5@oracle.co	Jerry R
Employee 6	Grade 1	4000	400	555-1235	emp6@oracle.co	Jerry R
Employee 7	Grade 2	9000	900	555-1235	emp7@oracle.co	Elizabeth K
Employee 8	Grade 3	6000	600	555-1236	emp8@oracle.co	John S
Employee 9	Grade 1	7000	700	555-1237	emp9@oracle.co	Jerry R
Employee 10	Grade 2	4000	400	555-1238	emp10@oracle.c	Elizabeth K
Employee 11	Grade 3	9000	900	555-1239	emp11@oracle.c	John S

Viewing the job details, here's the calculation script that the Groovy rule created. Notice that the FIX statement includes only the modified employees.

Copyright © 2022, 2026, Oracle and/or its affiliates.

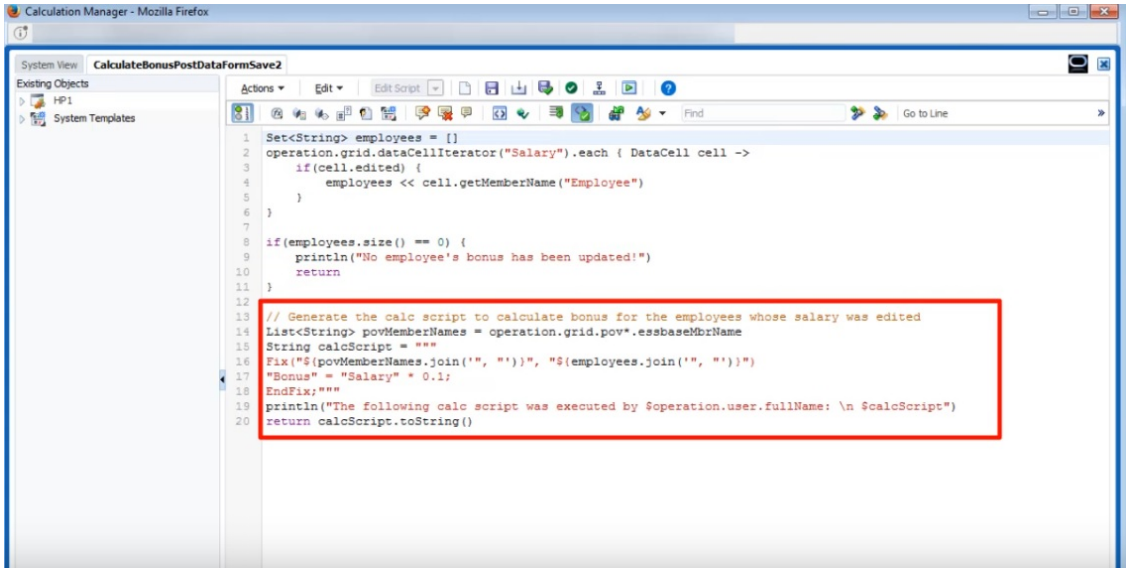


Let's open Calculation Manager to see the Groovy rule. This first section iterates over the grid in the form to find Salary cells that have been edited and collects the related employee names.



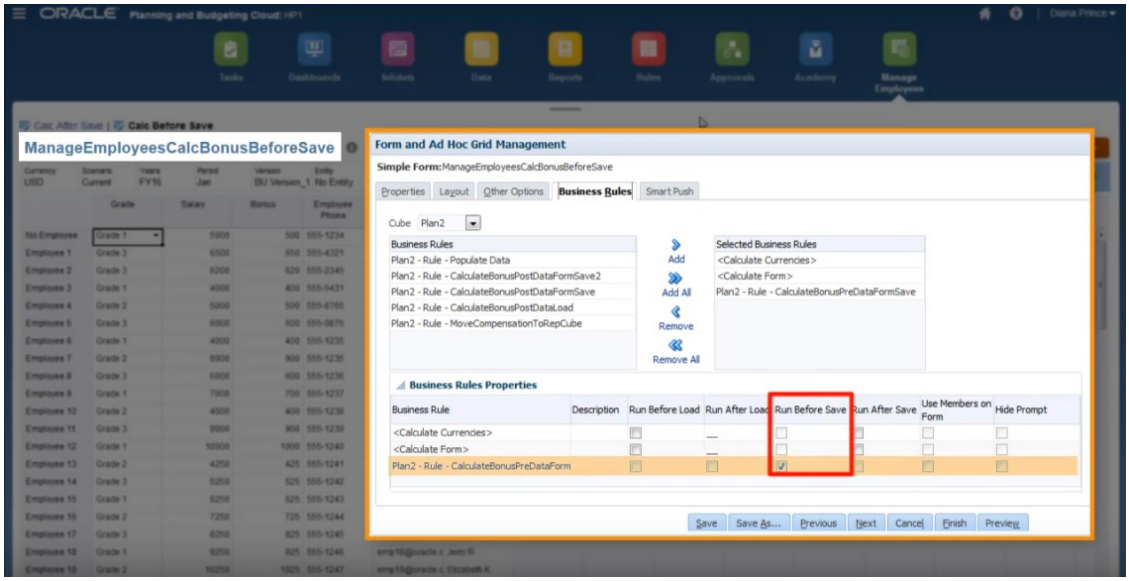
This section generates the calculation script; it finds the POV members from the form, then creates a FIX statement on the POV members and the edited employees.

Copyright © 2022, 2026, Oracle and/or its affiliates.



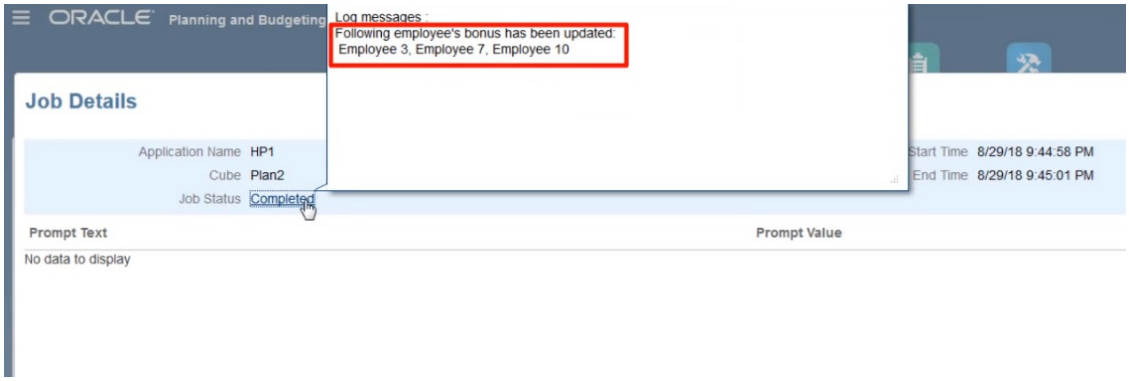
Now let's take a look at calculating before save.

This is the same form, but now it's defined with a different Groovy rule to calculate before save.



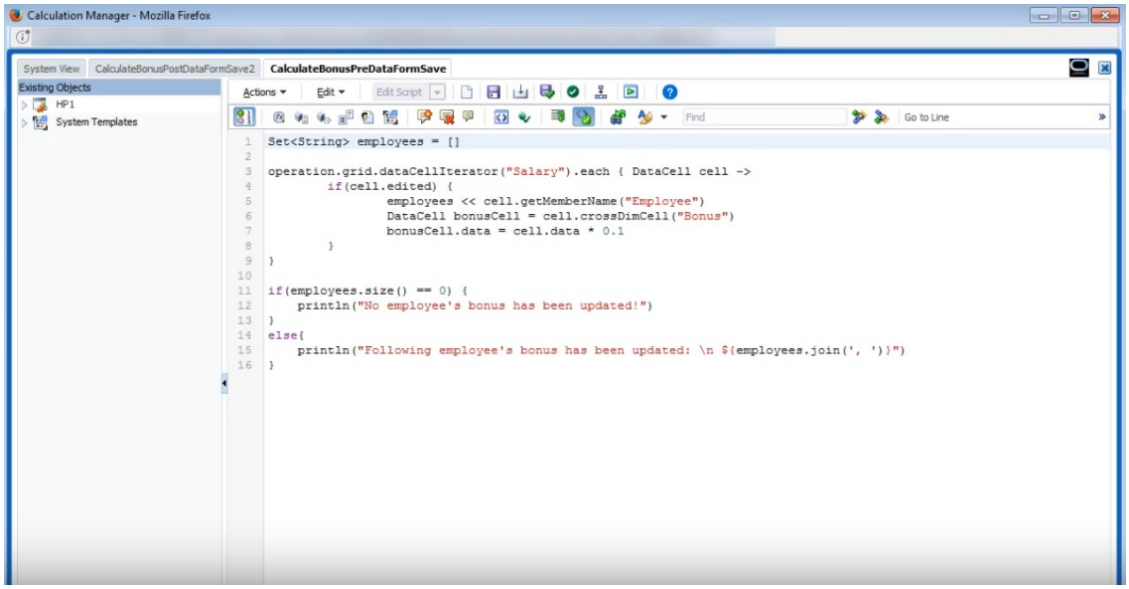
After updating the salary data and some of the phone numbers again, save the form to run the associated Groovy rule. The calculated bonus data is displayed on the form, but when you look at the job details, you can see that some of the bonus data was updated, but this time no calculation script was generated.

Copyright © 2022, 2026, Oracle and/or its affiliates.



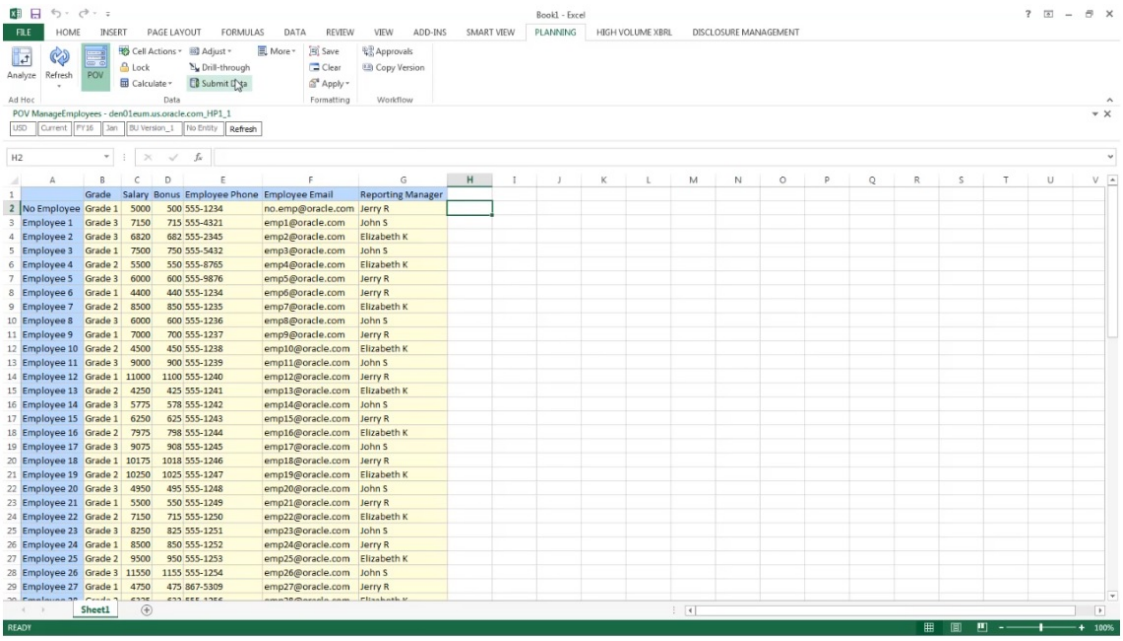
Open the Groovy rule in Calculation Manager.

Similar to the first rule, the script iterates over the grid in the form to find Salary cells that have been edited and collects the related employee names. Then it calculates bonus data for just the edited employees. Notice that no Oracle Essbase calculation script is generated.



Groovy rules also work with forms in Oracle Smart View for Office. Smart View gives you all the power of Microsoft Excel to make mass adjustments your data, and any Groovy rules for the form set to run before or after saving are executed when you submit data.

Copyright © 2022, 2026, Oracle and/or its affiliates.



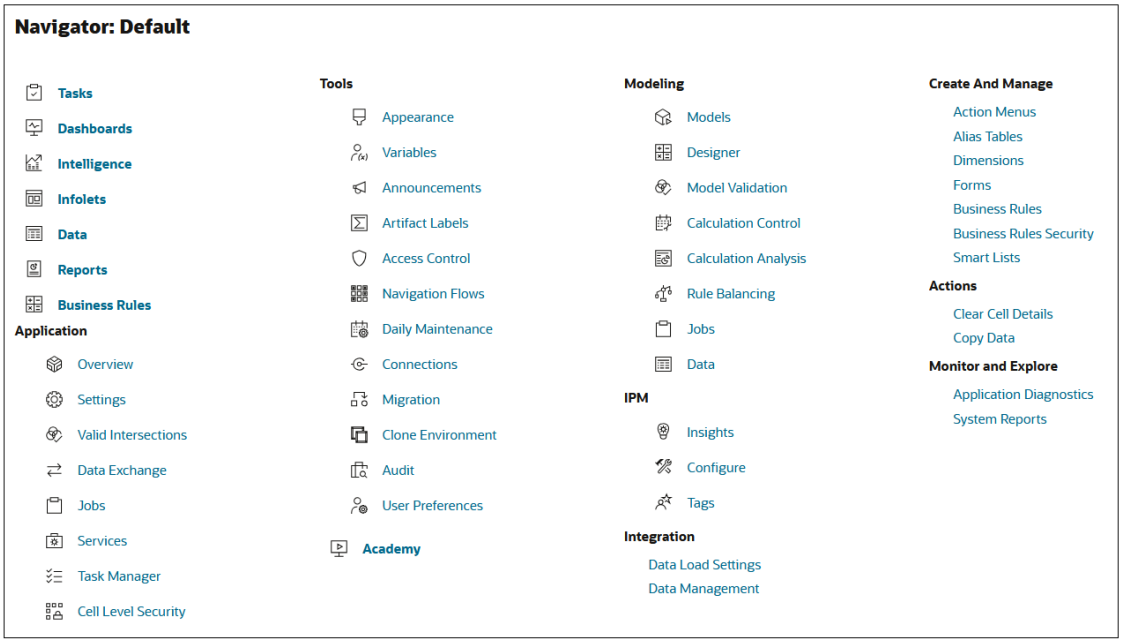
Copyright © 2022, 2026, Oracle and/or its affiliates.

Part VII

Administrative Tasks Accessed from the Navigator

Clicking **Navigator** on the Home page displays a list of links that connect you to more Enterprise Profitability and Cost Management functionality.

Tasks that can also be completed from the Enterprise Profitability and Cost Management Home page are indicated with an icon by the task. For example, to access the Dashboards page, you could either click the Dashboards link from the Navigator, or you could click the Dashboards card on the Enterprise Profitability and Cost Management Home page.



Tasks that are available only through the Navigator, and that *cannot* be completed from the Enterprise Profitability and Cost Management Home page, are displayed without an icon.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Note

The tasks available only through the Navigator are documented in both in the *Administering and Working with Enterprise Profitability and Cost Management* guide and in the *Administering Planning* guide. Clicking the links below will take you to the applicable sections in these guides.

Integration

Administering Data Load Settings

Importing Using Data Management

Create and Manage

Administering Action Menus

Administering Alias Tables

Administering Dimensions

Administering Forms

Creating and Managing Business Rules

Managing Business Rule Security

Administering Smart Lists

Actions

Clearing Cell Details

Copying Data

Monitor and Explore

Administering Application Diagnostics

Viewing Rules Usage

Reporting on Access Permissions

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part VIII

Setting Up Access Permissions and Data Security

Related Topics

- About Managing Access and Data Security
- Working with Access Permissions

Copyright © 2022, 2026, Oracle and/or its affiliates.

26

About Managing Access and Data Security

Enterprise Profitability and Cost Management implements several security layers to ensure that users have the right access to functions and data. Infrastructure security components, which are implemented and managed by Oracle, create a highly secure environment for the service.

Business process-level security is ensured by using the following mechanisms that permit only authorized users to access the application:

- Single Sign-on (SSO)
- Role-based access to data and artifacts

User access and data security in Enterprise Profitability and Cost Management is assigned using this process:

1. **Create users:** The Identity Domain Administrator creates or imports users using My Services. See Creating Users Using Oracle Cloud Identity Console in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
2. **Assign predefined roles:** The Identity Domain Administrator assigns users to one of four predefined roles in My Services in order to provide them access to the service environment. See Assigning Roles Using Identity Cloud Service in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
   Each predefined role provides a different level of access to business functions and associated data. See About Predefined Roles.
3. **Create groups:** After the predefined roles are assigned in My Services, Service Administrators can create groups in Access Control. Assigning roles to groups enables Service Administrators to grant roles to many users at once, thereby reducing administrative overhead. See Managing Groups in *Administering Access Control for Oracle Enterprise Performance Management Cloud*.
4. **Assign granular roles:** Service Administrators can extend the capabilities of users and groups by assigning them granular roles. See Assigning Roles to a Group or a User in *Administering Access Control for Oracle Enterprise Performance Management Cloud*.
   Granular roles can be assigned to users to enable them to perform functions beyond the access that is granted by a predefined role. See About Granular Roles.
5. **Assign access permissions:** Access permissions determine how you interact with the contents of the artifacts that are made accessible by your predefined and granular role assignments. Service Administrators use access permissions to assign users or groups Read, Write, or None permissions on specific granular artifacts such as dimension members, reports, and forms. Service Administrators can also restrict access to certain cell intersections by implementing cell-level security. See Working with Access Permissions.

How Permissions and Data Access are Evaluated

Permissions and data access are evaluated in this order:

1. Predefined roles. Users with the Service Administrator role have permissions to all granular artifacts.
2. Granular roles.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Access permissions that are specifically assigned to a user or a group that a user belongs to.

> **Note**
>
> If one member belongs to two groups with different permissions assigned to group members, the least restrictive permission takes precedence. For example, if one group assigns the member Read permission and another group assigns the same member Write permission, Write takes precedence. However if one of the groups assigns no permission (None) to its members, None takes precedence over Read and Write.

4. Parent-level assignments (for example, to parent members or folders).

About Predefined Roles

Predefined roles are assigned by the Identity Domain Administrator in My Services, and they provide users access to the service environment. See Managing Users and Roles in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

There are four predefined roles in Enterprise Profitability and Cost Management:

- **Service Administrator**: Performs all functional activities in an environment. This role should be granted to functional experts who need to create and administer Enterprise Profitability and Cost Management application and service components.
- **Power User**: Drives the model development and execution process.. This role grants high-level access to several functional areas within an environment and should be granted to the lead modelers and integrators working with the model, and business users in charge of a region who need to control the calculation process. Power Users can perform all the activities that a User can perform. Additionally, a Power User can perform these tasks:
  - Creates ad hoc grids and writes back into ad hoc grids and loads data using Data Integration
  - Creates, clears, and copies POV data
  - Creates and runs integrations
  - Creates models
  - Creates and edits profit curve
- **User**: Enters data where user input is requested, runs analytical tools and reports, and designs rules and calculations. Users can perform all the tasks that Viewers can perform. A User can perform these additional operations:
  - Performs ad hoc functions, but cannot write back into ad hoc grids or load data using Data Integration
  - Performs drill through
  - Creates, modifies, and deletes rules
  - Performs mass edits of rules
  - Runs rule balancing
  - Runs validations
  - Runs calculations, views and deletes calculation history

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Viewer**: Views and analyzes data but does not have write access. Specifically, a Viewer performs these operations:
  - Runs profit curves
  - Runs trace allocations
  - View models

For details on what access each predefined role grants, see Enterprise Profitability and Cost Management in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

Predefined roles are hierarchical. Access granted through lower-level roles is inherited by higher-level roles. For example, Service Administrators, in addition to the access that only they have, inherit the access granted through Power User, User, and Viewer roles.

The following table lists the functional areas in the service that can be accessed by each predefined role. Service Administrators can access all functional areas in the service.

Table 26-1 Functional Area by Predefined Role

Functional Area	Power User	User	Viewer
Dashboard	Yes	Yes	Yes
Intelligence	Yes	Yes	Yes
Infolets	Yes	Yes	Yes
Data	Yes	Yes	Yes
Reports	Yes	Yes	Yes
Application Cluster	No	No	No
Tools Cluster	User Preferences Only	User Preferences Only	User Preferences Only
Academy	Yes	Yes	Yes
Modeling Cluster	Yes	Yes	No

About Granular Roles

Granular roles enable Service Administrators to customize a user's access beyond the capabilities granted to that user by a predefined role. While users with the Service Administrator or Power User roles can access most of the functional areas in Enterprise Profitability and Cost Management, users with the User or Viewer predefined roles have a much more limited set of access privileges provided to them by their predefined roles. Granular roles enable these users to access functionality that their predefined role does not grant them by default.

> **Note**
>
> Granular roles can only enhance the access rights of users; none of the privileges granted by a predefined role can be restricted by assigning a granular role.

For a list of available granular roles in Enterprise Profitability and Cost Management, see Enterprise Profitability and Cost Management in *Administering Access Control*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Managing Application Ownership

The Service Administrator who creates the application is auto-assigned the Application Owner function. When a Service Administrator with the Application Owner function is deleted or when the user's predefined role assignment is downgraded (for example, from Service Administrator to Power User), the Application Owner function is reassigned to the next available Service Administrator user (in alphabetical order) for the application, and then role of the current Application Owner user is deleted or changed to sync up with Access Control.

If there are no available Service Administrators, then the Service Administrator user is not deleted or the role is not changed. Oracle will contact you with next steps to resolve the issue.

Any Service Administrator can use **System Settings** to take over or reassign the Application Owner role to any available Service Administrator.

See Managing Application and System Settings.

Copyright © 2022, 2026, Oracle and/or its affiliates.

27

Working with Access Permissions

Access permissions enable Service Administrators to assign permissions to users and groups for specific application artifacts.

Service Administrators can configure **Read**, **Write**, or **None** access permissions on these application artifacts:

- Dimensions, including user-defined dimensions. See Enabling or Disabling Security for Dimensions
- Forms
- Dashboards
- Infolets
- Reports, Books, and Bursting Definitions
- Form folders
- Dashboard folders
- Infolet folders
- Reports and Documents folders

You can specify access permission for individual users and each group. When you assign a user to a group, that user acquires the group's access permissions. If an individual's access permissions conflict with those of a group the user belongs to, user access permissions take precedence.

Types of Access Permissions

Access permissions include **Read**, **Write**, **None**, and **Display**.

For descriptions of these options, see Accessing Ancestor Members in Ad Hoc Grids.

You can also set who can launch which rules.

- **Launch**: Allow launch privileges

> **Note**
>
> View user types have no Write permission to dimension members, so can't launch rules having runtime prompts that include members, dimensions, member ranges, or cross-dimension runtime prompt types. They can, however, launch rules having runtime prompts of other types (for example, date type).

- **No Launch**: Disallow launch privileges

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If a user inherits Launch permission to a rule by belonging to a group, and is also assigned No Launch permissions by belonging to another group, the more restrictive No Launch assignment takes precedence.

You can specify access permission for individual users and each group. When you assign a user to a group, that user acquires the group's access permissions. If an individual's access permissions conflict with those of a group the user belongs to, user access permissions take precedence.

You can use groups to provide access permissions to your application artifacts such as forms, rules, and dashboards. Oracle Fusion Cloud Enterprise Performance Management recognizes three types of groups:

- **Predefined**: These groups are automatically created for each predefined role. All users are assigned to a predefined group based on their predefined role (for example, Power User).
- **EPM**: These are the groups that you create in **Access Control** in **Tools**.
- **IDCS**: These are the groups that you create in the Oracle Cloud Identity Console. You can view them in **Access Control** and assign them to granular roles and EPM groups.

For more information, see Managing Groups in *Administering Access Control*.

Inheriting Permissions

Inheritance determines the user or group's access permissions. You can specify an attribute that causes the children or descendants of that member to inherit its permissions. Assigned permissions take precedence over inherited permissions. You can include or exclude the member from the permissions setting.

Table 27-1 Options for Inheriting Access Permissions

Inheritance Option	Permission Assignment
Member	Only to the currently selected member
Children	To all children members in the level below the currently selected member
iChildren	To the currently selected member and all children members in the level below it
Descendant	To all descendant members below the currently selected member
iDescendant	To the currently selected member and all descendant members below it

How Permissions are Evaluated

When evaluating permissions, the application gives precedence in this order:

1. Role-level security. Users with the Service Administrator role have permissions to all application elements.
2. For Power User, User, and Viewer user types, permissions that are specifically assigned to users.
3. Permission assignments that are acquired by belonging to a group.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If one member belongs to two groups with different permissions assigned to group members, the least restrictive permission takes precedence. For example, if one group assigns the member Read permission and another group assigns the same member Write permission, Write takes precedence. However if one of the groups assigns no permission (None) to its members, None takes precedence over Read and Write.

4. Parent-level assignments (for example, to parent members or folders).

About Assigning Access Permissions

Service Administrators can assign permissions to artifacts (forms, dashboards, infolets, reports, books, and bursting definitions) and folders.

Principles:

- **Artifacts (Forms, Dashboards, Infolets, Reports, Books, and Bursting Definitions):**
  - Users and Power Users can view or enter data only into forms to which they have permissions (and can work only with members to which they have permissions).
  - Service Administrators and Power Users can design artifacts.
  - Power Users can access artifacts they created or to which a Service Administrator assigned them permissions.
  - Service Administrators have Write permissions to all dimension members and to all artifacts.
- **Folders:**
  - Users who are assigned permissions to a folder can access the items in that folder, unless they are assigned more specific permissions.
  - When you assign permissions to a folder, all folders under it inherit that permission.
  - If you assign specific permissions (for example, None or Write) to a folder, that permission takes precedence over its parent folder's permissions. For example, if a user has Write permission to Folder1 that contains Folder2 to which the user has None permission, the user can open Folder1, but doesn't see Folder2.
  - If a user has None permission to a folder called Folder1 that contains a form called Form1 to which the user has Write permission, the user can see Folder1 and Form1.

Application Artifacts That Can Be Assigned Permissions

You can assign permissions to:

- Dimensions, including user-defined dimensions

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> You can assign permissions to members by selecting the dimension property **Apply Security**. If you omit or clear the **Apply Security** setting, all users can access the dimension's members.
>
> By default, the Account, Entity, Scenario, and Version dimensions are enabled for access permissions. Optionally, you can enable this option for Period, Years, and Custom dimensions.

- Navigation flows
- Launch privileges to rules
- Rule folders
- Forms
- Dashboards
- Infolets
- Reports, Books, and Bursting Definitions
- Form folders
- Dashboard folders
- Infolet folders
- Reports and Documents folders
- Task lists
- Groovy templates

Adding, Changing, and Removing Permissions to Artifacts and Folders

The permissions assigned to artifacts (forms, dashboards, infolets, and reports, books, and bursting definitions) and folders refer to the ability to modify the artifact and folder definitions and not the underlying data.

1. Navigate to the artifact (Data, Dashboards, Infolets, Reports, or Documents) listing page.
2. Click the Actions icon next to the artifact or folder, and then click **Assign Permission**.

> **Note**
>
> You can assign permissions to only one artifact or folder at a time.

3. Click **Permissions**.
4. Perform a task:
   - To add permissions, click **Add User/Group**, and then select from the list of available users and groups.
   - To edit the type of permissions, select an option:

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - Click **Read** to allow the selected users and groups to view the artirfact or folder in the listing, but not allow them to create, edit, or delete the artifact or folder information.
  - Click **Write** to allow the selected users and groups to view the artifact or folder in the listing, and to create, edit, or delete the artifact or folder information.
  - Click **None** if you don't want the selected users or groups to view the artifact or folder in the listing.

- To remove permissions, click **Remove Access** next to the user or group.

Enabling or Disabling Security for Dimensions

You can enable security for dimensions, including user-defined Custom dimensions. Applying security enables the access granted by the predefined roles to apply to a dimension. If you do not set security on a dimension, all users can access the dimension members.

By default, the Scenario and Version dimensions are enabled for access permissions. Optionally, you can assign access to Account, Entity, PCM_Balance, PCM_Rule, Period, and Years.

You can assign security to dimension members for user and groups. You can assign security at a member level or parent level. See Assigning Security to Dimension Members.

To enable or disable security for a dimension:

1. Click the Navigator icon.
2. Under **Create and Manage**, click **Dimensions**.
3. From the **Dimension** drop down menu, select a dimension, and then click **Edit** .
4. From the **Edit Dimension Properties** page, select an option:
   - To enable security, click **Apply Security**.

     > **Note**
     >
     > If you do not select this option, there is no security on the dimension, and users can access its members without restriction.

   - To disable security clear **Apply Security**.
5. Click **Save**.

Assigning Security to Dimension Members

Before you can assign access to dimension members, you must select the **Apply Security** check box on the dimension's Edit Dimension Properties page. See Enabling or Disabling Security for Dimensions.

You can assign security to dimension members at a member level or at a parent level. Use **Member Level** to specify whether the children or descendants of that member will inherit its permissions. Assigned permissions take precedence over inherited permissions.

To assign, edit, and remove access permissions to members:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Click the Navigator icon.
2. Under **Create and Manage**, click **Dimensions**.
3. From the **Dimension** drop down menu, select the dimension that contains that member that you want to assign security to.
4. Select the member, and then click **Assign Access** .
5. Select the User or Group tab to assign access to individual users or groups.
6. To add access:
   a. Click **Actions**, and then **Add Access**.
   b. Select the user or group to add access to.
   c. From **Type of Access**, select an option:
      - **Read**
      - **Write**
      - **None**
      - **Display**

      For a description of these options, see Accessing Ancestor Members in Ad Hoc Grids in the *Oracle Smart View for Office User's Guide*.
   d. **Optional**: Select a member level:
      - **Member**
      - **Children**
      - **Children(inclusive)**
      - **Descendants**
      - **Descendants(inclusive)**
   e. Click **Add**.

To modify access:

1. From the Dimension screen, on the member to edit access for, click **Assign Access** .
2. Select the user or group access rights to edit, click **Actions**, and then **Edit Access**.
3. From **Type of Access**, select an option:
   - **Read**
   - **Write**
   - **None**
4. **Optional**: Select a member level:
   - **Member**
   - **Children**
   - **Children(inclusive)**
   - **Descendants**
   - **Descendants(inclusive)**

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. Click **Set**.

To remove access:

1. From the Dimension screen, on the member to remove access for, click **Assign Access** .
2. Select the user or group access rights to edit, click **Actions**, and then **Remove Access**.
3. Click **OK** on the confirmation dialog box.

About Effective Access Permissions to Shared Members

You can't assign access directly to a shared member. A shared member inherits access permissions from its base member, parent, or ancestor.

The application checks access permissions at each level, first by user, then by group, based on the member's access permissions inheritance relationship. If multiple access permissions exist, the least restrictive access permission is applied (for example, Write access takes precedence over Read access).

Sample Parent and Child Entity Members

Table 27-2 Example of Inherited Access to Shared Members

Case	Access Permission	Effective Access for Base and Shared Member CA	Explanation
Case 1	CA (base) = None iDescendants (West) = Read	Read	CA inherits Read access from its West parent because Read is less restrictive than None.
Case 2	iDescendants (United States) = None iDescendants (West) = Read iDescendants (Sales Region 1) = Write	Write	CA inherits Write access from its Sales Region 1 parent because Write is less restrictive than Read or None.
Case 3	iDescendants (United States) = Write iDescendants (West) = None iDescendants (Sales Region 1) = Read	Write	CA inherits Write access from its United States parent because Write is less restrictive than Read or None.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Defining Cell-Level Security

Related Topics

- Understanding Cell-Level Security
- Creating Cell-Level Security Definitions
- Viewing Cell-Level Security Definitions
- Filtering Cell-Level Security Definitions
- Importing and Exporting Cell-Level Security Definitions
- Testing Cell-Level Security
- Reordering the Cell-Level Security Definitions List

Understanding Cell-Level Security

About Cell-Level Security

Service Administrators applying cell-level security can deny access to cells that a user would normally have access to due to their regular security. Cell-level security is therefore defined as an exception to the existing member security. For example, a Department Manager requires access to all accounts in their own department, but only a certain account in all other departments. With the usual metadata security the Manager would have access to all accounts across all departments, but using cell-level security enables the Service Administrator to control the intersection of all accounts with the Manager's department and only the specific account in all other departments.

Cell-level security uses rules, similar to valid intersection rules, to deny read or write access to users viewing certain cell intersections anywhere a cell is shown (for example, forms, Smart View, reports, dashboards, infolets, and so on). When cell-level security rules are applied, users with read access can see the data value in a cell but the cell is not editable. If users are denied read access to a cell, the value displayed in the cell is #noaccess.

If you are a Service Administrator, you can define and assign cell-level security rules to any user or group. Cell-level security doesn't affect you.

Anchor and Nonanchor Dimensions

Cell-level security definitions use anchor and nonanchor dimensions:

- Anchor dimensions are always required dimensions in the cube that is used in the cell-level security definition.
- Nonanchor dimensions are either required or not:
  - If a nonanchor dimension is required, any cube that doesn't use that dimension will ignore any cell-level security definitions where that dimension is tagged as required.
  - If a nonanchor dimension isn't required, any cube that doesn't use that dimension will still evaluate any cell-level security definition that includes that dimension as not required and evaluate the definitions of any other dimensions in the definition in use in the cube.
  - By default, nonanchor dimensions aren't required. To make a nonanchor dimension required, click (Edit) next to the nonanchor dimension, and click **Required**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- By default, the anchor dimension members that are not specified in the rule are included in the security definition, but you can clear this option by clicking (Edit) next to the anchor dimension, and then clicking **Apply to Selected Members Only**.

Creating Cell-Level Security Definitions

To create a cell-level security definition:

1. Click **Application**, and then click **Cell-Level Security**.
2. Create the definition:
   a. Click **Create**.
   b. Enter a name and description for the definition.
   c. The **Enabled** checkbox is selected by default. To disable the definition, clear the **Enabled** checkbox. You can also enable or disable a definition directly on the **Cell-Level Security Definitions** page.
   d. To define cube-specific security, click **Cubes** and select from the list of cubes or select **All**.
   e. An anchor dimension is required. To select the anchor dimension, click **Select Anchor Dimension**. For information about anchor and nonanchor dimensions, see Understanding Cell-Level Security
   f. **Optional:** By default, the anchor dimension members that are specified in the rule are included in the security definition. If you click (Edit) next to the anchor dimension, and then click **Apply to Selected Members Only**, cell-level security is disabled for the selected members and cell-level security is applied to the rest of the members, excluding the selected members.
   g. To select additional dimensions (called nonanchor dimensions), click **Add Dimension**.
   h. **Optional:** By default, nonanchor dimensions are not required. To make a nonanchor dimension required, click (Edit) next to the nonanchor dimension, and click **Required**.
3. Define the cell-level security rule:
   a. Click **Add Rule**.
   b. In the **Users, Groups** column, click (Search) to find the users and groups to include in the cell-level security rule.
   c. For **Restriction**, choose **Deny Read** (default) or **Deny Write**. **Deny Read** is the default option because it is the most restrictive. If users are denied read access to a cell, the value displayed in the cell is #noaccess. Users with **Deny Write** access can see the data value in a cell but the cell is not editable.
   d. Click (Edit) next to the dimensions in the new rule:
      - Click **Edit** to open the **Select Members** page and select the members, substitution variables, and attributes to include in the cell-level security rule.
      - Click **Exclude** or **Exclude All** to define the dimension members you want to exclude from the rule:
        – **Exclude**: Selecting this option excludes members by ID. Only the specified members (base or shared) will be excluded.

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - **Exclude All**: Selecting this option excludes members by name. If a base member is specified, then the base and all of its shared members will be excluded. If a shared member is specified, then this member, its base member, and all other shared members of this member will be excluded.

- Click **Clear** to clear the selection.

To delete a rule, click (Remove).

4. Click **Save**.

The new cell-level security definition is added to the end of the list. Definitions are evaluated in the order they appear in the list. To reorder the definitions list, see Reordering the Cell-Level Security Definitions List.

After a definition is created, you can test it in a form to see how the form will look from a user's perspective. See Testing Cell-Level Security.

Viewing Cell-Level Security Definitions

To view cell-level security definitions:

1. Click **Application**, and then click **Cell-Level Security**.
2. To search the entire listing for certain definitions, enter search criteria in the **Search** box and then click (Search) to display only the definitions that meet the search criteria.
3. To filter the listing so it displays only the definitions that meet the filter criteria, specify the following filter options:

   - **Filter** : Click to display the **Filter** page where you can select from a robust list of filter options. For a complete list of filter options and their descriptions, see Filtering Cell-Level Security Definitions.
   - **Clear All** : Click to clear all filters for **Effective Assignment**, **Enabled**, and **Restriction**.
   - **Effective Assignment**: Filters the list so you view only the definitions that effect certain users or groups.
   - **Enabled**: Filters the list so you view only the definitions that are enabled (**Yes**), not enabled (**No**), or select **All**.
   - **Restriction**: Filters the list so you view only the definitions that are assigned the **Deny Read** or **Deny Write** restriction, or select **All**.
4. You can also perform these tasks on the **Cell-Level Security Definitions** page:
   - **Actions** menu: To import and export definitions, see Importing and Exporting Cell-Level Security Definitions.
   - **Test**: See Testing Cell-Level Security.
   - **Create**: See Creating Cell-Level Security Definitions.
   - **Refresh**: Click to refresh the definitions listing.
5. For each listing on the definitions page you can perform the following tasks:
   - **Enabled** column: Indicates whether a definition is enabled. Click the check mark next to the definition to disable or enable it. A green check mark indicates that the definition is enabled.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Action** column: Click ••• (Action) to edit, duplicate, or delete a definition, or to move it up or down in the listing order.

Filtering Cell-Level Security Definitions

You can filter the list of cell-level security definitions by certain criteria such as by cube, by restriction, or by date. When you filter, only the definitions that meet the filter criteria are displayed on the **Cell-Level Security Definitions** page.

To filter cell-level security definitions:

1. Click **Application**, and then click **Cell-Level Security**.
2. Click (Filter) to specify filter criteria:
   - **Cubes**: View only the definitions in the selected cube or cubes, or select **All**.
   - **Enabled**: View only the definitions that are enabled (**Yes**), not enabled (**No**), or select **All**.
   - **Restriction**: View only the definitions that are assigned the **Deny Read** or **Deny Write** restriction, or select **All**.
   - **Modified**: View only the definitions that were modified before or after a certain date and time, or the definitions modified within a range of dates or times. Select **After**, **Before**, or **Between** and then click (Select Date and Time) to specify the date and time criteria.
   - **Modified By**: View only the definitions modified by selected users.
   - **Effective Assignment**: View only the definitions that effect the selected users or groups.
3. Click **More** to further refine the filter criteria:
   - **Dimensions**
   - **Anchor Dimensions**
   - **Anchor Dimension: Apply to Selected Members Only**: Choose **Yes**, **No**, or **All**.
   - **Additional Dimensions Required**: Choose **Yes**, **No**, or **All**.
4. Click **Apply**.

Importing and Exporting Cell-Level Security Definitions

About Importing and Exporting Cell-Level Security Definitions

You can export the filtered list of cell-level security definitions from the listing page to a location on your local computer, or you can export them to the server. If no filter is defined on the listing page, then all cell-level security definitions are exported.

Use the Import action to import cell-level security definitions into the application from a location on your local computer or import them from the server. When you perform an import, the system tests the import file for anything that might break a definition; for example, if a cube is missing, or if an anchor dimension doesn't exist, or if a subrule is not found, errors are logged in the error file. Import jobs will only complete successfully if the import file has no errors.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Subrules provide information about the content of the rules such as the user assignment for each member of the rule (subrule), the member selection or exclusion for anchor and non anchor dimensions, and the restriction type applied for each subrule.

Depending on the export or import location you choose, the application definitions are exported or imported in either an Excel file format (XLSX) or a zip file format.

Cell-Level Security Import File

The Excel import file must have two sheets with the following names for the first and second sheets:

1. `Rules`
2. `Sub Rules`

The `Rules` sheet has the following column headings:

- **Name**
- **Position**
- **Description**
- **Enabled**
- **Valid Cubes** - This column can contain either `All` or a list of comma-separate names of cubes, such as `Plan1, Plan2`
- **Anchor Dim Name**
- **Anchor Dimension Apply to Unselected Members**
- **Dim1**
- **Dim1 Required**
- **Dim2**
- **Dim2 Required**
- **Dim***X*
- **Dim***X* **Required**

The `Sub Rules` sheet must have the following column headings:

- **Name** - This column must contain the name of the Rule from the first sheet
- **Users**
- **User Groups**
- **Restriction** This column can contain `Deny Read` or `Deny Write`
- **Anchor Members**
- **Anchor Exclusion**
- **Anchor Exclusion All**
- **Dim1 Members**
- **Dim1 Exclusion**

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Dim1 Exclusion All**
- **Dim2 Members**
- **Dim2 Exclusion**
- **Dim*X* Members**
- **Dim*X* Exclusion**
- **Dim*X* Exclusion All**

Exporting and Importing Cell-Level Security Definitions

To export and import cell-level security definitions:

1. Click **Application**, and then click **Cell-Level Security**.
2. Apply filters to the listing, as needed. See Filtering Cell-Level Security Definitions.
3. To export, click **Actions**, then **Export**, and then select the target location for the export file:
   - **Local**: Saves the export file to a location on your local computer. If you choose this option, click **Export**, and then specify where to save the XLSX export file.
   - **Outbox**: Runs a job that saves the export file in a zip format to the server which you can download now or use to schedule an export job later. If you choose this option, click **Save and Run Job**.

     To download the export file from the Outbox:

     a. Click **Application**, and then click **Jobs**.

     b. Under **Recent Activity** click the **Export CLS** job.

     c. On the **Job Details** page, click (Download) to select a download location for the cell-level security export file. You can also download the export file from the Inbox/Outbox Explorer for your business process.
4. If editing the export file in Excel, note that the Excel file has two sheets: `Rules` and `Sub Rules`.
5. To import, click **Actions**, then **Import**, and then select the location of the import source file:
   - **Local**: Loads the import file from a location on your computer. For **Source File**, click **Browse** to select the import file on your computer, and then click **Import**.
   - **Inbox**: Runs a job that loads the import file from the server. The import file must be in a zip file format. Enter the name of the file in **Source File**, click **Save and Run Job**, and then specify the **Name** and **Error File** on the **Save as Job** dialog. The error file provides information about the definitions that were not imported. You can download the error file from the Inbox/Outbox Explorer for your business process.

Testing Cell-Level Security

After defining cell-level security and enabling it, you can test it to see what an effected user would see when they view a form. Testing ensures that users are seeing only the cell values they are allowed to see and nobody is seeing more than they should. To test a definition, you must enable it.

To test cell-level security:

1. Click **Application**, and then click **Cell-Level Security**.
2. Enable the definition you want to test.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Click **Test**, and then select the form that you want to test.
4. In the **Select or Enter a User Name** text box, specify a user name or click (Search) to select a user, and then click OK.

> **Note**
>
> You can test only one user at a time.

The form displays the user access to each cell as Read, Write, or None.

Reordering the Cell-Level Security Definitions List

Cell-level security definitions are evaluated in the order they appear on the definitions list; for example, the application evaluates the first cell-level security definition in the list, then the second definition, and so on.

To change the position of a cell-level security definition in the list:

1. Click **Application**, and then click **Cell-Level Security**.
2. To the right of the cell-level security definition, click (Action).
3. Select **Move Up** or **Move Down**.

> **Tip**
>
> You can also drag cell-level security definitions to move them up and down in the list.

Reporting on Access Permissions

You can view current access permissions and print reports.

To report on current access permissions for users and groups in the application:

1. From the Home page, click Navigator, and then under **Monitor and Explore**, click **System Reports**.
2. Click **Access Control**.
3. On **Select User or Group**, select from the available options.
4. From the left **Available** panel, select and move users or groups on which to report to the **Selected** panel.
5. From the left **Available Objects** panel, select and move objects on which to report to the **Selected Objects** panel.
6. Select reporting options:
   - For **Show Matching Access of Type**, select the access to view: **Read**, **Write**, or **None**.
   - For **Group the Results By**, select how to view the report: **Users** or **Objects**.
   - From the **Report Type** sections, select **Assigned Access** or **Effective Access**:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 27-3 Access Report Types

Report Type	Description	Options
Assigned Access	Summarizes access permissions that Service Administrators assign	Specify whether access permissions are assigned by member selection relation or group membership: • **Show matching access of relation**: **Member**, **Children**, **Children (inclusive)**, **Descendants**, or **Descendants (inclusive)**. • **Show Inherited From Group**: Shows access permissions inherited by users in a group.
Effective Access **Note** Effective Access reports can't be generated for groups.	Summarizes access permission assignments as the application evaluates them (for example, by member selection relation, such as children, or group membership). This is useful if there are conflicts in access permissions.	Describe the origin of the effective access permissions by selecting **Show effective access origin**. For example, a user named JSomebody may be assigned Write access permissions to Entity1 and belong to a group named Sales that is assigned Read access permissions to Entity1. This setting would show that JSomebody has Write access permissions to Entity1 because individual assigned access permissions supersede access permissions inherited by group membership.

7. Click **Create Report**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Part IX

Administering and Working with Task Manager

Related Topics

- Overview of Using Task Manager with Enterprise Profitability and Cost Management
- Administering Tasks with Task Manager
- Using Task Manager

Overview of Using Task Manager with Enterprise Profitability and Cost Management

Task Manager helps you centrally manage a large set of tasks in Enterprise Profitability and Cost Management. Task Manager provides visibility and automation of tasks, as well as records activities related to those tasks. With Task Manager's scalability, you can execute several tasks at the same time. Review these sections to get a better overall picture of using Task Manager with Enterprise Profitability and Cost Management:

- Common Task Manager Terms
- Task Manager Process Flow
- Navigation Steps to Administer and Use Task Manager
- Example of Using Task Manager in Enterprise Profitability and Cost Management
- Task Manager Examples in the Sample Application

Common Task Manager Terms

- *Tasks* are a unit of action in Enterprise Profitability and Cost Management. Service Administratos and Power Users define tasks and assign tasks to users. Users read task instructions, answer questions, submit, reassign, approve and reject tasks, and access tasks from email notications or by logging in to Enterprise Profitability and Cost Management.

  There are two types of tasks. *Manual tasks* require users to complete the task and verify that the task was completed. *Automated tasks* require no user interaction and are based on a schedule. You can create a schedule that includes a combination of manual end-user tasks and automated tasks to help streamline your business process.
- *Templates* are the blue prints for repeatable tasks. They define all interactions required of the tasks and can be leveraged to create multiple schedules that can be executed based on the calendar frequency such as monthly or quarterly.
- *Schedules* define the chronologically ordered set of tasks to execute in Enterprise Profitability and Cost Management.
- *Alerts* are notifications from users on issues that they encounter during the process.

Task Manager Process Flow

The Task Manager proccess flow is as follows:

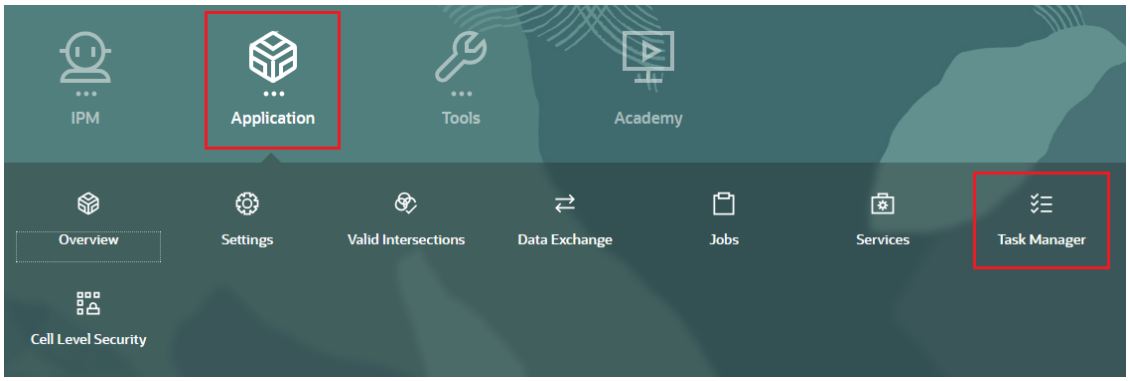
Copyright © 2022, 2026, Oracle and/or its affiliates.

- Define Task Types
- Create Tasks Templates
- Create Schedules
- Add Tasks to Templates
- Add Tasks to Schedules

Navigation Steps to Administer and Use Task Manager

Administrator Navigation Steps

Administrators define tasks and assign tasks to users on the Task Manager page. From the Home page, select **Application**, and then **Task Manager**.



User Navigation Steps

Users access tasks from the Tasks page. From the Home page, select **Tasks**.

Example of Using Task Manager in Enterprise Profitability and Cost Management

The following example shows how administrators and users could use Task Manager to define and run a month-end process in Enterprise Profitability and Cost Management.

Administrators

1. Define the month-end tasks for Enterprise Profitability and Cost Management.

   The following are typical month-end tasks for Enterprise Profitability and Cost Management. These tasks are done both in and out of Enterprise Profitability and Cost Management.

   - Update metadata (for example, new accounts, departments, products)
   - Refresh the database with new dimension changes

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Set up new POVs
- Review, update, and approve allocation models
- Execute and load financial data
- Review and approve financial data
- Load driver data
- Review and approve driver data
- Execute calculations
- Validate results
- Review and approve results
- Copy POVs to the Reporting cube
- Review dashboards and reports
- Finalize and approve results
- Announce reporting availability

2. Open Task Manager to set up the tasks, templates, and schedules.

   From the Home page, select **Application**, and then **Task Manager**.

3. **Optional:** After your Enterprise Profitability and Cost Management application is set up and before you start to define tasks, you may need to define the following system settings based on the tasks you are defining. You can modify these settings anytime after setting them up.

   - **Organizational Units:** Set up organizational units if you plan on using holiday rules. Organizational units are also used for filtering and reporting. See Managing Task Manager Organizational Units and Managing Holiday Rules for Tasks.
   - **Global Integration Tokens:** Set up global integration tokens if you plan to configure URLs from static parameters in Enterprise Profitability and Cost Management. See Managing Global Integration Tokens.
   - **Task Governors:** Set task governors to determine the maximum values of items displayed in a list, maximum approval levels, and maximum file upload size. See Setting Task Manager Governors.
   - **Other System Settings:** Configure system settings such as comments and task deletions, task displays in the worklist and Welcome panel, email notifications, reassignment request approvals, conditions and permissions to open tasks, and tasks in Smart View. See Changing Configuration Settings.

4. Make a template for the month-end process. The template can be used each month.

   See Managing Task Templates.

5. Create tasks based on task types, and then add them to the template.

   See Managing Task Types.

6. **Optional:** Integrate with other business processes.

   See Managing Integrations with Cloud EPM Services.

7. Create a schedule, using the template. Set a specific month and start date.

   See Creating Schedules from Templates.

8. Run the schedule to begin the month-end process.

   See Managing Schedules.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Users

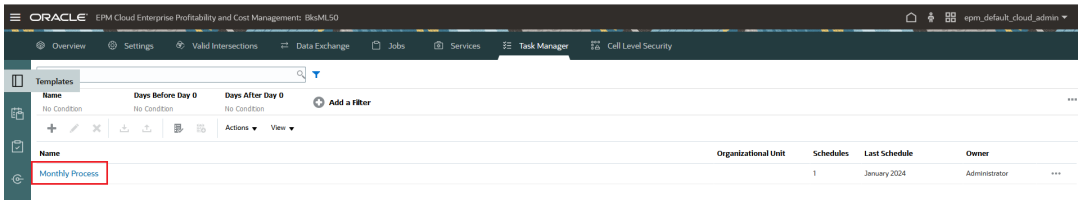
Use the Worklist to see the list of tasks that are assigned to you. To do this, from the Home page, select **Tasks**.

Task Manager Examples in the Sample Application

The BksMl50 sample application that is provided with Enterprise Profitability and Cost Management includes a Task Manager template called Monthly Process. This template includes several examples of typical tasks that you would complete each month. You can use this sample template to get ideas on the types of month-end tasks that you can set up in Task Manager to automate your month-end process.

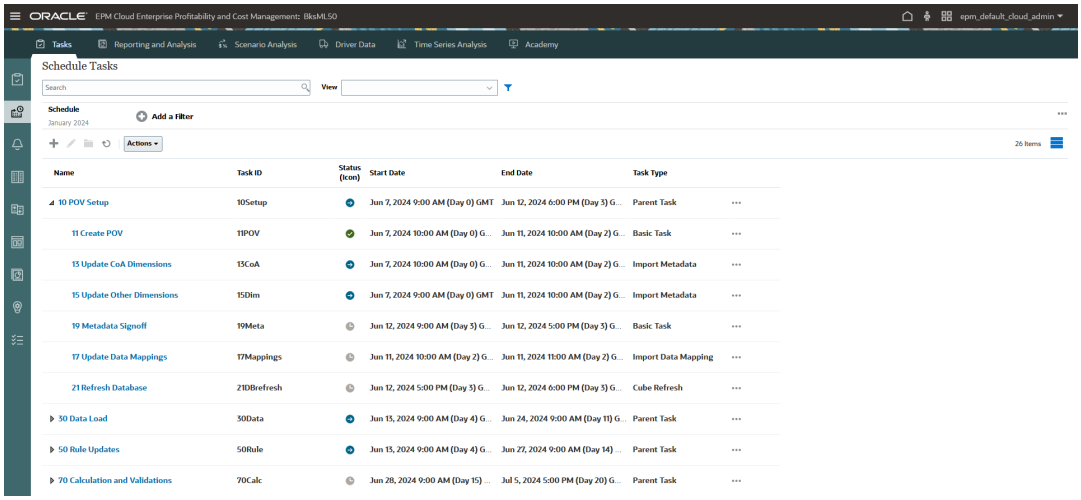
To access the Monthly Process template:

1. From the Home page, select **Application**, and then **Task Manager**.
2. From the **Templates** tab, click **Monthly Process**.



To see the tasks that have been set up in the Monthly Process template:

1. From the Home page, select **Tasks**.
2. Review the tasks on the **Schedules Tasks** tab to get ideas on the types of month-end tasks that you can create for Enterprise Profitability and Cost Management.



> **Note**
>
> See Creating the Sample Application for information on how to access the sample application,

Copyright © 2022, 2026, Oracle and/or its affiliates.

28

Administering Tasks with Task Manager

Task Manager provides centralized monitoring of all tasks and provides a visible, automated, repeatable system of record for running a business process.

Related Topics

- Setting Up Task Manager
- Managing Task Types
- Managing Task Templates
- Managing Tasks
- Managing Schedules
- Managing Task Manager Integrations
- Managing Alert Types for Task Manager
- Managing Views in Task Manager
- Viewing Currencies in Task Manager
- Generating Custom Reports for Task Manager
- Working with Views and Filters
- Managing Dashboards

Setting Up Task Manager

Related Topics

- Task Manager Terms
- Task Manager Overview
- Sample Task Flows
- Managing Task Manager Views, Lists, and Filters
- Managing Task Manager System Settings
- Managing Task Manager Attributes
- Managing Artifact Labels in Task Manager

Copyright © 2022, 2026, Oracle and/or its affiliates.

Task Manager Terms

Table 28-1 Task Manager Terms

Term	Description
Tasks	Tasks are activities performed during a business process, for example, Enter Form Data, or Review New Accounts. Service Administrators and Power Users define the tasks for the process, and include details for each task, such as start and end dates, assignees, and approvers. Users open assigned tasks, read instructions, answer questions, and after completing tasks, submit them.
Templates	Templates define a repeatable set of tasks required for a business process. Administrators can save a set of defined tasks as a template to use for future periods, such as monthly or quarterly, rather than recreating the tasks each time. For example, an administrator can save a set of tasks required for a monthly process and use the same template for that process every month.
Schedules	A schedule is an ordered set of tasks for a business process. Schedules can be created from a template of predefined tasks, or manually created. When administrators create a schedule, they map the relative dates that were defined for tasks such as Day 1 and 2 of the business process to calendar dates, such as March 1 and 2. When they change the status of the schedule to Open, the tasks run according to their scheduled start date and times. For example, an administrator creates a monthly process schedule for March, with the Review New Accounts task assigned to March 1. When the administrator changes the schedule from Pending to Open, on March 1, the Review New Accounts task starts and an email notification is sent to the task assignee.
Task Types	Task Types enable the standardization of task details across all tasks of the same type. Details defined on the Task Type are inherited by all tasks created from the Task Type. For example, when an administrator defines Task Type settings such as instructions or rules for the Approve Data Task Type, those settings are shared by all tasks created using the Approve Data Task Type. • Basic Task: a default Task Type, which does not contain any task details • Parent Task: a Task Type that enables you to create parent tasks for task hierarchies. For example, the Load Data parent task can have child tasks of Load EMEA Sales Data and Load NA Sales Data. • Integration Task: a Task Type that defines an action and includes the application component, such as a form, or parameters needed to link to an external application. Predefined Integrations and Task Types are automatically loaded for your service. After you set up a connection to a different service, you can include Integration Task Types from that service in your tasks. For example, an administrator using Task Manager in one service can enable and synchronize connections to a different service, such as Account Reconciliation, which loads the predefined Account Reconciliation Integrations and Task Types.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-1 (Cont.) Task Manager Terms

Term	Description
Integrations	Integrations are used to automate tasks across Oracle Fusion Cloud EPM business processes and external applications. You can define tasks that include Integrations with other applications. For Cloud EPM Services, the service is automatically configured with local predefined Integrations for the business process. If you have subscriptions to other Cloud EPM services, you can create connections between services and enable integrations using Task Manager. Pre-built integrations allow you to perform Task Manager tasks that access other Cloud EPM functionality. You can also create custom Integrations, for example, custom Event Monitoring tasks. Integration tasks run based on one of these Execution Types defined in the task: • End User - a task that requires the user to interact with a user interface to complete the task. When a user launches an end user task, the task automatically opens the user interface component needed to perform the task. For example, the Enter Form Data task requires a user to enter data. When the Enter Form Data task is launched, it opens the form UI. • Process Automation - a task that runs in the background without any user interaction required. These integrations are automatically executed in external applications when their start date and time are reached, and any predecessor tasks are completed. For example, a Load Data task can be defined to run automatically overnight based on its start date and time. • Event Monitoring - a task used to monitor a particular event that happened on an external system. When the action or status occurs in the external application, the task is changed to Closed. For example, if you are working with Task Manager in one application, you can monitor the status of a Copy Data task in an external application. When the Copy Data task completes and you see that the task is Closed, you can start the next task in your application, for example, Approve Data.
Alerts	Alerts are notifications from users on issues that they encounter during the process, such as hardware or software issues. When users encounter an issue and create an alert for it, they select from a list of predefined Alert Types to identify the issue. The Alert is then sent to the assignee defined in the Alert Type to be resolved. For example, a user has a task due and can't access their assigned tasks. The user selects an Alert Type, such as Access Issue, which sends the alert to the predefined assignee, for example, the System Administrator. The System Administrator resolves the access issue, then closes the alert.
Alert Types	Alert Types are categories of possible issues that might occur during the business process. Administrators can create Alert Types such as Missing Data or Access Issue. Each Alert Type defines a procedure that is used to capture critical information about the issue and assigns key personnel to resolve it. For example, an administrator can create an Alert Type called Access Issue, which contains questions to users for more detailed information. The administrator defines a workflow for the Alert Type with an assignee to resolve the issue such as a System Administrator, and a backup assignee if desired.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-1 (Cont.) Task Manager Terms

Term	Description
System Settings	System Settings enable Service Administrators to specify defaults for Task Manager settings. Administrators can define Global Integration Tokens to manage parameters for URLs, for example, in task instructions. They can determine Holiday Rules for which holiday dates apply to schedules, and create geographical or business unit Organizational Units to associate with task settings such as holidays and time zones. They can also configure settings such as comments and task deletions, email notifications, task governors for maximum values of list and file sizes, reassignment request approvals, permissions to reopen tasks, and specify how tasks display in Smart View, the Worklist, and the Welcome panel.
Worklist	A Worklist is the main end-user screen where users can easily work on their assigned tasks.
Schedule Tasks	Schedule Tasks page displays a list of schedules and the tasks they contain. This enables users to see all the tasks within a schedule. Filtering and Saved View options enable users to quickly review their tasks.
Overview Dashboard	The Overview Dashboard provides a summarized view of all tasks within a POV. You can filter tasks by Year, Period, and Schedule. You can view tasks by Schedule, Priority, Task Type, or Organizational Unit, and drill into task details.
Compliance Dashboard	The Compliance Dashboard provides metrics on how well the company achieved their compliance objectives, distinguishing tasks that were completed on time from those that were late, and providing a count of those that were approved or rejected. You can filter tasks by Year, Period, and Schedule, view user performance metrics based on user and organizational unit, and drill into task details.
Operational Dashboard	The Operational Dashboard provides an overall summary of data for a Task Manager process using a variety of displays. Operational dashboards can combine charts, lists, or pivot views. For example, you can create an Operational dashboard called Task Performance that contains a Bar chart for On Time Performance, a Pie chart for Task Status, and a Pivot view for Status by User.
Task Manager Report	The Task Manager Report is a report provided by default that reports on task execution. For example, it displays tasks that are At Risk, Early, Late, or Rejected by an approver. It also displays Task Compliance, Performance by Organization Unit, Users with Late Tasks, and an Audit Trail of task changes. Administrators can define their own custom reports as needed.

Task Manager Overview

Task Manager helps you define, execute, monitor, and report the interdependent activities of a business process. It provides centralized monitoring of all tasks and provides a visible, automated, repeatable system of record for running a business process. A task represents the unit of action performed in the application. Administrators or Power Users can define integrated task flows with interdependent relationships and hierarchies within their business processes. They can track progress, identify bottlenecks, and correct any errors or delays that may arise throughout the business process.

Copyright © 2022, 2026, Oracle and/or its affiliates.

With an EPM Enterprise subscription, the service is preloaded with integrated end user and process automation tasks for use within the business process. Administrators can add additional integrated tasks with other business processes by making connections with other Oracle Fusion Cloud EPM services. The service can be further extended to include integrations with Non-Cloud EPM applications. EPM Standard subscription do not include any local integrated tasks and can not be extended to include any other integrated tasks.

With Task Manager, you can:

- Define the tasks and schedule to ensure an efficient task flow
- Automate the business process, track its status, and provide notifications and alerts
- Monitor a business process and quickly act on possible errors to avoid delays.
- Provide notifications by email for delinquencies, due dates, and status changes.
- Analyze the effectiveness of the business process

How Task Manager Works

Task Manager provides a framework where the following key components for a business process can be defined:

- Organizational units are used to model regions, entities, business units, divisions, and other organizational or geographical divisions that are associated with the task. Model these organization units as hierarchies to create the actual structure and facilitate reporting.
- Holiday rules is a collection of holiday dates and is used by scheduling the task.
- Task types are set up by the administrator to ensure consistency across tasks and to leverage predefined product integrations. If the predefined task types doesn't meet the requirement, then they can create a task type. The task types can be either automated or manual with a defined assignee.
- Task templates are created to use a repeatable set of tasks across multiple periods. These schedules represent the chronological sequence of tasks created by selecting a template and assigning calendar dates.
- Tasks can be assigned to a user or a group.

The business process starts when the schedule status is changed from Pending to Open. During the business process, user receives email notifications of assigned tasks, and can click links in the email for direct access to the assigned task. Administrators have to enable the email notifications to allow this to happen. Users can also create alerts for issues that may occur, and these are forwarded to assignees and approvers for the resolution.

Roles in Task Manager

Task Manager includes three key roles:

- **Service Administrator** or **Power User**: Sets up templates and tasks for the business process and monitors the status of dashboard activities.
- **End User**: Reviews and completes assigned tasks. They can view the list of assigned tasks in the application or from the assigned task email.
- **Approver**: Reviews tasks and determines if the tasks can be approved or not.

For sample task flows, see Sample Task Flows.

Service Administrator or Power User tasks:

1. Set up users. See Managing Users and Roles in *Getting Started Guide for Administrators*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Completes the required setup procedures:
   - Set up organizational units. See Managing Task Manager Organizational Units.
   - Set up global integration tokens. See Managing Global Integration Tokens.
   - Set up holiday rules. See Managing Holiday Rules for Tasks.
   - Set up attachment size and other system settings. See Setting Task Manager Governors.
   - Enable email notifications. See Notifications in *Administering and Working with Enterprise Profitability and Cost Management*.
3. Review the tasks required for a business process and set up Task Types to ensure consistency across tasks and leverage predefined product integrations. See Managing Task Types.
4. Define and save a set of tasks as a template to use for future periods because many business processes are repetitive. See Managing Task Templates.
   For example, an administrator can set up a monthly or quarterly business process once and then use it repeatedly for all months or quarters. Tasks are defined with task predecessors, Assignees, and Approvers.
5. Generate a schedule (a chronological set of tasks) by selecting a template and assigning calendar dates to initiate a business process. The generic tasks in the template are applied to calendar dates. See Managing Schedules.
6. Change the schedule status from Pending to Open to begin a business process.
7. Modify and monitor the schedule as needed.

End Users and Approver Tasks:

After the administrator changes the schedule status (Open) to begin a business process, users can read task instructions, answer questions, submit, reassign, approve, and reject tasks, and access tasks from email notifications or by logging on to the application.

During the business process, users can:

1. Receive email notifications of assigned tasks and click links in the email for direct access to assigned tasks.
2. Alternatively, log on to review and access assigned tasks in different types of views.
3. Complete tasks and the tasks are sent to approvers and can be viewed by other users.
4. Create alerts for issues, such as hardware or software issues, that they encounter. Alerts are forwarded to Assignees and Approvers for resolution.

Watch this overview video to learn more.

Overview Video

UI Navigation for Task Manager

- Service Administrator or Power users access Task Manager from **Applications** > **Task Manager**.
- Users access all Task Manager features from **Home** > **Tasks**. This includes all task and alert listing screens, dashboards, and reports.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Sample Task Flows

Scenario 1: Power User

The Power User sets up a template and tasks for an upcoming business process.

- The Power User logs on and opens the Manage Templates page.
- The Power User selects the template for the business process.
- The Power User selects the calendar dates on which to line up the template tasks, and creates a schedule.
- The Power User then adds a task to the template.
- The Power User opens the schedule, which begins the process.

Scenario 2: Power User

The Power User monitors the status of activities through the Dashboard.

- The Power User logs on and checks the status of activities through Day 3.
- The Power User drills down to see the details of incomplete tasks.
- The Power User reviews open tasks for comments or attachments provided by assigned users.

Scenario 3: Approver

A user assigned as an Approver reviews a current task to determine whether it can be approved.

- The assigned Approver receives an email notification of an outstanding task.
- From the email, the Approver selects the link for the task.
- The Task Actions page is launched outlining the process.
- The Approver reviews the document that the user submitted when completing the task to ensure completeness.
- The Approver enters additional comments and approves the submission.
- If another level of approval is required, the task is forwarded to the next approver. If the task was the last requiring approval, then the task completes, and the system runs the next task if it is ready.
- The Approver can reject a task instead of approving it, and the task is reassigned to the Assignee.

Scenario 4: User

A user logs on to the application and reviews and completes an assigned task.

- The user logs on and reviews their tasks.
- The user clicks the link for an assigned task.
- The task page is launched with instructions for the task, and a reference document.
- The user reviews the instructions and the reference document, processes the updates, enters a comment about the task, and submits it for approval.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- The system automatically updates the task status and sends a notification to the assigned approver.

Scenario 5: User

A user responds to an email notification of a task to load data, clicks a link in the email, and then completes the task.

- The user receives an email notification of an outstanding task.
- From the email, the user selects the link for the page where the required process is documented.
- The user reviews the instructions for the task and opens the task.
- The user loads data into the system.
- The user enters a comment about the task and submits it for approval.

Managing Task Manager Views, Lists, and Filters

Related Topics

- Viewing Task Manager Lists
- Column Definitions for Task Manager

Viewing Task Manager Lists

The Task Manager list provides a central place to manage all your tasks. It displays a list of tasks and their status for a selected Year, Period, and Schedule.

If you are an Administrator, you can see all the available tasks in the system, and the user who is working on them.

If you are a user other than an Administrator, you can see all active tasks for your role that need your attention.

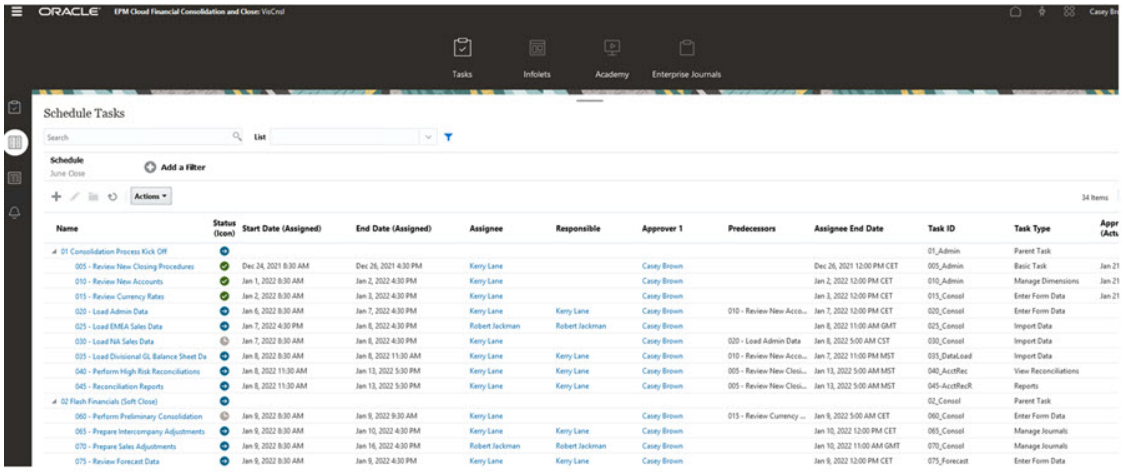
To view tasks:

1. On the Home page, click **Tasks**.
2. Click **Tasks** on the left navigation.
3. Select a **Year**, **Period**, and **Schedule**.
4. **Optional:** To search for a task, in the **Search** field, enter any text or numeric for which to search the task list.
5. **Optional:** To filter the list of tasks, click **Add a Filter** in the filter bar and specify filter criteria.

> **Note**
>
> To find late tasks, you can use the `Ever Been Late` attribute to easily identify any task that missed one or more of the scheduled due dates within its workflow. Even if the task is not currently late, but if the Assignee or any Approver has ever been late with their workflow, the `Ever Been Late` attribute indicates the task was missed for the scheduled due date.

Sample Task List

Copyright © 2022, 2026, Oracle and/or its affiliates.



Column Definitions for Task Manager

This section provides the column definitions for the following Task Manager objects:

- Task Manager – Schedule Tasks
- Task Manager – Templates
- Task Manager - Template Tasks
- Task Manager – Schedules
- Task Manager – Task Types
- Task Manager – Integrations
- Task Manager – Alert Types
- Task Manager – Filters
- Task Manager – Views
- Task Manager – Attributes
- Task Manager – Currencies

Task Manager – Schedule Tasks

This section provides the definitions for the Task Manager Schedule Tasks columns.

Table 28-2 Column Definitions - Task Manager – Schedule Tasks

Column Name	Description
Approver 1-10	User, Group, or Team responsible for approving the task
Approver 1-10 (Actual)	User who approved the task
Approver 1-10 (Backup)	User who can approve the task if the Approver (Primary) is unavailable
Approver 1-10 (Primary)	User, Group, or Team that was specified to approve the task
Approver 1-10 End Date (Actual)	Actual end date when the role was completed
Approver 1-10 End Date (Actual, Local)	Actual end date when the role was completed, in the local time zone of the org unit (if assigned an org unit)
Approver 1-10 End Date (Assigned)	Assigned end date for the approver

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-2 (Cont.) Column Definitions - Task Manager – Schedule Tasks

Column Name	Description
Approver 1-10 End Date (Assigned, Local)	Assigned end date for the approver of the task, in the local time zone of the org unit (if assigned an org unit)
Approver 1-10 Rejections (Count)	Total count of scheduled tasks rejected by the approver
Approver 1-10 Scheduled End Date	Effective end date for the approver of the task
Approver 1-10 Scheduled End Date (Local)	Scheduled end date for the approver of the task, in the local time zone of the org unit (if assigned an org unit)
Approver 1-10 Scheduled Start Date	Effective start date for the approver of the task
Approver 1-10 Scheduled Start Date (Local)	Scheduled start date for the approver of the task, in the local time zone of the org unit (if assigned an org unit)
Approver 1-10 Start Date	Assigned start date of the task
Approver 1-10 Start Date (Local)	Assigned start date of the task, in the local time zone of the org unit (if assigned an org unit)
Approvers (Count)	Total count of assigned approvers
Assignee	User, Group, or Team currently responsible for working on the task
Assignee (Actual)	User who submitted the task
Assignee (Backup)	User who can work on the task if the Assignee (Primary) is unavailable
Assignee (Primary)	User, Group, or Team who was specified to work on the task
Assignee End Date	Effective end date for the assigned user
Assignee End Date (Actual)	Actual end date when the assignee role was completed
Assignee End Date (Actual, Local)	Actual end date when the assignee role was completed, in the local time zone of the org unit (if assigned an org unit)
Assignee End Date (Assigned)	Effective end date for the assignee role to be completed
Assignee End Date (Assigned, Local)	Actual end date when the role was completed, in the local time zone of the org unit (if assigned an org unit)
Assignee End Date (Local)	assigned End Date of the task, in the local time zone of the org unit (if assigned an org unit)
Comments (Count)	Total count of comments for the scheduled task
Created By	Name of the user who created the scheduled task
Created On	Date and time when the scheduled task was created
Description	Description of the scheduled task
End Date	Effective end date of the scheduled task
Ever Been Late (Assignee)	Indicates whether the date when the assignee submitted the task was past the due date
Ever Been Late (Approver 1-10)	Indicates whether approver role has ever been late
Execution Type	Execution type such as End User, System Automated, or Event Monitoring
Instructions	Set of instructions for completing the scheduled task
Integration	Integration associated with the scheduled task
Last Updated By	Name of the user who last updated the scheduled task
Last Updated On	Date and time when the scheduled task was last updated

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-2 (Cont.) Column Definitions - Task Manager – Schedule Tasks

Column Name	Description
Late (Approver 1-10)	Indicates whether the approver completed the task past the due date
Late (Assignee)	Indicates whether the assignee completed the task past the due date
Open Task	Indicates whether the task is opened
Organizational Unit	Assigned organizational unit
Owner	Name of the scheduled task owner, which must be a Service Administrator or Power User
Parent	Task ID of the parent task
Predecessors	Predecessor for the current task. It can be from another template.
Priority	Priority of the task
References (Count)	Count of references added for the scheduled task (URL and content server references)
Rules (Count)	Total count of rules directly on the scheduled task
Run As	Run the task as the user. Only applicable for system-automated tasks.
Run As Authorized	User who can authorize this task. If the Run As user is the user who also created the task, then the user can authorize the task, without being prompted to re-enter their password.
Start Date	Effective start date of the scheduled task
Start Task Early	Indicates whether the assignee is allowed to open a pending task prior to the scheduled start time
Status (Icon)	Icon indicating the status of the scheduled task
Successors	Successor for the current task
Task ID	Unique identifier for the task
Task Type	Type of task

Example

The following example shows the task workflow between Assignee or Approver, Actual Assignee or Approver, and Primary Assignee or Approver.

Sl No	Action	Assignee / Approver	Assignee / Approver (Actual)	Assignee / Approver (Primary)	Comments
1	Initial state	PREP_TEAM		PREP_TEAM	No one has claimed or submitted the task
2	Barry Mills claims the task	Barry Mills		PREP_TEAM	User information based on claim action
3	Barry Mills submits the task	Barry Mills	Barry Mills	PREP_TEAM	Actual set on workflow action

Copyright © 2022, 2026, Oracle and/or its affiliates.

Sl No	Action	Assignee / Approver	Assignee / Approver (Actual)	Assignee / Approver (Primary)	Comments
4	Admin re-assigns task to Susan Chang	Susan Chang	Barry Mills	Susan Chang	Both Assignee and Assignee (Primary) are changed, but Assignee (Actual) remains with the user who submitted the task
5	Task is rejected	Susan Chang		Susan Chang	Assignee (Actual) is cleared. Workflow goes back to the user who was re-assigned in the previous step
6	Susan Chang submits the task	Susan Chang	Susan Chang	Susan Chang	Actual set on new user's workflow action.

Task Manager – Templates

This section provides the definitions for the Task Manager templates columns.

Table 28-3 Column Definitions - Task Manager Templates

Column Name	Description
Created By	Name of the user who created the template
Created On	Date and time when the template was created
Description	Description of the template
Embedded In	A list of templates that the current template is embedded in
Embedded Only	Template is only to be used as an embedded template and isn't allowed to be deployed. This prevents supporting templates from being deployed by mistake.
Embedded Templates	A list of templates that are embedded in the current template
Last Schedule	Last schedule created from each template
Last Updated By	Name of the user who last updated the template
Last Updated On	Date and time when the template was last updated
Name	Name of the template
Number of Days After Day 0	Number of days a template tracks after day zero. Days after Day Zero are represented as Day 3, Day 4, and so on.
Number of Days Before Day 0	Number of days a template tracks before day zero. Days before Day Zero are represented as Day-5, Day-4, and so on.
Organizational Unit	Assigned organizational unit

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-3 (Cont.) Column Definitions - Task Manager Templates

Column Name	Description
Owner	Name of the template owner, which must be a Service Administrator or Power User. The template owner is also the default owner of all tasks in the template unless overridden at the task level.
Schedules	Total number of schedules created from each template

Task Manager - Template Tasks

This section provides the definitions for the Task Manager template task columns.

Table 28-4 Column Definitions - Task Manager Template Tasks

Column Name	Description
Active	Status of the task template
Approver 1-10	User, Group, or Team responsible for approving the task
Approver 1-10 (Backup)	User who can approve the task if the Approver (Primary) is unavailable
Approver 1-10 (Primary)	User, Group, or Team that was specified to approve the task
Approver 1-10 End Date (Assigned)	Assigned end date for the approver
Approver 1-10 End Date (Assigned, Local)	Assigned End Date of the task, in the local time zone of the org unit (if assigned an org unit)
Approver 1-10 Scheduled End Date	Scheduled End Date of the task
Approver 1-10 Scheduled End Date (Local)	Scheduled End Date of the task, in the local time zone of the org unit (if assigned an org unit)
Approver 1-10 Scheduled Start Date	Scheduled Start Date of the task
Approver 1-10 Scheduled Start Date (Local)	Scheduled Start Date of the task, in the local time zone of the org unit (if assigned an org unit)
Approver 1-10 Start Date	Assigned Start Date of the task
Approver 1-10 Start Date (Local)	Assigned Start Date of the task, in the local time zone of the org unit (if assigned an org unit)
Approvers (Count)	Total count of assigned approvers
Assignee	User, Group, or Team currently responsible for working on the task
Assignee (Backup)	User who can work on the task if the Assignee (Primary) is unavailable
Assignee (Primary)	User, Group, or Team who was specified to work on the task
Assignee End Date	End date for the assigned user
Assignee End Date (Local)	Assigned End Date of the task, in the local time zone of the org unit (if assigned an org unit)
Created By	Name of the user who created the template task
Created On	Date and time when the template task was created
Description	Description of the template task
Execution Type	The execution type such as End User, System Automated, or Event Monitoring
Instructions	Set of instructions for completing the task

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-4 (Cont.) Column Definitions - Task Manager Template Tasks

Column Name	Description
Integration	The execution type, End User, System Automated or Event Monitoring
Last Updated By	Name of the user who last updated the template task
Last Updated On	Date and time when the template task was last updated
Organizational Unit	Assigned organizational unit
Owner	Name of the template task owner, which must be a Service Administrator or Power User. The template task owner is also the default owner of all tasks in the template unless overridden at the task level.
Parent	Task ID of the parent task
Predecessors	Predecessor for the current task. It can be from another template.
Priority	Priority of the task
References (Count)	Count of references added for the template task (URL and content server references).
Rules (Count)	Total count of rules directly on the enterprise journal
Run As	Run the task as the user. Only applicable for system-automated tasks.
Run As Authorized	User who can authorize this task. If the Run As user is the user who also created the task, then the user can authorize the task, without being prompted to re-enter their password.
Start Task Early	Whether the assignee is allowed to open a pending task prior to the scheduled start time
Successors	Successor for the current task
Task ID	Unique identifier for the task
Task Type	Type of task
Template	Template associated with the task

Task Manager – Schedules

This section provides the definitions for the Task Manager Schedules columns.

Table 28-5 Column Definitions - Task Manager – Schedules

Column Name	Description
Created By	Name of the user who created the schedule
Created On	Date and time when the schedule was created
Date Zero Date	Date to assign as day zero
Description	Description of the schedule
End Date	Effective end date for the schedule
Last Updated By	Name of the user who last updated the schedule
Last Updated On	Date and time when the schedule was last updated
Name	Name of the schedule
Organizational Unit	Organizational unit associated with the schedule
Owner	Name of the schedule owner, which must be a Service Administrator or Power User
Period	Period for the schedule

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-5 (Cont.) Column Definitions - Task Manager – Schedules

Column Name	Description
Start Date	Effective start date for the schedule
Status	Status of the schedule
Tasks	Tasks associated with the schedule
Year	Year when the schedule was created

Task Manager – Task Types

This section provides the definitions for the Task Manager Task Types columns.

Table 28-6 Column Definitions - Task Manager – Task Types

Column Name	Description
Created By	Name of the user who created the task type
Created On	Date and time when the task type was created
Description	Description of the task type
Execution Type	Type of execution associated with the task type
Integration	Integration associated with the task type
Last Updated By	Name of the user who last updated the task type
Last Updated On	Date and time when the task type was last updated
Name	Name of the task type
Task Type ID	Unique identifier of the task type

Task Manager – Integrations

This section provides the definitions for the Task Manager Integrations columns.

Table 28-7 Column Definitions - Task Manager – Integrations

Column Name	Description
Connection	Application to which the task belongs
Created By	Name of the user who created the integration
Created On	Date and time when the integration was created
Description	Description of the integration
Execution Type	Execution type for the integration
Integration Cloud Deployment	Associated integration cloud deployment for the integration
Last Updated By	Name of the user who last updated the integration
Last Updated On	Date and time when the integration was last updated
Name	Name of the integration

Task Manager – Alert Types

This section provides the definitions for the Task Manager Alert Types columns.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-8 Column Definitions - Task Manager – Alert Types

Column Name	Description
Alert Type ID	Unique identifier for the alert type
Associated With	Object associated with the alert type such as a task
Created By	Name of the user who created the alert type
Created On	Date and time when the alert type was created
Description	Description of the alert type
Enabled	Indicates whether the alert type is enabled
Last Updated By	Name of the user who last updated the alert type
Last Updated On	Date and time when the alert type was last updated
Name	Name of the alert type

Task Manager – Filters

This section provides the definitions for the Task Manager Filters columns.

Table 28-9 Column Definitions - Task Manager – Filters

Column Name	Description
Created By	Name of the user who created the filter
Created On	Date and time when the filter was created
Description	Description of the filter
Last Updated By	Name of the user who last updated the filter
Last Updated On	Date and time when the filter was last updated
Name	Name of the filter
Public	Whether the filter is public
Type	Type of the filter

Task Manager – Views

This section provides the definitions for the Task Manager Views columns.

Table 28-10 Column Definitions - Task Manager – Views

Column Name	Description
Created By	Name of the user who created the view
Created On	Date and time when the view was created
Default	Indicates whether the view is set as the default view
Description	Description of the view
Last Updated By	Name of the user who last updated the view
Last Updated On	Date and time when the view was last updated
Name	Name of the view
Public	Indicates whether the view is public
Type	Type of the view

Copyright © 2022, 2026, Oracle and/or its affiliates.

Task Manager – Attributes

This section provides the definitions for the Task Manager Attributes columns.

Table 28-11 Column Definitions - Task Manager – Attributes

Column Name	Description
Attachments	Indicates whether the attribute has attachments
Calculation	Indicates if the attribute is a calculation attribute
Created By	Name of the user who created the attribute
Created On	Date and time when the attribute was created
Last Updated By	Name of the user who last updated the attribute
Last Updated On	Date and time when the attribute was last updated
Lines	Number of lines of text that are visible, without scrolling, on the Actions dialog boxes
Locked	Indicates whether the attribute is locked
Name	Name of the attribute
Type	Type of the attribute

Task Manager – Currencies

This section provides the definitions for the Task Manager Currencies columns.

Table 28-12 Column Definitions - Task Manager – Currencies

Column Name	Description
Currency Code	Country's currency code that identifies the currency
Currency Symbol	Currency symbol for the currency code
Decimal Places	Indicates how to display numbers with decimal values
Description	Name of the country associated with the currency code
Enabled	Indicates whether the currency code is enabled

Managing Task Manager System Settings

Related Topics

- Managing Global Integration Tokens
- Managing Task Manager Organizational Units
- Managing Holiday Rules for Tasks
- Changing Configuration Settings
- Using Oracle Cloud Object Storage to Store Attachments

Managing Global Integration Tokens

The Global Integration Tokens feature enables creation of parameterized URLs. The URLs can be used for a variety of purposes.

When creating the URL, the parameters are inserted into the URL. When the URL is clicked, the parameters are replaced with the appropriate values.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example, the following is an excerpt of the parameters:

```
…$YearName$%22%22Period%20Name%22&val6=%22$PeriodName$
%22&col17=%22Logical%20Schedules%22.%22Year%20Name%22&val7=%22$Y earName$
%22&col8=%22Logical%20Schedules%22.%22Deployment%20Name%22&val8=%22$
ScheduleName $%22
```

where

```
$YearName$ = 2012
$PeriodName$ = Jan12
$ScheduleName$ = DemoSchedule
```

The URL becomes:

```
…
%222012%22%22Period%20Name%22&val6=%22Jan2012%22&col7=%22Logical%20Schedules%2
2.%22Year%20Name%22&val7=%222012%22&col8=%22Logical%20Schedules%22.%22Schedule
%20Name%22&val8=%22DemoSchedule%22
```

Parameters can be configured from static parameters defined in your application, attributes of type Text and List, and the following native attributes assigned to Tasks, Templates, and Schedules:

- Period Name
- Schedule Name
- Task Name
- Task ID
- Year Name

You can access URLs from the following locations:

- **Templates**: After an administrator or power user adds a reference URL to a template in the Instructions section, the URL is clickable on the Instruction tab.
- **Schedule**: After an administrator or power user adds a reference URL to a schedule in the Instructions section, the URL is clickable in Instructions.
- **Task Details**: After an administrator or power user or task owner adds a reference URL to a task in the Instructions section, the URL is clickable in Instructions.
- **Task Types**: After an administrator adds a reference URL to a Task Type in the Instructions section, the URL is clickable on the **Instruction** tab.
- **Task Actions**: Viewers of **Task Actions** can click the reference URLs.

Creating a Global Integration Token

Use these guidelines for creating Global Integration Tokens:

- The token name must be unique.
- Tokens can't be modified.
- Tokens shouldn't be deleted. If you try to delete a token, a warning will display: "Deleting a Global Integration Token will invalidate the URLs that are referencing it. Are you sure you want to continue?"

Copyright © 2022, 2026, Oracle and/or its affiliates.

To create a Global Integration token:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left, and then select **Global Integration Tokens**.
3. Click **New**.
4. Enter:
   - **Name**: A unique token name
   - **Type**: Static or Task Attribute
   - **Token Value**:
     - If **Task Attribute** is selected as the Parameter Type, select the value that is passed when the URL is rendered.
     - If **Static Attribute** is selected as the Parameter Type, enter the value that is passed when the URL is rendered.
5. Click **Save**.

Deleting a Token

To delete a token:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left, and then select **Global Integration Tokens**.
3. Select a token, and then click **Delete**.

   A warning message is displayed: "Deleting a Global Integration Token will invalidate the URLs that are referencing it. Are you sure you want to continue?"
4. Click **Yes** to confirm deletion.

Managing Task Manager Organizational Units

Organizational Units enable administrators to define regions, entities, business units, divisions, departments, or any other entity that might be affiliated with a task. For example, you could define a geographical Organizational Unit called "North America", or a business unit Organizational Unit called "Sales". Organizational Units are hierarchical to facilitate reporting. The "Sales" Organizational Unit could contain "East Sales Region" and "West Sales Region" as part of its hierarchy.

When you create a schedule, you select the Organizational Unit to be used for the schedule, and the selected Organizational Unit is applied to all tasks in the schedule.

For example, you may have defined an Organizational Unit called "East Sales Region". When you select "East Sales Region" as the Organizational Unit for the schedule, the selected Organizational Unit is applied to all tasks in the schedule. The settings that you defined for that Organizational Unit, such as Timezone, Holiday Rules, and Work Days, apply to all tasks in the schedule for the "East Sales Region".

Related Topics

- Adding Organizational Units
- Importing Organizational Units
- Selecting an Organizational Unit

Copyright © 2022, 2026, Oracle and/or its affiliates.

Adding Organizational Units

To add an organization:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Organizations** tab on the left and then select **Organizational Units**.
3. Click **Add Sibling**.
4. On the **Properties** tab, enter:
   - **Name**: You can enter a maximum of 255 characters.

     Administrators can change the name, and it need not be unique.
   - **Organizational Unit ID**: A unique ID used to identify the transaction for Migration purposes.

     The Organizational Unit ID can't be changed after an organizational unit is set. You can enter a maximum of 255 characters.
   - Optional: **Parent Organization**: Enables Administrators to change the hierarchy.
   - **Description**: You can enter a maximum of 255 characters.
   - **Timezone**: Determines which time zone applies to the organizational unit. Selection of a time zone is optional. If a time zone is not selected, the task time zone will revert to the user's time zone.
   - **Holiday Rule**: Determines which list of holidays applies to the organizational unit. Selection of a Holiday Rule is optional.
   - **Work Days**: Determines which days of the week are work days.
5. The **Access** tab enables Administrators to assign viewer and commentator access in a centralized location, rather than having to assign it to each task.

   To select a user:

   a. Click **Add**.
   b. In **Select Viewers**, enter the First Name and Last Name, or click **Search Users**, then select **Users** or **Groups**.
   c. In **Search Results**, select the users and click **Add** or **Add All** to move them to the Selected list.

Importing Organizational Units

To import organizational units:

1. On the Home page, click **Application** and then click **Task Manager**.
2. Click the **Organizations** tab on the left and select **Organizational Units**.
3. Click **Import** .
   - Click **Choose File** to navigate to the CSV import file.

     Sample Organizational import format:

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The following section shows the import format. This example requires a pre-existing parent organizational unit named "Americas", a holiday rule named "US", and a Viewer named "fm_user5".

```
"OrganizationalUnitID","Name","ParentOrganization","Description","TimeZone
","H olidayRule","Calendar","Workdays","Viewer1","Commentator1"
"US2","US2","Americas","Import Organization US2 Example","ET
(UTC-05:00)","US","",2-3-5,"fm_user5",""
```

- For **Import Type**, select one:
  - **Replace**: Replaces the Organizational Unit detail with the Organizational Unit that is in the file that you are importing. It does not affect other units that are not specified in the import file.
  - **Replace All**: Imports a new set of Organizational Units that replaces the existing Units. This option is useful when you want to replace a unit in one system with an updated definition from another system. Organizational Units that are not specified in the import file are deleted.
- For **File Delimiter**, select **Comma**, **Tab**, or **Other**.

4. Click **Import**.

Selecting an Organizational Unit

Administrators define organizational units in Organizations to help organize and schedule tasks.

To select an organization:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Organizations** tab on the left, and then select **Organizational Units**.
3. Select an organization. An arrow indicates a child organization exists. Expand the parent to select a child organization.

Managing Holiday Rules for Tasks

Holiday Rules are collections of holiday dates that Administrators use when scheduling tasks.

After you create a Holiday Rule, you can apply the rule to an Organizational Unit and then apply the Organizational Unit to the schedule template. For example, you might have defined a Holiday Rule for all the yearly holiday dates for the "East Sales Region" Organizational Unit. When you select the "East Sales Region" as the Organizational Unit for a schedule, the predefined holiday dates apply to the tasks in the schedule.

See Applying a Holiday Rule to an Organizational Unit and Applying a Holiday Rule to a Schedule Template.

Creating Holiday Rules

To create holiday rules:

1. On the Home page, click **Application**, and then click **Task Manager**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click the **Organizations** tab on the left.
3. Click **Holiday Rules**.
4. Click the **New** icon.
5. Enter:
   - **Holiday Rule ID**: You can enter a maximum of 255 characters. The **Holiday Rule ID** is mandatory and must be unique.
   - **Name**: You can enter a maximum of 50 characters. The **Name** does not need to be unique.
   - **Year**: The Year attribute behaves as a filter option. You don't need to select a value for this attribute. If you do, the table is filtered to display the dates associated with the selected year.
6. To name a holiday, in the **Holiday** section, click the **Import** icon to import the list of holidays, or click the **New** icon and enter the date and name of the holiday.

Applying a Holiday Rule to an Organizational Unit

After you create a holiday rule, you can apply it to an organizational unit, and then apply it to a schedule.

To apply a holiday rule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Organizations** tab on the left.
3. Click **Organizational Units**.
4. Create or edit an organization.
5. On **Properties**, from the **Holiday Rule** drop-down, select a holiday rule.
6. Click **Save**.

Applying a Holiday Rule to a Schedule Template

After you create a holiday rule and apply it to an organizational unit, you can apply the organizational unit to a schedule template.

To apply a holiday rule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Select a template, click the **Actions** icon to the right of the template, and then select **Create Schedule**.
4. For **Schedule Parameters**, specify the **Schedule**, **Year**, **Period**, and **Day Zero Date**.
5. Under **Date Mapping**, click **Advanced Configuration**.
6. For **Organizational Unit**, select **Use Task Value** or **Set Value To**. For **Set Value To**, click the **Search** icon to select an organizational unit.
7. Select the organizational unit that you created or edited that contains the holiday rule and click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

8. Click **OK**.

   The Schedule Parameters Date Mapping now shows the holiday.

Importing Holiday Dates

You can import dates into a holiday rule.

To import holiday dates:

1. On the Home page, click **Application** and then click **Task Manager**.
2. Click the **Organizations** tab on the left.
3. Click **Holiday Rules**.
4. Create or select a holiday rule.
5. Before the **Holiday** section, click the **Import** icon.
6. Click **Choose File** to navigate to the CSV import file.
7. For **Import Type**, select one:
   - **Replace**: Replaces the holiday dates with the holiday dates in the file that you are importing. Does not affect other units that are not specified in the import file.
   - **Replace All**: Imports a new set of holiday dates that replaces the existing holiday dates. Use this option to replace unit in one system with an updated definition from another system. Holiday dates that are not specified in the import file are deleted.
8. For **Date Format**, select a format from the drop-down list of allowed date formats. Date formats are not translated. By default, the date format is set to the locale date format of the exported file location.
9. For **File Delimiter**, select **Comma**, **Tab**, or **Other**.
10. Click **Import**.

Editing Holiday Rules

To edit holiday rules:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Organizations** tab on the left and then select **Holiday Rules**.
3. Select a rule.
4. Edit the following fields:

   > **Note**
   >
   > The **Holiday Rule ID** is not editable.

   - **Name**: The name can be a maximum of 50 characters. It does not need to be unique.
   - **Year**: The Year attribute behaves as a filter option. You do not need to select a value for this attribute. If you do, the table is filtered to display the dates associated with the selected year.
5. Click **Save**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Duplicating Holiday Rules

To duplicate holiday rules:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Organizations** tab on the left.
3. Click **Holiday Rules**.
4. Select a rule and click the **Duplicate** icon.
5. Edit the rule as needed.

Deleting Holiday Rules

You cannot delete a holiday rule associated with an organizational unit that is not logically deleted. A list of organizational units to which the holiday rule was assigned is displayed.

To delete holiday rules:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Organizations** tab, and then select **Holiday Rules**.
3. Select a rule, and then click the **Delete** icon.

Changing Configuration Settings

Related Topics

- Allowing Editing and Deleting Comments
- Allowing Task Deletions
- Enabling Application Dimension Alias
- Enabling Artifact Labels
- Enabling Email Notifications
- Setting Task Manager Governors
- Allowing Reassignment Request Approvals
- Reopening Tasks
- Settings for Task Manager Reports
- Setting Export to Excel Format
- Specifying Task Display in Smart View
- Displaying Upcoming Tasks in Worklist and Welcome Panel

Allowing Editing and Deleting Comments

A Service Administrator can decide to allow editing and deleting comments in tasks by using the **Allow Comment Editing and Deleting** configuration settings option. By default, this option is Off.

To allow users to edit and delete comments:

1. On the Home page, click **Application**, and then click **Task Manager**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click the **System Settings** tab on the left.
3. Click **Comments**.
4. For **Allow Comment Editing and Deleting**, select **Turn On** to enable editing and deleting comments.

Allowing Task Deletions

Service Administrators can specify whether to allow tasks to be deleted. By default, this option is Off.

> **Note**
>
> The setting affects only running and closed tasks.

To allow users to delete tasks:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left.
3. Select **Allow Task Deletion**.
4. Select **Turn On** to enable deletions.

Enabling Application Dimension Alias

You can enable Application Dimension Alias support for Task Manager . Within the application, administrators can assign alternate names, or aliases, to system dimensions and user-defined dimension members. The application allows up to 30 aliases per dimension member, including the default alias.

When enabled, the Year and Period dimensions will display to the user their alternative alias table labels based on the user's preferred alias table selection and member name display preference. The alias labels will be displayed within the listing page columns, filter bars, and dashboard displays. Users can set their alias table selection and member name display preference within the **User Preferences** > **General** > **Alias Settings**.

> **Note**
>
> The Year dimension will be renamed from Year to Years and its members will have the fiscal year format (FY00).

If the Dimension Alias support is disabled, then Years will revert to Year and display as numeric values (example, 2024, 2025, and so on) and Periods will be shown with their default Member Name. They will be displayed this way regardless of the user's preferred Alias table selection.

To enable or disable dimension alias:

1. Go to **Applications** > **Task Manager** > **System Settings**.
   The Manage System Settings page is displayed.
2. Click **Translation** and then select the **Enable Dimension Aliases** option. To disable dimension alias, clear this option.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Dimension Alias support is configured for within the Task Manager System Settings.

After enabling or disabling this option, the database is refreshed on the application. The Refresh Dimensional Metadata job is initiated to copy the metadata.

The following jobs may be queued if they are triggered:

- LCM Import
- LCM Export
- Import Tasks
- Import Reports

As the Year value can be modified from FY00 format to numerical format and vice versa, the preceding jobs are blocked until the Refresh Dimensional Metadata job is completed.

After the database is refreshed, you must sign-off and sign-in to view the alias support. All dimensions will be realigned with the application dimension definitions. All references to the year dimension and members will automatically be updated. Custom Report definitions may need to be revised depending on how the Year dimension was referenced.

Enabling Artifact Labels

Enabling Artifact Labels for Task Manager allows Administrators to enter translated labels in different languages for artifact properties such as a Task's name or description. These labels will be displayed to users based on their language preference. If an Artifact Label hasn't been entered for the user's preferred language, then the original label entered in the artifact property, or the default artifact label, is shown.

To enable artifact labels:

1. Go to **Applications** > **Task Manager** > **System Settings**.
   The Manage System Settings page is displayed.
2. Click **Translation** and then select the **Enable Artifact Labels** option.
   The setting is saved and will be effective after you re-login.

   When you re-login, to access Artifact Labels, go to **Application** > **Task Manager** and click the **Artifact Labels** icon on the left. The Artifact Labels page is displayed.

Enabling Email Notifications

Service Administrators can set up Email Notifications for components such as Alerts, Task Manager, and Consolidation Journals. When you enable email notifications, batch notifications are generated. When the notification is no longer required, you can deactivate email notifications and reminders.

> **Note**
>
> By default, email notifications aren't enabled.

Administrators can also assign the number of days before a due date to send reminder notifications.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Due Date Reminder notifications are emailed to Assignees and Approvers in these conditions:

- Responsibility for a component action changes: Sent based on information in the action
- A due date is missed: Sent based on information in the action
- A due date is approaching: Sent based on the number of days in advance that you specify

To enable email notifications:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left.

   The Manage System Settings page is displayed.
3. Click **Email Notifications**.
4. Specify the following information:
   - **Email Notifications**: Select **Turn On** to enable the notification. Click **Turn Off** to disable the notification.
   - If you can edit the **From Address** field, enter an email address to indicate from where the user is receiving the notification. You can also include a product acronym. If you can't edit the **From Address** field, the default email address is displayed as `no.reply@epm.oraclecloud.com`.
     Email notifications also include the service name in the footer of the email. For example: "Note - This is an automated email notification generated from EPM Task Manager on efim.trcs".
   - **Number of days before due date to send reminder**
   - **User Specified**: Select this checkbox to allow users to customize their email notification settings. Users can personalize their email notification settings within their user preferences (**Tools** > **User Preferences** > **Notifications**).
     If you don't select this checkbox, then the user inherits the settings made by the administrator.
   - **Email Start Time** and **Email End Time**: Specify the time period in a day when scheduled emails will be sent. This setting will take effect in each user's individual time zone.
5. For each component, you can specify the **Notification Type**. The types of notifications are:
   - **Late Notifications** (for Task Manager)
   - **Status Change Notifications** (for Alerts, Task Manager and Consolidation Journals)
   - **Due Date Reminder Notifications** (for Task Manager)
6. Select an option in the **Notify Me** column for each notification or notification type to indicate the frequency of the notifications:
   - **Immediately**: Email notifications are sent immediately.

     > **Note**
     >
     > If you set **Notify Me** to **Immediately**, the email notifications are sent immediately even when it is outside of the user's email start/end time.

   - **Once a day**
   - **Every 2 hours**

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Every 3 hours**
- **Every 4 hours**
- **Every 6 hours**
- **Mixed**
- **Never**: Select this option to deactivate a notification. This option is only applicable for **Status Change Notification** and **Due Date Reminder Notification**. For **Late Notification**, only the following notification types get this option:
  - You are the task owner and task assignee is late
  - You are the task owner and task approver is late

For each type of notification, expand the required component, and choose when to be notified. For example, for **Status Change Notification**, expand **Task Manager**. For **You are the task approver and task approver is late**, select **Every 2 hours** as a choice of notification.

If an Administrator disables the **Email Notifications** in Services, then notifications are suspended.

For more information, see Managing Notification Types and Settings.

See also "Notifications" under Setting User Preferences in *Administering and Working with Enterprise Profitability and Cost Management.*

Managing Notification Types and Settings

Service Administrators can define the default settings for the notifications for all users for the following components:

- Alerts
- Task Manager
- Consolidation Journals

Alert Notifications

Status Change Notification Options

Notification Type	Notify Me Options
You are the alert approver and alert status changes to open with approver	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the alert assignee and alert status changes to open with assignee	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Copyright © 2022, 2026, Oracle and/or its affiliates.

Notification Type	Notify Me Options
You are the alert owner and alert status changes to open with assignee	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the alert owner and alert status changes to open with approver	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the alert owner and alert status changes to completed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the alert owner and alert status changes to open with owner	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are an alert viewer and alert status changes to open with owner	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are an alert viewer and alert status changes to open with assignee	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are an alert viewer and alert status changes to open with approver	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Copyright © 2022, 2026, Oracle and/or its affiliates.

Notification Type	Notify Me Options
You are an alert viewer and alert status changes to completed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

> **Note**
>
> When selecting an option other than **Immediately**, any Alerts that are associated with Pending or Locked Schedules will not be emailed.

Task Manager Notifications

Late Notification Options

Notification Type	Notify Me Options
You are the task approver and task approver is late	• Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task assignee and task assignee is late	• Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task owner and task assignee is late	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task owner and task approver is late	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Copyright © 2022, 2026, Oracle and/or its affiliates.

Status Change Notification Options

Notification Type	Notify Me Options
You are the schedule owner and schedule is created	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the schedule owner and schedule status changes to open	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the schedule owner and schedule status changes to closed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the schedule owner and schedule status changes to locked	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the schedule viewer and schedule is created	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the schedule viewer and schedule status changes to open	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the schedule viewer and schedule status changes to closed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Copyright © 2022, 2026, Oracle and/or its affiliates.

Notification Type	Notify Me Options
You are the schedule viewer and schedule status changes to locked	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task assignee and task status changes to open with assignee	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task approver and task status changes to open with approver	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the backup assignee, and the primary assignee is unavailable	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the backup approver, and the primary approver is unavailable	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task authorizer and schedule status changes to open	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task owner and task status changes to open with assignee	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Copyright © 2022, 2026, Oracle and/or its affiliates.

Notification Type	Notify Me Options
You are the task owner and task status changes to open with approver	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task owner and task status changes to closed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task owner and task status changes to force closed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task owner and task status changes to aborted	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task viewer and task status changes to open with assignee	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task viewer and task status changes to open with approver	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task viewer and task status changes to closed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Copyright © 2022, 2026, Oracle and/or its affiliates.

Notification Type	Notify Me Options
You are the task viewer and task status changes to force closed	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task viewer and task status changes to aborted	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the journal submitter, and the journal needs to be posted	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the journal approver, and the journal needs approval	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Due Date Reminder Notification Options

Notification Type	Notify Me Options
You are the task approver and task is "At Risk"	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task assignee and task is "At Risk"	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task owner and task is "At Risk"	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Copyright © 2022, 2026, Oracle and/or its affiliates.

Notification Type	Notify Me Options
You are the task assignee and assignee due date is within 1 days	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the task approver and approver due date is within 1 days	• Never • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Consolidation Journals

Status Change Notification Options

Notification Type	Notify Me Options
You are the journal approver, and the journal needs approval	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day
You are the journal submitter, and the journal needs to be posted	• Never • Immediately • Every 2 hours • Every 3 hours • Every 4 hours • Every 6 hours • Once a day

Email notifications for Journal actions are based on entity access, not on the Consolidation Journal roles. Users that do not have the Consolidation Journal roles and that should not be receiving emails should disable Consolidation Journal notifications from User Preferences.

To disable Consolidation Journal notifications:

1. From the Home page, select **Tools**, then **User Preferences**.
2. Select **Notifications**, then **Status Change Notification,** then select **Consolidation Journals**.
3. Change the setting for **You are the journal submitter and the journal needs to be posted** to **Never**.
4. Change the setting for **You are the journal approver and the journal needs approval** to **Never**.
5. Save the changes.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Setting Task Manager Governors

In Task Manager, you can set governors on various system settings and the system provides default settings which you can decrease or increase up to the maximum value. For example, you can specify the maximum number of rows to display in lists.

- **Maximum Number of Items displayed in a List**: Determines the maximum number of rows displayed in a List view; for example, Schedule Tasks.
- **Maximum Approver Levels**: Determine the number of levels that a task might be reviewed.
- **Select maximum file upload size (MB)**: Determines the maximum attachment file size that users can upload. This setting helps administrators adapt to work within limitations of the environment in which the application is installed.

To set Task Manager governors:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left.
3. On the **Manage System Settings** page, click **Governors**.
4. Specify a maximum value or leave the default setting:
   - **Maximum Number of Items displayed in a List**: The default is 10000.
   - **Maximum Approver Levels**: Select a value from 1 to 10.
   - **Select maximum file upload size (MB)**: Select a value from 5 MB, with incremental values of 5 MB, up to 100 MB.
5. In the **Reports** section, change the setting only if instructed by Oracle Support.
6. In the **Dashboards** section, set **Execute Queries in Parallel** to **Turn On** to enable parallel execution for operational dashboard queries. The default is **Turn Off**.

> **Note**
>
> This setting affects all operational dashboard objects such as Task Manager, Supplemental Data, Enterprise Journals, and Alerts.

7. Click **Save**.

Allowing Reassignment Request Approvals

As an Administrator, you can specify which workflow users can directly perform and approve reassignment requests rather than submitting requests to an Administrator or Power User for approval.

Users can then approve reassignment requests from their Worklist.

Service Administrators should also see the reassignment requests if they are required to approve the requests in case the Task Owner is unavailable.

To allow workflow users to perform reassignments:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Select **Reassignment Requests**.
4. For **Allow reassignment request approval by**, select one or more options:
   - **Administrator**
   - **Power User**
   - **Users**

Reopening Tasks

In Task Manager, there might be times when users need to reopen a task. Administrators can specify whether to allow open or closed tasks to be reopened.

To allow reopening of tasks:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left.
3. Select **Reopen**.
4. Set the conditions to allow reopening of a task that is Open with an Assignee or Approver. For **Task is Open with Assignee or Approver**:
   - **Not Allowed**: This is the default option and assignees or approvers cannot change the workflow of an open task after it has been submitted or approved.
   - **Allowed for all approvers**: Allows approvers who have approved a task to return the workflow to themselves.
   - **Allowed for all assignees and approvers**: Allows an assignee who has submitted a task or an approver who has approved a task to return the workflow to themselves.
5. Set the conditions to allow reopening closed tasks. For **Task is Closed**:
   - **Not Allowed**: This is the default option and users will not be able to reopen a closed task.
   - **Allowed for final approver**: Allows only the final approver to reopen and return the workflow to themselves.
   - **Allowed for all approvers**: Allows an approver to reopen and return the workflow to themselves.
   - **Allowed for all assignees and approvers**: Allows assignees and approvers of a task to reopen and return the workflow to themselves.

Settings for Task Manager Reports

When generating reports in Microsoft Excel format, a row that spans multiple lines may result in empty rows displayed after the row that contains data. This may cause a problem if you've scripts that perform calculations on a row value. Task Manager provides a setting to control the display of these extra rows.

To resolve this issue, you must modify the template file of the report by performing the following:

- Remove any empty lines from the table row
- Change the row height of the row to 0

Alternatively, Task Manager provides a setting to control the display of these extra rows. This setting applies to all the reports.

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left.
3. Click **Reports**.
4. Unselect **Enable Row Split** to ensure that multiple rows aren't displayed for each row of data in Microsoft Excel.

Setting Export to Excel Format

To export data to Microsoft Excel, you can set the format to .xls or .xlsx.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab on the left.
3. Click **Reports**.
4. In **Export Excel Format**, select one of the following options:
   - **Excel 97 - 2003 (.xls)**: Exports data in tables to .xls format.
   - **Excel (.xslx)**: Exports data in tables to .xlsx format.

Specifying Task Display in Smart View

You can configure the display of Task Manager tasks when they are launched from Oracle Smart View for Office by selecting columns to display; for example, Task Attributes.

To select columns to display in Smart View:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **System Settings** tab.
3. Select **Smart View**.
4. Under **Column Selection**, from the **Available** list, select the columns to display, then click the **Add** arrow keys to move them to the **Selected** column, or **Remove** to remove them.

   You can select a maximum of 30 columns, and reorder the columns as needed.
5. Click **Save** to save your selection.

Displaying Upcoming Tasks in Worklist and Welcome Panel

As an administrator, you can decide whether to show only Current Tasks, or Current and Upcoming Tasks in the Workflow of the Worklist and Welcome Panel.

If you enable Current and Upcoming Tasks, users can see items currently available to work on, and also items in the upcoming workflow. For example, users can see an upcoming task that is due for them to approve, but not immediately available, as the preparer has not yet finished the task.

You also have the option to display the tasks with description (default) or by the Task ID/ Organizational Unit.

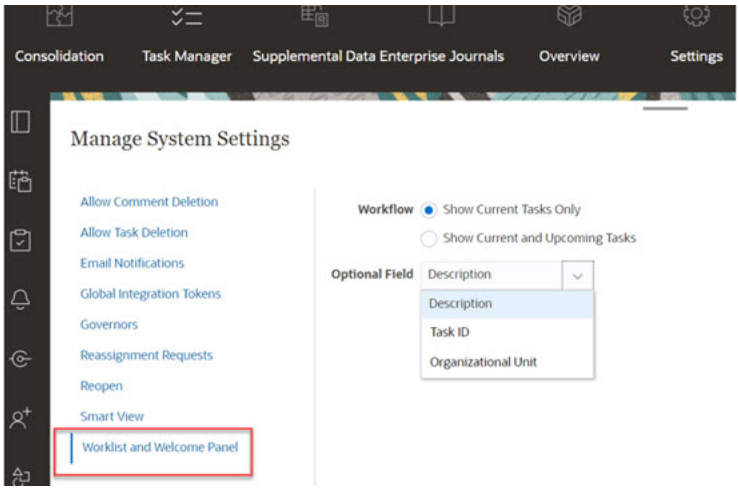
By default, the system displays only Current Tasks.

To set the display for tasks:

1. On the Home page, click **Application**, and then click **Task Manager**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click the **System Settings** tab on the left.
3. Select **Worklist and Welcome Panel**.
4. Select an option for **Workflow**:
   - **Show Current Tasks Only**
   - **Show Current and Upcoming Tasks**
5. Select an option for **Optional Field**:
   - **Description** (default)
   - **Task ID**
   - **Organizational Unit**



Using Oracle Cloud Object Storage to Store Attachments

Related Topics

- About Using Oracle Cloud Object Storage to Store Attachments
- Understanding What is Stored on OCI Object Storage
  Enterprise Profitability and Cost Management automatically handles moving files to and from OCI Object Storage so users can upload and view attachments seamlessly.
- Steps to Use OCI Object Storage with Enterprise Profitability and Cost Management

About Using Oracle Cloud Object Storage to Store Attachments

Customers who have a large Enterprise Profitability and Cost Management database mainly due to the number of uploaded attachments should use **Oracle Cloud Infrastructure (OCI) Object Storage** to store the attachments. Using a separate storage option will allow a large reduction in the size of the LCM snapshot so the backup, download and restore steps will be more streamlined (for example, when restoring a snapshot from test to production, or when downloading a snapshot for offline storage). Another advantage is that using OCI Object Storage allows you to increase the maximum attachment size from 20 MB to 100 MB. It is a highly recommended best practice to use OCI Object Storage.

OCI Object Storage requires its own subscription and configuration so this feature is optional. If you choose to set it up, attachments are stored in OCI Object Storage going forward and existing attachments will be moved to OCI Object Storage once configured.

Copyright © 2022, 2026, Oracle and/or its affiliates.

When you create an application using a snapshot or by cloning, and the source application uses OCI Object Storage to store attachments, the password required to access the OCI Object Storage bucket is not exported in the new application for security reasons. The recommended best practice is to separately clone your source OCI Object Storage bucket, and configure the new bucket on the new application. See Setting Up OCI Object Storage in Enterprise Profitability and Cost Management.

Note

- Once you start using OCI Object Storage, you cannot go back to using the Enterprise Profitability and Cost Management database for these attachments.
- During cloning if the source is set to use object storage in between, then after migration, sometimes the overall statistics about the attachments on the target (OCI) doesn't match the source because of the following:
  - **Orphan records**: When orphan references at source (that are considered for statistics at source) are migrated, they get lost at the target system because they aren't associated with any objects. This causes a mismatch in the statistics at target when compared to source. For example, orphan references are created when an alert has comment references and the comments are deleted but the references aren't deleted at source.
  - **Duplicate attachments**: For duplicate attachments at source, only the distinct reference for statistics at source are considered. However, after migration, each duplicate record has its own unique reference at target because they are migrated as part of different artifacts. This causes mismatch in the statistics.

Note

This is applicable only for Task Manager.

Understanding What is Stored on OCI Object Storage

Enterprise Profitability and Cost Management automatically handles moving files to and from OCI Object Storage so users can upload and view attachments seamlessly.

Some examples of what Enterprise Profitability and Cost Management stores in OCI Object Storage are attachments for Task Manager.

A unique ID is generated for each attachment that is created in Task Manager. This ID is used as the file name when the attachment is stored in OCI Object Storage. The name actual name of the attachment file is stored as a property of the object storage file. For example, assume that you add an attachment with the file name `fx_translations.xlsx` to Task Manager. A unique ID, say `fpbh-2765`, is generated for this attachment. This attachment is stored in OCI Object Storage with the name `fpbh-2765` and the actual name of the attachment file, `fx_translations.xlsx`, is stored as a property of `fpbh-2765` in OCI Object Storage. To determine the actual name of an attachment file, use **View Details** for the file in OCI Object Storage.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Enterprise Profitability and Cost Management does not delete any files from OCI Object Storage. Instead, OCI Object Storage attachments are purged based on the Retention Policy set in OCI Object Storage. See Using Retention Rules to Preserve Data.

Steps to Use OCI Object Storage with Enterprise Profitability and Cost Management

The following are the high-level steps for using OCI Object Storage with Enterprise Profitability and Cost Management.

1. Subscribe to OCI Object Storage. See Oracle Cloud Infrastructure - Cloud Storage.

   To review the user assistance for OCI Object Storage, see Overview of Object Storage.

2. Create the environment required to store attachments in OCI Object Storage. This includes setting up the bucket (logical storage location in OCI Object Storage) in which attachments will be stored.

   See Setting Up OCI Object Storage.

3. Configure Enterprise Profitability and Cost Management to store attachments in OCI Object Storage.

   See Setting Up OCI Object Storage in Enterprise Profitability and Cost Management.

4. Configure Backup and Disaster Recovery for object storage. For more information, see *How can I set up backup and disaster recovery for my own Object Storage bucket?* section in Backup and Disaster Recovery in *Getting Started Guide for Administrators*.

> **Caution**
>
> If an Object Storage bucket is accidentally deleted, it cannot be recovered. Therefore, it is vital that you configure backup and disaster recovery for buckets that store your data.

Setting Up OCI Object Storage

A separate subscription to **OCI Object Storage** is required to use this feature. Note that a Bucket is a logical container in **OCI Object Storage** for storing objects. In the context of Task Manager , your attachments are considered objects.

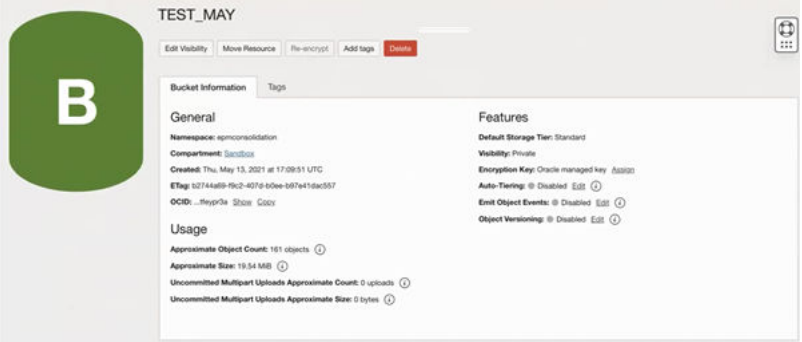
The high level steps in **OCI Object Storage** are listed here:

1. Create a Bucket in **OCI Object Storage** to store your attachments. For instructions, see Creating a Bucket.

> **Note**
>
> You can create a bucket in an existing compartment or create a new compartment for the attachments.

Here's an example of a set up Bucket.

Copyright © 2022, 2026, Oracle and/or its affiliates.



To enable you to test access to the bucket and to switch seamlessly from a test environment to a production environment, it is recommended that you create two folders within the bucket – one folder for the test environment and another folder for the production environment. For example, if you create a bucket named `task_manager_rec_data` to store your attachments, create folders `test` and `prod` within this bucket. During the implementation phase, use the `test` folder by specifying the bucket URL as `<bucket_url>/test`. When moving to the production environment, switch the bucket configuration to `<bucket_url>/prod`. The folder `test` can subsequently be deleted without any impact in the production environment.

2. Ensure that Auto-Tiering is disabled for the bucket. See Managing Auto-Tiering for an Object Storage Bucket.
3. You need to keep the **Lifecycle Policy Rules** as is in **OCI Object Storage**. Do not change this.
4. Optional: **Retention Rules** in **OCI Object Storage** follow your company's audit requirements (for example five to seven years).
5. In **Oracle Cloud Infrastructure** (OCI), you need to create a user for Enterprise Profitability and Cost Management and grant that user at least READ and WRITE access but do not grant DELETE access. The user can be an **Identity and Access Management** (IAM) user or a Federated user.
   We recommend a separate user be created for accessing Object Storage for Enterprise Profitability and Cost Management. This user has to be granted privileges to access to the attachment storage bucket and to manage objects in the bucket.
6. You need to create a group to assign policies.

   Access to Object Storage is managed by **Identity and Access Management (IAM)** policies. Common object storage policies can be found in Let users write objects to Object Storage buckets

   To create **IAM** policies, see Getting Started with Policies

   Here is an example of the policy that is required.

   - `Allow group EpcmAttachmentWriters to read buckets in compartment ABC`
   - `Allow group EpcmAttachmentWriters to manage objects in compartment ABC where all {target.bucket.name='EpcmAttachments', any {request.permission='OBJECT_CREATE', request.permission='OBJECT_INSPECT', request.permission='OBJECT_READ'}}`
7. An auth token has to be created for the user. For details, see Working with Auth Tokens

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The auth token will not be displayed after it has been created so make a note of the token since it will be used later in the configuration process.

8. Once you have created the Bucket and created a user, you need to set up **OCI Object Storage** in Enterprise Profitability and Cost Management so that the connection is made using the **Bucket URL**, **Username** , and **Password**. See Setting Up OCI Object Storage in Enterprise Profitability and Cost Management.

Setting Up OCI Object Storage in Enterprise Profitability and Cost Management

To set up **OCI Object Storage** in Enterprise Profitability and Cost Management for Task Manager attachments:

1. Go to **Navigator** and click **Connections** under **Tools**.
   The Manage Connections page is displayed.
2. Click **Create** to create a connection.
   The Select Provider to Create Connection dialog box is displayed.
3. Click **Other Web Service Provider**.
   The Enter Connection Details dialog box is displayed.
4. Specify the following details:
   - **Connection Name**: Name of the Object Storage connection.
   - **Description**: Brief description about the connection.
   - **URL**: Object Storage bucket URL. It's the URL of the Oracle Object Storage Cloud bucket.
   - **User** and **Password**: User name and password you created for Enterprise Profitability and Cost Management in **Oracle Cloud Infrastructure**.

   > **Note**
   >
   > If the user was created in the Federated Identity Provider, then the user name has to be prefixed with the Federated Identity Provider name. For example: `oracleidentitycloudservice/username`. For password, you must use the auth token as the password, not the login password.
5. Click **Save and Close** to save the Object Storage connection details.
6. Go to **Home** > **Applications** > **Task Manager**.
7. Click **System Settings** tab.
   The Manage System Settings page is displayed.
8. Click **Object Storage** and from the **Connections** drop-down list, select the Object Storage connection.
   The **Bucket URL** is populated automatically.

   The URL format is:`https://swiftobjectstorage.region_identifier.oraclecloud.com/v1/namespace/bucket_name` where:
   - `region_identifier` is the hosting Oracle Cloud Infrastructure (OCI)

Copyright © 2022, 2026, Oracle and/or its affiliates.

- `region.namespace` is the top-level container for all buckets and objects. Each Oracle Cloud Infrastructure tenant is assigned a unique system-generated and immutable Object Storage namespace name at account creation time. Your tenancy's namespace name, for example, `axaxnpcrorw5`, is effective across all regions
- `bucket_name` is the name of a logical container where you store your data and files. Buckets are organized and maintained under compartments.

An example URL is: `https://swiftobjectstorage.us-ashburn-1.oraclecloud.com/v1/epmcloud/fccsAttachments`

If you created folders within your bucket, the URL format is `https://swiftobjectstorage.us-ashburn-1.oraclecloud.com/v1/epmcloud/`*`bucket_name/folder_name`*, where `folder_name` is the name of the folder containing the data.

9. Click **Validate and Save**. The system validates to make sure the connection is working properly and creates and reads a test file.
The Object Storage confirmation dialog box is displayed.
10. Click **Continue**. A batch job starts immediately that will move attachments currently in the database to the specified Object Storage location. Henceforth, all attachments will be saved in the Object Storage location instead of the database. You can't revert to the database once the attachments are stored in Object Storage location.
11. Statistics display depending on whether you are an existing customer or a new customer first setting up **OCI Object Storage** and Enterprise Profitability and Cost Management:
    - Number of migrated attachments: How many attachments are migrated.
    - Size of migrated attachments (MB): Size of attachments that are migrated.
    - Number of pending attachments: How many attachments are still pending for migration.
    - Size of pending attachments (MB): Size of the attachments pending for migration.
    - Number of all the attachments: How many total attachments are in the system (includes migrated attachments plus pending migration attachments plus newly added attachments).
    - Size of all the attachments (MB): Size of all attachments in the system

    > **Note**
    >
    > After migration from test environment to production environment, if you do not update the manual step of connections details, then uploading and downloading attachments within the application results in an error. Download will happen with 0 bytes and upload will result in validation error.

    - If you are an existing customer, you will see statistics relating to migration of the attachments from the Enterprise Profitability and Cost Management database to **OCI Object Storage**. You will see statistics increment as attachments are moved. Enterprise Profitability and Cost Management takes the attachments from the database and moves files to **OCI Object Storage** in the Bucket you have set up. This is performed based on the **Bucket URL**, along with the user name and password you created for Enterprise Profitability and Cost Management in **Oracle Cloud Infrastructure**. The attachments are moved from the database into **OCI Object Storage** and then removed from the database.

      After the first time migration, uploads and downloads of attachments are stored and retrieved from **OCI Object Storage**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- If you are new to Enterprise Profitability and Cost Management, many of the statistics shown will display as zero since you are not moving existing attachments to **OCI Object Storage**.

Here's a sample screenshot of the statistics.

Clicking **Reset** will reset to the last connection that worked.

Troubleshooting Configuration Problems

When setting up **OCI Object Storage**, if you see the following error, there may be problem with the bucket URL or credentials:

```
Error: Unable to connect to the Object Storage service using the specified URL
and credentials.
```

Use any REST client such as cURL or Postman to test the bucket URL and credentials.

The format of the cURL command is as follows: `curl <bucket URL> -u "<username>:<password>"`

Following is an example of a cURL command to test your URL and credentials:

```
curl https://swiftobjectstorage.us-ashburn-1.oraclecloud.com/v1/epmcloud/
taskAttachments -u "username:password"
```

Managing Task Manager Attributes

Attributes are user-defined fields defined centrally by administrators and used in many places.

You can specify different value types for attributes: Date, Date/Time, Integer, List, Multi-Line Text, Number, True/False, Text, User, and Yes/No. For example, you can define a custom attribute named Auto Submit with a value type of Yes or No. When you assign the Auto Submit attribute to an item, you can set it to Yes for tasks required by external users.

If you select the List type, you can define a pick list of values. For example, you can define a List attribute named Sales Region, with North, South, East, and West as values.

You can create, edit, and delete attributes.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The maximum number of Task Manager attributes that you can create or import is 10,000.

Defining Task Manager Attributes

To define a Task Manager attribute:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Attributes** tab on the left.
3. Click the **New** icon, then on the **Properties** tab specify the following properties:
   - **Name**: You can enter a maximum of 80 characters.

     > **Note**
     >
     > You can create an object using the same name that you used earlier and deleted. Any objects that were previously linked to the deleted object will be associated with the new object.

   - **Description**: You can enter a maximum of 255 characters.
   - **Type**:
     - **Date**
     - **Date/Time**
     - **Integer**: Allows a value between -2147483648 and 2147483647. For **Total**, specify the totaling method for the attribute:
       - **None** (default): No total is calculated.
       - **Average**: The average of the rows with data. Rows without data are not counted in the denominator
       - **Count**: The count of the rows with data.
       - **Sum**: Additive total.
     - **List**: Click **List Values** to enter a list of valid responses to the question. You can enter a maximum of 255 characters.
     - **Multi-Line Text**: Click **Format** and specify the **Number of Lines**, from 3 to 50 lines. Multi-Line Text determines how many lines of text are visible, without scrolling, on the Actions dialog boxes. The maximum length should be less than 4,000 characters.

       Select **Include Attachments** if you want to include an **Attachments** section on the Actions dialog box.
     - **Number**: Enter a value xxxxxxxxxxxxxxxxx.xxxxxxxxx (17 digits and 9 decimal places). Click **Format** and select number formatting options:
       - For **Decimal Places**, enter a value for the number of decimal places to display.
       - For **Display As Percentage**, select if you want a percentage to display.

Copyright © 2022, 2026, Oracle and/or its affiliates.

    - Select the **Thousands Separator** option if you want numbers to display a thousands separator (for example, 1,000.00).
    - For **Currency Symbol**, select a currency symbol; for example, $ (United States of America Dollar).
    - For **Negative Number**, select how to display negative numbers; for example, (123).
    - For **Scale**, select a scale value for numbers; for example, 1000.
  - **Text**: Enter a maximum of 4000 characters.
  - **True/False**
  - **User**
  - **Yes/No**
- **Calculation**: Select to add logical and mathematical functions for attributes in the **Calculation** tab.

  See Defining Calculation Attributes.

Defining Calculation Attributes

Calculation attributes enable you to add logical and mathematical functions to derive values for attributes. They can be embedded within other calculated attributes to produce complex functions. Calculated attributes are read-only. They can only be evaluated against Schedules.

Schedules: You can add any Calculation and the calculation is evaluated, regardless of whether or not it was explicitly assigned to the task.

Templates: You cannot add a custom attribute that has the Calculation option selected as a column or a filterable attribute.

When administrators add attributes to the Attributes sections in the Actions dialogs, they are viewable by workflow users. Administrators can restrict access to certain roles by setting the access to Do Not Display. For example, for calculated attribute XYZ, an administrator could set the access to `Viewer: Do Not Display` so that the XYZ attribute is not displayed for users with only the Viewer role.

Any user role can add calculated attributes as columns in views and portlets. They can also be added as filterable attributes in the Filter Panel.

To define a calculation attribute:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Attributes** tab on the left.
3. Click **New** icon, and then on the **Properties** tab enter a **Name** for the attribute, and then select an attribute **Type**.
4. Select the **Calculation** option.
5. On the **Calculation** tab, select a **Calculation Type**.

You can select from the following calculation types. The available types are determined by the attribute **Type** (**Text**, **Integer**, and so on).

- **Assign Value to List**: Assign custom values to a List type attribute
- **Assign List To Value**: Assign custom list values to the values of a different attribute. Only available for List type attributes.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Conditional**: A conditional calculation (If – Then – Else)
- **Scripted**: A free-form scripted calculation. Only available for attributes of type Integer, Multi-line Text, Number, or Text.

The following table lists the Calculation types available for each Attribute type.

Attribute Type	Assign Value to List	Conditional	Scripted	Assign List to Value
Date				
Date/Time				
Integer	X	X	X	
List		X		X
Multi-Line Text	X	X	X	
Number	X	X	X	
Text	X	X	X	
True/False		X		
User				
Yes/No		X		

Calculation Definition

The **Scripted** Calculation type enables you to enter a free-form calculation equation. You can use **Add Attribute** and **Add Function**:

- **Add Attribute**: Select an attribute and insert the attribute into the Calculation Definition box at the location of the cursor. If the cursor is in the middle of a word or attribute, the word/attribute will be replaced in the definition. The script format adds brackets {} around the name of the new attribute.

  The only available attributes are Schedule attributes.
- **Add Function**: Select a function and add the function to the Calculation Definition. The Function is added with placeholders for each parameter.

For example: Insert the DATE_DIFF function in the calculation definition:

```
DATE_DIFF(<Date1>, <Date2>, <Type>)
```

Then replace the placeholders with attributes:

```
DATE_DIFF( {Start Date}, {End Date}, 'DAYS')
```

Numeric and Date Functions

- **Absolute Value**: Returns the absolute value of a specified number. If a number is less than zero, the positive value of the number is returned. If the specified number is equal to or greater than zero, the specified number is returned.

  ```
  ABS(<Number>)
  ```
- **Add Month**: Returns a date offset a specified number of months from the starting date. The date will always fall in the specified month offset. If the starting date has a day value beyond what is in the offset month, the last day of the offset month will be used. For example, EDate (31-Jan-2017, 1) returns (28-Feb-2017). For Months, enter the number of months before or after the start date. A positive value for months yields a future date. A negative value yields a past date.

  ```
  ADD_MONTH(<Start Date>, <Months>, <Length>)
  ```

  Example: `ADD_MONTH(DATE(2017, 2, 15) 3)`

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Date**: Returns a date value based on specified integer values for the year, month and day.

  `DATE(<Year>, <Month>, <Day>)`

- **Date Difference**: Returns the difference in years, months, days, hours, minutes, or seconds between two dates. For DATE 1 and DATE 2, the values TODAY and NOW can be used, which denote the current date (with no time component) and date-time, respectively.

  `DATE_DIFF(<Date1>, <Date2>, <Type>)`

  Example: `DATE_DIFF( {Start Date}, 'TODAY', 'DAYS')`

- **Day**: Returns the day value of a date as an integer number

  `DAY(<DATE>)`

- **Extract Text**: Returns the substring within the value, from the specified positions.

  `SUBSTRING(<Value>, <Location>, <Length>)`

  Example: `SUBSTRING( {Name}, 4, 10)`

- **If Then Else**: Allows you to insert a conditional calculation into the scripted calculation. IF_THEN_ELSE calculations can also be nested to support ELSE IF type calculations.

  `IF_THEN_ELSE(<Condition>, <Value1>, <Value2>)`

  Example: `IF_THEN_ELSE( ( {Priority} = 'Low'), 1,IF_THEN_ELSE( ( {Priority} = 'Medium'), 2, IF_THEN_ELSE( ( {Priority} = 'High'), 3, 0)))`

  Example: `IF_THEN_ELSE( ( {Priority} = 'Low'), 'Good'`
  `IF_THEN_ELSE( ( {Priority} = 'Medium'), 'Better'. 'Best') )`

- **Instring**: Returns the index of the substring within the value.

  `INSTRING(<Value1>, <Value to Search>)`

  Example: `INSTRING({Name}, 'a')`

- **Length**: Takes a text value as a parameter and returns an integer which is the number of characters in the text. If the value is empty/null, the calculation will return 0.

  `Length ({<attribute>})`

  Example: `LENGTH("Value")` would return 5, and `LENGTH({Name})` would return the number of characters in the name of the object.

  Use the calculation with SUBSTRING to extract the last four characters of a text value.

  `SUBSTRING( {MyString}, LENGTH ({MyString}) - 4`

- **Lowercase**: Returns the value in lower case

  `LOWERCASE(<Value>)`

  Example: `LOWERCASE ({Task Code})`

- **Maximum**: Returns the maximum value from a list of attributes. There can be any number of parameters.

  `MAX <Value1>, <Value2>, <ValueN>)`

  Example: `MAX( {Scripted Substring Loc a}, {Scripted Substring Loc s}, {Scripted Substring Loc t} )`

- **Minimum**: Returns the minimum value from a list of attributes. There can be any number of parameters.

  `MIN (<Value1>, <Value2>, <ValueN>)`

Copyright © 2022, 2026, Oracle and/or its affiliates.

Example: `MIN( {Scripted Substring Loc a}, {Scripted Substring Loc s}, {Scripted Substring Loc t} )`

- **Month**: Returns the month value of a date as an integer number (1-12)

  `MONTH (<DATE>)`

- **Power**: Raises one number to the exponential power of another.

  `POWER(x,y) where x=BASE NUMBER,and y=EXPONENT` and x and y can be attributes or calculations, as long as they are numeric.

  Example: `POWER(3,4)=81`

> **Note**
>
> Fractional values will reduce the number to its root. For example, `POWER(27, 1/3) = 3` the cube root.
>
> Negative values will perform an inverse of the exponential calculation. For example, `POWER(2, -2) = 1 / (2^2) = 1 / 4 = .25`.

- **Round**: Returns the value rounded to the decimal places specified

  `ROUND <Attribute>, <Decimal Places>)`

  Example: `ROUND( ({Scripted Substring Loc t} / 7), '4')`

- **Text Location**: Returns the index of the substring within the value, starting at 1 as the first position.

  `INSTRING(<Value>, <Value To Search>)`

  Example: `INSTRING( UPPERCASE( {Name} ), 'TAX' )`

- **Uppercase**: Returns the value in upper case.

  `UPPERCASE(<Value>)`

  Example: `UPPERCASE( {Name} )`

- **Year**: Returns the year value of a date as an integer number.

  `YEAR (<DATE>)`

Calculation Validation

The following validation checks are performed when you save the Calculation:

- The syntax of the Calculation is correct.
- The Attributes and Functions specified in the Calculation exist.
- Parameters to Functions are correct.
- No Circular Loops exist.

Importing List Attributes

To import Task Manager attributes of the List type:

1. Create an import file of List attributes in a TXT file format, with each value on a separate line.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example:

```
Blue
Yellow
Red
Green
```

The import option is always "Replace All".

2. On the Home page, click **Application**, and then click **Task Manager**.
3. Click the **Attributes** tab on the left.
4. Select an attribute of type **List**, and click **Edit**.
5. Click the **Import** icon.
6. For **File**, click **Choose File**, find a TXT import file, and then select a **File Delimiter**.
7. Click **Import**. **Import List Values** displays the values: Total List Values, Completed, Errored, List Values Created, and List Values Updated.

   If **Completed Successfully**, click **OK**.

   If **Completed with Errors**, the errors are listed. To export the error list, click **Export to Excel** .

Editing Attributes

You can edit the name of a custom Task Manager attribute. If the attribute type is a List, you can also add, rename, or delete list values.

To edit Task Manager attributes:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Attributes** tab on the left.
3. Select an attribute and click **Edit**.
4. Edit the attribute name.

> **Note**
>
> If the attribute is a List type, you can add, rename, or delete list values. After a custom attribute is saved, you can't change its type.

5. Click **OK**.

   All related templates, schedules, task types, or tasks are updated.

Duplicating Attributes

You can duplicate attributes.

To duplicate attributes:

1. On the Home page, click **Application**, and then click **Task Manager**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click the **Attributes** tab on the left.
3. Select an attribute to duplicate, and click **Duplicate**.
4. Click **Close**.

Deleting Attributes

You can delete attributes that you no longer need. When you delete an attribute, the system removes all references to the attribute.

To delete attributes:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Attributes** tab on the left.
3. Select the attributes to delete, and click **Delete**.
4. At the confirmation prompt, click **Yes**.

Viewing Attributes

In Attributes, you can specify which columns to display for the list of attributes, or show all. You can also reorder columns, sort columns by ascending or descending order, and change the column widths.

To display columns:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Attributes** tab on the left.
3. Do one or more of the following tasks:
   - To display all columns, select **View**, then **Columns**, and then select **Show All**.
   - To display specific columns, select **View**, then **Columns**, and then select or deselect the column names.
   - To reorder columns, select **View**, and then **Reorder Columns**, select columns and use the Up or Down arrows or drag them to change the order.
   - To sort columns, hover over a column header until the Sort icons are displayed, and then click **Sort Ascending** or **Sort Descending**.
   - To change column widths, hover over the column header dividers until the arrows display, and drag the columns to the desired width.

Searching for Attributes

You can use the Search function in the Attributes list to find attributes for Task Manager tasks. You can enter full or partial names on which to search. Using the filter bar, you can control the attributes that you see in the list. By default, all attributes are displayed.

To search for Task Manager attributes:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Attributes** tab on the left.
3. To search for an attribute, enter search criteria in the **Search** text box.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. **Optional:** From the filter bar, click on a category to display additional search operators such as **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Starts With**, and **Ends With**.

   You can filter attributes using these categories: **Name**, **Type**, **Calculation**, **Created By**, **Created On**, **Last Updated By**, or **Last Updated On**.

> **Note**
>
> - Click **Add a Filter** to view all categories.
> - To hide the filter bar, click the **Filter** icon.
> - To clear all filters, click **Clear All Filters** in the
>
> icon.

Managing Artifact Labels in Task Manager

Administrators can enter translated labels in different languages for artifact properties like a Task's Name or description using the Artifact Labels page. These labels will be displayed to users based on their language preference. If an Artifact Label hasn't been entered for the user's preferred language, then the original label entered in the artifact property, or default artifact label, is shown.

The Artifact Labels list is automatically updated when a new artifact is added to the application.

Artifacts that have the exact label for a property appear only once within the listing. For example, a task named "Review Plan Operating Expenses" appears in multiple monthly schedules. The Artifact Labels list shows only one entry for a Task with the Name - "Review Plan Operating Expenses" and shares all entered language labels.

Editing an artifact property, such as renaming a task, creates a new entry within the artifact label list, which requires new language labels to be entered.

An artifact label is removed from the Artifact Label list when all instances of the artifact referring that label have been removed from the application. For example, all tasks named "Review Plan Operating Expenses" need to be deleted from all the monthly schedules before it's removed from the Artifact Label list.

> **Note**
>
> You must have the **Task Manager - Artifacts – Manage** role to access the Artifact Labels. Additionally, the **Enable Artifact Labels** option must be enabled. For more information, see Enabling Artifact Labels .

View Artifact Labels

To view artifact labels:

1. Go to **Application** > **Task Manager** and click the **Artifact Labels** icon on the left. The Manage Artifact Labels page displays a list of artifact labels with the following information:
   - **Artifact Type**: Type of artifact such as Schedule, Task, and Template.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Property**: The artifact property such as Name or Description.
- **Default**: Default label entered on the artifact.
- **English**: Text to be displayed in English language.
- **Created By**: Indicates the user that created the default artifact label.
- **Last Updated By**: Indicates the last user to update the artifact label.

Optionally, you can click the **Customize Columns** icon and add or remove the required columns. Columns for each supported language is available. When you click **Customize Columns**, the Columns window is displayed. To show a column, in the Hide section, mouse grab the icon for the column name that you want to show and then drag and drop to the required position in the Show section. To show a column, in the Hide section, mouse grab the icon for the column name that you want to hide and then drag and drop to the required position in the Hide section. You can also use the following shorcut keys:

- Focus on a row, then use F2 followed by Space to select or deselect it.
- With focus on a row, use **CTRL+X**, followed by the Up or Down arrow keys to move to another row, then use **CTRL+V** to move the initial row above the current row.

2. Use the **Search** field and the filter clips to search for a required artifact label.

Edit a Artifact Label

To edit an artifact label:

1. On the Artifact Labels page, select the artifact label that you want to edit and click **Edit**. The Edit Languages panel is displayed with a field for each supported language.
2. Specify the translated text for the required language and click **Save**.

Edit Artifact Labels in Bulk

To edit the artifact labels in bulk, you can export the artifact list, update the file, and then import the file. Any translations in the import file updates the existing translations in the UI.

To export the list of artifact labels:

1. On the Artifacts page, click **Export**.
   The displayed artifact labels are exported to a CSV file and downloaded to your system.

   Optionally, you can limit the export to the artifact labels you want to edit by using the search bar and filter chips.
2. In the exported file, add new artifact labels within the language columns, and save the file. The exported file includes four columns that indicate the Artifact Type Id (ArtifactTypeID), Object Type (ObjectType), Property (Property), and the Default Label (DefaultLabel). The values within the rows in these columns can't be modified. Also, you can't remove these four columns.

   Additionally, there are columns for each supported language (LangXx). You can remove the language column that you won't update with artifact labels.

   The following table provides the language column codes.

Language Column Codes		
LangAr = Arabic	LangHe = Hebrew	LangPtBr = Portuguese (Brazil)
LangCs = Czech	LangHu = Hungarian	LangRo= Romanian

Copyright © 2022, 2026, Oracle and/or its affiliates.

Language Column Codes		
LangDa= Danish	LangIt = Italian	LangRu= Russian
LangDe= German	LangJa = Japanese	LangSv = Swedish
LangEn = English	LangKo= Korean	LangTh= Thai
LangEs = Spanish	LangNl = Dutch	LangTr = Turkish
LangFi = Finnish	LangNo = Norwegian	LangZhCn = Chinese (Simplified)
LangFr = French	LangPl = Polish	LangZhTw = Chinese (Traditional)
LangFrCa = French (Canada)	LangPt = Portuguese	

3. To import the translated artifact labels, click **Import** and select the updated CSV file that contains the translated artifact labels.
Initially a message at the bottom of the page is displayed indicating import has started.

   After some time, import completed successfully is displayed. You can click **View Details** to view the following import details:

   - File name
   - Type of import
   - Importer's name
   - Start time of the import operation
   - End time of the import operation
   - Status of the import:
     - If Success, the number of objects created, deleted, and updated are displayed
     - If Failed, the error and the details are displayed

4. Click **Refresh** to refresh the list of artifact labels.

Managing Task Types

Related Topics

- Task Types
- Creating Task Types
- Viewing Task Type History
- Editing Task Types
- Viewing Task Types
- Searching for Task Types
- Importing Task Types
- Exporting Task Types
- Deleting Task Types

Task Types

Task Types are saved definitions of commonly performed tasks. They identify and categorize tasks commonly performed during a business process, for example, Data Entry or General Ledger Extract. Task Types enable you to set default information, such as settings that must be

Copyright © 2022, 2026, Oracle and/or its affiliates.

input by the user, and questions or instructions that are shared by all tasks of that type. For example, if you have a set of required questions to be answered by users responsible for data loads, you can create a Data Load Task Type with the required questions. When you create data load tasks, you can select the Data Load Task Type and the questions are automatically included in the tasks.

Two predefined Task Types are installed by default:

- Basic Task: Basic Task Type that does not contain instructions, questions, or attributes.
- Parent Task: Enables you to create parent tasks to define task hierarchies.

To create and manage Task Types, you must be assigned the Service Administrator or Power User security role. Power Users can create their own Task Types, but can only view those of others.

> **Note**
>
> EPM Enterprise subscriptions are configured with additional Task Types for all local integrations for the business process. New Integration Task Types will be automatically added to the service when new predefined integrations are enabled.

See Managing Integrations with Cloud EPM Services and Managing Integrations with Cloud Applications.

Creating Task Types

Task Types enable you to set default information for a task, such as settings that need to be input by the user, or questions or instructions that are shared by all tasks of that type.

To create a Task Type:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Click **New**.
4. See also:
   - Setting Task Type Properties
   - Setting Task Type Parameters
   - Specifying Task Type Instructions
   - Specifying Task Type Questions
   - Working With Task Type Rules
   - Viewing Task Type History

Setting Task Type Properties

The Properties tab enables you to set the name, ID, and description, and associate an Integration Type.

For End User Types, you can allow an Assignee to open a pending task prior to the scheduled time, if all task predecessor conditions have been met.

To set Task Type properties:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Create a new Task Type.

   The **Properties** tab is displayed by default.
2. Enter a **Task Type Name**. You can enter a maximum of 80 characters.
3. Enter a **Task Type ID** that can be used to identify the Task Type. You can enter a maximum of 80 characters.
4. Enter a **Description** for the Task Type. You can enter a maximum of 255 characters.
5. To specify an Integration, click the magnifying glass to search for and select an Integration, then click **OK**. Selecting an Integration enables the Task Type to inherit the parameters from that Integration.
6. **Optional:** For an End-User Type, select **Allow Early Start** to allow the Assignee to open the task before the scheduled start time.
7. See also:
   - Setting Task Type Parameters
   - Specifying Task Type Instructions
   - Specifying Task Type Questions
   - Working With Task Type Rules
   - Viewing Task Type History

Setting Task Type Parameters

The Parameters tab enables you to set the parameters for the Task Type.

> **Note**
>
> The Parameters tab is available only if you have selected an Integration that has parameters that must be defined. Parameter values can be set at the Task Type level or at the task level.

Some tasks contain parameters that need to be changed each time that they are applied to a schedule. For example, date-driven parameters for Data Entry tasks may need to be set to the current month each time they are added to a schedule. When you set Task Type parameters, you can specify which parameters can be overridden during the scheduling process.

To set Task Type parameters:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab, and then click **New**.
3. Enter **Task Type Name** and **Task Type ID**.
4. Select the **Parameters** tab.
5. Enter parameter values as required.
6. **Optional:** To enable the parameter to be overridden at scheduling time, select **Override at Scheduling**.
7. See also:
   - Setting Task Type Properties

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Specifying Task Type Instructions
- Specifying Task Type Questions
- Working With Task Type Rules
- Viewing Task Type History

Specifying Task Type Instructions

You can create a set of instructions for completing tasks. You can also add references to documents, files, or URLs to websites. For example, you can attach a policy document as a reference, or a link to a product instruction guide.

To specify instructions:

1. On the Home page, click **Application**, and then **Task Manager**.
2. Click the **Task Types** tab, and then click **New**.
3. Enter the **Task Type Name** and **Task Type ID**.
4. Select the **Instructions** tab.
5. In **Instructions**, enter the instruction text.

To add a reference:

1. In the **References** section, click **Add**.
2. From the **Type** list, select one of these types:
   - **Local File**: Click **Choose File** to select and attach the file, enter a **Name**, and then click **OK**.
   - **URL**: Enter the **URL** and a URL **Name**; for example, https://www.oracle.com, Oracle, and then click **OK**.

> **Note**
>
> You can add one or more attachments by using drag and drop functionality available from the **Add Attachments** dialog box. You can rename the attachment in the **Name** field, if desired. If you drag and drop multiple attachments, you can upload them at one time.
>
> You must access the **Add Attachments** dialog box to properly drag and drop attachments.

> **Tip**
>
> To delete a reference, select the reference, and click **Delete**.

3. See also:
   - Setting Task Type Properties
   - Setting Task Type Parameters
   - Specifying Task Type Questions
   - Working With Task Type Rules

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Viewing Task Type History

Specifying Task Type Questions

You can specify Task Type questions that apply to all tasks with that Task Type.

> **Note**
>
> The Questions tab is not available for a Task Type that uses an automated Integration.

To specify questions:

1. Create a new Task Type.
2. Select the **Questions** tab.
3. Click **New**.
4. From the **New Question** dialog box, for **Question**, enter the text for the question.
5. From the **Type** list, select a question type:
   - **Date**
   - **Date/Time**
   - **Integer**
   - **List**: Enter a list of valid responses to the question.
   - **Multi-Line Text**: The maximum length should be less than 4,000 characters.

     For **Number of Lines**, enter a value between 3 and 50 lines. Multi-Line text determines how many lines of text are visible, without scrolling, on the Actions dialog boxes.

     Select **Attachments** if you want the custom attribute to include an attachments section.
   - **Number**: Select formatting options to override the defaults set in the **Preferences** section of **System Settings**:
     - For **Decimal Places**, enter the number of decimal places to display.
     - Select **Display as Percentage** to display a percent sign.
     - Select **Thousands Separator** to display a thousands separator (for example, 1,000.00). The system displays the thousands separator symbol for the user locale.
     - For **Currency Symbol**, select the currency; for example, $ (United States of America Dollar).
     - For **Negative Number**, select how to display negative numbers; for example, (123).
     - To scale a number, in **Scale**, select from 1000 to 1000000000000.
   - **True/False**
   - **Text**: The maximum length is 255 characters.
   - **User**
   - **Yes/No**

Copyright © 2022, 2026, Oracle and/or its affiliates.

6. Assign a **Role**. The purpose of assigning a role is to determine which role can answer the question:
   - **Assignee**
   - **Approver**
   - **Owner**
   - **Viewer**

   When re-ordering questions, you can only re-order within a role.
7. If the question is required, select **Required**.

   The **Required** checkbox is disabled for Questions assigned to Owner or Viewer roles.
8. Click **OK** to save the question.
9. **Optional:** To change the order of questions, select a question, then click **Move to Top, Move Up** **Move Down**, or **Move to Bottom.**
10. **Optional:** To edit a question, select the question and click **Edit**. To remove a question, select the question and click **Delete**.
11. Click **Save and Close** to save the Task Type.
12. See also:
    - Setting Task Type Properties
    - Setting Task Type Parameters
    - Specifying Task Type Instructions
    - Working With Task Type Rules
    - Viewing Task Type History

Assigning Task Type Attributes

To locate Task Types in the system, you can apply attributes to the Task Type. When you select an attribute, you can set a value for the attribute based on the attribute type. You can later filter by the attribute value.

For example, you may have a List attribute named Sales Region with the values of North, South, East, and West. The current Task Type applies only to the West Sales Region, so you can add the Sales Region attribute and set it to "West".

To apply an attribute:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left, and then click **New**.
3. Enter the **Task Type Name** and the **Task Type ID**.
4. Select the **Attributes** tab.

   Enables administrators to assign attributes and provide values for the attributes.

   To add an attribute, click **Add**. Enter:
   - **Attribute**: Select an attribute from the list of defined attributes.
   - **Type**: This field is not editable; it's populated by the Attribute.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Value**: Select a value associated with the type of attribute; for example, a numeric value for Formatted Number attribute, a List for List attribute, multiple lines of displayed text without scrolling for Multi-Line Text, a name of a person, User, or Yes or No for the Yes/No attribute.
- **Access**: All roles have view access unless otherwise specified in the Access box.

  To add an access, for each of the roles:

  a. Click ➕ **Add**.

  b. Select a role: **Owner**, **Assignee**, **Approver**, with separate roles for each Approver level currently in use in the application, or **Viewer**.

  c. Select one of the Role access types.

  - **Do Not Display**: Does not see this attribute on the Task Actions dialog box, or in any of the dashboards, list views, or reports.
  - **Allow Edits**: Has the ability to add, change, and remove values for the attribute, but subject to the editability rules.
  - **Required**: Requires a value for the attribute. The **Required** option is available for Assignees and Approvers. Until a value is provided, Assignees are prevented from submitting, and Approvers are prevented from approving.

  d. Click **OK**.

5. Click **OK**.
6. See also:
   - Setting Task Type Properties
   - Setting Task Type Parameters
   - Specifying Task Type Instructions
   - Specifying Task Type Questions
   - Working With Task Type Rules
   - Viewing Task Type History

Working With Task Type Rules

Task Type Rules apply to all Tasks of the same Task Type and thus serve as a convenient mechanism to apply rules to groups of Tasks. Rules configured on the Task Type dialog propagate down to the Edit Task Dialog, appearing on the Rules tab in that dialog, in read-only form for template tasks, and copied to schedule tasks.

Available task type rules:

- **Auto Approve Task** : Automatically completes specified approvals only if specified conditions have been met.
  Example of conditions that could apply to this rule: If attributes have specified values (including calculated attributes)

  When conditions are satisfied, the specified approver levels are marked as complete, thus progressing workflow to the next approval level, or to Closed if no additional approval levels exist.

  Auto Approve Task runs when the Task status changes to Open with Approver.
- **Auto Submit Task**: Causes a task to be submitted automatically if specified conditions are met.

Copyright © 2022, 2026, Oracle and/or its affiliates.

When conditions are satisfied, the assignee role is marked as complete, thus progressing workflow to the first approval level, or to Closed if no approval levels exist.

Auto-Submit Task rule runs when the Task status changes from Pending to Open with Assignee.

- **Prevent Task Approval**: This rule prevents approval of a task based on attribute values, or other characteristics. This rule runs when the Approver clicks **Approve**.
- **Prevent Task Submission**: This rule prevents submission of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit**.
- **Prevent Task Rejection**: This rule prevents rejection of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit**.
- **Send Email on Update**: This rule runs based on user actions on the task. Hence, you must set the conditions for the rule appropriately. The most common condition is to have a condition with the Status attribute or the Status Detailed attribute:
  - Status attribute: The only valid value that you can select is Closed. Pending, Open, and Error are all statuses that result from automated actions on the task.
  - Status Detailed attribute: The valid statuses are with the approver.

To work with task type rules:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Click a task type and then click **Edit**.
4. Select the **Rules** tab. You can view the following information:
   - **Order**: The order of precedence
   - **Rule**: Name of the Rule
   - **Conditions**: The choice of what conditions must exist before running the rule
5. To edit a rule, on the Rules tab, click **Edit** and update:
   - **Rule**: Select a rule.
   - **Description**: **Optional.** Explain why you configured the rule and how it should be used.
   - Message (for some rules as noted below):
     - **Message to Approver**: Define an optional message to approver in a **Prevent Task Approval** rule.
     - **Message to Assignee**: Define an optional message to assignee in a **Prevent Task Submission** rule.
   - **Approver Level**: For certain rules, select the rule for **All Levels** or select the Approver levels.

> **Note**
>
> The **Approver Level** must be set on the **Auto Approve Task** rule, and the **Prevent Task Approval** rule.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Select **Create Filter** and populate the conditions section or select **Use Saved Filter**, and then select a filter. The filter selected and configured for the rule determines the conditions that trigger the rule to apply.
- For **Conditions**, select one:
  - **Use Saved Filter**: The **Condition** section displays a read-only version of the conditions associated with the saved filter.
  - **Create Filter**: The **Condition** section is enabled.

    Conjunction, **Source**, **Attribute**, **Operator**, and **Value** behave as they do for the existing advanced filter feature.
- For **Filter Task**, specify on which task the conditions should be selected:
  - **Current Task**
  - **Any Predecessor**
  - **Specific Task**: Provide the **Task ID**.

> **Note**
>
> When you make changes to a rule definition, the additional information is added to the audit log. You can view the changes both in the **History** tab as well as the **Audit Report**.

6. See also:
   - Setting Task Type Properties
   - Setting Task Type Parameters
   - Specifying Task Type Instructions
   - Specifying Task Type Questions
   - Viewing Task Type History

Viewing Task Type History

The system maintains a history of Task Type actions, which you can view from the View Task Types dialog box. The History tab displays the components that were updated, the modification type, the old and new values, the user who made the modification, and the change date. The information on the History tab is read-only and cannot be changed.

To view Task Type history:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Select a Task Type and click **Edit**.
4. Select the **History** tab.
5. When you finish, click **Save and Close** or **Cancel**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Editing Task Types

From the Task Types dialog box, you can edit Task Types. For example, you can add or delete attributes, edit parameters, add or delete questions, edit instructions, or change the order of questions.

Editing Task Types may have an effect on tasks that are created from the Task Type. For tasks in a template, the effect is immediate. Changes to the Task Type (instructions, questions, and so on), are automatically updated in tasks of that type. There is no effect if you edit a Task Type in a schedule.

To edit a Task Type:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Select the Task Type that you want to edit.
4. Use one of these methods:
   - Select the **Actions** icon to the right of the Task Type, and then select **Edit**.
   - Click the **Edit** icon.
   - Right-click and select **Edit**.
5. Select the tab for the information you want to edit and edit the Task Type.
6. Click **Save and Close**.

Viewing Task Types

In Task Types, you can specify columns to display for the list of Task Types, or show all. You can reorder columns, sort columns by ascending or descending order, or change the column widths.

To display columns:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Do one or more of the following tasks:
   - To display all columns, select **View**, then **Columns**, and then select **Show All**.
   - To display specific columns, select **View**, then **Columns**, and then select or deselect the column names.
   - To reorder columns, select **View**, and then **Reorder Columns**. Select columns and use the Up or Down arrows or drag them to change the order.
   - To sort columns, hover over a column header until the Sort icons are displayed, and then click **Sort Ascending** or **Sort Descending**.
   - To change column widths, hover over the column header dividers until the arrows display, and drag the columns to the desired width.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Searching for Task Types

You can use the Search function in the Task Types list to find Task Types. You can enter full or partial names on which to search. Using the filter bar, you can control the task types that you see in the list. By default, all task types are displayed.

To search for task types:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. To search for a task type, enter search criteria in the **Search** text box.
4. **Optional:** From the filter bar, click on a category to display additional search operators such as **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Starts With**, and **Ends With**.

   You can filter task types using these categories: **Name**, **Task Type ID**, **Integration**, **Execution Type**, **Created By**, **Created On**, **Description**, **Last Updated By**, **Last Updated On**, and **User Created**.

> **Note**
>
> - Click **Add a Filter** to view all categories.
> - To hide the filter bar, click the **Hide Filter Bar** icon.
> - To clear all filters, click the **Filters** icon, and then click **Clear All Filters**.

Importing Task Types

You can import Task Types or partial Task Type information from text files. The process is similar to importing tasks into a template.

> **Note**
>
> Task Type rules cannot be imported. Use Migration to import Task Type rules.

To import Task Types, you must have the Service Administrator or Power User security role.

To import Task Types:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Click **Actions**, and then **Import**.
4. Click **Choose File** and navigate to the file.
5. Select an **Import Type**:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Replace**: Completely replaces the definition of a Task Type with the definition in the import file. This option replaces all Task Type detail with the information that is in the file that you are importing. It does not affect Task Types that are not specified in the import file.

  The system displays a warning that task types matching a task type ID in the import file will be modified. If you do not want to overwrite the task type, click **Cancel**.

  > **Note**
  >
  > You can select the **Keep Attachments** checkbox to retain attachments to task types that are being replaced.

- **Update**: Updates partial information for Task Types. This option is not a full replacement of the Task Type details. Only details for the Task Type properties specified in the file are updated.

6. Select a **Date Format**.

   Select a format from the drop-down list of allowed date formats. Date formats are not translated. By default, the date format is set to the locale date format of the exported file location.

7. Select a **File Delimiter** for the import file. Choose **Comma**, **Tab**, or choose **Other** to specify any single character for the **Other Delimiter**.

8. Click **Import**.

Exporting Task Types

You can export Task Types to a comma-separated values (CSV) file, which can be read by Excel, then modified and reimported.

> **Note**
>
> Task Type rules can't be exported. Use Migration to export Task Type rules.

To export Task Types:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Select one or more task types, click **Actions**, and then select **Export**.
4. In the **Export Task Types** dialog, select from the following export options:
   - For **Rows**, select **All Task Types** or **Selected Task Types**.
   - For **Format**, select **Formatted data** or **Unformatted data for future import**.
5. Click **Export**. The file is downloaded in Excel or CSV format depending on the selection: **Formatted data** or **Unformatted data for future import**.
6. Click **Close** to close the Export Task Types dialog.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Deleting Task Types

You can delete Task Types that you no longer need. To delete a Task Type, you must have Service Administrator or Power User security rights.

> **Note**
>
> You cannot delete a Task Type if tasks belong to it.

To delete a Task Type:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Select the Task Type that you want to delete.
4. Use one of these methods:
   - Select **Actions**, and then **Delete**.
   - Click the **Delete** icon.
   - Right-click and select **Delete.**
5. At the confirmation prompt, click **Yes.**

Managing Task Templates

A task template defines a repeatable set of tasks required for a business process. It is used as a basis for creating schedules. You can create templates for different types of processes.

Template tasks are not assigned to specific days on a calendar, but are defined using generic days, for example, day-3, day-2, day-1, day 0, based on the process activities. You apply the task flow defined in the template to calendar dates when you create schedules.

If you are a Service Administrator or Power User, you can view, create, edit, and delete templates.

> **Note**
>
> The maximum number of task templates that you can create or import is 10,000.

Creating Task Templates

Administrators create templates for repeatable tasks in a business process. You can create templates for different types of business processes, such as monthly or quarterly. For example, you can save a set of tasks required for a monthly close and use the same template every month.

When you create a template, you set template properties such as a name, description and time span. You can specify instructions, attributes, rules, and day labels, and assign owners and viewers.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Watch this video to learn about creating task templates.

Creating Task Templates.

To create a template:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Click **New**.
4. Enter the necessary information in the template sections:
   - Setting Template Properties
   - Specifying Template Instructions
   - Assigning Viewers to Templates
   - Applying Template Attributes
   - Specifying Day Labels
   - Embedding Templates
   - Working With Template Rules

Setting Template Properties

The Properties tab enables you to specify the template name, description, owner, and time span.

You must assign a template owner to every template, which must be a Service Administrator or Power User. The current ID is the default owner. The template owner is also the default owner of all tasks in the template unless overridden at the task level.

Tasks in a template are organized by numeric template days. Each template has a Day Zero. You can specify the number of days a template tracks before and after the Zero day. Days before Day Zero are represented as Day-5, Day-4, and so on. Days after Day Zero are represented as Day 3, Day 4, and so on. A template has at least one day (Day Zero), even if you do not specify days before or after it.

To set template properties:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. From the **New** or **Edit Template** dialog, on the **Properties** tab, enter:
   - **Name**: You can enter a maximum of 80 characters.
   - **Description**: You can enter a maximum of 255 characters.
   - **Organizational Unit**
4. Enter the time span for the template.
   - For **Number of Days Before Day 0,** select a number.
   - For **Number of Days After Day 0,** select a number.
5. **Optional:** Select **Embedded Only** if the template is only to be used as an embedded template.

Copyright © 2022, 2026, Oracle and/or its affiliates.

If this option is enabled, the template is not allowed to be deployed. This prevents supporting templates from being deployed by mistake.

6. For **Owner**, use the default owner or click **Select Owner** . Administrators, or Power Users configured with the Administrator or Power User roles are the only roles that will display when you click **Search** to select a user to assign as an Owner. Any member of the Shared Services group can perform the role, but the same person cannot perform more than one role.
7. Enter the necessary information in the template sections:
   - Specifying Template Instructions
   - Assigning Viewers to Templates
   - Applying Template Attributes
   - Specifying Day Labels
   - Embedding Templates
   - Working With Template Rules

Specifying Template Instructions

You can specify instructions in the template for completing the business process. Users can view the instructions from tasks in the template. The instructions are also transferred to each schedule.

You may want to supply additional detail to help users understand the purpose of the template and how to complete the tasks. You can attach additional references.

You can easily see if a task includes instructions within the Schedule Task and Template Task lists. You can add the Instructions column to your list view and see the textual instructions for the task.

To specify template instructions:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. From the New or Edit Template dialog, select the **Instructions** tab.
4. In **Instructions**, enter instruction text for each task in the template to include.
5. Click **OK**.

To add a reference:

1. In the **References** section, click **Add**.
2. From the **Reference Type** list, select one of these types:
   - **Local File**: Click **Choose File** to select and attach the file, enter a name, and click **OK**.
   - **URL**: Enter the URL, then enter a URL name; for example: https://www.oracle.com., Oracle, and then click **OK**.
3. Enter the necessary information in the template sections:
   - Setting Template Properties
   - Assigning Viewers to Templates
   - Applying Template Attributes

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Specifying Day Labels
- Embedding Templates
- Working With Template Rules

Assigning Viewers to Templates

The Viewers tab enables you to assign viewer rights to users who may view tasks in the schedule and schedule tasks that are generated from the template. You can assign multiple users to a template as viewers. Viewers can be a team or group assignment. A Power User viewer can view the template details and template tasks as read-only. A Viewer has no template access, and only read-only access to schedules produced from the template.

> **Note**
>
> Only users who have the task Viewer role can respond to questions.

To assign viewer rights:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. From the New or Edit Template dialog, select the **Viewers** tab.
4. Click **Add**.
5. To search by users or groups, click **Search Users**, then select **Users** or **Groups**.
6. Enter a full or partial user name, then click **Search**.
7. To specifically identify a user, click **Advanced**, then enter a **User ID** or **Email** address.
8. From the **Search Results** list, select users, then move them to the **Selected** pane.
9. For additional details about the user, such as groups or roles, click **Details**.
10. Click **Add** or **Add All** to move users to the **Selected** list.

> **Tip**
>
> To remove users, select them, and then click **Remove** or **Remove All**.

11. Enter the necessary information in the template sections:
    - Setting Template Properties
    - Specifying Template Instructions
    - Applying Template Attributes
    - Specifying Day Labels
    - Embedding Templates
    - Working With Template Rules

Copyright © 2022, 2026, Oracle and/or its affiliates.

Applying Template Attributes

To locate templates in the system, you can apply attributes to the template. When you select an attribute, you can set a value for the attribute based on the attribute type. You can later filter by the attribute value.

For example, you may have a List attribute named Sales Region with the values of North, South, East, and West. The current template applies only to the West Sales Region, so you can add the Sales Region attribute and set it to "West".

To apply an attribute:

1. On the Home page, click **Application,** and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. From the **New Template** or **Edit Template** dialog, select the **Attributes** tab.
4. Click **Add**.
5. From the **Attribute** list, select an attribute. The **Type** field is not editable; it's populated by the Attribute.
6. For **Value**, depending on the attribute, select a value for the attribute from a drop-down list, or enter a value.
7. Click **OK**.
8. Enter the necessary information in the template sections:
   - Setting Template Properties
   - Specifying Template Instructions
   - Assigning Viewers to Templates
   - Specifying Day Labels
   - Embedding Templates
   - Working With Template Rules

Specifying Day Labels

You can customize the names of days in the template. Editing the name of the day does not change its sequential order.

Day Labels created in a template are copied to any schedule created from the template.

To specify day labels:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. From the **New Template** or **Edit Template** dialog, select the **Day Labels** tab.
4. Select a day to rename.
5. Rename the day from its default value to a custom name. You can enter a maximum of 20 characters.
6. Click **OK**.
7. Enter the necessary information in the template sections:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Setting Template Properties
- Specifying Template Instructions
- Assigning Viewers to Templates
- Applying Template Attributes
- Embedding Templates
- Working With Template Rules

Embedding Templates

You can reuse tasks from one task template in another by embedding one template into another template. When you schedule tasks for a template, tasks for embedded templates are also scheduled. For example, you may have two templates that are essentially the same, with some additional tasks for one of the templates. You can specify that one template embeds the second template so if you change one template, you don't need to update the other one. When you generate a schedule, it will include the tasks from the other template.

For example, you can have a core set of monthly tasks and you can extend that for your quarterly close by creating a new template called quarterly tasks and embed the monthly tasks and add a few additional tasks. Additionally, they can create an Annual template and embed the quarterly template and add additional new tasks as needed.

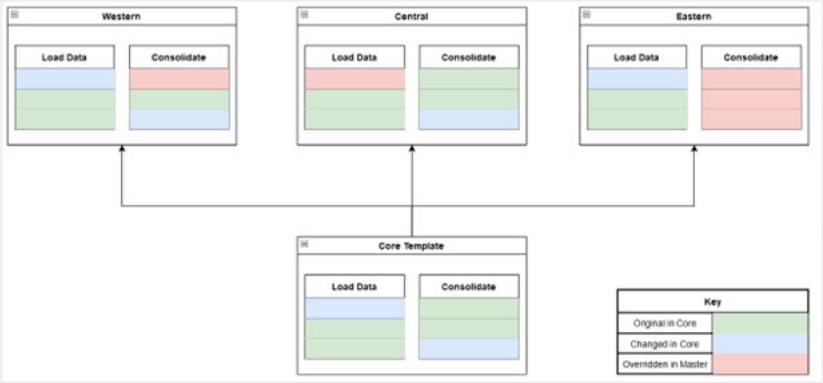
When you select a template to embed within your template, you can have the option to make the embedded template's tasks editable within your template. When you embed a template as editable, you can edit the embedded template tasks allowing overrides on the task properties within the containing template. You can create an embed only template with the core set of common tasks, which multiple groups can leverage for their business process. Each group can then create a master template and embed the core template in their master template. Additional tasks specific to their group can be added in each of the master templates. They can make changes to the embedded tasks in the master template. The overridden fields are tracked in each master template.

Any changes to the core tasks that are not already overridden will appear immediately in the master template. Instead of deletion, the user can inactivate a core task in a particular master template so that it will not be deployed to a schedule. If any tasks are added to the core set, those will automatically flow into the different group's templates within the organization.

The following image shows how the fields are edited and overridden from the core template to the master templates:

- **Core Template**: Updates to the first field in the Load Data Task and the last field in the Consolidate Task will be carried through to the master Templates unless otherwise overridden.
- **Western Template**: First field of the Consolidate task is overridden.
- **Central Template**: Override to the first field of the Load Data Task will be used even though it has been updated in the Core Template.
- **Eastern Template**: All fields of the Consolidate Task have been overridden and these values will be used.

Copyright © 2022, 2026, Oracle and/or its affiliates.



> **Note**
>
> You can embed multiple levels of templates. For example, if Template A is embedded in Template B, then Template B can be embedded in another template. However, you can only edit the template up one level.

Embedded templates are task templates that are not designed to be deployed directly, but rather to be used by other templates that are directly deployed. Use the following columns to identify embedded templates:

- **Embedded**: A list of templates that are embedded in the current template. Blank if none.
- **Embedded In**: A list of templates that the current template is embedded in. Blank if none.

> **Note**
>
> These columns are not displayed by default, but are available from the **View** menu.

To embed templates:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. To identify previously embedded templates, click **View**, then **Columns**, and then select **Embedded In** or **Embedded Templates**.
4. In the **New Template** or **Edit Template** dialog, select the **Embedded Templates** tab.
5. From the **Templates** list, select a template to embed.
6. From **Embedded Mode** list, select one of the following:
   - View Only
   - Editable

> **Tip**
>
> To remove a template or templates, select the template from the **Embedded Template Name** list and click **Remove**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

7. Click **OK**.
8. Enter the necessary information in the template sections:
   - Setting Template Properties
   - Specifying Template Instructions
   - Assigning Viewers to Templates
   - Applying Template Attributes
   - Specifying Day Labels
   - Working With Template Rules

   When editing a task within an embedded template:
   - On the **Properties** tab, you can change the attribute value for all the properties except the **Task ID** and **Task Type**. When you change a value, the **Overridden** column displays **Yes** for the attribute.
   - On the **Instructions** tab, if the **References** section displays references from the core set of tasks, then you can't modify the references. However, you can add new references.
   - On the **Workflow** tab, if the embedded task has two approvers, you can't delete them because two approvers are mandatory. If you add a new approver, then you can delete the one of the existing approvers.
   - On the **Questions** tab, any questions from the core set are displayed as locked and you can't modify them. But you can add new questions. The same applies to the **Viewers** and **Rules** tabs.
   - On the **Predecessors** tab, all predecessors are defined in the core template, and you can't add new predecessors.
   - On the **Attributes** tab, you can add new and edit existing attributes. You can't reorder the attributes inherited from the core tasks, but the newly added attributes could be re-ordered.
   - You can't change the children for an embedded parent task.

   To clear overrides, select the required template task and click **Actions** > **Clear overrides**.

Working With Template Rules

Template rules apply to all tasks in the template, and rules are also applied to groups of tasks. Rules that you configure in the **Template** dialog box apply to the **Schedule** dialog box and the **Edit Task** dialog box, and they are displayed on the **Rules** tabs, in read-only form.

Template rules:

- **Auto Approve Task**: Automatically completes specified approvals if specified conditions have been met.
  Examples of conditions that could apply to this rule:
  - Attributes have specified values (including calculated attributes)
  - Predecessor task contains an attribute with a specified value

  When conditions are satisfied, the rule causes the specified approver levels to be marked as complete, and workflow progresses to the next approval level or is closed if no additional approval levels exist.

  This rule runs when the Task status changes to Open with Approver.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Auto Submit Task**: Automatically submits a task if specified conditions are met. When conditions have been satisfied, the rule causes the assignee role to be marked as complete, thus progressing workflow to the first approval level, or to Closed if no approval levels exist.

  > **Note**
  >
  > – Auto Submit Task runs when the Task status changes from Pending to Open with Assignee. Auto Submit Task rule honors predecessor relationship. It will only run when Finish-To-Finish predecessors have completed without error and Finish Error-To-Finish predecessors have completed. When a Finish-To-Finish predecessor is Closed by either user or rules, it should check for its Running successors and trigger Auto Submit Task rules if necessary.
  >
  > – Auto Submit Task rule is not triggered when the task has missing parameters.

- **Prevent Task Approval**: This rule prevents approval of a task based on attribute values, or other characteristics. This rule runs when the Approver clicks **Approve** or when the approver clicks **Actions** > **Update**.
- **Prevent Task Submission**: This rule prevents submission of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit** or when the assignee clicks **Actions** > **Update**.
- **Prevent Task Rejection**: This rule prevents rejection of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit** or when the assignee clicks **Actions** > **Update**.
- **Send Email on Update**: This rule runs based on user actions on the task. Hence, you must set the conditions for the rule appropriately. The most common condition is to have a condition with the Status attribute or the Status Detailed attribute:

  – Status attribute: The only valid value that you can select is Closed. Pending, Open, and Error are all statuses that result from automated actions on the task.

  – Status Detailed attribute: The valid statuses are with the approver.

  The rule runs when a user using the task action dialog:

  – Claims, releases, submits, approves, rejects, reopens, force-starts, or force-closes a task

  – Updates an attribute value

  – Answers a question

  – Adds a comment

  – Deletes a comment

  – Adds a reference attachment

To work with template rules:

1. On the Home page, click **Application**, then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Open a template.
4. Click the **Rules** tab. You can view the following information about the rules that are associated with a template:
   - **Order**: Order of precedence

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Rule**: Name of the rule
- **Conditions**: Conditions that must exist before running the rule

5. To create or edit a rule, on the **Rules** tab, click the **New** icon or select an existing rule and click the **Edit** icon.
6. On the **Properties** tab:
   - **Rule**: Select a rule.

     > **Note**
     >
     > When you make changes to a rule definition, the additional information is added to the audit log. You can view the changes both in the **History** tab as well as the **Audit Report**.

   - **Description**: **Optional.** Explain why you configured the rule and how it should be used. You can enter a maximum of 255 characters.
   - **Run When**: Indicates the events associated with the rule.
   - **Approver Level**: Select **All Levels** or select the Approver levels.
7. On the **Filter** tab:
   - Select **Create Filter** and populate the conditions section or select **Use Saved Filter**, and then select a filter. The filter selected and configured for the rule determines the conditions that trigger the rule to apply.
   - **Filter Task**: Specify for which task the condition should be selected:
     - **Current Task**
     - **Any Predecessor**
     - **Specific Task**: Provide the **Task ID**
   - **Conditions**:
     - **Use Saved Filter**: The **Conditions** section displays a read-only version of the conditions associated with the saved filter.
     - **Create Filter**: The **Conditions** section is enabled and you can click **Create Condition** or **Create Condition Group** to specify conditions.

       Conjunction, **Source**, **Attribute**, **Operator**, and **Value** behave as they do for the existing advanced filter feature.
8. To delete, duplicate, or reorder a rule, click the appropriate button and follow the instructions.
9. Enter the necessary information in the template sections:
   - Setting Template Properties
   - Specifying Template Instructions
   - Assigning Viewers to Templates
   - Applying Template Attributes
   - Specifying Day Labels
   - Embedding Templates

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Template History

The system maintains a history of template actions, which you can view from the Template dialog box. The History tab displays the components that were created or updated, the modification type, the old and new values, the user who made the modification, and the change date. The information on the History tab is read-only.

To view template history:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Select a template for which to view history and click **Edit**.
4. Select the **History** tab.
5. Click **OK**.

Opening Templates

You can open and work with templates from the Templates dialog box.

To open a template:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. From **Templates**, select a template.
4. Use one of these methods:
   - Click the **Actions** icon to the right of the template, and then select **Edit**.
   - Click the template.
   - Right-click and then select **Edit**.

Adding Tasks to Templates

You can add tasks to Task Manager templates. Each task has a start date and time. End-User tasks also have an end date and time when added to a template. The start day in a template corresponds to template days, rather than to calendar days.

> **Note**
>
> The maximum number of tasks that you can add to a Task Manager template is 500,000.

To add a task to a Task Manager template:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Select and open a template.

Copyright © 2022, 2026, Oracle and/or its affiliates.

If you have a large list of templates, enter a full or partial name in the **Search** box to search for templates from a list in the selection dialog.

4. Add tasks as required.
5. Click **OK**.

Editing Templates

You can edit Task Manager templates to change the properties, such as the name of a template and the number of days before and after Day Zero. If you reduce the number of days before or after the Day Zero, tasks associated with those days are removed. Editing a template has no effect on schedules previously generated from that template.

You can edit, copy, and delete tasks in a template.

You must be working in the source template to edit tasks from embedded templates.

To edit a Task Manager template:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Select a template and click **Edit**.
4. Edit the template properties.
5. Click **OK**.

Importing Tasks into Templates

You can import tasks, or partial task data, from text files such as a Microsoft Excel spreadsheet, into a template. For example, you can enter task definitions as rows in Excel, save the file as a comma-separated values (CSV) file, and then import it into a template. You can also use the Import feature to quickly add many repetitive tasks by editing the fields in a text file and importing it, rather than creating individual tasks.

> **Note**
>
> Before you import tasks into a template, you must specify task IDs that are unique in the template to ensure that no two tasks have the same ID.

To import tasks, you must have security rights to edit the template.

These options are available for importing tasks into a template:

- **Replace**: Replaces the definition of a task with the definition in the import file. This option replaces the task detail with the detail that is in the file that you are importing. It does not affect other tasks in the template that are not specified in the import file.
- **Update**: Updates partial information for tasks. For example, in the import file, you might have made changes to task instructions, reassigned Owners, Assignees, and Approvers, or removed some attributes and added new attributes. You might also have made the same change to a large number of tasks, for example, adding a new attribute to 100 of 400 tasks. The update option is not a full replacement of the task details. Only details for the task properties specified in the file are updated. For example, if the import file has only a

Copyright © 2022, 2026, Oracle and/or its affiliates.

column for a task instructions, the task name, Assignee, attributes, and other properties are not affected.

- **Delete**: Deletes tasks and associated information based on a list of task IDs provided in a file. The required information to perform a delete is a file with a column of task IDs.

To import tasks into a template:

1. On the Home page, click **Application**, and then click **Task Manager**,
2. Click the **Templates** tab on the left.
3. Select a template into which to import tasks.
4. Click **Import Tasks**.
5. Enter the name of the file to import, or click **Choose File** to find the file.
6. Select an import option:
   - **Replace**: Replaces the definition of a task with the definition in the import files. It does not affect other tasks that are not specified in the import file.

     > **Note**
     >
     > You can select the **Keep Attachments** checkbox to retain attachments to tasks that are being replaced.

   - **Update**: Updates partial information for tasks. For example, in the import file, you might have made changes to task instructions, reassigned Owners, Assignees, and Approvers, or removed some attributes and added new attributes. You might also have made the same change to a large number of tasks, for example, adding a new attribute to 100 of 400 tasks. The update option is not a full replacement of the task details. Only details for the task properties specified in the file are updated. For example, if the import file has only a column for a task instructions, the task name, Assignee, attributes, and other properties are not affected.

     > **Note**
     >
     > The system displays a warning that tasks in the template that match a task ID in the import file will be modified. If you do not want to overwrite the task, click **Cancel** to cancel the import process.

   - **Delete**: Deletes tasks and associated information based on a list of task IDs provided in a file. The required information to perform a delete is a file with a column of task IDs.
7. Select a **Date Format**.

   Select a format from the drop-down list of allowed date formats. Date formats are not translated. By default, the date format is set to the locale date format of the exported file location.
8. Select a **File Delimiter** for the import file. Select **Comma** or **Tab**. Select **Other** to specify any other single character as the **Other Delimiter**.
9. Click **Import**.

- If the import is successful, the Import Success dialog box is displayed, indicating the template name, the name of the file containing the tasks, and the total number of tasks imported. Click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- If errors are found, the import process is not run, and the Import Errors dialog box displays errors. View the errors, then click **OK** to return to the Templates page.

Table 28-13 Troubleshooting Import Errors

Error	Resolution
Duplicate Task ID	Check for duplicate Task IDs. Task IDs must be unique within the template or schedule. See Creating Tasks.
Task Name is too long	The Task Name can contain a maximum of 80 characters. See Setting Task Properties.
Organizational Value - "Invalid Value"	The Organizational Value cannot be blank, contain bullet points or multiple lines.

Task Import File Format

The task import file enables you to specify the task information that you want to import into a template. The first row contains only the column headings that identify the data in that column, for example, TaskName. Separate rows are used to define each task.

Each task in the file must be given a unique ID in the TaskID column. You use the numeric IDs to uniquely identify predecessors and parent tasks. For example, when you enter a parent task in the Parent column, you enter the numeric ID of the task rather than the task name.

When you use the Replace or Replace All options, you can add, remove, and shift the columns but you cannot remove required columns. When you use the Update option, there are no required columns except TaskID, or TaskTypeID when you are importing Task Types. The data in each column must match the column ID in the first row.

Many column IDs may have an indeterminate amount of values. For example, a task may have many viewers. You can add parameters by modifying the ending number, for example, Viewer4, Viewer5, and so on.

The numbers that you append to the column IDs for Approvers, Questions, or References only represent the relative order with the other approvers, questions, or references. When you update these, the system matches by the name of the approver, question, or reference without regard to the number in the file format column. To replace question text, approvers, or reference names, you must use Replace mode. When you select Update mode, the system only adds a new question, approver, or reference if the file names do not match.

All Text Lookup rows in the file must match values stored in the application. For example, if you are importing Task Types, you must have specified values for them when you set up the application. For groups of column headings, if you have a certain number of one of the group, you must have the same number for other members. For example, if you have QText5, there must be a corresponding QType5.

> **Note**
>
> When you need to create multiple lines of text in the import file (for example, in Instructions), use this syntax to indicate a new line: '\n'. Do not use hard returns to separate lines of text.

Column ID	Description	Type
TaskID	ID of task. Maximum of 80 characters.	Text

Copyright © 2022, 2026, Oracle and/or its affiliates.

Column ID	Description	Type
TaskName	Name of task	Text
TaskType	Task Type	Text Lookup
Description	Full description of task. Maximum of 1000 characters.	Text
Priority	Task priority (High, Medium, Low)	Text Lookup
StartDate	Start date, in template days (for example, -5, 0, 1, 12) For schedules, the start date must be a calendar date in the locale format.	Integer
StartTime	Start time in HH:MM (24-hour), for example: 13:00	Integer
EndDate	User tasks only, in template days (for example, -5, 0, 1, 12) For schedules, the end date must be a calendar date in the locale format.	Integer
EndTime	User tasks only, in HH:MM (24-hour), for example, 13:00	Integer
Duration	Task duration in minutes (automated tasks only)	Number
Owner	Task owner	Text Lookup
Assignee	Task Assignee (user tasks only)	Text Lookup
Active	Whether the task is active. Only applies to template import.	Boolean
StartEarly	Whether the Assignee is allowed to open a pending task prior to the scheduled start time	Boolean
RunAs	RunAs user name. Only applicable for system-automated tasks.	Text Lookup
Instruction	Instruction text. Maximum of 2 GB.	Text
Reference#	Instruction reference (URL and Content Server references)	URL
RefText#	Reference name, for URL references	Text
RefType#	Reference type (URL, Document)	Text Lookup
RefURL#	Reference URL, for URL references	URL
RefDocId#	Reference document ID, for document references	Integer
Approver#	Approver Level	User Name
Viewer#	Task viewer	User Name
QText#	Required for question. Text of question. Maximum of 255 characters.	Text
QType#	Required for question. Data type of question (Text, Member, True/False, and so on)	Text Lookup
QReq#	Required for question. Question required? (Yes or No)	Boolean

Copyright © 2022, 2026, Oracle and/or its affiliates.

Column ID	Description	Type
QList#	List of values for question, separated by | symbol, for example, Red|Green|Blue|Yellow.	Text Lookup
QCurrSymbol#	Currency format for question X	Text
QDecPlaces#	Number of significant digits after the decimal places for question X	Number
QNegNumFmt#	Negative number format for question X	Text: - or ( )
QScale#	Scale format for question X	Number, in magnitude: 1000 and so on
QThouSep#	Thousand separator indicator for question X	Boolean
Attribute#	Attribute name, for example, Color	Text Lookup
AttrVal#	Attribute value, for example, Red. Maximum of 255 characters.	Text
AttrDisplay	Display to user (in task action dialog box) for attribute	Boolean
Param#	Parameter name	Text Lookup
ParmVal#	Parameter value	Text
Parent	Task ID of the task parent	Task ID
Predecessor#	Predecessor task ID (from column A)	Task ID
PredType#	Required. Predecessor type (for example, Finish to Start).	Text Lookup
PredTemplate#	Name of the predecessor template or schedule, if the predecessor belongs to a different template or schedule	Text

When you import Task Types, these columns are used:

- TaskTypeID
- IntegrationType
- ParamOverride# - whether the parameter can be overridden

A sample task import file is provided. It contains these dynamic parameters, which you can modify:

- Two questions
- Two attributes
- Two instructional references
- Three predecessor tasks
- Three approver levels

Exporting Tasks to Microsoft Excel

You can export tasks from a template to a flat file in CSV format, then use Microsoft Excel to modify the file. For example, you can export the tasks from a template in a test installation and import them to a template in a production installation. When you export tasks from a template, they are saved to a CSV file.

To export tasks:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Click the **Tasks** tab.
4. Select one or more tasks and from the **Actions** menu, click **Export**. The file is downloaded in Excel or CSV format depending on the selection: Formatted data (visible columns only) or Unformatted data for future import.
5. Click **Close** to close the Export Tasks dialog box.

Reassigning Users in Templates

You may periodically need to reassign users to different tasks. For example, you may create a template and assign a user to certain tasks; however, later that employee leaves the company and another employee assumes those tasks. You can use the Reassign feature in the Templates dialog box to automatically change assignments instead of manually searching for, opening, and editing individual tasks. The Reassign feature enables you to quickly find the tasks associated with one user and reassign them to another.

You can reassign users for multiple templates at a time. This can be helpful if your application has a large number of templates.

You can select the roles for which to reassign users. For example, if you select the Owner role, the system reassigns the user only in tasks in which the user was assigned as the owner.

When tasks are reassigned, email notifications are sent immediately to reassigned users.

To reassign users:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Select one for more templates for which you want to reassign users.
4. Select **Actions**, and then **Reassign User**.
5. For **Find User**, enter the search criteria for the user that you want to replace:
   a. Click **Find User**, then from the **Select User** dialog box, enter the first or last name for the user, and then click **Search**.
   b. Select the user from the results, then click **OK**.
6. Click **Replace With** and enter search criteria for the user to whom you want to reassign tasks.
7. Select roles for the user that must be reassigned:
   - **Owner**
   - **Assignee**
   - **Approver**
   - **Viewer**
8. Click **Reassign**.

   When the process ends, the system displays a "Reassign Users - Success" message that indicates that the user reassignment is complete, and displays the template name and total number of user reassignments made.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating Schedules from Templates

You can create schedules from templates. Creating a schedule from a template populates the schedule with the tasks in the template. If the source template has embedded templates, the tasks in the embedded templates are included. Template instructions, viewers, and attributes are also added to the schedule.

To create a schedule from a template, you must have the Service Administrator or Power User role.

When tasks are added from a template to a schedule, they are assigned calendar dates based on their relationship to the Day Zero template date. Calendar dates can account for non-working days of the schedule if required. For example, if you exclude weekend days in your schedule, if Day 0 is a Friday, the tasks for Day 1 are applied to the following Monday instead of Saturday. The Date Map displays the calendar date assigned to each template day and you can use it to adjust date assignments.

> **Tip**
>
> You can create one global template and use that template to create the appropriate schedules for each regional entity, taking into consideration the holiday calendars, time zones, and work day configurations of the region.

A task in one template can have predecessor tasks in other templates. When you create a schedule from a template, you can select predecessor tasks in schedules as predecessors for tasks with predecessors in other templates. You use the Predecessor Task Links tab to select predecessor tasks in schedules.

By default, a new schedule has a status of Pending, which enables you to make changes as needed.

You can also use a REST API to create Schedules from Templates. This enables you to create an automated routine to generate all of your periodic task schedules. For more information, see Deploy Task Manager Templates in *REST APIs* .

To create a schedule from a template:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Select the template that you want to schedule.
4. If the template was successfully validated, create the schedule. Click the **Actions** icon on the right side, and then select **Create Schedule**, or click the **Create Schedule** icon.
5. On the **Schedule Parameters** tab, enter the following information:
   - **Schedule**: The name of the schedule.
   - **Year**: Select the schedule year.
   - **Period**: Select a period for the schedule.
   - **Day Zero Date**: Select the calendar date to assign to the template Day Zero.
   - **Date Mapping**:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Organizational Unit** - Select an option:
  - **Use Task Value**: Select a value from the Organizational Unit.
  - **Set Value To**: The selected organizational unit is applied to all tasks in the Schedule (even if the task in the template contained a different Organizational Unit value). Since all tasks have the same Organizational Unit, the Organizational Unit in the Date Mapping panel on the Create Schedule from Template dialog box is Read Only.
- **Calendar days**
- **Working days** - By default, Monday - Friday are working days, and Saturday and Sunday are non-working days.
- **Advanced Configuration** - Select this option to override the **Organizational Unit** and **Work Days** configuration for all tasks in the schedule.
- **Date Map**: To modify a date assignment, enter a new date in the **Date** column.

  Date mapping may vary by Organization Unit. If there is no Organization Unit assigned to the template level, the "Unassigned" day mapping will be applied to the schedule. If the template has an Organization Unit assigned, then the day mappings for that Organization Unit are assigned to the schedule.

  For multiple days mapped to the same date, the Day Labels will be concatenated with a comma. Non-working days have a blank Day Label.

6. **Optional:** Select the **Predecessor Task Links** tab, select the schedule that contains the predecessor task, then in the **Assigned Task** list, select the predecessor task.
7. **Optional:** Select the **Override Parameters** tab, review the parameters, and in the **New Value** column, for each parameter that you want to modify, enter a new value.

   > **Note**
   >
   > The **Override Parameters** tab displays only tasks that use a Task Type in which at least one parameter has the **Override** option enabled.

8. Click **Create Schedule**.

   A schedule is created and populated with the tasks from the template, and a status of Pending.

   You can view a list of schedules on the Schedule Tasks page.

   When deploying a template, only rules of the main template is copied to the deployed schedule. Rules of the embedded template isn't copied to the schedule or schedule tasks. Autosubmit rules are automatically run when schedule tasks are changing from Pending to Open with Assignee status, or when schedule tasks are re-opened. To understand the rules that will be run after deploying a template to schedule, you can click **Edit** to view the rules of a specific schedule task in **Tasks** > **Schedule Tasks** list.

   When deploying template tasks, by default, the timezone of the current user is used for scheduling unless the template task is associated with an Organizational Unit. When the Organizational Unit has a specified timezone, that timezone is used for scheduling the task.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Using the Override Parameter Option When Creating Schedules from Templates

It's common for an integrated task to have parameters that you must update periodically. Many integrated tasks have a **Period** parameter that varies between task executions in different schedules. For example, the **Run Data Rule** integrated task's **Start Period** and **End Period** parameters may need to be modified within different schedules created from the template.

The **Override Parameter** option allows a quick way to update these parameters, which you must update periodically.

Initially, designate the integration parameters that you must update at scheduling time by selecting the **Override at Scheduling** property in the task type. For new task types, see Setting Task Type Parameters. For existing task types, see Editing Task Types.

For example, edit the **Run Data Rule** task type. On the **Parameters** tab, select the **Override at Scheduling** option for **Start Period** and **End Period**, and then save.

Secondly, when adding the integrated tasks to your template, select the task type and populate the required parameters. For the parameters designated for override, you can provide the default values or leave them blank. See Adding Tasks to Templates in *Administering Financial Consolidation and Close*.

For example, add one or more **Run Data Rule** tasks to your template by selecting the **Run Data Rule** task type. On the **Parameters** tab, enter **Jan** for **Start Period** and **Feb** for **End Period**.

Lastly, when creating a schedule from template, select the **Override at Scheduling** tab. Within the table, all parameters that are designated for an override at scheduling will be listed with their current values. You can enter a new parameter value, which will be set for all tasks using the task type.

For example, when creating a schedule from the template, the **Override at Scheduling** tab will show the Run Data Rule **Start Period** and **End Period** parameters with their current values. You can override the parameter by updating the values within the table.

Table 28-14 Override Parameters at Scheduling

Task Type Name	Parameter Name	Current Value	New Value
Run Data Rule	Start Period	Jan	Feb
Run Data Rule	End Period	Feb	Mar

When the schedule is created, the Run Data Rule tasks will be set with **Start Period** as **Feb** and **End Period** as **Mar**.

Manually Validating Templates

When you generate a schedule from a template, the system automatically validates the template first to check for uniqueness violations, tasks that directly or indirectly depend on each other, or a date-precedence mismatch. For example, you cannot have circular predecessors.

You can manually validate templates. Validation is particularly useful to check for problems after you import tasks into a template from a file.

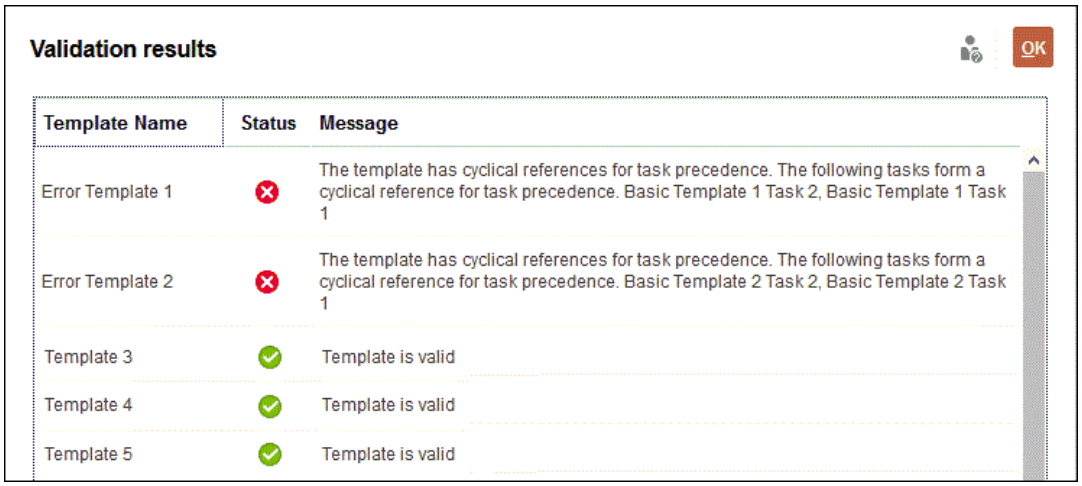
The validation results show the template names, status, and error messages. You can sort the list of validation results by Template Name or Status.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To manually validate templates:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. From **Templates**, select one or more templates to validate.
4. Click **Validate**.

   If no errors exist, the validation results show a "Template is valid" message. If errors exist, it shows the error details.



Viewing Task Manager Templates

In the Templates dialog box, you can specify which columns to display for the list of templates, or show all. You can also reorder columns, sort columns by ascending or descending order, or change the column widths.

To display columns:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Do one or more of the following tasks:
   - To display all columns, select **View**, then **Columns**, and then select **Show All**.
   - To display specific columns, select **View**, then **Columns**, and then select or deselect the column names.
   - To reorder columns, select **View**, and then **Reorder Columns**. Select columns and then use the Up or Down arrows or drag them to change the order.
   - To sort columns, hover over a column header until the Sort icons are displayed, and then click **Sort Ascending** or **Sort Descending**.
   - To change column widths, hover over the column header dividers until the arrows display, and drag the columns to the desired width.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Searching for Templates

You can use the Search function in a Templates list to quickly find Task Manager templates. You can enter full or partial names on which to search. Using the filter bar, you can control the templates that you see in the list. By default, all templates are displayed.

To search for templates:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. To search for a template, enter search criteria in the **Search** text box.
4. **Optional:** From the filter bar, click on a category to display additional search operators such as **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Starts With**, and **Ends With**.

   You can filter templates using these categories: **Name**, **Owner**, **Organizational Unit**, **Days After Day 0**, **Days Before Day 0**, **Embedded In**, **Embedded Only**, **Embedded Templates**, **Description**, **Created By**, **Created On**, **Last Updated By**, or **Last Updated On**.

> **Note**
>
> - Click **Add a Filter** to view all categories.
> - To hide the filter bar, click the **Hide Filter Bar** icon.
> - To clear all filters, click the **Filters** icon, and then click **Clear All Filters**.

Deleting Templates

You can delete Task Manager templates that you no longer need. To delete a template, you must have security rights to the template.

Deleting a template removes it from the list of available templates and removes tasks associated with it. It does not directly affect a running schedule, however some reporting and dashboard metrics may use the template to link various schedule runs together, which are not possible if the template is deleted.

To delete a Task Manager template:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left.
3. Select the template, and click **Delete**.
4. At the confirmation prompt, click **Yes**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Managing Tasks

Tasks are the core units of action in a business process, such as data entry or data consolidation.

Each task has different parameters depending on the Task Type. If you have Service Administrator or Power User security rights, you can create, edit, or delete tasks.

See Creating Tasks.

See also: Managing Services

Creating Tasks

You can add tasks to templates or schedules. If you create a task in a template, you assign the start and end date as days before or after Day Zero. If you create a task in a schedule, you select calendar dates for the start and end dates.

You can group tasks under parent tasks to provide a simpler view of the business process. After viewing upper-level parent tasks, you can then drill into the underlying tasks. Child tasks of parent tasks may have different owners than the parent task.

You can create a task using any of these methods:

- Drag and drop the Task Type onto a template or schedule in a view.
- Right-click on a task and select **New**.

Then enter the task information:

- Setting Task Properties
- Setting Task Parameters
- Specifying Task Instructions
- Selecting the Workflow
- Adding Task Questions
- Setting Task Viewers
- Setting Task Predecessors
- Applying Task Attributes
- Working With Task Rules
- Viewing Task History

To learn more about creating tasks, watch the video Creating Tasks.

For additional information on creating tasks, see the tutorial Viewing, Updating, and Adding Tasks in Task Manager.

Setting Task Properties

The Properties dialog enables you to set the task name, task ID, description, task type, priority, start and end date or duration.

Copyright © 2022, 2026, Oracle and/or its affiliates.

You also use Properties to specify task Owners and Assignees. If an Owner or Assignee is not available to work on the task (due to sick time, vacation, has left the company, or is simply too busy), you can reassign users associated with a task, template, or schedule. Template, schedule, and task Owners, Assignees, and Approvers may also reassign their tasks.

For end-user tasks, you can allow an Assignee to open a pending task prior to the scheduled time, if all task predecessor conditions have been met.

Automated tasks have no Assignees, however you can specify Run As users for users under which tasks of that type are run.

Event Monitoring tasks have no Assignees and Run As users.

To set task properties:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left and then click the **Tasks** tab.

> **Note**
>
> The **Tasks** tab is displayed at the bottom of the page.

3. Open a task.
4. Click **Properties** and enter this information:
   - **Task Name**: Enter a maximum of 80 characters or less.
   - **Task ID**: Identifies the task (required). Task IDs must be unique within the template or schedule. You can enter a maximum of 80 characters or less.
   - **Description**: Enter a maximum of 255 characters or less.

     > **Note**
     >
     > You can use carriage returns and URLs in Descriptions, Questions, and Instructions.

   - **Organizational Unit**: Represents a hierarchical entity-type structure that you can use to model your organization. Define a separate organizational unit for each entity for which separate reporting is required, or for entities that require different configurations for any of the following: time zones, holidays, work days, or viewer or commentator assignments. Organizational Units are defined in system settings.

     When deploying template tasks, by default, the timezone of the current user is used for scheduling unless the template task is associated with an Organizational Unit. When the Organizational Unit has a specified timezone, that timezone is used for scheduling the task.
   - **Task Type**: Click the magnifying glass and select a Task Type (required).
   - For **Priority**, select from the following options:
     - **High**
     - **Medium**
     - **Low**

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Owner**: Use the default owner or click **Select Owner** to select a user or group.
- Select **Active** to include this task in schedules generated from the template.

> **Note**
>
> This option is not available for tasks created in schedules.

5. Click **Save and Close**.
6. See also:
   - Setting Task Parameters
   - Specifying Task Instructions
   - Selecting the Workflow
   - Adding Task Questions
   - Setting Task Viewers
   - Setting Task Predecessors
   - Applying Task Attributes
   - Working With Task Rules
   - Viewing Task History

Setting Task Parameters

The Parameters dialog only contains data for tasks that are associated with an Integration Type and have parameters. Integration Types provide links to external applications. From Parameters, you can set specific information about the task and how it is run. The parameters are passed to the external application. For example, if the task contains a link to a data grid, you might use the Parameters dialog to select a point of view for the grid.

To set task parameters:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left and then click the **Tasks** tab.

> **Note**
>
> The **Tasks** tab is displayed at the bottom of the page.

3. From the **New Task** or **Edit Task** dialog box, click **Parameters**.
4. If the parameter values are not entered by the task type, you may enter the required parameter values.

> **Note**
>
> If the parameters are not defined when the task is ready to start, an email is sent to the task owner. The task waits to start until the values are provided.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. See also:
   - Setting Task Properties
   - Specifying Task Instructions
   - Selecting the Workflow
   - Adding Task Questions
   - Setting Task Viewers
   - Setting Task Predecessors
   - Applying Task Attributes
   - Working With Task Rules
   - Viewing Task History

Specifying Task Instructions

Task owners can create a set of instructions for completing the task. All other users who have access to the task are only able to read the instructions. If there are task instructions that are inherited from the Task Type, template, or schedule, that instruction text is displayed above the instruction text box and is read-only.

For template tasks, the Template and Task Types instructions are viewable but not editable.

To specify instructions:

1. On the Home page, click **Application** and then click **Task Manager**.
2. Click the **Templates** tab on the left, and then click the **Tasks** tab.

> **Note**
>
> The **Tasks** tab is displayed at the bottom of the page.

3. From the **New Task** or **Edit Task** dialog box, click **Instructions**.
4. Enter the **Instructions** which can have unlimited characters.

To add a reference:

1. In the **References** section, click **Add**.
2. From the **Reference Type** list, select one of these types:
   - **Local File**: Click **Choose File** to select and attach the file, enter a **Name**, and then click **OK**.
   - **URL**: Enter the **URL** and URL **Name**; for example, https://www.oracle.com, Oracle.
3. See also:
   - Setting Task Properties
   - Setting Task Parameters
   - Selecting the Workflow
   - Adding Task Questions
   - Setting Task Viewers
   - Setting Task Predecessors

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Applying Task Attributes
- Working With Task Rules
- Viewing Task History

Selecting the Workflow

To select the Task Manager workflow:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left and then click the **Tasks** tab.

> **Note**
>
> The **Tasks** tab is displayed at the bottom of the page.

3. From the New Task or Edit Task dialog box, click **Workflow**.

   The Workflow section contains the Assignee and Approver assignments.

> **Note**
>
> You cannot assign the same user to multiple roles within the workflow.

4. Enter the following information for the Assignee:

   - **Assignee**: To assign an Assignee to a named user or Shared Services Group, click **Select Assignee**.
     The **Actual** attribute is available for each workflow stage, showing the actual user for the completed workflow. For example, **Assignee (Actual)**. In the workflow, the **Actual** column shows who performed work on the task, regardless of the user status.

> **Note**
>
> The additional user information only appears if the task is reassigned after it was completed by the initial user.

   For an End-User task, for **Assignee,** click **Select Assignee** to find a user.

   If you do not select an Assignee, the owner becomes the default Assignee. Parent and automated tasks have no Assignees.

> **Note**
>
> For a Process-Automated task, click **Run As**, search for and select a user under which tasks of this type are run, and click **OK**.
> If the selected **Run As** user is the user who also created the task, then the user can authorize the task, without being prompted to re-enter their password.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Backup**: If you assigned a user for the primary Assignee, you can assign a backup user authorized as an Assignee:

  a. Click **Select Backup Assignee** .

  b. Enter the **First Name** and **Last Name** or click **Search** to select a backup user.

  c. Click **OK**.

- **Require Action By**: When a group or team is assigned as the assignee, the **Backup** option is replaced with the **Require Action By** option with the following values:

  – **Any Assignee** (default)

  – **All Assignees**

  If **All Assignees** is selected, then everyone in the group or team must submit the task for it to be sent to the approvers.

- **Starts**: Select a start date, then select the time of day, in increments of 15 minutes, for the task to start.
- **Ends**: Select an end date, then select the time of day, in increments of 15 minutes, for the task to end.
- **Optional:** For **Minimum Duration**, enter the minimum duration of a task in the form of **Day(s)**, **Hour(s)**, and **Minute(s)**. An At Risk criteria is based on the condition if the Start date was missed **and** (the End_date minus the Current_date is less than the minimum task duration **or** the End_Date minus the Start_Date is less than the minimum duration). The At Risk tasks display in the Needs Attention Graph in the Status Chart of the Dashboard.
- **Optional:** For an End-User task, select **Allow Early Start** to allow the Assignee to open the task before the scheduled start time.

5. Optional: Enter this information for the Approver:

   a. Click the + to add an approval level

   b. Assign an **Approver** by selecting a User, Group, or Team.

   c. **Backup**: If you assigned a user for the Approver, you can assign a backup user authorized as an Approver.

      i. Click **Select Backup Approver** .

      ii. Enter the **First Name** and **Last Name** or click **Search** to select a backup user.

      iii. Click **OK**.

   d. Specify the **End Date**.

   e. **Require Action By**: When a group or team is assigned as the approver, the **Backup** option is replaced with the **Require Action By** option with the following values:

      - **Any Approver** (default)
      - **All Approvers**

      If **All Approvers** is selected, , then all approvers are required to approve the task prior to the task moving to the next level of approval or being marked complete. If any one of the approvers rejects the task, the task is assigned back to the **Assignee**.

   f. Repeat to add additional approval levels.

   g. Use the arrows icons to reorder the approval levels.

6. See:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Setting Task Properties
- Setting Task Parameters
- Adding Task Questions
- Setting Task Viewers
- Setting Task Predecessors
- Applying Task Attributes
- Working With Task Rules
- Viewing Task History

Adding Task Questions

> **Note**
>
> The Questions tab is not displayed for automated tasks or parent tasks.

When you create a task, you may want the Assignee to answer questions about their actions before they indicate a task is complete. For example, you may ask if a certain process was followed when completing that task.

You can specify various types of questions, such as Text, Number, or True/False, and indicate whether they are required. If a question is required, the user must respond or they cannot submit the task for approval. You can also order the questions by using the Move Up and Move Down buttons.

For schedule tasks, users can respond to the questions from the Task Actions page. If you are creating or updating a task in a template, an additional column displays, showing whether the row is locked or unlocked to indicate whether the user can remove or update the questions. Rows that are locked cannot be edited or deleted because they are inherited from the Task Type.

In templates, the Task Type questions are displayed, but are not editable.

> **Note**
>
> Only users who have the task Viewer role can respond to questions.

To add a question:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left, and then click the **Tasks** tab.

   > **Note**
   >
   > The **Tasks** tab is displayed at the bottom of the page.

3. From the **New Task** or **Edit Task** dialog box, click **Questions**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Click **Add**.
5. Enter the **Question** with a maximum of 2000 characters or less.
6. For **Type**, select from the following options:
   - **Date**
   - **Date/Time**
   - **Integer**: Enter a value between -2147483648 and 2147483647.
   - **List**: Enter a list of valid responses to the question (up to 255 characters).
   - **Multi-Line Text**: Enter the **Number of Lines**, from 3 to 50 lines. Enter a maximum of 4000 characters. Multi-Line Text determines how many lines of text are visible without scrolling, on the Actions dialog boxes. Select **Attachments** if you want to include an attachments section.
   - **Number**: Enter a value xxxxxxxxxxxxxxxxx.xxxxxxxxx (17 digits and 9 decimal places).

     Select number formatting options:
     - For **Decimal Places**, enter a value for the number of decimal places to display.
     - For **Display As Percentage**, check the box if you want a percentage to display.
     - Select the **Thousands Separator** option if you want numbers to display a thousands separator (for example, 1,000.00).
     - For **Currency Symbol**, select a currency symbol; for example, $ (United States of America Dollar).
     - For **Negative Number**, select how to display negative numbers; for example, (123).
     - For **Scale**, select a scale value for numbers; for example, 1000 or 1000000000000.
   - **True/False**
   - **Text**: You can enter a maximum of 4000 characters.
   - **User**
   - **Yes/No**
7. Assign a **Role** (**Assignee**, **Approver**, **Owner**, **Viewer**) to the question. Access is based on responsibilities.
8. If the question is required, select **Required**.

   The **Required** checkbox is disabled for Questions assigned to Owner or Viewer roles.
9. Click **OK**.
10. **Optional:** To change the order of questions, select a question, then click **Move to Top, Move Up** **Move Down**, or **Move to Bottom.**.
11. **Optional:** To edit a question, select the question and click **Edit**. To remove a question, select the question and click **Delete**.
12. See also:
    - Setting Task Properties
    - Setting Task Parameters
    - Specifying Task Instructions

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Adding Task Questions
- Setting Task Viewers
- Setting Task Predecessors
- Applying Task Attributes
- Working With Task Rules
- Viewing Task History

Setting Task Viewers

The Viewers tab enables you to add or remove Viewers for the current task. You can specify an unlimited number of viewers.

To set task access:

1. From the **New Task** dialog box, select the **Viewers** tab.
2. Enter the first or last name of the user, then click **Search**.

   To specifically identify a user, click **Advanced**, then enter a **User ID** or **Email** address.

   > **Tip**
   >
   > For additional details about the user, such as groups and roles, click **Details**.

3. To remove a user from the Viewers list, select the user, then click **Remove**.
4. See also:
   - Setting Task Properties
   - Setting Task Parameters
   - Specifying Task Instructions
   - Selecting the Workflow
   - Adding Task Questions
   - Setting Task Predecessors
   - Applying Task Attributes
   - Working With Task Rules
   - Viewing Task History

Setting Task Predecessors

The Predecessors tab enables you to set predecessors for the current task. For template tasks, you can choose a predecessor from another template, and for schedule tasks, you can choose a predecessor from another schedule. You must assign a condition to the predecessor/successor relationship.

A task does not need predecessor tasks as long as a start date and time is specified. If both are specified, the task begins when the predecessor tasks are started or complete (for Finish to Start) and the start date and time is reached.

You can set these conditions under which the predecessor relationship is established:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Condition	Description
Finish to Start	Default. The task starts as soon as the predecessor task completes or finishes with warning.
Finish Error to Start	The task starts as soon as the predecessor task completes, even if it is in error.
Finish Error to Finish	The task completes as soon as the predecessor task completes, even if it is in error.
Finish to Finish	The task cannot be marked as Complete until the predecessor task is marked as complete. This is primarily used for user tasks. For example, a user can start a document summary, but cannot mark it complete until the consolidated data is final.

To set task predecessors:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left and then click the **Tasks** tab.

> **Note**
>
> The **Tasks** tab is displayed at the bottom of the page.

3. From the **New Task** or **Edit Task** dialog box, select the **Predecessors** tab.
4. Click **Add**.
5. To search for a Predecessor task, click **Expand Search**, enter the **Task Name**, then click the **Search** button. To refine the search, click **Advanced**, and enter advanced search criteria.
6. Select a predecessor task(s) and click **OK**.
7. See also:
   - Setting Task Properties
   - Setting Task Parameters
   - Specifying Task Instructions
   - Selecting the Workflow
   - Adding Task Questions
   - Setting Task Viewers
   - Applying Task Attributes
   - Working With Task Rules
   - Viewing Task History

Applying Task Attributes

To locate tasks in the system, you can apply attributes to the task. When you select an attribute, you can set a value for the attribute based on the attribute type. You can later filter by the attribute value.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example, you may have a List attribute named Sales Region with the values of North, South, East, and West. The current task applies only to the West Sales Region, so you can add the Sales Region attribute and set it to "West".

To apply task attributes:

1. Open a task and select the **Attributes** tab.

   Click **Add**, then enter the following:

   - **Attribute**: Select an attribute from the list of defined attributes.
   - **Type**: This field is not editable; it is populated by the Attribute.
   - **Value**: Select a value associated with the type of attribute; for example, a numeric value for Formatted Number attribute, a List for List attribute, multiple lines of displayed text without scrolling for Multi-Line Text, a name of a person, User, or Yes or No for the Yes/No attribute.
   - **Access**: All roles have view access unless otherwise specified below.

     To add an access, for each of the Text Box and Attachments tabs:

     a. Click **Add**.

     b. Select a role.

     c. Select one of the Role access types:

        – **Do Not Display**: Does not see this attribute in any of the dashboards, list views, or reports.

        – **Allow Edits**: Has the ability to add, change, and remove values for the attribute, but subject to the editability rules.

        – **Required**: Requires a value for the attribute.

2. Click **OK**.
3. See also:
   - Setting Task Properties
   - Setting Task Parameters
   - Specifying Task Instructions
   - Selecting the Workflow
   - Adding Task Questions
   - Setting Task Viewers
   - Setting Task Predecessors
   - Working With Task Rules
   - Viewing Task History

Working With Task Rules

Task rules affect task behavior. These rules enable users to assign rules directly to tasks when assigning rules isn't appropriate at the Template, Schedule, or Task Type level. Rules apply to the tasks for which the rules were configured.

Available task rules:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Auto Approve Task**: Automatically completes specified approvals only if specified conditions have been met.
  Examples of conditions that could apply to this rule include:
  - Attributes have specified values (including calculated attributes)
  - Predecessor task contains an attribute with a specified value

  When conditions are satisfied, the specified approver levels are marked as complete, thus progressing workflow to the next approval level, or to Closed if no additional approval levels exist.

  This rule runs when the Task status changes to Open with Approver.
- **Auto Submit Task** - Automatically submits a task if specified conditions are met.
  When conditions are satisfied, the assignee role is marked as complete, thus progressing workflow to the first approval level, or to Closed if no approval levels exist.

  This rule runs when the Task status changes from Pending to Open with Assignee.
- **Prevent Task Approval**: Prevents approval of a task based on attribute values, or other characteristics. This rule runs when the Approver clicks **Approve** or when the approver clicks **Actions** > **Update**.
- **Prevent Task Submission**: Prevents submission of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit** or when the assignee clicks **Actions** > **Update**.
- **Prevent Task Rejection**: This rule prevents rejection of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit** or when the assignee clicks **Actions** > **Update**.
- **Send Email on Update**: This rule runs based on user actions on the task. Hence, you must set the conditions for the rule appropriately. The most common condition is to have a condition with the Status attribute or the Status Detailed attribute:
  - Status attribute: The only valid value that you can select is Closed. Pending, Open, and Error are all statuses that result from automated actions on the task.
  - Status Detailed attribute: The valid statuses are with the approver.

  The rule runs when a user using the task action dialog:
  - Claims, releases, submits, approves, rejects, reopens, force-starts, or force-closes a task
  - Updates an attribute value
  - Answers a question
  - Adds a comment
  - Deletes a comment
  - Adds a reference attachment

To work with task rules:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Open a task.
3. Click the **Rules** tab. You can view the following information:
   - **Order**: The order of precedence.
   - **Rule**: Name of the rule.
   - **Conditions**: The choice of what conditions must exist before running the rule.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. To create or edit a rule, on the **Rules** tab, click the **New** icon or select an existing rule and click the **Edit** icon.
5. On the **Properties** tab:
   - **Rule**: Select a rule.

     > **Note**
     >
     > When you make changes to a rule definition, the additional information is added to the audit log. You can view the changes both in the **History** tab as well as the **Audit Report**.

   - **Description**: **Optional.** Explain why you configured the rule and how it should be used. You can enter a maximum of 255 characters.
   - **Run When**: Indicates the events associated with the rule.
   - **Approver Level**: Select **All Levels** or select the Approver levels.
6. On the **Filter** tab:
   - Select **Create Filter** and populate the conditions section or select **Use Saved Filter**, and then select a filter. The filter selected and configured for the rule determines the conditions that trigger the rule to apply.
   - **Filter Task**: Specify for which task the condition should be selected:
     - **Current Task**
     - **Any Predecessor**
     - **Specific Task**: Provide the **Task ID**
   - **Conditions**:
     - **Use Saved Filter**: The **Conditions** section displays a read-only version of the conditions associated with the saved filter.
     - **Create Filter**: The **Conditions** section is enabled and you can click **Create Condition** or **Create Condition Group** to specify conditions.

       Conjunction, **Source**, **Attribute**, **Operator**, and **Value** behave as they do for the existing advanced filter feature.
7. See also:
   - Setting Task Properties
   - Setting Task Parameters
   - Specifying Task Instructions
   - Selecting the Workflow
   - Adding Task Questions
   - Setting Task Viewers
   - Setting Task Predecessors
   - Applying Task Attributes
   - Viewing Task History

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Task History

For each task, the system retains a history of the changes made to it; for example, a shift in dates or change in ownership. Each change record includes the field, modification type such as added, created, or changed, the old and new values, the user who made the change, and the date on which the change was made. The information on this tab is read-only.

To view task history:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Select a task.
3. Select the **History** tab on the right.
4. When you finish, click **Save and Close**.

Working with the Task Dialog Box

You can view a list of tasks from the Schedule Tasks page. You can filter the available schedule list by date or status.

To view the Tasks from the Schedule Tasks page:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. For **Schedule**, select a schedule, or select **All** if you do not want to filter the list.
3. **Optional:** To filter the schedule list by year or period, select a **Year** and **Period**.
4. **Optional:** To filter the schedule list by status, from **Schedule Status**, select a status.
5. Select a task.
6. Click the **Properties** tab on the right to view the following fields:
   - **Name**
   - **Task ID**
   - **Status**
   - **Schedule**
   - **Priority**
   - **Task Type**
   - **Task Type**
   - **Description**
   - **Owner**
   - **Start Date**
   - **End Date**
   - **Duration**
   - **Actual Start Date**
   - **Actual End Date**
   - **Actual Duration**
7. Click **Instructions** to display any instructions.

Copyright © 2022, 2026, Oracle and/or its affiliates.

8. Click **Alerts** to display current alerts.
9. Click **Workflow** to view assignees for the tesk.
10. Click **Attributes** to view any attributes for the task.
11. Click **Questions** to view any questions that have been posted for the task.
12. Click **Comments** to view any comments that have been posted for the task.
13. Click **Related Tasks** to view any related tasks. You can view Predecessors or Successor tasks.
14. Click **Parameters** to view dashboard, cluster, application, and so on.
15. Click **History** to capture an audit trail of changes to the task. You can view the activity for the task, including **All Activity**, **Last 7 Days**, and **Today**.
16. Click **Actions**, then select one of the following actions:
    - **Submit Task**
    - **Abort Task**: Cancels a task. The purpose of canceling a task (instead of performing a forced close) is to prevent successors from continuing and to keep the process moving.
    - **Force Close Task**
    - **Refresh**
17. Click **Close**.

Importing and Exporting Tasks

Importing Tasks

To import tasks:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Select a task, click **Actions**, and then **Import Tasks**.
3. Click **Browse** to find the import file.
4. Select an **Import Type**:
    - **Replace**: Replaces the definition of a task with the definition in the import file. This option replaces the task detail with the detail that is in the file that you are importing. It does not affect other tasks in the schedule that are not specified in the import file.

      The system displays a warning that tasks in a schedule that match a task ID in the import file will be modified. If you do not want to overwrite the task, click **Cancel**.

      You can select the **Keep Attachments** checkbox to retain attachments to tasks that are being replaced.
    - **Update**: Updates partial information for tasks. For example, in the import file, you might have made changes to task instructions, reassigned Owners, Assignees, and Approvers, or removed some attributes and added new attributes. You might also have made the same change to a large number of tasks, for example, adding a new attribute to 100 of 400 tasks. The update option is not a full replacement of the task details. Only details for the task properties specified in the file are updated. For example, if the import file has only a column for a task instructions, the task name, assignee, attributes, and other properties are not affected.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Delete**: Deletes tasks and associated information based on a list of task IDs provided in a file. The required information to perform a delete is a file with a column of task IDs.

5. Select a **Date Format**.

   Select a format from the drop-down list of allowed date formats. Date formats are not translated. By default, the date format is set to the locale date format of the exported file location.

6. Select a **File Delimiter** for the import file: **Comma** or **Tab**. Choose **Other** to specify any single character as the **Other Delimiter**.

7. Click **Import**.

Exporting Tasks

To export tasks:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Select a task, click **Actions**, and then select **Export Tasks**.
3. Select Export options:
   - Select **All Tasks** or **Selected Tasks**.
   - For **Format**, select **Formatted data (visible columns only)** or **Unformatted data for future import**.

> **Note**
>
> If you are an Administrator or Power User, you can select the format. If you have User security rights, by default the Format option is **Formatted data (visible columns only)**, and it cannot be changed.

4. Click **Export**. The file is downloaded in Excel or CSV format depending on the selection: Formatted data (visible columns only) or Unformatted data for future import.
5. Click **Close**.

Editing Tasks

You can edit tasks depending on their status and your security rights. For example, you can edit a task description, attributes, or end date.

For an Open task in a Task List, you cannot edit the start date, because the task has started. You can only change the duration or the end date. You also cannot edit instructions, questions, Assignee, or approver, and you cannot add, delete, or edit predecessors. You can reassign the Assignee or approver from the Task Actions workflow.

To edit a task:

1. On the Home page, click **Tasks**, and highlight the task that you want to edit. The **Edit** icon is enabled.
2. Click the **Edit** icon.
3. To edit task attributes:

   Click the **Attributes** tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To add an attribute, click the **Add** icon to display the **Add Attribute Assignment** dialog box, and then make the following selections:

- **Attribute**: Select an attribute from the list of defined attributes.
- **Type**: This noneditable field is populated by the Attribute.
- **Value**: Select a value associated with the type of attribute; for example, a numeric value for Formatted Number attribute, a List for List attribute, multiple lines of displayed text without scrolling for Multi-Line Text, a name of a person, User, or Yes or No for the Yes/No attribute.
- **Access**: Select the access to the attribute.

4. Click **OK**.

Adding Attachments

If you have an attachment you want to include with your task, such as a Word file, Excel spreadsheet or other document, you can use one of the following methods to attach the document to the task. You can attach multiple items at the same time. When you click OK, the system uploads all the documents that you attached.

To add an attachment to a task:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Select a task.
3. Select the **Comments** tab.
4. Click the **Attachment** icon to open the **Add Attachment** dialog box.
5. Select one of the following options to attach the document:
   - Browse to the location of the document.
   - Drag and drop the document directly from your local directory.
6. **Optional:** Rename the document.
7. Click **OK**.

Sorting Tasks

From the Task List, you can sort tasks by ascending or descending order. You can sort by Schedule Name, Status, Owner, Start or End Date, or Duration.

To sort tasks:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Hover over a column header until the Sort icons display, and then click **Sort Ascending** or **Sort Descending**.

Searching for Tasks

You can use the Task Find feature to find specific tasks. For example, you might enter "load" to find load tasks. You can search using full or partial words. You can scroll through the results using the Previous and Next buttons.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To search for a task:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Enter a task name in the **Search** field.
3. Click **Previous** or **Next** to find the previous or next task that matches the search criteria.

Moving Tasks

You can use views to move tasks. For example, you can move tasks in the Gantt view.

> **Note**
>
> Move is not available for parent tasks.

To move a task:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Select a task.
3. Right-click on the task and drag it to a new location, or cut, copy, and paste the task.
4. Navigate to the target destination for the task and click **OK**.

Cutting, Copying, and Pasting Tasks

You can cut and copy tasks in templates and schedules. For example, you can copy a task from one schedule or template and paste it into another.

When you paste a task, the Task Details dialog box opens and enables you to modify the task that you are pasting.

If you paste a task onto a parent task, the pasted task becomes a child of the parent task. If you paste a task onto a child task, the pasted task becomes a sibling of the child task.

> **Note**
>
> Cut, Copy, and Paste features are not available for parent tasks. The Cut function is not available for scheduled (Open or Closed) tasks.

To cut, copy, or paste a task:

1. On the Home page, click **Tasks** and select a task.
2. Right-click on the task and select an action, or from the main toolbar, click **Actions**, and then select:
   - **Cut**: Cuts the task and stores it on the clipboard.
   - **Copy**: Copies the task and stores it on the clipboard.
3. Right-click on the task, then select **Paste**, or from the main menu toolbar, click **Actions**, and then select **Paste**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The **Task Details** dialog box opens and enables you to make changes to the task that you are pasting.

4. Click **OK** to complete the paste operation.

   The task is inserted and the views and filter views are refreshed to display the pasted task.

Reopening Manual and Automated Tasks

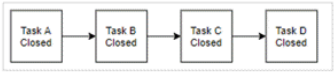
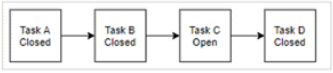
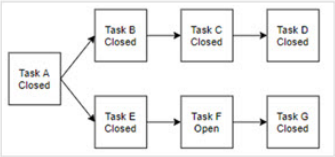
You can reopen tasks and choose to reestablish the predecessor and successor relationships.This is available on both manual end user tasks as well as automated tasks. Reopening an automated task will execute the task with the same parameters. If modifications to the automated task parameters are required, edit the closed automated task and select **Reopen Task**.

Reopening a Manual Task

To reopen a task:

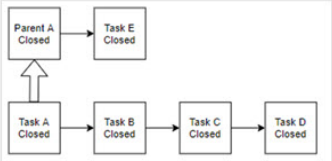
1. On the Home page, click **Tasks**, and then **Tasks**.
2. Select a closed task and click **Open** or click on the task name.
3. On the **Action** dialog, select **Reopen Task** from the **Actions** menu.
   You can choose which successors to automatically reopen and restore the predecessor links when a task is reopened. From the list of these successor tasks, you can choose all of them, none (default), or some subset for reopening.

Table 28-15 Successor Type - Use Case Example

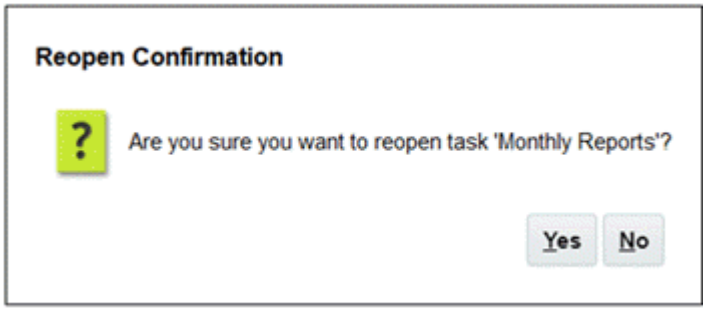
Successor Type	Description	Use Case Example
Direct Successors	The simplest case is a single line of successors and is likely to be the most common case. Each Closed or Errored (less likely) task that is a successor of the task to be reopened is eligible to be reopened	 If Task A is reopened, 'Task B', 'Task C' and 'Task D' are available to be reopened.
Mixed Status Successors	Once an Open or Pending task is encountered, it and any subsequent tasks are not eligible to be reopened.	 If Task A is reopened, only 'Task B' is available to be reopened.
Multiple Successors	A task can have more than one successor. Each branch should be followed to determine eligible tasks. This should extend all the way down the tree.	 If Task A is reopened, 'Task B', 'Task C', 'Task D' and 'Task E' are available to be reopened.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-15 (Cont.) Successor Type - Use Case Example

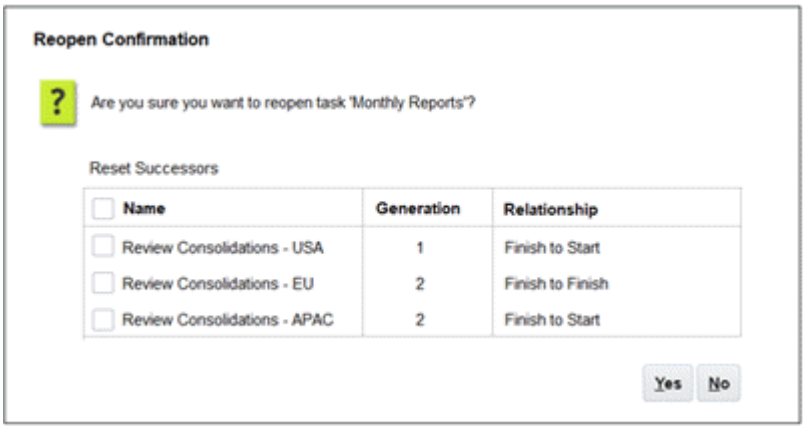
Successor Type	Description	Use Case Example
Parent Tasks	Parent tasks will be automatically be reopened if they were closed prior to their child task re-opening. In this case, any successor tasks of the parent are eligible to be reopened.	 If Task A is reopened, 'Task B', 'Task C', 'Task D' and 'Task E' are available to be reopened. 'Parent A' is automatically reopened.

- If there are no eligible successor tasks, the **Reopen Tasks** dialog displays a confirmation message prompting you to reopen the specified task.



  - Click **Yes**, to close the dialog and reopen the task.
  - Click **No**, to close the dialog without reopening the task.
- If there are eligible successors to the task to be reopened, the **Reopen Tasks** dialog displays a confirmation message listing the successors with checkboxes, and you can select them to reopen.

> **Note**
>
> Automated tasks that didn't complete successfully due to an error, warning, or were force closed won't be listed in the successors list.



Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Name** checkbox: Selecting the **Name** checkbox toggles between selecting all or selecting none of the successors. By default, this is unchecked and all of the tasks are unchecked.
- **Successor Name**: Selecting a checkbox next to a successor task will cause it to reset when the task reopens.
- **Generation**: Read-only field indicating the distance from the task being reopened. Parent tasks will not count as part of this calculation.
- **Relationship**: Read-only field displaying the relationship to the task being reopened.
- Click **Yes** to close the dialog and reopen the task.
- Click **No**, to close the dialog without re-opening the task

4. Add or delete predecessors and then click **Save and Close**.
   Designate relationships:
   - Designate predecessor tasks. Choose one:
     - If there are predecessors, then you can choose this option: Re-establish predecessor relationships - Tasks will open in original order.
     - Ignore predecessor relationships - All tasks will re-open immediately.
   - Designate successor tasks:
     a. Select **Re-Open Successor Tasks**. The successor list is displayed.
     b. Select the successor tasks.
5. Click **OK** to close. The task details dialog box closes and the task reopens based on your selections. Click **OK**, otherwise, click **Cancel**.

Reopening an Automated Task

To reopen an automated task and change the automation parameters:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Select a closed automated task and click the **Edit** icon.
3. On the **Task Details** dialog, click **Reopen**. The Task is now editable.
4. Click on the parameters tab and update parameters as needed.
5. Click **Save and Close**.
   The service will display a confirmation message to reopen the automated task.
   - Click **Yes**, to close the dialog and reopen the task.
   - Click **No**, to close the dialog without reopening the task.

   If there are eligible successors to the task to be reopened, the **Reopen Tasks** dialog displays a confirmation message listing the successors with checkboxes, and you can select them to reopen. See the previous section Reopening a Manual Task.

Submitting Tasks

To submit tasks:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Select the tasks that you need to submit.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To multiselect, press **Ctrl** for random selection or press **Shift** while you click the first and last row in a range.

3. Select **Submit Task**. A warning is displayed that this will complete the task. Click **Yes** to proceed.
4. Review any errors, and click **OK**.

Approving or Rejecting Tasks

To approve or reject tasks:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Select the tasks that you need to approve or reject.

   To select multiple tasks, press **Ctrl**, or press **Shift** while you click the first and last row in a range.
3. Highlight the selected task, and under **Actions**, select **Set Status**, and then select **Approve** or **Reject**.
4. Review any errors, and click **OK**.

Claiming or Releasing Tasks

You can claim and release a single task or multiple tasks at a time in Task ManagerTask Manager. Users who are associated with tasks can claim or release tasks.

The ability to claim a task from another user is useful when a user has claimed a task, but can't complete a task, for example, because of an absence.

When a task is claimed, the Assignee changes to the person who claimed the task.

When a task is released, the Assignee is no longer associated with the task.

> **Note**
>
> If the bulk update feature is enabled, you can claim or release multiple tasks at a time.

Claiming or Releasing a Task Using Task Actions Menu

To claim or release a task from the task **Actions** menu:

1. On the Home page, click **Tasks**, and then click **Schedule Tasks**.
2. Click the task that you want to claim or release, or select the task and click the **Open** icon.
3. From the **Actions** menu, click **Claim** or **Release**.
   A pop-up message asking for confirmation is displayed.
4. Click **Yes**.
   A confirmation message is displayed indicating the task was claimed or released successfully.

   If any errors occur, review and fix the errors, and then perform the same steps to claim or release the tasks.
5. Click **Close** to close the dialog box.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Claiming or Releasing Tasks from the Task List

To claim or release tasks from the Task List:

1. On the Home page, click **Tasks**, and then click **Schedule Tasks**.
2. Select the task that you want to claim or release.
   To select multiple tasks, press **Ctrl**, or press **Shift** while you click the first and last row in a range. The selected tasks are highlighted.
3. From **Actions**, click **Update**, and then click **Claim** or **Release**.
   A pop-up message asking for confirmation is displayed.
4. Click **Yes**.
   The Task Action Results dialog box displays information about the status, number of tasks selected, tasks considered, tasks processed successfully, and tasks that were unsuccessful. These are the possible statuses for the process:
   - Processing
   - Completed Successfully
   - Completed with Errors

   A visual indicator shows the completion percentage. For tasks completed with errors, the dialog box displays the errors. You can click **Export to Excel** and export the displayed errors to an Excel file. Review and fix the errors, and then perform the same steps to claim or release the tasks.
5. Click **Close** to close the dialog box.

Managing Task Reassignments

You may periodically need to reassign users to different tasks. For example, you may assign a task to an employee, but later that employee leaves the company and another employee assumes those tasks. You can use the Reassign feature to quickly find the tasks associated with one user and reassign them to another.

From the Task Actions dialog box, workflow users (Assignees and Approvers) can request reassignment of their workflow role for a single task. These requests require approval. Administrators and schedule/template Owners can reassign the task using the Edit Task dialog box without requiring approval.

When tasks are reassigned, email notifications are sent immediately to reassigned users.

To request a reassignment:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Click on a task to open the Task Properties.
3. Click the **Actions** menu and select **Request Reassignment**.
4. Enter or click **Search** to find the task to be reassigned.
5. For **Create Reassignment Request**, click the **Select User** icon and select **To User**.
6. Under **Reassign**, select the tasks to be reassiged:
   - **Selected Tasks**
   - **Selected and Future Tasks**
7. Enter a **Justification** for the reassignment.

Copyright © 2022, 2026, Oracle and/or its affiliates.

8. Click **OK** and then **Close**.

Automated Task Execution

You can view the status of the automated tasks on the Schedule Tasks page.

To view the status of the tasks:

1. On the Home page, click **Tasks**, and then click **Tasks**. For more information, see Working with the Task Dialog Box
2. Click the **Refresh** icon to update the task details within the task list.

For Process Automation tasks, Task Manager executes the business process when the start time is met. When the business process completes, the task is marked complete.

During the execution of this process, Task Manager submits the job to the target application which returns a Job ID as most of the tasks execute in the background. Task Manager polls the target application to check the status of the job at regular intervals. Initially, the polling interval is less than a second and gradually it increases to a maximum polling interval of 15 mins. The polling interval is proportional to the time taken by the task to complete as described in the following table. The polling interval reduces the overhead related to frequent querying for job completion status in both Task Manager and the underlying application which ensures optimal system performance.

Process Automation Execution Time	Additional Time to Update Task Completion Status
1 minute	Maximum 1 second
10 minutes	Maximum 15 seconds
1 hour	Maximum 2 minutes
5 hours	Maximum 9 minutes
10 hours	Maximum 15 minutes

> **Note**
>
> If the task status has not been updated after the job is completed, don't force close the task immediately. It's recommended to wait for up to 15 minutes for long running tasks or as per the preceding timings.

For event monitoring tasks, Task Manager executes the event monitor when the start time is met. The task status is updated once Task Manager receives the event notification from the other application.

Canceling Tasks

The purpose of canceling a task, instead of performing a Forced Close, is to prevent successor tasks from continuing and to keep the process moving:

- When a Finish-to-Start or Finish-Error-to-Start predecessor is canceled, its successor tasks remain as Pending. To keep the process moving, you must edit the successor tasks to remove the canceled predecessor and to start the successors.
- When a Finish-to-Finish or Finish-Error-to-Finish predecessor is canceled, to keep the process moving, the task owner/schedule owner/administrator must force a close of the successor task.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Deleting Tasks

You can delete tasks that you no longer need. To delete a task, you must have Service Administrator or Power User security rights.

In schedules, you can delete only tasks that have a status of Pending. You cannot delete tasks that have a status of Open or Closed. If you delete a parent task, you can choose to delete just the parent, or the parent and its children.

To delete a task:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Click **Actions**, and then select **Delete**.
3. At the confirmation prompt, click **Yes**.

Managing Services

The Services (**Homepage** > **Application** > **Services**) option allows you to view the status of certain service related tasks. Green indicates that it's running. Actions to take from Services are **Run Now** or **Restart**.

> **Note**
>
> You can use **Run Now** to take an immediate action such as run open tasks. You should only use **Restart** if there was a service shutdown and this option is not green. Restart resets the service without running the service itself.

- **System Maintenance**: Refers to actions that Task Manager performs routinely within Tasks, such as the user synch process and cleanup of the database and is not the same as actions taken at the Cloud level called Daily Maintenance. Daily Maintenance is accessed by clicking Tools, then Daily Maintenance, includes actions such as operational maintenance and backup snapshots performed in the Cloud on test or production environments.
- **Task Email Notifications**: Used to notify users that work has been assigned to them. A Service Administrator can use the option on Services to **Restart** or **Run Now**.

  > **Note**
  >
  > – There is a separate option that a Service Administrator can use to turn off email notifications under **Application** → **Configuration** → **Settings** → **System Maintenance Process**.
  >
  > – Email notifications contain service and tenant information in the footer to help identify where an email is coming from.

- **[Schedule Name] Monitor**: Available for each schedule that is open and with tasks in the future. This option checks if any tasks need to be open in a schedule.
- **Task Status Update**: Background service which executes and monitors the process automated tasks.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Managing Schedules

A schedule defines a chronologically ordered set of tasks that must be executed for a specific business process, and is the application of a template into the calendar. For example, you can apply the Quarterly template as Q1FY19 for the first Quarter, then apply the template again as Q2FY19 for the second quarter.

The maximum number of schedules that you can create, import, or deploy is 100,000.

Schedules have a status of Pending, Open, Closed, or Locked. You can change the status of a schedule from Pending to Open, or from Open to Closed or Locked.

> **Note**
>
> - After a schedule is set to Open, it cannot be reset to Pending.
> - After a schedule is set to Locked, its status cannot be changed.
> - Schedule Owners and Viewers are notified by an email when a Schedule is deleted.
> - An immediate reassignment request notification is sent out to administrators and schedule owners when an assignee or approver requests a reassignment.

Manually Creating Schedules

To create a schedule, you must be an Administrator or Power User. A Power User can run Create Schedule on a template or select New from Manage Schedules. You can manually define a schedule from the Manage Schedules page, or create a schedule from a template. When you create a schedule from a template, all values are inherited from the template definition.

Watch this video to learn more about creating schedules.

Creating Schedules

To manually create a schedule:

1. On the Home page, click **Application**.
2. Click **Task Manager**.
3. Click the **Schedules** tab on the left.
4. Click **New**.
5. Enter schedule information on the schedule tabs:
   - Setting Schedule Properties
   - Adding Instructions to Schedules
   - Assigning Schedule Viewers
   - Applying Schedule Attributes
   - Adding Day Labels

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Working With Schedule Rules
- Viewing Schedule History

Setting Schedule Properties

The Properties tab enables you to set the name, description, start and end dates, and owners for schedules. The schedule owner must be an Administrator or Power User. The default owner is the current user. The start and end dates specify the initial date range for the schedule, however, after the schedule is created, you can add tasks with dates earlier or later and the properties are updated to reflect the earliest and latest dates.

To set schedule properties:

1. Create a new schedule and select the **Properties** tab:
   - **Name**: You can enter a maximum of 80 characters.
   - **Description**: You can enter a maximum of 255 characters.
   - **Organizational Unit**
   - **Start Date**: Starting date for the schedule
   - **End Date**: Ending date for the schedule
   - **Year**
   - **Period**
   - **Day Zero Date**: The date to assign as day zero
   - **Owner**: Use the default owner or click **Select Owner**.
   - **Status**

     > **Note**
     >
     > The **Status** field does not display until the new schedule is saved. The schedule status is initially set to Pending and is display only.

   - **Source Template**
2. To save and close, click **OK** or click another tab; all entries are saved.
3. Enter schedule information on the schedule tabs:
   - Adding Instructions to Schedules
   - Assigning Schedule Viewers
   - Applying Schedule Attributes
   - Adding Day Labels
   - Working With Schedule Rules
   - Viewing Schedule History

Adding Instructions to Schedules

You can specify instructions and supporting documents for a schedule, which are then inherited by all tasks in the schedule.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To add instructions to a schedule:

1. Create a new schedule and select the **Instructions** tab.
2. In **Instructions**, enter instructions for the schedule.
3. To add a reference:
   a. In the **References** section, click **Add**.
   b. From the **Reference Type** list, select one of these types:
      - **Local File**:

        Click **Choose File** to select and attach the file, enter a **Name**, and click **OK**.
      - **URL**:

        Enter the **URL**, then enter a URL **Name**; for example, https://www.oracle.com, Oracle, and then click **OK**.
4. To save and close, click **OK** or click the **Viewers** tab; all entries are saved.
5. Enter schedule information on the schedule tabs:
   - Setting Schedule Properties
   - Assigning Schedule Viewers
   - Applying Schedule Attributes
   - Adding Day Labels
   - Working With Schedule Rules
   - Viewing Schedule History

Assigning Schedule Viewers

The Viewers tab enables you to assign viewer rights for schedules. A schedule can have multiple viewers, however they must have the proper security roles. Viewers receive read-only access to all tasks in the schedule.

> **Note**
>
> Only users who have the task Viewer role can respond to questions.

To assign viewer rights:

1. Create a new schedule and select the **Viewers** tab.
2. Click **Add**.
3. To search by users or groups, click the **Search Users** icon, then select **Users** or **Groups**.
4. Enter a user name, or part of the name, then click **Search**.
5. To identify a user, click **Advanced**, then enter a **User ID** or **Email**.
6. From the **Search Results** list, select users.
7. For additional details about the user, such as groups, roles, and assignments, click **Details**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

8. Click **Add** or **Add All** to move users to the Selected list.

> **Tip**
>
> To remove users, select users, then click **Remove** or **Remove All.**

9. To save and close, click **OK** or click the **Attributes** tab; all entries are saved.
10. Enter schedule information on the schedule tabs:
    - Setting Schedule Properties
    - Adding Instructions to Schedules
    - Applying Schedule Attributes
    - Adding Day Labels
    - Working With Schedule Rules
    - Viewing Schedule History

Applying Schedule Attributes

To locate schedules in the system, you can apply attributes to the schedule. When you select an attribute, you can set a value for the attribute based on the attribute type. You can later filter by the attribute value.

For example, you may have a List attribute named Sales Region with the values of North, South, East, and West. The current schedule applies only to the West Sales Region, so you can add the Sales Region attribute and set it to "West".

To apply an attribute:

1. Create a new schedule and select the **Attributes** tab.
2. Click ➕ **Add**.
3. From the **Attribute** list, select an attribute.
4. For **Value**, depending on the attribute, select a value for the attribute from a drop-down list, or enter a value.
5. To save and close, click **OK** or click the **Day Labels** tab; all entries are saved.
6. Enter schedule information on the Schedule tabs:
    - Setting Schedule Properties
    - Adding Instructions to Schedules
    - Assigning Schedule Viewers
    - Adding Day Labels
    - Working With Schedule Rules
    - Viewing Schedule History

Adding Day Labels

You use business day labels in the business activity for a calendar day. Labels can mark a milestone day or specify the purpose of the day.

To add a day label to a schedule:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Create a new schedule and select the **Day Labels** tab. You can enter a maximum of 20 characters.
2. Add a day label to a specific date.
3. To save and close, click **OK** or click the **Rules** tab; all entries are saved.
4. Enter schedule information on the schedule tabs:
   - Setting Schedule Properties
   - Adding Instructions to Schedules
   - Assigning Schedule Viewers
   - Applying Schedule Attributes
   - Working With Schedule Rules
   - Viewing Schedule History

Working With Schedule Rules

Schedule rules apply to all tasks in the schedule and thus apply rules to groups of tasks. Rules configured in the **Schedule** dialog box are copied to new schedule tasks.

Available schedule rules:

- **Auto Approve Task**: Automatically completes specified approvals only if specified conditions have been met.
  Example of conditions that could apply to this rule include: Attributes have specified values (including calculated attributes).

  When conditions are satisfied, the specified approver levels are marked complete, and workflow progresses to the next approval level, or closes if no additional approval levels exist.
- **Auto Submit Task**: Automatically submits a task if specified conditions are met.
  When conditions are satisfied, the Assignee role is marked complete, and workflow progresses to the first Approval level, or closes if no Approval levels exist.
- **Prevent Task Approval**: Prevents approval of a task based on attribute values, or other characteristics. This rule runs when the Approver clicks **Approve** or when the approver clicks **Actions** > **Update**.
- **Prevent Task Submission**: Prevents submission of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit** or when the assignee clicks **Actions** > **Update**.
- **Prevent Task Rejection**: Prevents rejection of a task based on attribute values, or other characteristics. This rule runs when the Assignee clicks **Submit**. This rule runs when the Assignee clicks **Submit** or when the assignee clicks **Actions** > **Update**.
- **Send Email on Update**: Runs based on user actions on the task. Hence, you must set the conditions for the rule appropriately. The most common condition is to have a condition with the Status attribute or the Status Detailed attribute:
  - Status attribute: The only valid value that you can select is Closed. Pending, Open, and Error are all statuses that result from automated actions on the task.
  - Status Detailed attribute: The valid statuses are with the approver.

  The rule runs when a user using the task action dialog:
  - Claims, releases, submits, approves, rejects, reopens, force-starts, or force-closes a task

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Updates an attribute value
- Answers a question
- Adds a comment
- Deletes a comment
- Adds a reference attachment

To view schedule rules:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Double-click a schedule.
4. Click the **Rules** tab. You can view the following information about the rules that are associated with a template:
   - **Order**: Order of precedence
   - **Rule**: Name of the rule
   - **Conditions**: Conditions that must exist before running the rule
5. To create or edit a rule, on the **Rules** tab, click the **New** icon or select an existing rule and click the **Edit** icon.
6. On the **Properties** tab:
   - **Rule**: Select a rule.

     > **Note**
     >
     > When you make changes to a rule definition, the additional information is added to the audit log. You can view the changes both in the **History** tab as well as the **Audit Report**.

   - **Description**: **Optional.** Explain why you configured the rule and how it should be used. You can enter a maximum of 255 characters.
   - **Run When**: Indicates the events associated with the rule.
   - **Approver Level**: Select **All Levels** or select the Approver levels.
7. On the **Filter** tab:
   - Select **Create Filter** and populate the conditions section or select **Use Saved Filter**, and then select a filter. The filter selected and configured for the rule determines the conditions that trigger the rule to apply.
   - **Filter Task**: Specify for which task the condition should be selected:
     - **Current Task**
     - **Any Predecessor**
     - **Specific Task**: Provide the **Task ID**
   - **Conditions**:
     - **Use Saved Filter**: The **Conditions** section displays a read-only version of the conditions associated with the saved filter.

Copyright © 2022, 2026, Oracle and/or its affiliates.

– **Create Filter**: The **Conditions** section is enabled and you can click **Create Condition** or **Create Condition Group** to specify conditions.

  Conjunction, **Source**, **Attribute**, **Operator**, and **Value** behave as they do for the existing advanced filter feature.

8. Enter schedule information on the schedule tabs:
   - Setting Schedule Properties
   - Adding Instructions to Schedules
   - Assigning Schedule Viewers
   - Applying Schedule Attributes
   - Adding Day Labels
   - Viewing Schedule History

Setting Required Task Parameters

The task is in a pending state until the required parameters are filled in. If they are not filled in before the specified start date, then an email notification is sent to the task owner. In addition, the task shows up in views under **Needs Attention**. After the required parameters are filled in, the task starts.

Opening Schedules

You open schedules to add, edit, or work on tasks.

When you create a schedule, it has a status of Pending by default. When you select the View menu option for a schedule, you can make final adjustments to it, and add, edit, or delete tasks.

To run a schedule, you must change the schedule Status from Pending to Open. See Setting Schedule Status.

To open a schedule for editing:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Use one of these methods:
   - Select **Actions** to the right of the schedule in the listing, and then select **View**.
   - Highlight a schedule, then click the **View** icon.
   - Right-click the highlighted schedule, and then select **View**.

Editing Schedules

You can edit schedules to change the properties, such as the name or the schedule or the start and end dates. You cannot change the start date to a date later than the first task in the schedule, or the end date to a date earlier than the last task in the schedule. You can make changes to an Open or Pending schedule to modify pending tasks. You cannot add, change, or delete tasks in a Closed or Locked schedule. To edit a schedule, you must be the schedule owner or an Administrator.

To edit a schedule:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Select a schedule and click **Edit**.
4. Edit the schedule.
5. Click **OK**.

Adding Tasks to Schedules

You can add tasks to a schedule if it is Pending or Open. You cannot add tasks to a Closed or Locked schedule.

> **Note**
>
> The maximum number of tasks that you can add to a Task Manager schedule is 500,000.

To add a task to a schedule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Open a schedule.
4. Add tasks.

Importing Tasks into Schedules

You can import tasks, or partial task data, from text files into a schedule with a status of Pending or Open. For example, if you have a Microsoft Excel spreadsheet with task definitions, you can save the file as a CSV file, then import it into a schedule. You can also use the Import feature to quickly add many repetitive tasks by editing the fields in a CSV file and importing it, rather than creating individual new tasks.

You cannot import tasks into schedules that have a Closed or Locked status.

> **Note**
>
> Before you import a file to a schedule using the Update option for a closed task, remove the Owner, Assignee, Approver, and Start Date and Time fields from the import file, or an error occurs.

If you import information on an End-User task that has started running, it is reset to Open with Assignee status, and the answers to questions are cleared.

To import tasks into a schedule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Click **Import Tasks**.
4. Enter the name of the file to import, or click **Choose File** to find the file.
5. Select an import option:
   - **Replace**: Replaces the definition of a task with the definition in the import file. This option replaces the task detail with the detail that is in the file that you are importing. It does not affect other tasks in the schedule that are not specified in the import file.

     > **Note**
     >
     > You can select the **Keep Attachments** checkbox to retain attachments to tasks that are being replaced.

   - **Update**: Updates partial information for tasks. For example, in the import file, you might have made changes to task instructions, reassigned Owners, Assignees, and Approvers, or removed some attributes and added new attributes. You might also have made the same change to a large number of tasks, for example, adding a new attribute to 100 of 400 tasks. The update option is not a full replacement of the task details. Only details for the task properties specified in the file are updated. For example, if the import file has only a column for a task instructions, the task name, Assignee, attributes, and other properties are not affected.

     > **Note**
     >
     > The system displays a warning that tasks in the schedule that match a task ID in the import file will be modified. If you do not want to overwrite the task, click **Cancel**.

   - **Delete**: Deletes tasks and associated information based on a list of task IDs provided in a file. The required information to perform a delete is a file with a column of task IDs.
6. **Optional**: Select **Keep Attachments** to retain any attachments associated with a task that is being replaced.
7. Select a **Date Format**.

   Select a format from the drop-down list of allowed date formats. Date formats are not translated. By default, the date format is set to the locale date format of the exported file location.
8. For **File Delimiter** for the import file, select **Comma** or **Tab**. Select **Other** to specify any single character as the **Other Delimiter**.
9. Click **Import**.
   - If the import is successful, the Import Success dialog box is displayed, indicating the schedule name, the name of the file containing the tasks, and the total number of tasks imported. Click **OK**.
   - If errors are found, the import process is not run, and the Import Errors dialog box displays the errors. View the errors, then click **OK** to return to the **Schedules** page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-16 Troubleshooting Import Errors

Error	Resolution
Duplicate Task ID	Check for duplicate Task IDs. Task IDs must be unique within the template or schedule. See Creating Tasks.
Task Name is too long	The Task Name can contain a maximum of 80 characters. See Setting Task Properties.
Organizational value - "Invalid Value"	The Organizational value cannot be blank, contain bullet points or multiple lines.

Updating Tasks in Schedules

You may need to manually update information on a task that is running, and in this case, you can reopen it. When you reopen a task, it is reset to Open with Assignee status, and you can edit the information. For example, you can change the instructions and references, attributes, and questions. If you make changes, previous answers to questions are cleared.

Reopening a series of tasks does not reestablish the predecessor relationships. All end-user tasks are reset to Open with Assignee. No tasks are reverted to Pending status.

You can reopen tasks under these conditions:

Table 28-17 Conditions for Reopening Tasks

Task Status	End-User
With Assignee/Running	You can edit or import data into the Instruction, Attribute, or Question sections. When you save the task, it is reset to the Assignee, and the answers to questions are cleared.
With Approver	You can edit or import data in to the Instruction, Attribute, or Question sections. When you save the task, it is reset to the Assignee, and the answers to questions are cleared.
Closed/Error	From Task Details, the task owner can click Reopen to reopen the task and make changes. When you save the task, it is reset to the Assignee.

To update tasks in a schedule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Open a schedule.
4. Select a task with a **Closed** or **Error** status, right-click, and then select **View**.

   The View Task dialog box is displayed.
5. Click **Reopen**.
6. Edit the task.
7. If the system displays a warning that the Assignee must complete the task again, or that the service will be executed again, click **Yes** to continue or **No** to cancel.
8. Perform an action:
   - For a Closed task, click **Close**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- For an Error task, click **Save and Close**.

Reassigning Users in Schedules

You may periodically need to reassign users to different schedules. For example, you may create a schedule and assign a user to certain rights; however, later that employee leaves the company and another employee assumes those schedules. You can use the Reassign feature in the Schedules dialog box to automatically change assignments instead of manually searching for, opening, and editing individual schedules. The Reassign feature enables you to quickly find the schedules associated with one user and reassign them to another.

You can reassign users for multiple schedules at a time. This can be helpful if your application has a large number of schedules.

To reassign users:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Select one or more schedules for which you want to reassign users.
4. Click **Actions**, and then **Reassign User**.
5. For **Find User**, click **Find User** and enter search criteria for the user that you want to replace:
   a. From the **Select User** dialog box, enter the first or last name for the user, and click **Search**.
   b. Select the user from the results, then click **OK**.
6. For **Replace With**, click the **Replace With** icon and enter search criteria for the user to whom you want to reassign tasks:
   a. From the **Select User** dialog box, enter the first or last name for the user, and click **Search**.
   b. Select the user from the results, then click **OK**.
7. Select the **Ending Between** dates.
8. Select roles for the user that must be reassigned:
   - **Owner**
   - **Assignee**
   - **Approver**
   - **Viewer**
9. Click **Reassign**.

   When the process ends, the system displays a Reassign Users - Success message that indicates that the user reassignment is complete, and displays the schedule name and total number of user reassignments made.

Authorizing Process-Automated Tasks

When you create Process-Automated tasks, for security purposes, you specify a user account under which the task is run. To preserve security, you may require authorization to perform the task if any of these conditions occurs:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- If you add a Process-Automated task with an alternate runtime user known as the Run As user to a schedule, from a template or by manually adding the task
- When you set a schedule to Open status, the system automatically issues a request for authorization if it has not been completed.

If the parameters of a task are modified by a user other than the Assignee (or task owner if the owner is also the Assignee), the authorization is reset to Unauthorized and must be obtained by entering a password. For Process-Automated tasks, if a user other than the specified or default Run As user modifies the parameters, the task is reset to Unauthorized.

Authorization ensures that the user performing the Process Automated task has security privileges for the application and data for which the task runs. An administrator who knows the credentials of the runtime user can perform the authorization or issue a request to the user to obtain authorization.

When the Process Automated task is scheduled to run, if authorization is not provided, the task is not run, and its status changes to Needs Attention. If an owner or Assignee edits the task, the task details indicate that authorization is required. In this case, only the Run As user can authorize the task.

A user who receives a request for authorization can access the authorization on the Worklist from a link in the email or by logging on to the application.

> **Note**
>
> From a Schedule or from a Worklist, before the task Start Date, the Administrator, Schedule Owner, or Task Owner can authorize the task. After the task Start Date, only the Run As user can authorize the task.

To authorize a task:

1. On the Home page, click **Application**, and then click **Task Manager**
2. Select the **Schedules** tab on the left.
3. Select a schedule.
4. Select **Actions**, and then select **Authorize Tasks**.

   The system displays a **Users** selection list and a table of unauthorized tasks for the selected schedule. The user selection list is populated with users that have pending Process-Automated tasks assigned to them that require authorization.
5. From the user selection list, select a user.

   The system displays a list of unauthorized tasks for that user. Your user name displays first on the list in bold by default. If you have no unauthorized tasks, the list is blank.
6. Select a task that needs authorization.
7. To view task details, click a task name and review the task parameters.

> **Tip**
>
> To contact the task owner by email, click the Owner name next to the task and view the user details.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Setting Schedule Status

You manage the schedule lifecycle by setting the schedule status. You can set the status of a schedule to Open, Closed, or Locked, depending on its current status. To set schedule status, you must be the schedule owner or Service Administrator.

You can set the status for multiple schedules at a time. This can be helpful if your application has a large number of schedules.

These are the available statuses:

- **Pending**: The schedule is not yet active. When you create a schedule, it has a status of Pending by default so that you can make final adjustments to it, and add, edit, or delete tasks. When a schedule has a Pending status, you cannot close or lock the schedule.
- **Open**: To run a schedule, change the status from Pending to Open. When the schedule is opened, tasks begin to execute according to their definition. Status for tasks that have met their start date, time and conditions are set to Open, and task notifications are sent to their Assignees.
- **Closed**: When work on the schedule has reached a stage when the schedule is no longer active, and follow-up work is all that is required, you set the status to Closed. You cannot add new tasks to a Closed schedule. However, users can continue to work on tasks that are not complete. You can reopen a Closed schedule if needed, which changes its status to Open.
- **Locked**: When all tasks are completed, you set the status to Locked. After a schedule is locked, it cannot be modified. You cannot edit a Locked schedule, but you can set the status back to Open, if required.

Automated tasks execute based on their defined workflow within the schedule and don't require manual intervention. If you want the automated task execution to be dependent on a manual user action, there are two scheduling options:

- Add a basic or an end user task as a **Start to Finish** predecessor of the automated task. The automated task will execute after the preceding task is completed, and the start time is met. See Setting Task Predecessors in *Administering Financial Consolidation and Close*.
- Assign a **Run As** user within the workflow on the automated task. See Selecting the Workflow in *Administering Financial Consolidation and Close*. When a **Run As** user is specified for the automated task, then the task's execution will be dependent on the designated **Run As** user authorization. The automated task will only execute after the start time, predecessors, and **Run As** authorization have been met. See Authorizing Process-Automated Tasks in *Administering Financial Consolidation and Close*.

> **Note**
>
> If a schedule task start time is reached and authorization has not been provided for a system-automated task, the task remains in the Pending status and requires authorization.

To set the schedule status:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Select one or more schedules for which to set status.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Click **Actions**, and then **Set Status,** or select the **Set Status** dropdown.
5. Click one of these status options, depending on the current status:
   - **Open**
   - **Closed**
   - **Locked**
6. A system warning is displayed about the change, for example, that setting the status to Open will begin execution of all tasks for the current date. To confirm the status change, click **Yes**.

Viewing Schedule History

The system maintains a history of schedule actions, which you can view from the Edit Schedules dialog box. The History tab displays the components that were updated, the modification type, the old and new values, the user who made the modification, and the change date. The information is read-only.

To view schedule history:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Select a schedule.
4. Select the **History** tab and review the schedule history.
   - **Modification Type**: Indicates the type of change: Created, Changed, Added, Removed
   - **Modified On**: Date of the modification
   - **Modified By**: Name of the user who modified the schedule
   - **Old Value**
   - **New Value**
5. Click **OK**.

Validating Schedules

You can validate schedules with a status of Pending or Open. Validating a schedule checks for problems with start and end dates, predecessor relationships, parent-child relationships, and missing task parameters for product integrations. You cannot change a schedule status from Pending to Open until all validation errors are resolved. To validate schedules, you must be the schedule owner or Service Administrator.

The validation results show the schedule names, status, and error messages. You can sort the results by Schedule Name or Status.

To validate schedules:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Select one or more schedules to validate.
4. Click **Actions**, and then select **Validate**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

If no errors exist, the validation results show a "Schedule is valid " message. If errors exist, it shows the error details.

Locking Schedules

You can lock a schedule to prevent users from making further changes.

To lock a schedule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. From the list of schedules, select a schedule.
4. Select the **Actions** icon to the right of the schedule in the listing, and then select **Set Status**, or from the **Set Status** drop-down list, select **Locked**.
5. **Optional:** If you need to reopen the Locked schedule, select **Actions**, and then **Set Status**, or from the **Set Status** drop-down list, select **Open**.

Viewing Schedules

In Schedules, you can specify which columns to display for the list of schedules, or show all. You can also reorder columns, sort columns by ascending or descending order, or change the column widths.

To display columns:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Do one or more of the following tasks:
   - To display all columns, select **View**, then **Columns**, and then select **Show All**.
   - To display specific columns, select **View**, then **Columns**, and then select or deselect the column names.
   - To reorder columns, select **View**, then **Reorder Columns**, select columns, and then use the Up or Down arrows or drag them to change the order.
   - To sort columns, hover over a column header until the Sort icons are displayed, and then click **Sort Ascending** or **Sort Descending**.
   - To change column widths, hover over the column header dividers until the arrows display, and drag the columns to the desired width.

Searching for Schedules

You can use the Search text box in a Schedules list to quickly find schedules. You can enter full or partial names on which to search. Using the filter bar, you can control the schedules that you see in the list. By default, all schedules are displayed.

To search for a schedule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. To search for a schedule, enter search criteria in the **Search** text box.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. **Optional:** From the filter bar, click on a category to display additional search operators such as **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Starts With**, and **Ends With**.

   You can filter schedules using these categories: **Name**, **Year**, **Period**, **Status**, **Start Date**, and **End Date**. Click **Add a Filter** to add additional filters: **Created By**, **Created On**, **Day Zero Date**, **Description**, **Last Updated By**, **Last Updated on**, **Organizational Unit**, **Owner**, and **Tasks**.

> **Note**
>
> - Click **Add a Filter** to view all categories.
> - To hide the filter bar, click the **Hide Filter Bar** icon.
> - To clear all filters, click the **Filters** icon, and then click **Clear All Filters**.

Deleting Schedules

You can delete a schedule that you no longer need. To delete a schedule, you must be the schedule owner or Service Administrator. Deleting a schedule removes it and all references to it from the system.

To delete a schedule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. From **Schedules**, select the schedule that you want to delete.
4. Click **Delete**.

   The system displays a warning that if you delete a schedule, it will also permanently delete all tasks within the schedule, and the only way to recover is from a backup.
5. To delete the schedule, click **Yes**.

Managing Task Manager Integrations

You can enable Task Manager tasks to include integrations within the Oracle Fusion Cloud Enterprise Performance Management and other external applications.

Task Manager allows you to incorporate integrated tasks within your business processes. These simplify the process by automating manual tasks or including embedded application pages or links.

To manage Task Manager integrations, you must have the Service Administrator role.

Task Manager supports the following integration types:

End User

An End User integrated task requires the user to interact with an application web page. These application web pages are displayed within the task or included as links within the task. An Integration requires an execution URL for user tasks and an optional set of parameters. The

Copyright © 2022, 2026, Oracle and/or its affiliates.

execution URL launches the external program, and the parameters pass information required for the task to the external program. For example, the Approve Journals Integration contains parameters such as the Point of View dimension values for the journal.

Users must perform and validate the task. For example, the task may be a generic task such as submitting data, or it may require product integration to facilitate or validate its completion.

Process Automation

A Process Automation task initiates an action within the connected application. These integrations are automatically executed in external applications when their Start date and time are reached, and their predecessor tasks are completed, for example, an overnight feed from a General Ledger. These tasks are often executed after working hours. They require limited user interaction and do not have Assignees.

Event Monitoring

An Event Monitoring task is a task which is passive. It does not initiate any action but monitors another application awaiting for an action or status to occur. Once the action or status occurs, the task is marked complete. These are based on events that occur in external applications, for example Approve Journals.

Task Manager provides these pre-built integrations:

- Cloud Integrations: End User and Process Automation integrations for Cloud EPM Connections. See Managing Integrations with Cloud EPM Services.
- Cloud Integrations: Oracle Cloud ERP. See Managing Integrations with Cloud Applications.

If you require any other Integrations for Cloud or On Premises, you can create Custom Integrations. See Creating Custom Integrations.

Managing Integrations with Cloud EPM Services

If you are using Task Manager and have subscriptions to other Oracle Fusion Cloud Enterprise Performance Management services, you can create connections between services and enable integrations using Task Manager functionality.

Pre-built integrations enable you to perform Task Manager tasks that access other Cloud EPM functionality.

Pre-built integrations are provided within Task Manager for these Cloud EPM services:

- Account Reconciliation
- Enterprise Data Management
- Enterprise Profitability and Cost Management
- Financial Consolidation and Close
- Planning and Planning Modules
- Profitability and Cost Management
- Tax Reporting

To learn more about how to set up integrations, see Adding Pre-built Integrations in Cloud EPM.

To learn more about which end user integrations are available, see End User Integrations for Cloud EPM.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To learn more about which pre-built automated integrations are available, see Automation Integrations for Cloud EPM.

Watch the video Managing Task Manager Integrations

Adding Pre-built Integrations in Cloud EPM

Make sure you have the prerequisites and follow these steps to set up an integration between Task Manager and other Oracle Fusion Cloud Enterprise Performance Management services.

For an overview of the Task Manager integrations, see Managing Task Manager Integrations.

Prerequisite

To create integrations between Cloud EPM services, you need to obtain a subscription to the Cloud EPM service you want to integrate with.

To Create the Integration Type and Task Type

For Cloud EPM services where Task Manager has been enabled (for example, Financial Consolidation and Close), the service is automatically configured with the Integrations and Task Types for that business process.

Task Manager can be extended to include integrations with your other business processes by defining a connection to the business process and then deploying the Integrations and Task Types.

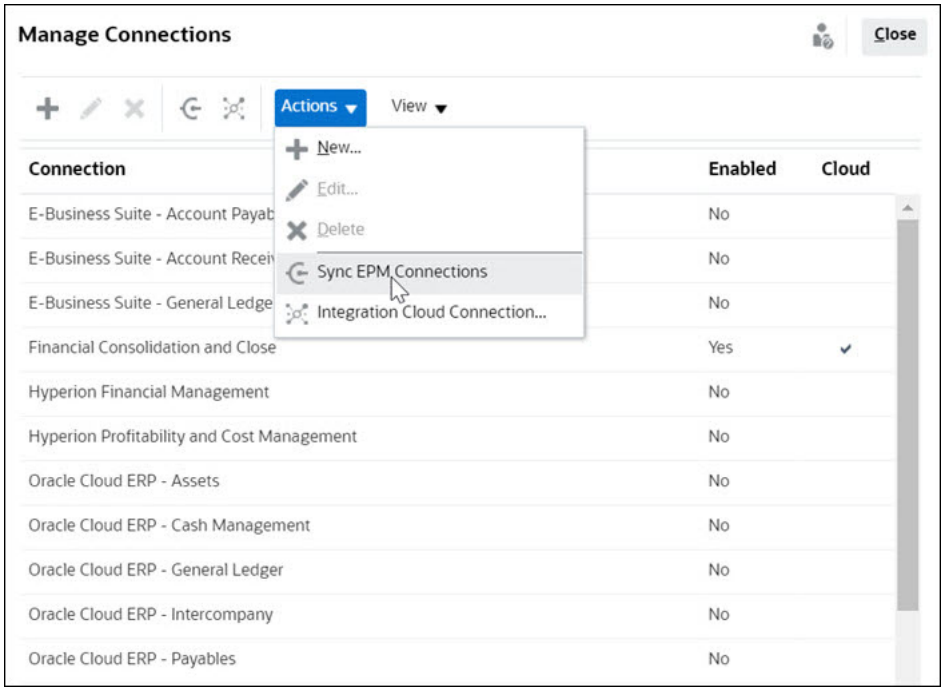
To add pre-built integrations within the Cloud EPM:

1. Create the connection between the service that contains Task Manager and the other service:
   - On the Home page, click **Tools**, and then click **Connections**.
   - Click **Create** to create a new connection:
     - For Enterprise Data Management, select **Other Web Service Provider**.
     - For all other Cloud EPM services, select **Oracle Enterprise Performance Management Cloud** provider.
   - Name the EPM Connect connection. For example, if integrating with Enterprise Profitability and Cost Management, a possible **Connection Name** could be **EPCM**.
   - Specify the connection URL.
   - Specify the user credentials.
   - Additionally for **Other Web Service Provider**, you must specify advanced options. Click **Show Advanced Options**.
     - For **Type**, select **Parameter**.
     - For **Name**, enter SERVICE_TYPE (this is a fixed value).
     - For **Value**, enter EDMCS (this is a fixed value).

   For more information about connecting Cloud EPM subscriptions, see Connecting Environments in Cloud EPM in *Administering and Working with Enterprise Profitability and Cost Management*.
2. On the Home page, click **Application**, and then click **Task Manager**.
3. Click the **Integrations** tab on the left.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. From the **Integrations** page, click **Manage Connections**.
5. On **Manage Connections**, from **Actions**, select **Sync EPM Connections**.



A message displays the progress of the synchronization, and details the integrations added to the service. An Integration Type and Task Type is added for each Integration.

See also:

- End User Integrations for Cloud EPM
- Automation Integrations for Cloud EPM

End User Integrations for Cloud EPM

End user integrations allow you to access functionality in other remote Oracle Fusion Cloud Enterprise Performance Management environments while using Task Manager.

For an overview of the Task Manager integrations, see Managing Task Manager Integrations.

This section lists the available end user integrations for each Cloud EPM service:

- End User Integrations for Account Reconciliation
- End User Integrations for Enterprise Profitability and Cost Management
- End User Integrations for Financial Consolidation and Close
- End User Integrations for Planning and Planning Modules
- End User Integrations for Profitability and Cost Management
- End User Integrations for Tax Reporting

For a description of the remote Cloud EPM functionality, see the documentation for that Cloud EPM service.

End User Integrations for Account Reconciliation

- Console
- Data Exchange

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Reconciliation List (Period, Saved List)
- Reports
- Transaction List (Period, Saved List)

End User Integrations for Enterprise Profitability and Cost Management

- Calculate Model
- Data Exchange
- Enter Form Data
- Export Data
- Export Metadata
- Import Data
- Invalid Intersections Report
- Manage Dimensions
- Manage Forms
- Manage Valid Intersections
- Profit Curves
- Refresh Application
- Reports
- Update Rules
- Validation Model
- View Calculation Analysis
- View Dashboard
- View Operational Dashboard
- View Rule Balancing
- View Trace Allocations

End User Integrations for Financial Consolidation and Close

- Approvals
- Configure Application
- Data Exchange
- Enter Form Data (Form)
  Required parameter is Form (EPM Artifact Type) displayed in drop down list in Task Details dialog.
- Export Data
- Export Metadata
- Export Journal
- Generate Financial Report
  Required parameter is the choice of report from drop down.
- Import Data
- Import Metadata

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Import Journal
- Invalid Intersections Report
- Generate Intercompany Matching Report
- Generate Journal Report
- Manage Approvals
- Manage Dimensions
- Manage Forms
- Manage Journals
- Manage Ownership
- Manage Periods
- Manage Valid Intersections
- Refresh Application
- Reports
- View Dashboard (Dashboard)
  Required parameter is Dashboard (EPM Artifact Type) displayed in the drop down list in the Task Details dialog.
- View Financial Reports
- View Operational Dashboard

End User Integrations for Planning and Planning Modules

- Approvals
- Data Exchange
- Enter Form Data (Form)
  Required parameter is Form (EPM Artifact Type) displayed in drop down list in Task Details dialog.
- Generate Financial Report
  Required parameter is the choice of report from drop down.
- Invalid Intersections Report
- Manage Approvals
- Manage Dimensions
- Manage Rules
- Manage Valid Intersections
- Reports
- View Dashboard (Dashboard).
  Required parameter is Dashboard (EPM Artifact Type) displayed in the drop down list in the Task Details dialog
- View Financial Reports
- View Operational Dashboard

End User Integrations for Profitability and Cost Management

- Dashboards

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Data Exchange
- Generate Profitability Report
- Profit Curves (Profit Curve)
  Required parameter is Profit Curve (EPM Artifact Type) displayed in drop down list in Task Details dialog.
- View Dashboard (Dashboard).
  Required parameter is Dashboard (EPM Artifact Type) displayed in the drop down list in the Task Details dialog.

  View Report (Report)

End User Integrations for Tax Reporting

- Approvals
- Configure Application
- Data Exchange
- Enter Form Data (Form)
  Required parameter Form (EPM Artifact Type) displayed in drop down list in Task Details dialog.
- Export Data
- Export Metadata
- Generate Financial Report
  Required parameter is the choice of report from drop down.
- Import Data
- Import Metadata
- Invalid Intersections Report
- Manage Approvals
- Manage Dimensions
- Manage Forms
- Manage Periods
- Manage Valid Intersections
- Refresh Application
- Reports
- View Dashboard (Dashboard).
  Required parameter is Dashboard (EPM Artifact Type) displayed in the drop down list in the Task Details dialog
- View Financial Reports
- View Operational Dashboard

Automation Integrations for Cloud EPM

These pre-built integrations are available

- Automation Integrations for Cloud EPM Platform
- Automation Integrations for Account Reconciliation

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Automation Integrations for Enterprise Data Management
- Automation Integrations for Enterprise Profitability and Cost Management
- Automation Integrations for Financial Consolidation and Close and Tax Reporting
- Automation Integrations for Planning and Planning Modules
- Automation Integrations for Profitability and Cost Management

To use the pre-built Oracle Fusion Cloud Enterprise Performance Management Integrations, you must specify parameters for the integration. Many parameters for automated integrations are selectable from drop-down lists, which eliminates the need to manually enter values. For example, to run a rule or ruleset, you can select from a list of business rules, such as ForceConsolidate or ForceTranslate.

For an overview of the Task Manager integrations, see Managing Task Manager Integrations.

Automation Integrations for Cloud EPM Platform

Integration Name / Module	Module	Description	Parameters/ Description
Copy File from	All Cloud EPM Services except Enterprise Data Management	Copies a file from current service where Task Manager is configured to another Cloud EPM Service. For example, if you have configured Task Manager in Enterprise Profitability and Cost Management and set up Account Reconciliation connection, **Copy File from** Enterprise Profitability and Cost Management copies the file from Enterprise Profitability and Cost Management to Account Reconciliation.	File Name: Name of the file that you want to copy. Save File As: Name of the file that you want to save. This can be different than the original file name. External Directory Name (Optional): Name of the directory.
Copy File to Enterprise Profitability and Cost Management	All Cloud EPM Services except Enterprise Data Management	Copies a file to current service where Task Manager is configured from another Cloud EPM service.	File Name: Name of the file that you want to copy. Save File As: Name of the filethat you want to save. This can be different than the original file name. External Directory Name (Optional): Name of the directory.
Delete File From Enterprise Profitability and Cost Management	All Cloud EPM Services except Enterprise Data Management	Deletes a file from a Cloud EPM service.	File Name: Name of the file that you want to delete.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name / Module	Module	Description	Parameters/ Description
Lock Unlock Data Integration	All Cloud EPM Services except Enterprise Data Management	Locks or unlocks an integration for a location, category, and period in Data Exchange. This is a process-automated integration.	Operation: Choose from lock or unlock. Lock Type: Choose whether the Lock/ Unlock operation is for an application or a location. Period: Specify the period of the POV from the integration or data load rule defined in Data Exchange, for example, "Jan-21". Category: Specify the predefined Scenario value based on the POV Category from the integration (data rule) definition. The categories available are those that are created in the Data Integration set-up, such as "Actual." Application (Optional): If selected Lock Type is application, specify the name of application, for example, "Vision". Location (Optional): If selected Lock Type is location, specify the name of the location. If the location is locked, data cannot be loaded to it. Unlock By Location (Optional): This parameter can be specified when selected operation is lock and selected location is application. If checked when locking the target application, then the system locks all rules present in the location under target application and not the application-level lock. For more information, see Lock and Unlock POV in *REST APIs for Oracle Fusion Cloud EPM*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name / Module	Module	Description	Parameters/ Description
Run Data Integration	All Cloud EPM Services except Enterprise Profitability and Cost Management	Execute an integration or data load rule based on how periods are processed and source filters. This allows the integration of data loads defined in Data Exchange easily into the monthly processing schedule.	Job Type: Integration is the job type. Integration Name: The name of the integration defined in Data Integration. Period Name: Name of the period. Import Mode: Determines how the data is imported into Data Integration. Export Mode: Determines how the data is exported into Data Integration. File Name: Applicable only for native file-based data loads and ignored if specified for other loads. Source Filters: A parameter used to update the source filters defined for the data load rule or integration. Target Options: A parameter used to update the target options defined for the data load rule or integration. Execution Mode: Applicable only for Quick Mode integrations. For more details about these parameters, see Running Integrations in *REST APIs for Oracle Fusion Cloud EPM*.
Run Pipeline	All Cloud EPM Services except Enterprise Data Management	Executes a pipeline based on job parameters and variables that you select.	Job Type: Pipeline is the job type. Job Name: Pipeline code defined for the Pipeline in Data Integration. Start Period: The first period for which data is to be loaded. This period name must be defined in Data Integration period mapping. End Period: The last period for which data is to be loaded. This period name must be defined in Data Integration period mapping. Import Mode: Determines how the data is imported into Data Integration. Export Mode: Determines how the data is exported into Data Integration. Attach Logs: Indicated whether logs are included as an attachment to an email. Send Email: Determines when an email is sent when a Pipeline is run. Send To: Determines the recipient email ID for the email notification. Variables: Used to specify custom variables for the pipeline job in either JSON or key-value format. For more details about these parameters, see Running a Pipeline in *REST APIs for Oracle Fusion Cloud EPM*.

See also Copy and Delete Integration Files

Copyright © 2022, 2026, Oracle and/or its affiliates.

Automation Integrations for Account Reconciliation

Integration Name / Module	Module	Description	Parameters/ Description
Change Period Status	Reconciliation Compliance	Changes the status of a period (Open, Closed, Pending, Locked).	Period: The name of the period Status: Pending, Open, Closed, Locked
Create Period End Reconciliations	Reconciliation Compliance	Copies all selected profiles to a period and returns success or failure status.	Period: The name of the period Filter: The name of the filter that matches the reconciliation
Import Balances	Reconciliation Compliance	Imports balance data using Data Management from a previously created Data Load definition.	Period: The name of the period dl_Definition: The name of a previously saved data load using the format DL_name such as DL_test
Import Pre-Mapped Balances	Reconciliation Compliance	Imports pre-mapped balances.	Period: The name of the period BalanceType: SUB|SRC for sub system or source system CurrencyBucket: Currency bucket, such as Functional File: The name of the file relative to the inbox, for example, balances.csv. The file has to be uploaded to Account Reconciliation using EPM Automate or REST API.
Import Pre-Mapped Transactions	Reconciliation Compliance	Imports pre-mapped transactions for a particular period.	TransactionType: Allowed Transaction Types are BEX (Explained Balance), SRC (Adjustment to Source System), and SUB (Adjustment to Subsystem) File: The name of the file relative to the inbox, for example, transactions.csv. The file has to be uploaded to Account Reconciliation using EPM Automate or REST API. DateFormat: Date Format, such as MM/dd/yyyy, dd/MM/yyyy, dd-MMM-yy, MMM d,yyyy, or All.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name / Module	Module	Description	Parameters/ Description
Import Pre-Mapped Transactions	Transaction Matching	Imports a file of pre-mapped transactions into Transaction Matching.	DataSource: Text ID of the data source where the transaction will be imported to File: The name of the file relative to the inbox, for example, transactions.csv. The file has to be uploaded to Account Reconciliation using EPM Automate or REST API. ReconciliationType: Text ID of the reconciliation type where the transaction file will be imported to, such as Bank to GL. DateFormat: Date Format, such as MM/dd/yyyy, dd/MM/yyyy, MM-dd-yyyy, d-M-yyyy, dd-MMM-yy, MMM d, yyyy
Import Profiles	Reconciliation Compliance	Imports profiles for a particular period.	ImportType: The import type. Supported values are Replace and ReplaceAll Period: The period for which to import ProfileType: The profile type. Supported values are Profiles and Children File: The name of the file relative to the inbox, for example, profiles.csv. The file has to be uploaded to Account Reconciliation using EPM Automate or REST API. DateFormat: Date Format, such as MM/dd/yyyy, dd/MM/yyyy, d-M-yyyy, dd-MMM-yy, MMM d, yyyy, or All

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name / Module	Module	Description	Parameters/ Description
Import Rates	Reconciliation Compliance	Imports rates for a particular period and rate type.	Period: The name of the period RateType: The rate type, such as Accounting Import Rates (Reconciliation Compliance) File: The name of the file relative to the inbox, for example, rates.csv. The file has to be uploaded to Account Reconciliation using EPM Automate or REST API. ImportType: Supported import types are Replace and ReplaceAll
Monitor Reconciliations	Reconciliation Compliance	Monitors list of reconciliations in ARCS.	Period: The name of the period Filter: Filter string used to query list of reconciliations
Run Auto Match	Transaction Matching	Runs the auto match process in Transaction Matching.	ReconTypeId: The Text ID of the Reconciliation type to be auto matched
View Reconciliations	Reconciliation Compliance	View reconciliations for a specified period.	Period: The name of the period Saved List: The name of a Public saved list
View Transactions	Transaction Matching	View transactions for a specified period.	Period: The name of the period Saved List: The name of a Public saved list

Automation Integrations for Enterprise Data Management

Integration Name	Description	Parameters/ Description
Export Dimension	Exports a dimension from Enterprise Data Management to a configured connection. This is a process-automated integration. See Adding Pre-built Integrations in Cloud EPM.	Application: The name of the Enterprise Data Management application from which to export the dimension. Dimension: The name of the dimension to export. Connection: **Optional.** The name of the connection to which to export the dimension. File Name: The file and path from which to export the dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Export Dimension Mapping	Exports a Dimension Mapping from Enterprise Data Management to a configured connection. This is a process-automated integration.	Application: The name of the Enterprise Data Management application from which to export the Dimension Mapping. Dimension: The name of the Dimension Mapping to export. Connection: **Optional**. The name of the connection to which to export the Dimension Mapping. Mapping Location: The location to which to export the Dimension Mapping. File Name: The file and path from which to export the Dimension Mapping.
Import Dimension	Imports a Dimension from a configured connection to an Enterprise Data Management application. This is a process-automated integration. See Adding Pre-built Integrations in Cloud EPM.	Application: The name of the Enterprise Data Management application to which to import the dimension. Dimension: The name of the dimension to import. Connection: The name of the connection from which to import the dimension. File Name: The file and path from which to import the dimension. Import Option: **Optional**. Determines how the data is imported into Enterprise Data Management.
Extract Dimension	Extracts a dimension from Enterprise Data Management to a configured connection. This is a process-automated integration.	Application: The name of the Enterprise Data Management application from which to extract the dimension. Dimension: The name of the dimension to extract. Extract: The name of the extract. Connection: The name of the connection to which to extract the dimension. File Name: The file and path from which to extract the dimension.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Automation Integrations for Enterprise Profitability and Cost Management

Integration Name	Description	Parameters/ Description
Calculate Model	Calculates a model for one or more points of view.	Job Type: Calculate Model Job Name: Name of the job POV Delimiter: Delimiter used in POV values. The default delimiter is _ (under score). The delimiter must be enclosed in double quotation marks. Only these delimiters are supported: • _ (under score) • # (hash) • & (ampersand) • ~ (tilde) • % (percentage) • ; (semicolon) • : (colon) • - (dash) POV Name: Name of the POV to calculate. You can pass one or more POVs separated by a comma (,). Model Name: Name of the model to calculate Execution Type: Identifies the rule execution type Monitoring Task: Monitors another application awaiting an action or status to occur Rule Name: Name of the single rule to run First Ruleset Sequence Number: Sequence number of the first rule in the rule set to run Last Ruleset Sequence Number: Sequence number of the last rule in the rule set to run Clear Existing Calculations: Whether to clear existing calculations Execute Calculations: Whether to execute calculations Optimize for Reporting: Whether to optimze the calculation process for reporting Generate Debug Scripts: Whether to generate debug scripts

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
		Comment: Comments to describe the job
Clear Cube	Clears specific data within the PCM_CLC and PCM_REP cubes.	Job Type: Clear Cube Job Name: Name of the job
Clear Data by Point of View	Clears data from a point of view without removing the point of view.	Job Type: Clear POV Job Name: Name of the job POV Delimiter: Delimiter used in POV values. The delimiter must be enclosed in double quotation marks. Other than a comma, only these delimiters are supported: • _ (under score) • # (hash) • & (ampersand) • ~ (tilde) • % (percentage) • ; (semicolon) • : (colon) • - (dash) POV Name: Name of the POV to clear Cube Name: Name of the cube on which clear operation is to be executed Clear Input Data: Whether to clear input data Clear Allocated Data: Whether to clear allocated data Clear Adjustment Data: Whether to clear adjustent data

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Copy Data by Point of View	Copies data from one point of view to another.	Job Type: Copy POV Job Name: Name of the job POV Delimiter: Delimiter used in POV values. The delimiter must be enclosed in double quotation marks. Other than a comma, only these delimiters are supported: • _ (under score) • # (hash) • & (ampersand) • ~ (tilde) • % (percentage) • ; (semicolon) • : (colon) • - (dash) Source POV: Name of the source POV Destination POV: Name of the destination POV Copy Type: Specifies the data to copy from the source Source Cube Name: Name of the source cube Destination Cube Name: Name of the destination cube
Cube Refresh	Refreshes the OLAP cube.	Job Type: Cube Refresh Job Name: Name of the job
Export Data	Exports application data into a file using the export data settings, including file name, specified in a job of type export data. The file containing the exported data is stored in the repository.	Job Type: Export Data Job Name: Name of the job Export File Name: File name to which data is to be exported
Export Data Mapping	Exports a Data Mapping defined in Data Management to a specified location. This is a process-automated integration. For more information, see Adding Pre-built Integrations in Cloud EPM. Member mappings define relationships between source members and target dimension members within a single dimension.	Job Type: Export Data Mapping Dimension: The dimension name for a specific dimension to import, such as ACCOUNT, or ALL to import all dimensions File Name: The file and path from which to export mappings. The file format can be .CSV, .TXT, .XLS, or .XLSX. Include the outbox in the file path, for example, outbox/BESSAPPJan-06.csv. Location Name: Name of the location to which to export

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Export Metadata	Exports metadata from a file in the repository into the application using the export metadata settings specified in a job of type export metadata.	Job Type: Export Metadata Job Name: Name of a batch defined in export metadata Export Zip File Name: Name of the zip file for the exported metadata
Import Data	Imports data from a file in the repository into the application using the import data settings specified in a job of type import data.	Job Type: Import Data Job Name: Name of the job Import File Name: File name from which data is to be imported
Import Data Mapping	Imports a Data Mapping defined in Data Management to a specified location. This is a process-automated integration. Member mappings define relationships between source members and target dimension members within a single dimension. You can import member mappings from a selected Excel, .CSV or .TXT file.	Job Type: Import Data Mapping Dimension: Dimension name for a specific dimension to import, such as ACCOUNT, or ALL to import all dimensions File Name: The file and path from which to import mappings. The file format can be .CSV, .TXT, .XLS, or .XLSX. The file must be uploaded prior to importing, either to the inbox or to a sub-directory of the inbox. Include the inbox in the file path, for example,inbox/BESSAPPJan-06.csv. Import Mode: MERGE to add new rules or replace existing rules, or REPLACE to clear prior mapping rules before import Validation Mode: Whether to use validation mode: true or false. An entry of true validates the target members against the target application; false loads the mapping file without any validations. Note that the validation process is resource intensive and takes longer than the validation mode of false; the option selected by most customers is false. Location: Data Management location where the mapping rules should be loaded. Mapping rules are specific to a location in Data Management.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Import Metadata	Imports metadata from a file in the repository into the application using the import metadata settings specified in a job of type import metadata.	Job Type: Import Metadata Job Name: Name of a batch defined in import metadata Import Zip File Name: Name of the zip file for the imported metadata
Lock Unlock Data Integration	Locks or unlocks an integration for a location, category and period in Data Exchange. This is a process-automated integration.	Job Type: Lock Unlock Data Integration Operation: Lock or unlock Lock Type: Whether the Lock/ Unlock operation is for an application or a location Period: Period of the POV from the integration or data load rule defined in Data Exchange, for example, "Jan-21" Category: Predefined Scenario value based on the POV Category from the integration (data rule) definition. The categories available are those that are created in the Data Integration set-up, such as "Actual." Application (Optional): If the selected Lock Type is application, the name of the application; for example, "Vision". Location (Optional): If the selected Lock Type is location, the name of the location. If the location is locked, data cannot be loaded to it. Unlock By Location (Optional): This parameter can be specified when the selected operation is lock and selected location is application. If checked when locking the target application, then the system locks all rules present in the location under target application and not the application-level lock. For more information, see Lock and Unlock POV in *REST APIs for Oracle Fusion Cloud EPM*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Batch	Executes a batch of jobs that have been defined in Data Management	Job Type: Run Batch Batch Name: Name of the batch to be executed, such as Dimension Map For POV (Dimension, Cat, Per) Path Report Format Type: The file format of the report - PDF, XLSX, or HTML Parameters: Can vary in count and values based on the report Location: The location of the report, such as Comma_Vision Run As: Specify this parameter in the Workflow tab
Run Business Rule	Launches a business rule.	Job Type: Run Business Rule Rule Name: Name of the business rule. Parameters: Run time prompts in JSON syntax. The parameter name should be the same as th name defined in rule definition. For example, {"MyScenario1":"Current", "MyVersion1":"BU Version_1", "ToEntity":"CA", "Rule_Level_Var":"AZ", "planType":"Plan1"} The following format is also supported; for example: "Scenario=Actual" "Entity=Total Geography" "Year=FY21" "Period=Apr"
Run Business Rule Set	Launches a business rule set. Rule sets with no runtime prompts or runtime prompts with default values will be supported.	Job Type: Run Business Rule Set Job Name: Name of the job Ruleset Name: Name of the business rule set Parameters: Run time prompts in JSON syntax. The Parameter name should be the same as the name defined in rule definition. For example, {"MyScenario1":"Current", "MyVersion1":"BU Version_1", "ToEntity":"CA", "Rule_Level_Var":"AZ", "planType":"Plan1"} The following format is also supported; for example: "Scenario=Actual" "Entity=Total Geography" "Year=FY21" "Period=Apr"

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Data Integration	Execute an integration or data load rule based on how periods are processed and source filters. This allows the integration of data loads defined in Data Exchange easily into the monthly processing schedule.	Job Type: Run Data Integration Integration Name: Name of the integration defined in Data Integration Period Name: Name of the period Import Mode: Determines how the data is imported into Data Integration Export Mode: Determines how the data is exported into Data Integration File Name: Applicable only for native file-based data loads and ignored if specified for other loads Source Filters: Parameter used to update the source filters defined for the data load rule or integration Target Options: Parameter used to update the target options defined for the data load rule or integration Execution Mode: Applicable only for Quick Mode integrations For more details about these parameters, see Running Integrations in *REST APIs for Oracle Fusion Cloud EPM*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Data Rule	Executes a Data Management data load rule based on the start period and end period, and import or export options that you specify.	Job Type: Run Data Rule Data Rule Name: Name of a data load rule defined in Data Management Start Period: The first period for which data is to be loaded. This period name must be defined in Data Management period mapping. End Period: The last period for which data is to be loaded. This period name must be defined in Data Management period mapping. Import Mode: Determines how the data is imported into Data Management: • APPEND to add to the existing rule • POV data in Data Management • REPLACE to delete the POV data and replace it with the data from the file • RECALCULATE to skip importing the data, but re-process the data with updated Mappings and Logic Accounts. • NONE to skip data import into Data Management staging table Export Mode: Determines how the data is exported into Data Management: • STORE_DATA to merge the data in the Data Managementstaging table with the existing Financial Consolidation and Close or Tax Reporting data • ADD_DATA to add the data in the Data Management staging table to Financial Consolidation and Close or Tax Reporting • SUBTRACT_DATA to subtract the data in the Data Management staging table from existing Financial Consolidation and Close or Tax Reporting data • REPLACE_DATA to clear the POV data and replace it with data in the Data

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
		Management staging table. The data is cleared for Scenario, Version, Year, Period, and Entity • NONE to skip data export from Data Management to Financial Consolidation and Close or Tax Reporting File Name: If you do not specify a file name, the API imports the data contained in the file name specified in the load data rule. The data file must already reside in the INBOX prior to data rule execution. Run As: Specify this parameter in the Workflow tab
Run Pipeline	Executes a pipeline based on job parameters and variables that you select.	Job Type: Pipeline Job Name: Pipeline code defined for the Pipeline in Data Integration Start Period: The first period for which data is to be loaded. This period name must be defined in Data Integration Period mapping. End Period: The last period for which data is to be loaded. This period name must be defined in Data Integration period mapping. Import Mode: Determines how the data is imported into Data Integration Export Mode: Determines how the data is exported into Data Integration Attach Logs: Whether logs are included as an attachment to an email Send Email: Determines when an email is sent when a Pipeline is run Send To: Determines the recipient email ID for the email notification For more details about these parameters, see Running a Pipeline in *REST APIs for Oracle Fusion Cloud EPM*.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Automation Integrations for Financial Consolidation and Close and Tax Reporting

Integration Name	Description	Parameters/ Description
Clear Cube **Note:** This integration is applicable only for Tax Reporting.	Clears specific data within input and reporting cubes.	Name: Name of the clear cube job.
Copy Ownership Data to Next Year	Automates task to copy the ownership data from the last period of a year to the first period of the next year. For more information, see copyOwnershipDataToNextYear in *Working with EPM Automate*.	Scenario: The name of the scenario, such as Actual, selectable Years: Selectable
Cube Refresh	Refreshes the OLAP cube.	Name: Name of the refresh cube job.
Clear Data	Executes a Clear Data job using the profile name. For more information about using Clear Data in Financial Consolidation and Close, see Clear Data in *REST APIs for Oracle Fusion Cloud EPM*. For more information about using Clear Data in Tax Reporting, see Clear Data in *REST APIs for Oracle Fusion Cloud EPM*.	Profile Name: Clear data profile name.
Copy Data	Executes a Copy Data job using the profile name.	Profile Name: Copy data profile name.
Export Data	Exports application data into a file using the export data settings, including file name, specified in a job of type export data. The file containing the exported data is stored in the repository.	Name: Name of the export data job. Export File Name: **Optional**. File name to which data is to be exported.
Export Data Mapping	Exports a Data Mapping defined in Data Management to a specified location. This is a process-automated integration. For more information, see Adding Pre-built Integrations in Cloud EPM. Member mappings define relationships between source members and target dimension members within a single dimension.	Dimension: The dimension name for a specific dimension to import, such as ACCOUNT, or ALL to import all dimensions. File Name: The file and path from which to export mappings. The file format can be .CSV, .TXT, .XLS, or .XLSX. Include the outbox in the file path. For example, outbox/BESSAPPJan-06.csv. Location Name: The name of the location to which to export.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Export Ownership Data	Automates task to export ownership data from a entity to a comma-delimited CSV file. For more information, see exportOwnershipData in *Working with EPM Automate*.	Entity: The name of the entity. Scenario: The name of the scenario, such as Actual. Selectable. Years: Selectable Period: The name of the period, such as January. Selectable. File Name: The name of the file to export.
Import Data	Imports data from a file in the repository into the application using the import data settings specified in a job of type import data.	Name: Name of the import data job. Import File Name: **Optional**. File name from which data is to be imported.
Import Data Mapping	Imports a Data Mapping defined in Data Management to a specified location. This is a process-automated integration. Member mappings define relationships between source members and target dimension members within a single dimension. You can import member mappings from a selected Excel, .CSV or .TXT file.	Job Type: The job type, MAPPINGIMPORT. Job Name: The dimension name for a specific dimension to import, such as ACCOUNT, or ALL to import all dimensions. File Name: The file and path from which to import mappings. The file format can be .CSV, .TXT, .XLS, or .XLSX. The file must be uploaded prior to importing, either to the inbox or to a sub-directory of the inbox. Include the inbox in the file path, for example,inbox/BESSAPPJan-06.csv. Import Mode: MERGE to add new rules or replace existing rules, or REPLACE to clear prior mapping rules before import. Validation Mode: Whether to use validation mode: true or false. An entry of true validates the target members against the target application; false loads the mapping file without any validations. Note that the validation process is resource intensive and takes longer than the validation mode of false; the option selected by most customers is false. Location Name: The Data Management location where the mapping rules should be loaded. Mapping rules are specific to a location in Data Management.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Import Metadata	Imports metadata from a file in the repository into the application using the import metadata settings specified in a job of type import metadata.	Name: The name of a batch defined in import metadata.
Import Ownership Data	Automates task to import ownership data from a CSV file available in the environment into a period. For more information, see importOwnershipData in *Working with EPM Automate*.	Scenario: The name of the scenario, such as Actual. Selectable. Years: Selectable Period: The name of the period, such as January. Selectable. File Name: The name of the file to import.
Journal Period	Opens or closes a journal period automatically. The system will close the period only if there are no Approved and Unposted journals. If there are Approved and Unposted journals, the system will not close the period, and returns an error. If there are Unposted journals in Working and Submitted status, the system will close the period, with a warning.	Scenario: The name of the scenario, such as Actual Year: The year, such as FY20 Period: The name of the period, such as January Action: Open or Close
Monitor Enterprise Journals **Note:** This integration is applicable only for Financial Consolidation and Close.	Monitors the completion status of Journals within a Year/ Period or filtered list.	Year: Optional. The year, such as 2022. Selectable. Period: Optional. The name of the period, such as January. Selectable. Filter Name: Optional.The name of the Filter you created to monitor the status of the Enterprise Journals. **Note:** Though all the parameters are optional, you must specify at least a Filter Name or Year and Period.
Recompute Ownership Data	Automates task for recomputing of ownership data. For more information, see recomputeOwnershipData in *Working with EPM Automate*.	Scenario: The name of the scenario, such as Actual Years: The year, such as FY20 Period: The name of the period, such as January

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Batch Rule	Executes a batch of jobs that have been defined in Data Management.	Name: The name of the report to be executed, such as Dimension Map For POV (Dimension, Cat, Per) Path Report Format Type: The file format of the report - PDF, XLSX, or HTML Parameters: Can vary in count and values based on the report Location: The location of the report, such as Comma_Vision Run As: You must specify this parameter in the Workflow tab.
Run Business Rule	Launches a business rule.	Name: The name of a business rule exactly as it is defined. Parameters: Run time prompts in JSON syntax. Parameter name should exactly be same as defined in rule definition. For example, { "MyScenario1":"Current", "MyVersion1":"BU Version_1", "ToEntity":"CA", "Rule_Level_Var":"AZ", "planType":"Plan1"} Following format is also supported, example: "Scenario=Actual" "Entity=Total Geography" "Year=FY21" "Period=Apr"
Run Business Rule Set	Launches a business rule set. Rule sets with no runtime prompts or runtime prompts with default values will be supported.	Name:The name of a business rule set exactly as it is defined. Parameters: Run time prompts in JSON syntax. Parameter name should exactly be same as defined in rule definition. For example, { "MyScenario1":"Current", "MyVersion1":"BU Version_1", "ToEntity":"CA", "Rule_Level_Var":"AZ", "planType":"Plan1"} Following format is also supported, example: "Scenario=Actual" "Entity=Total Geography" "Year=FY21" "Period=Apr"

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Consolidation	This task is a utility task to run consolidation. Task will prompt user to enter parameters for running the tasks such as Scenario, Year, Period, and Entity.	Scenario Year Period Entity: Multiple entities can be added with comma separator.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Data Rule	Executes a Data Management data load rule based on the start period and end period, and import or export options that you specify.	Job Name: The name of a data load rule defined in Data Management. Start Period: The first period for which data is to be loaded. This period name must be defined in Data Management period mapping. End Period: The last period for which data is to be loaded. This period name must be defined in Data Management period mapping. Import Mode: Determines how the data is imported into Data Management. APPEND to add to the existing rule POV data in Data Management REPLACE to delete the POV data and replace it with the data from the file RECALCULATE to skip importing the data, but re-process the data with updated Mappings and Logic Accounts. NONE to skip data import into Data Management staging table Export Mode: Determines how the data is exported into Data Management. STORE_DATA to merge the data in the Data Management staging table with the existing Financial Consolidation and Close or Tax Reporting data ADD_DATA to add the data in the Data Management staging table to Financial Consolidation and Close or Tax Reporting SUBTRACT_DATA to subtract the data in the Data Management staging table from existing Financial Consolidation and Close or Tax Reporting data REPLACE_DATA to clear the POV data and replace it with data in the Data Management staging table. The data is cleared for Scenario, Version, Year, Period, and Entity NONE to skip data export fromData Management to

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
		Financial Consolidation and Close or Tax Reporting File Name: **Optional**. If you do not specify a file name, this API imports the data contained in the file name specified in the load data rule. The data file must already reside in the INBOX prior to data rule execution. Run As: You must specify this parameter in the Workflow tab.
Run Force Consolidation	This task is a utility task to run force consolidation. The task will prompt the user to enter parameters for running the tasks such as Scenario, Year, Period, and Entity.	Scenario Year Period Entity: Multiple entities can be added using a comma separator.
Run Force Translation	This task is a utility task to run force translation. The task will prompt user to enter parameters for running the tasks such as Scenario, Year, Period, and Entity.	Scenario Year Period Entity: Multiple entities can be added with comma separator.
Run Translation	This task is a utility task to run translation. The task will prompt user to enter parameters for running the tasks such as Scenario, Year, Period, and Entity.	Scenario Year Period Entity: Multiple entities can be added with comma separator.

Automation Integrations for Planning and Planning Modules

Integration Name	Description	Parameters/ Description
Clear Cube	Clears specific data within input and reporting cubes.	Name: Name of the clear cube job.
Cube Refresh	Refreshes the OLAP cube.	Name: Name of the refresh cube job.
Export Data	Exports application data into a file using the export data settings, including file name, specified in a job of type export data. The file containing the exported data is stored in the repository.	Name: Name of the export data job. Export File Name: **Optional**. File name to which data is to be exported.
Import Data	Imports data from a file in the repository into the application using the import data settings specified in a job of type import data.	Name: Name of the import data job. Import File Name: **Optional.** File name from which data is to be imported.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Import Metadata	Imports metadata from a file in the repository into the application using the import metadata settings specified in a job of type import metadata.	Name: The name of a batch defined in import metadata.
Run Batch	Executes a batch of jobs that have been defined in Data Management.	Name: The name of the report to be executed, such as Dimension Map For POV (Dimension, Cat, Per) Path Report Format Type: The file format of the report, PDF, XLSX, or HTML Parameters: Can vary in count and values based on the report Location: The location of the report, such as Comma_Vision
Run Business Rule	Launches a business rule.	Name: The name of a business rule exactly as it is defined. Parameters: Run time prompts in JSON syntax. Parameter name should exactly be same as defined in rule definition. For example, { "MyScenario1":"Current", "MyVersion1":"BU Version_1", "ToEntity":"CA", "Rule_Level_Var":"AZ", "planType":"Plan1"} Following format is also supported, example: "Scenario=Actual" "Entity=Total Geography" "Year=FY21" "Period=Apr"
Run Business Ruleset	Launches a business ruleset. Rulesets with no runtime prompts or runtime prompts with default values will be supported.	Name: The name of a business ruleset exactly as it is defined. Parameters: Run time prompts in JSON syntax. Parameter name should exactly be same as defined in rule definition. For example, { "MyScenario1":"Current", "MyVersion1":"BU Version_1", "ToEntity":"CA", "Rule_Level_Var":"AZ", "planType":"Plan1"} Following format is also supported, example: "Scenario=Actual" "Entity=Total Geography" "Year=FY21" "Period=Apr"

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Data Rule	Executes a Data Management data load rule based on the start period and end period, and import or export options that you specify.	Job Name: The name of a data load rule defined in Data Management. Start Period: The first period for which data is to be loaded. This period name must be defined in Data Management period mapping. End Period: The last period for which data is to be loaded. This period name must be defined in Data Management period mapping. Import Mode: Determines how the data is imported into Data Management. APPEND to add to the existing rule POV data in Data Management REPLACE to delete the POV data and replace it with the data from the file RECALCULATE to skip importing the data, but re-process the data with updated Mappings and Logic Accounts. NONE to skip data import into Data Management staging table exportMode: Determines how the data is exported into Data Management. STORE_DATA to merge the data in the Data Management staging table with the existing Oracle Hyperion Planning data ADD_DATA to add the data in the Data Management staging table to Planning SUBTRACT_DATA to subtract the data in the Data Management staging table from existing Planning data REPLACE_DATA to clear the POV data and replace it with data in the Data Management staging table. The data is cleared for Scenario, Version, Year, Period, and Entity NONE to skip data export from Data Management to Planning File Name: **Optional**. If you do not specify a file name, this API imports the data contained in the file name specified in the

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
		load data rule. The data file must already reside in the INBOX prior to data rule execution.

Automation Integrations for Profitability and Cost Management

Integration Name	Description	Parameters/ Description
Apply Data Grants	Applies data grants for a given Profitability and Cost Management application. This API submits a job to create and apply the data grants in Essbase. This API removes all existing data grants in Oracle Essbase and recreates them with the latest information from the application. It can also be used to repair data grants if there are any issues.	None
Deploy ML Cube	Deploy or redeploy the calculation cube for a selected Profitability and Cost Management application.	isKeepData: Specify whether to preserve existing data isReplacecube: Specify whether to replace existing comment: Any user comments

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run ML Calc	Run or clear calculations for a selected application. Use with Management Ledger.	povGroupMember: The POV group member for which to run calculations, such as 2015_January_Actual isClearCalculated: Whether to clear the calculation data, true or false subsetStart: Rule Set Starting Sequence Number subsetEnd: Rule Set Ending Sequence Number Rule: Rule Name for a SINGLE_RULE ruleSetName: Rule Set Name for a SINGLE_RULE option exeType: The execution type specifies which rules to run; possible values are ALL_RULES, RULESET_SUBSET, SINGLE_RULE. Other parameters are required based on the exeType value. exeType: ALL_RULES overrides all other options such as subsetStart, subsetEnd, ruleSetName, ruleName, and so on. exeType: RULESET_SUBSET considers only subsetStart and subsetEnd. exeType: SINGLE_RULE considers only ruleSetName and ruleName. Comment: Use comment text. Delimiter: String delimiter for POV group members, such as an underscore (_).
Clear ML POV	Clear model artifacts and data from a POV combination for any application.	POV GroupMember: The POV group member for which to run calculations, such as 2015_January_Actual isManageRule: Whether to clear the program rule details isInputData: Whether to clear input data IsAllocatedValues: Whether to clear allocated values stringDelimiter: String delimiter for POV group members

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Copy ML POV	Copy model artifacts and data from a Source POV combination to a Destination POV combination for any application. Use with Management Ledger applications.	POVs: Included in the path srcPOVMemberGroup: Source POV member group, such as 2014_January_Actual destPOVMemberGroup: Destination POV member group, such as 2014_March_Actual isManageRule: Whether to copy the program rule details isInputData: Whether to copy input data modelViewName: To copy a slice of data from source POV to destination POV Create Dest POV: Whether to create the destination POV if it does not already exist String Delimiter: String delimiter for POV group members

Copyright © 2022, 2026, Oracle and/or its affiliates.

Integration Name	Description	Parameters/ Description
Run Data Rule	Executes a Data Management data load rule based on the start period and end period, and import or export options that you specify.	Job Name: The name of a data load rule defined in Data Management. Start Period: The first period for which data is to be loaded. This period name must be defined in Data Management period mapping. End Period: The last period for which data is to be loaded. This period name must be defined in Data Management period mapping. Import Mode: Determines how the data is imported into Data Management. APPEND to add to the existing rule POV data in Data Management. REPLACE to delete the POV data and replace it with the data from the file RECALCULATE to skip importing the data, but re-process the data with updated Mappings and Logic Accounts. NONE to skip data import into Data Management staging table Export Mode: Determines how the data is exported into Data Management. STORE_DATA to merge the data in the Data Management staging table with the existing Profitability and Cost Management data. ADD_DATA to add the data in the Data Management staging table to Profitability and Cost Management. SUBTRACT_DATA to subtract the data in the Data Management staging table from existing Profitability and Cost Management data REPLACE_DATA to clear the POV data and replace it with data in the Data Management staging table. The data is cleared for Scenario, Version, Year, Period, and Entity NONE to skip data export from Data Management to

Copyright © 2022, 2026, Oracle and/or its affiliates.

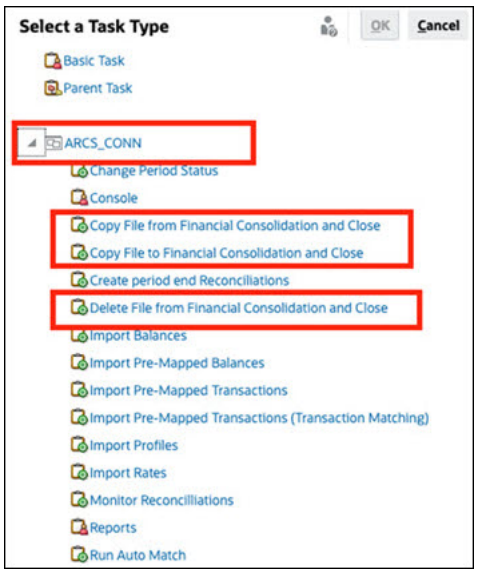
Integration Name	Description	Parameters/ Description
		Profitability and Cost Management File Name: **Optional**. If you do not specify a file name, this API imports the data contained in the file name specified in the load data rule. The data file must already reside in the INBOX prior to data rule execution.
Run Batch Rule	Executes a batch of jobs that have been defined in Data Management.	Job Name: The name of a batch defined in Data Management.
Update Dimension	Uploads a new dimension flat file for an application created using a flat file. This is a process-automated integration. For more information, see Update Dimensions As a Job in *REST APIs for Oracle Fusion Cloud EPM*.	File Name: Data file name Seperator Character: **Optional** Parameter

Copy and Delete Integration Files

The following integrations are common for Oracle Fusion Cloud Enterprise Performance Management:

- **Copy File from** <Cloud EPM Service>
- **Copy File to** <Cloud EPM Service>
- **Delete File from** <Cloud EPM Service>

Example



To perform these integrations:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. From the list of pre-built integrations, select **Copy File from** <Cloud EPM Service>. This copies a file from the Current Task Manager service to a Remote Cloud EPM Service. For example, if you have configured Task Manager in Enterprise Profitability and Cost Management and set up an Account Reconciliation connection, **Copy File from Enterprise Profitability and Cost Management** copies the file from Enterprise Profitability and Cost Management to Account Reconciliation

   > **Note**
   >
   > This applies to all remote Cloud EPM services except Enterprise Data Management.

   - Enter the following Parameters:

     - **File Name**: Browse to and select the file that you want to copy.
     - **Save File As**: Enter a file name (which can be different than the original file name).
     - **External Directory Name** (Optional): Select the name of a directory.
   - Click **Save and Close**.
4. Select **Copy File to** <Cloud EPM Service>. This copies a file to the current service where Task Manager is configured from another Cloud EPM service.

   > **Note**
   >
   > This applies to all remote Cloud EPM services except Enterprise Data Management.

   - Enter the following Parameters:
     - **File Name**: Browse to and select the file that you want to copy.
     - **Save File As**: Enter a file name (which can be different than the original file name).
     - **External Directory Name** (Optional): Select the name of a directory.
   - Click **Save and Close**.
5. Select **Delete File from** <Cloud EPM Service>. This deletes a file from a Oracle Fusion Cloud EPM service.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> This applies to all remote Cloud EPM services except Enterprise Data Management.

- For **File Name**, browse to and select the file that you want to delete.

- Click **Save and Close**.

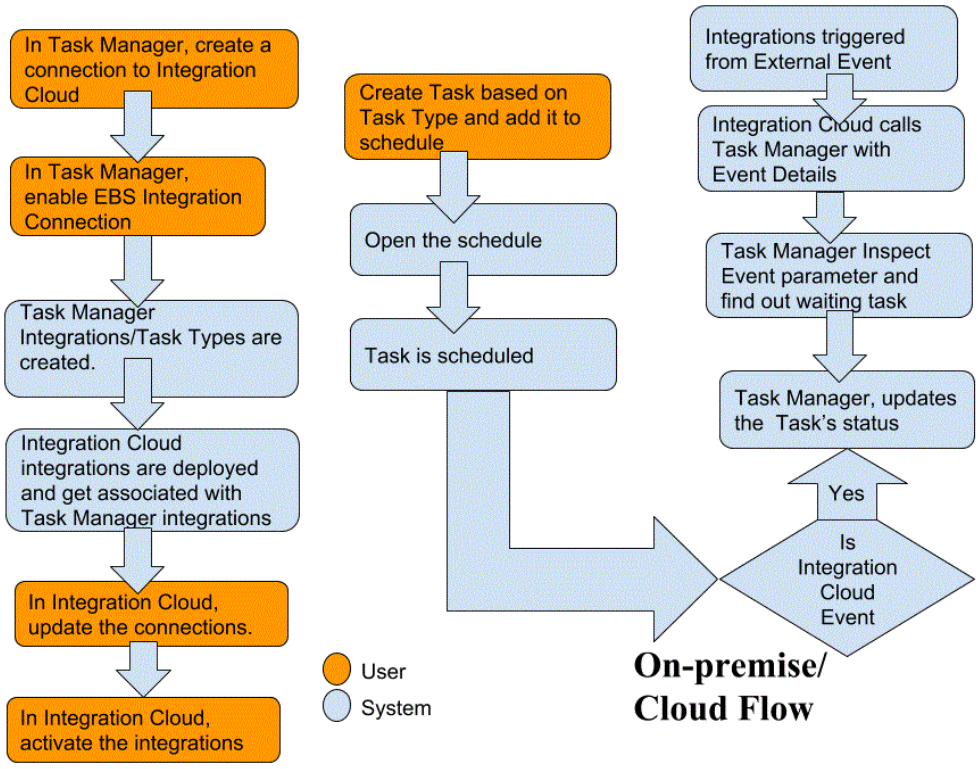
See also, Automation Integrations for Cloud EPM.

Managing Integrations with Cloud Applications

This appendix describes how to set up the Oracle Cloud ERP pre-built Task Manager integration.

Oracle Fusion Cloud Enterprise Performance Management uses Oracle Integration cloud as an integration platform for Task Manager to perform automated tasks with non-Cloud EPM services.

The following diagram shows the system and user flow that applies to :



End User Integrations for Oracle Cloud ERP

Task Manager end user integrations allow you to access functionality in remote Cloud environments. This section lists the available Task Manager end user integrations available for Oracle Cloud ERP.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For a description of the remote Cloud functionality, see the documentation for that Cloud service.

End User Integrations for Oracle Cloud ERP - Assets

- Asset Balances Reconciliation with General Ledger
- Asset Cost Summary
- Asset Reserve Summary
- Calculate Depreciation
- Calculate Deferred Depreciation
- Capitalize CIP Assets
- Create Assets Accounting
- Journal Entry Reserve Ledger Report
- Manage Asset Assignments
- Manage Asset Financial Transactions
- Manage Mass Retirements
- Manage Mass Transfers
- Periodic Mass Copy for Tax Books
- Period Close Exception Report
- Prepare Source Lines and Submit Post Mass Additions
- Reinstate Assets
- Retire Assets

End User Integrations for Oracle Cloud ERP - Cash Management

- Bank Statement Reconciliation
- Create Accounting
- Cash to General Ledger Reconciliation Report
- Subledger Period Close Exceptions Report

End User Integrations for Oracle Cloud ERP - General Ledger

- AutoPost Journals
- AutoReverse Journals
- Close General Ledger Periods
- Create Allocation Rules
- Create Balance Sheet Closing Journals
- Create Income Statement Closing Journals
- Extract Payables to General Ledger Reconciliation Data
- Extract Receivables to General Ledger Reconciliation Data
- Financial Reporting Center Work Area
- General Accounting Dashboard
- Generate Allocation Rules

Copyright © 2022, 2026, Oracle and/or its affiliates.

- General Ledger Trial Balance
- General Ledger Average Trial Balance
- General Ledger Journals Report
- General Ledger General Journals Report
- General Ledger Journals Details Report
- General Ledger Journals Day Book Report
- General Ledger Journals Batch Summary Report
- General Ledger Account Details Report
- General Ledger Account Analysis for Contra Account Report
- General Ledger Average Balance Audit Account Analysis Report
- General Ledger Account Analysis Report
- General Ledger Trial Balance Report
- Import Journals
- Manage General Ledger Accounting Periods
- Manage Journals
- Open General Ledger Periods
- Period Close Dashboard
- Reconcile Payables to General Ledger
- Reconcile Receivables to General Ledger
- Revalue Balances
- Translation
- Transfer Balances Cross Ledgers
- Transfer Balances to Secondary Ledger

End User Integrations for Oracle Cloud ERP - Intercompany

- Intercompany Account Details Report
- Intercompany Reconciliation
- Intercompany Transaction Summary Report
- Intercompany Transactions Work Area
- Manage Intercompany Period Status
- Transfer Intercompany Transactions to General Ledger
- Transfer Intercompany Transactions to Receivables
- Transfer Intercompany Transactions to Payables

End User Integrations for Oracle Cloud ERP - Payables

- Apply Missing Conversion Rates
- Complete or Cancel Incomplete Payment Process Requests
- Create Payables Accounting
- Create Mass Additions

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Extract Payables to General Ledger Reconciliation Data
- Import Payables Invoices
- Import Payables Payment Requests
- Manage Payables Period
- Open Items Revaluation Report
- Payables Unaccounted Transactions Report
- Payables Invoices Landing Page
- Payables Unaccounted Transactions Report with Sweep Option
- Payables Trial Balance Report
- Period Close Exceptions Report
- Review Payables to General Ledger Reconciliation Report
- Transactions Pending Approvals
- Transfer Cost to Cost Management
- Update Matured Bills Payable Status
- Update Matured Bills Payable Status
- Validate Unvalidated Transactions

End User Integrations for Oracle Cloud ERP - Receivables

- Approve or Reject Customer Credits
- Billing Work Area
- Clear Receipts Automatically
- Create Automatic Billing Adjustments
- Create Automatic Receipt Batch
- Create Receipts Remittance Batch
- Create Late Charge Batch
- Create Automatic Receipt Write-Offs
- Create Receivables Accounting
- Extract Reconciliation Data From Receivables to General Ledger
- Import AutoInvoice: Master
- Manage Receivables Accounting Periods
- Manage Revenue Adjustments
- Receivables Balances Work Area
- Process Receipts Through Lockbox
- Recognize Revenue
- Receivables Aging by General Ledger Account Report
- Submit Subledger Period Close Exceptions Report

End User Integrations for Oracle Cloud ERP - Tax

- Tax Reconciliation Report

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Tax Reconciliation by Taxable Account Report

Application Token Values for Cloud ERP Integrations

Token Name: SERVER

Token Description: Property used for URL-based integration, for example, as in this fictitious URL: `https://customer_chosen_domain_name_fa.DC.oraclecloud.com`

> **Note**
>
> Do not specify forward slash (/) at the end of the URL.

Pre-requisites to Display ERP Cloud Task in Task Manager

To display Cloud ERP task in Task Manager, Cloud ERP application must be enabled to display the site within iFrame. If you see a blank page with an error "refused to connect <Cloud ERP URL>" when opening the Cloud ERP, make sure you complete these pre-requisite.

1. Identity Cloud Service (IDCS) - Allow Authentication Via an iFrame
   a. In the IDCS Admin Console, in the navigation tray, click **Settings** > **Session Settings**.
   b. Enable the **All Cross-Origin Resource Sharing (CORS)** slider.
   c. In **Allowed CORS Domain Names**, enter the EPM root URL
   d. Click **Save**. See IDCS - How to Allow Authentication Via an an IFrame.

   > **Note**
   >
   > If you are not using IDCS and using some other application for single sign on such as Okta, you must enable Cross-Origin Resource Sharing (CORS) in that application for EPM.

2. Request the Oracle Cloud ERP Applications administrator to enable Cross-Origin Resource Sharing (CORS) by adding the Oracle Fusion Cloud Enterprise Performance Management root URL to the Oracle Cloud Application for the profile options:
   - ORA_CORS_ORIGINS
   - ORACLE.ADF.VIEW.ALLOWED_ORIGINS

   To update the profile value:
   a. Login to Cloud ERP applications as an administrator.
   b. From the **User Admin** menu, go to **Setup And Maintenance**.
   c. Search for **Manage Administrator Profile Values**.
   d. Enter ORACLE.ADF.VIEW.ALLOWED_ORIGINS as the profile code and click **Search**.
   e. In the **Profile Values** section, specify the value. To access third party URL, include 'self' along with third party URL (use white space as separator). For example: 'self' <white space> <url>

      See
      - Valid Value for ORACLE.ADF.VIEW.ALLOWED_ORIGINS to Avoid Fetching Data Issue

Copyright © 2022, 2026, Oracle and/or its affiliates.

- How to use the ORACLE.ADF.VIEW.ALLOWED_ORIGINS profile option
- Administering Visual Builder Studio

f. Repeat the same steps for the ORA_CORS_ORIGINS profile option.

Event Monitoring Integrations for Oracle Cloud ERP

This section lists the out of box event monitoring integrations for Oracle Cloud ERP.

> **Note**
>
> For custom process automation or event monitoring integration to Oracle Cloud ERP, see Creating Custom Task Manager Integrations.

Supported Events for Oracle Cloud ERP General Ledger

The following events are supported for General Ledger:

Source	Event	Description
General Ledger	Accounting Period Closed	Signals when a general ledger accounting period is closed.
General Ledger	Accounting Period Opened	Signals when a general ledger accounting period is opened.
General Ledger	Accounting Period Reopened	Signals when a general ledger accounting period is reopened.
General Ledger	Journal Batch Approved	Signals when a journal batch is approved.
General Ledger	Journal Batch Posting Completed	Signals when a journal batch is posted.

Integrations Added to Existing Out of Box Connection

The table lists integrations that are added to monitor these business events from Task Manager, which includes:

- Integration Types in Tax Reporting
- Task Types in Tax Reporting
- Integration Flows in Integration Cloud

Connection Name	Integration Name	Integration Code	Event Name	Description	Parameter(s)
Oracle Cloud ERP - General Ledger	Period Close Event	R13GLPeriodClose	Accounting Period Closed	Oracle Cloud ERP General Ledger Period Close Event Monitoring	**LedgerName**: Name of the Ledger. For example, US Primary Ledger. **Period**: Name of the Period. For example, 01-19.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Connection Name	Integration Name	Integration Code	Event Name	Description	Parameter(s)
Oracle Cloud ERP - General Ledger	Period Open Event	R13GLPeriodOpen	Account Period Opened	Oracle Cloud ERP General Ledger Period Open Event Monitoring	**LedgerName**: Name of the Ledger. For example, US Primary Ledger. **Period**: Name of the Period. For example, 01-19.
Oracle Cloud ERP - General Ledger	Period Reopen Event	R13GLPeriodReopen	Accounting Period Reopened	Oracle Cloud ERP General Ledger Period Reopen Event Monitoring	**LedgerName**: Name of the Ledger. For example, US Primary Ledger. **Period**: Name of the Period. For example, 01-19.
Oracle Cloud ERP - General Ledger	Journal Approve Event	R13GLJournalBatchApprove	Journal Batch Approved	Oracle Cloud ERP General Ledger Journal Batch Approve Event Monitoring	**BatchName**: Journal Batch Name **Period**: Name of the Period. For example, 01-19.
Oracle Cloud ERP - General Ledger	Journal Post Event	R13GLJournalBatchPost	Journal Batch Posted	Oracle Cloud ERP General Ledger Journal Batch Post Event Monitoring	**BatchName**: Journal Batch Name **Period**: Name of the Period. For example, 01-19.

Setting Up the Integration in Task Manager

In Task Manager, you can create an Event Monitoring integration for Oracle Cloud ERP - General Ledger. The Event Monitoring integration is triggered when an external event occurs in another Cloud service application.

Make sure the business events are enabled in Oracle Cloud ERP. You can verify the events using REST API. See these topics in the "ERP Business Events REST Endpoints" section of the *REST API for Oracle Financials Cloud* guide available at docs.oracle.com.

To verify the events, see "Get all business event records".

If any event is not enabled, see "Update the enabled indicator for a business event".

Task Manager uses Oracle Integration Cloud for all the integrations to external applications. You can setup a connection to Oracle Integration Cloud in Task Manager using Basic or OAuth 2.0 authentication.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - For Oracle Integration Cloud Generation 2, both Basic Auth and OAuth 2.0 is supported.
> - For Oracle Integration Cloud Generation 3, only OAuth 2.0 is supported.
> - Basic Auth user must have the Service Administrator role for Oracle Integration Cloud.
> - For OAuth 2.0, only client credentials are supported. OAuth 2.0 client application should have the Service Administrator role for Oracle Integration Cloud and allowed scope should be all.

Before setting up the OAuth 2.0 connection, make sure you've the client credentials such as access token URL, client ID, client secret, and scope. For setting up the OAuth client application, see **OAuth Authentication in Oracle Integration** in *Oracle Integration Cloud Generation 3* documentation.

To setup the Integration Cloud connection in Task Manager:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **Manage Connections**, and then from **Actions**, select **Integration Cloud Connection**.
4. Select one of the following authentication mechanisms:
   - **Basic Auth**: Specify the Integration Cloud URL, service administrator user ID, and password.
   - **OAuth 2.0**: Provide the Integration Cloud URL, access token URL, client ID, client secret, and scope.

   > **Note**
   >
   > - For Gen 2, enter the URL: `https://<SERVICE_NAME>-<TENANT_NAME>.integration.ocp.oraclecloud.com`
   > - For Gen 3, enter the URL: `https://<SERVICE_INSTANCE>.integration.<REGION>.ocp.oraclecloud.com`. To find your service instance, log into Integration Cloud and open the About window.

5. Click **Validate**. After validation is successful, click **Save**. This saves the server and credentials of the connection.

Enabling the Oracle Cloud ERP - General Ledger Connection

To enable the Oracle Cloud ERP - General Ledger connection:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left, then click **Manage Connections**.
3. Select **Oracle Cloud ERP - General Ledger** from the list, click **Actions**, and then select **Edit**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. In the **Edit Connection** dialog, select **Enabled**, and then click **OK**.

> **Note**
>
> The first time you enable the connection to Integration Cloud, all Integration Cloud deployments will fail during activation. The Administrator must login to Integration Cloud, test and save the deployed connections, and then activate the deployed integrations in Integration Cloud.

Setting Up the Integration Flow in Integration Cloud

To set up the integration flow in Integration Cloud:

1. Log in to Integration Cloud Services.
2. Navigate to **Connections**.

   EPM Fusion Connection and **EPM Connection** are automatically created.
3. Edit the connections by providing the environment and credential information:
   - **EPM Fusion Connection** is the connection to the Oracle Cloud ERP. You must update the credentials, Service Catalog Service WSDL URL, and Event Catalog URL. See Prerequisites for Creating a Connection for more details.
   - **EPM Connection** is the connection to the Oracle Fusion Cloud Enterprise Performance Management Service in Task Manager. See Oracle Enterprise Performance Management Cloud Adapter with Oracle Integration for more details.

   After configuring, testing, and saving the connections, you see a green check mark next to the connections.

4. Return to Task Manager and select **Integrations**.
5. Select the integration from the list, then click **Deploy to Integration Cloud** from the toolbar.
6. In the **Deploy to Integration Cloud** dialog, click **Generate**.

   The Cloud Integration deployment is successful. Verify the activation status in the Integration Cloud by logging into the Oracle Integration Cloud service, then Integrations.

Adding the Event Monitoring Task to a Template or a Schedule

After the set up is complete, you can add the event monitoring tasks to a schedule or a template.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Templates** tab on the left and create a new template; for example, **ERP Event Template**.
3. Create the event monitoring task. See Creating Tasks.

Copyright © 2022, 2026, Oracle and/or its affiliates.

In the Task Type, make sure to select **Oracle Cloud ERP - General Ledger**, then select the event monitoring task; for example, **Period Open Event**.

4. In Task Manager, click **Template**, select **ERP Event Template**, and create a schedule. See Creating Schedules from Templates.

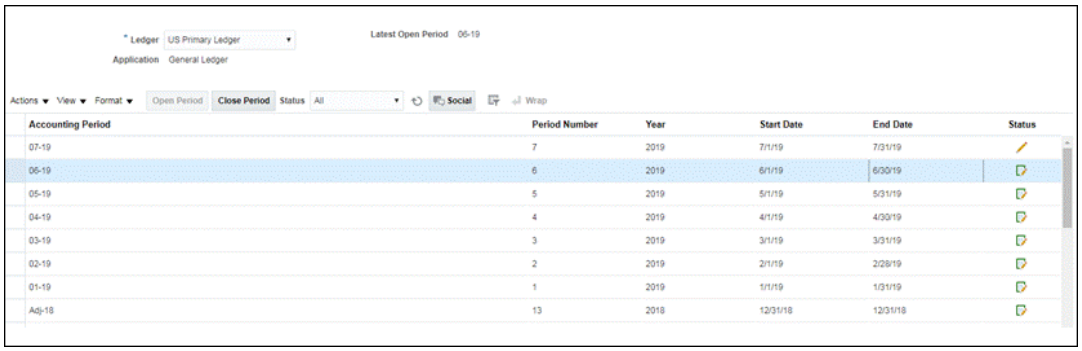
5. In Task Manager, click **Schedules**, select the schedule, and change the status to **Open**.

   You can monitor the schedule task in the **Schedule Tasks** screen.

Triggering the Period Close Event in Oracle Cloud ERP

To raise the Period Close event in Oracle Cloud ERP:

1. Login to Oracle Cloud ERP.
2. Select the **General Accounting** tab, then **Period Close**.
3. Click **General Ledger** and select the period, then click **Close Period**.



4. Wait for a few minutes for the task to be completed. Then navigate to the **Schedule Tasks** screen in **Tasks** to verify the task is closed.

Triggering the Period Open/Reopen Event in Oracle Cloud ERP

To raise the Period Open event in Oracle Cloud ERP:

1. Login to Oracle Cloud ERP.
2. Select the **General Accounting** tab, then **Period Close**.
3. Click **General Ledger** and select the period, then click **Open Period**.
4. Wait for a few minutes for the task to be completed. Then navigate to the **Schedule Tasks** screen in **Tasks** to verify the task is closed.

> **Note**
>
> If you open a period that has never been opened, the Period Open Event is triggered. If you open a period that has been closed before, the Period Reopen Event is triggered.

Triggering the Journal Batch Approved Event in Oracle Cloud ERP

To raise the Journal Batch Approved event in Oracle Cloud ERP:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Login to Oracle Cloud ERP.
2. Select the **General Accounting** tab, then **Journals**.
3. Click **Requiring My Approval** and select the journal batch, then click **Approve**.
4. Wait for a few minutes for the task to be completed. Then navigate to the **Schedule Tasks** screen in **Tasks** to verify the task is closed.

> **Note**
>
> You can trigger the Journal Batch Approved event only if it is the last approval in the multi level approval process.

Triggering the Journal Post Event in Oracle Cloud ERP

To raise the Journal Batch Approved event in Oracle Cloud ERP:

1. Login to Oracle Cloud ERP.
2. Select the **General Accounting** tab, then **Journals**.
3. Click **Tasks** and select **Create Journal**.
4. In **Create Journal** screen, specify the required information, then click **Save**.

> **Note**
>
> The journal batch name and accounting period should match the parameters of the task in the Task Manager schedule.

5. Wait for a few minutes for the task to be completed. Then navigate to the **Schedule Tasks** screen in **Tasks** to verify the task is closed.

Troubleshooting

This section provides the troubleshooting information for the event monitoring integrations for Oracle Cloud ERP.

Issue	Root Cause	Resolution
Communication error importing to Oracle Integration Cloud	The configured OAuth application doesn't have Service Administrator role for Oracle Integration Cloud.	Create a separate OAuth application and grant Service Administrator role for the OAuth application. Add OIC scope all. See Setting Up the Integration in Task Manager. This is required so that you can deploy the out of box OIC flow from Task Manager to OIC.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Issue	Root Cause	Resolution

Posting the journal did not trigger the flow in Oracle Integration Cloud.	Business event not enabled in ERP .	Perform the following:
		• Retrieve a list of available business events
		• Get specific business event
		• Update the enable indicator for business event
		• Check the subscription to business event
		You can call the `PublicEvent` subscription's REST resource using any REST client to check the subscription status.
		
		`Method : GET`
		`URL : https://fa_host.oraclecloud.com/soa-infra/PublicEvent/subscriptions`
		
		The response contains the endpoint URL for the related subscription.
		For troubleshooting issues related to business events, see Business Event Troubleshooting Issues

Copyright © 2022, 2026, Oracle and/or its affiliates.

Issue	Root Cause	Resolution
Posted Journal does not close the task in Financial Consolidation and Close	Journal batch name is updated with additional information when the Journal is posted	Perform the following: 1. Create a new connection in task manager. For example, Custom_XXX_ERP. 2. Create a custom integration and task type in task manager. **Note** Create the integration under new connection. Use the same parameters as out of box integration. Prefix the integration name, code name, and event name. For example, Custom_XXX_JournalPostEvent. 3. In Oracle Integration Cloud: a. Create a new connection for Oracle Cloud ERP and Oracle Fusion Cloud EPM. b. Duplicate the out of box OIC flow. c. Replace the connections to point to new connections created for Cloud ERP and Cloud EPM. d. Customize the OIC flow to remove information from the batch name. e. Send the modified batch name to the Update Task for Event Monitoring API. f. Test the end-to-end flow from Oracle Cloud ERP to Enterprise Profitability and Cost Management.

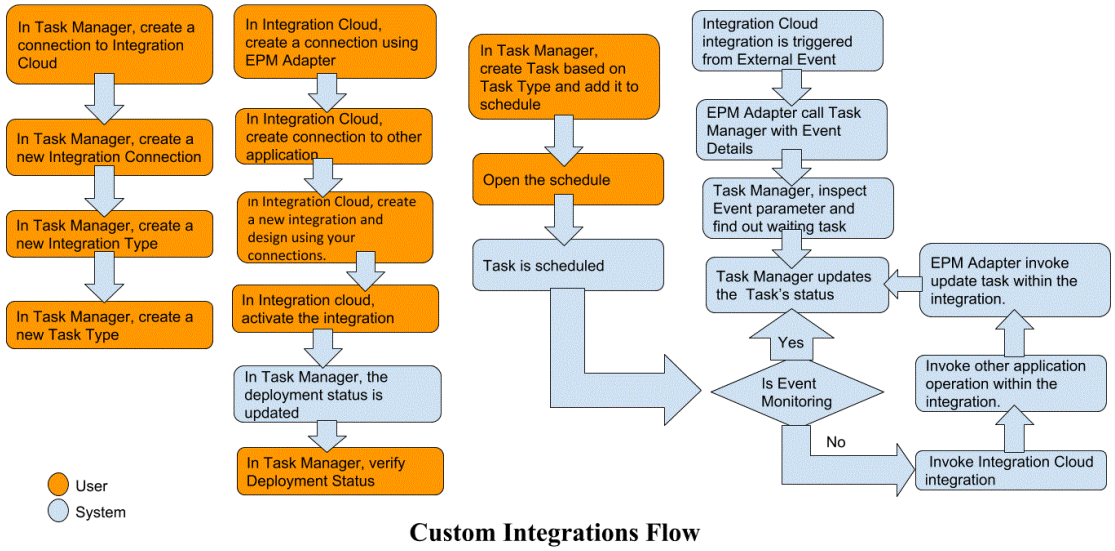
Copyright © 2022, 2026, Oracle and/or its affiliates.

Issue	Root Cause	Resolution
		For more information, see Creating Custom Integrations.

Creating Custom Integrations

In Task Manager, you can create and manage custom Process Automation or Event Monitoring integrations with external applications. An EPM Adapter enables you to create connections and integration flows in Integration Cloud Service using Oracle Oracle Fusion Cloud Enterprise Performance Management and other cloud and on-premises applications.

The following diagram shows the user and system flow for creating custom integrations:



Custom Integrations Flow

See these topics:

- Creating Custom Process Automation Integrations
- Creating Custom Event Monitoring Integrations

Creating End User Integration

When you create Integrations, you select End-User as the Execution type. Users can then create task types based on the defined Integrations, or validate the Integrations.

To create an Integration:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **New**.

See also, Setting Integration Properties and Setting Integration Parameters.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating Custom Process Automation Integrations

In Task Manager, you can create custom process automation integrations with external applications. In a Process Automation integration, a task is automatically executed in an external application when its start date and time are reached, and when any predecessor tasks are completed, for example, an overnight feed from a General Ledger.

When you create a Process Automation task, if you have set up email notifications, the task Owner automatically receives an email notification when the task starts or is completed. The Assignee that is specified when you set up a workflow receive an action notification when there is a change in the task status and an action needs to be performed, such as an approval, and the Owner receives a notification when the approval is completed.

Make sure you have the prerequisites and follow these steps to set up an integration between Task Manager and an external application.

For an overview of the custom integrations flow, see Creating Custom Integrations.

Prerequisites

To integrate Task Manager with an external application, you need:

- A subscription to Oracle Integration Cloud Service, to integrate with non-Oracle Fusion Cloud Enterprise Performance Management services.

> **Note**
>
> You need one Integration Cloud instance per Oracle Cloud EPM instance.

- The external application set up.

1. Subscribe to **Oracle Integration Cloud/Oracle Autonomous Integration Cloud**. See Integration Cloud Service Documentation for detailed information.
2. Install Integration Cloud Agent in your application environment to communicate with your Oracle Cloud EPM instance. For details on setting up Integration Cloud Agent, see Managing Agent Groups.

> **Note**
>
> If the application services are deployed in an environment set up in a demilitarized zone (DMZ) configuration so that these services are publicly accessible through the Internet, you do not need to install Integration Cloud Agent.

Creating a Connection in Task Manager

1. On the Home page, click **Application** and then click **Task Manager**.
2. Click the **Integrations** tab on the left, and then click **Manage Connections**.
3. Click **New**.
4. For **Connection** enter a name for the connection.
5. Select **Enabled** to enable the connection.
6. Select **Cloud** if the external application is a Cloud service.

Copyright © 2022, 2026, Oracle and/or its affiliates.

7. Click **OK** to save the connection.

Setting Up the Integration in Task Manager

1. On the Home page, click **Applications**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left, and then click **New**.
3. On the **Properties** tab, specify the required information:
   a. For **Name**, enter a name for the Integration.
   b. For **Code**, enter an Integration Code for the integration task.

      The code is used to execute the Integration and to map updates to an Integration from a file import.
   c. **Optional:** In **Description**, enter a description for the integration task.
   d. For **Connection**, select an application to which the task belongs.

      You can maintain the list of applications from the Manage Connections icon in the Manage Connections dialog box.
   e. For **Execution Type**, select **Process Automation**.
4. On the **Parameters** tab, click **New** and then specify the required information:
   a. For **Name**, enter a name for the parameter.
   b. For **Parameter Code**, enter a parameter code.
   c. **Optional:** Enter a parameter **Tooltip**.
   d. From the **Parameter Type** list, select a type, and enter additional information for the parameter:
      - **Checkbox**: Boolean value
      - **Date**: Date value
      - **Integer**: Numeric value in whole numbers
      - **Number**: Numeric value in whole numbers or fractions
      - **Options Group**: Check box for a predefined set of values
      - **Static List**: Predefined set of text values
      - **Task Information**: Task information, for example, Assignee, duration, start and end dates
      - **Text**: Free-form text value.
      - **EPM Artifact**: Name of the artifact, such as the form or report.
   e. If the parameter requires a value, select **Required**.
   f. Click **OK** to save the parameter.
   g. Click **Save and Close** to save the Integration.

Creating a Task Type for the Integration

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Click **New**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. On the **Properties** tab, specify a **Task Type Name** and **Task Type ID**.
5. For **Integration**, click **Search**, select the Integration, and then click **OK**.
6. On the **Parameters** tab, set the Task Type parameters.

Setting Up the Integration Cloud Connection in Task Manager

Task Manager uses Oracle Integration Cloud for all the integrations to external applications. You can setup a connection to Oracle Integration Cloud in Task Manager using Basic or OAuth 2.0 authentication.

> **Note**
>
> - For Oracle Integration Cloud Generation 2, both Basic Auth and OAuth 2.0 is supported.
> - For Oracle Integration Cloud Generation 3, only OAuth 2.0 is supported.
> - Basic Auth user must have the Service Administrator role for Oracle Integration Cloud.
> - For OAuth 2.0, only client credentials are supported. OAuth 2.0 client application must have Service Administrator role for Integration Cloud and allowed scope should be all.

Before setting up the OAuth 2.0 connection, make sure you've the client credentials such as access token URL, client ID, client secret, and scope. For setting up the OAuth client application, see **OAuth Authentication in Oracle Integration** in *Oracle Integration Cloud Generation 3* documentation.

To provide Service Administrator role for Integration Cloud:

1. Log in to the Identity Cloud Service Administrator console as an Administrator.
2. From Oracle Cloud Service, select the Oracle Integration Cloud Service.
3. On the **Application** tab, from the row menu for Service Administrator, click **Assign Application** and select the OAuth application you setup in the previous step.

To setup the Integration Cloud connection in Task Manager:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **Manage Connections**, and then from **Actions**, select **Integration Cloud Connection**.
4. Select one of the following authentication mechanisms:
   - **Basic Auth**: Specify the Integration Cloud URL, service administrator user ID, and password.
   - **OAuth 2.0**: Provide the Integration Cloud URL, access token URL, client ID, client secret, and scope.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - For Gen 2, enter the URL: `https://<SERVICE_NAME>-<TENANT_NAME>.integration.ocp.oraclecloud.com`
> - For Gen 3, enter the URL: `https://<SERVICE_INSTANCE>.integration.<REGION>.ocp.oraclecloud.com`. To find your service instance, log into Integration Cloud and open the About window.

5. Click **Validate**. After validation is successful, click **Save**. This saves the server and credentials of the connection.

Creating a Connection and Integration in Integration Cloud

1. Log in to Integration Cloud.
2. Create a connection using Oracle Enterprise Performance Management Cloud adapter to your EPM server. Refer to this link for more details: Create a Connection to Oracle Enterprise Performance Management Cloud.
3. Create one or more connections to the other application as needed.
4. Create Process Automation Integration using the connections created and activate it. See the example in Using the Oracle Enterprise Performance Management Cloud Adapter with Oracle Integration.

Completing the Integration Setup in Task Manager

Use these steps to complete the Integration setup in Task Manager.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left and verify that the new Integration is displayed on the Integrations list.
3. In Task Manager, select **Schedules**, and create a new Schedule in Pending state. See Manually Creating Schedules.
4. Create the process automation task and add it to the schedule. See Creating Tasks.
5. From **Schedules**, select and open the schedule.

Creating Custom Event Monitoring Integrations

In Task Manager, you can create an Event Monitoring integration for an external application. The Event Monitoring integration is triggered when an external event occurs in another Cloud service application. An example of an Event Monitoring integration is a trigger from Oracle E-Business Suite - General Ledger when a period, for example, January 2018, is closed.

Make sure you have the prerequisites and follow these steps to set up an integration between Task Manager and an external application.

For an overview of the custom integrations flow, see Creating Custom Integrations.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Prerequisites

> **Note**
>
> Event monitoring can also be triggered through any integration tool capable of invoking REST APIs. In that case you do not need the these prerequisites.

To integrate Task Manager with an external application, you need:

- A subscription to Oracle Integration Cloud Service, to integrate with on-premises and non-Oracle Fusion Cloud Enterprise Performance Management services.

  > **Note**
  >
  > You need one Integration Cloud instance per Oracle Cloud EPM instance.

- The external application set up.

1. Subscribe to Oracle Integration Cloud / Oracle Autonomous Integration Cloud. See Integration Cloud Service Documentation for detailed information.
2. Install Integration Cloud Agent in your application environment to communicate with your Oracle Cloud EPM instance. For details on setting up Integration Cloud Agent, see Managing Agent Groups.

   > **Note**
   >
   > If the application services are deployed in an environment set up in a demilitarized zone (DMZ) configuration so that these services are publicly accessible through the Internet, you do not need to install Integration Cloud Agent.

Setting Up the Integration in Task Manager

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left, and then click **New**.
3. On the **Properties** tab, specify the required information:
4. a. For **Name**, enter a name for the Integration.
   b. For **Code**, enter an Integration Code for the integration task.

      The code is used to execute the Integration and to map updates to an Integration from a file import.

   c. **Optional:** In **Description**, enter a description for the integration task.
   d. For **Connection**, select an application to which the task belongs.

      You can maintain the list of applications from the Manage Connections icon in the Manage Connections dialog box.

   e. For **Execution Type**, select **Event Monitoring**.
   f. For **Event Name**, enter a name for the event.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. On the **Parameters** tab, click **New** and specify the required information:
   a. For **Name**, enter a name for the parameter.
   b. For **Parameter Code**, enter a parameter code.
   c. **Optional:** Enter a parameter tooltip.
   d. From the **Parameter Type** list, select a type, and enter additional information for the parameter:
      - **Checkbox**: Boolean value
      - **Date**: Date value
      - **Integer**: Numeric value in whole numbers
      - **Number**: Numeric value in whole numbers or fractions
      - **Options Group**: Check box for a predefined set of values
      - **Static List**: Predefined set of text values
      - **Task Information**: Task information, for example, Assignee, duration, start and end dates
      - **Text**: Free-form text value
      - **EPM Artifact**: Name of the artifact, such as the form or report
   e. If the parameter requires a value, select **Required**.
   f. Click **OK** to save the parameter.
   g. Click **Save and Close** to save the Integration.

Creating a Task Type for the Integration

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Task Types** tab on the left.
3. Click **New**.
4. On the **Properties** tab, specify a **Task Type Name** and **Task Type ID**.
5. For **Integration**, click **Search**, select the Integration, and then click **OK**.
6. On the **Parameters** tab, set the Task Type parameters.

Setting Up the Integration Cloud Connection in Task Manager

Task Manager uses Oracle Integration Cloud for all the integrations to external applications. You can setup a connection to Oracle Integration Cloud in Task Manager using Basic or OAuth 2.0 authentication.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> - For Oracle Integration Cloud Generation 2, both Basic Auth and OAuth 2.0 is supported.
> - For Oracle Integration Cloud Generation 3, only OAuth 2.0 is supported.
> - Basic Auth user must have the Service Administrator role for Oracle Integration Cloud.
> - For OAuth 2.0, only client credentials are supported. OAuth 2.0 client application should have the Service Administrator role for Integration Cloud and allowed scope should be all.

Before setting up the OAuth 2.0 connection, make sure you've the client credentials such as access token URL, client ID, client secret, and scope. For setting up the OAuth client application, see **OAuth Authentication in Oracle Integration** in *Oracle Integration Cloud Generation 3* documentation.

To setup the Integration Cloud connection in Task Manager:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **Manage Connections**, and then from **Actions**, select **Integration Cloud Connection**.
4. Select one of the following authentication mechanisms:
   - **Basic Auth**: Specify the Integration Cloud URL, service administrator user ID, and password.
   - **OAuth 2.0**: Provide the Integration Cloud URL, access token URL, client ID, client secret, and scope.

   > **Note**
   >
   > - For Gen 2, enter the URL: `https://<SERVICE_NAME>-<TENANT_NAME>.integration.ocp.oraclecloud.com`
   > - For Gen 3, enter the URL: `https://<SERVICE_INSTANCE>.integration.<REGION>.ocp.oraclecloud.com`. To find your service instance, log into Integration Cloud and open the About window.

5. Click **Validate**. After validation is successful, click **Save**. This saves the server and credentials of the connection.

Setting Up the Integration in Integration Cloud

> **Note**
>
> If you are not planning to use Integration Cloud, skip this step.

To set up the integration in Integration Cloud:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Log in to Integration Cloud.
2. Create a connection using Oracle Enterprise Performance Management Cloud adapter to your EPM service. Refer to this link for more details: Create a Connection to Oracle Enterprise Performance Management Cloud.
3. Create one or more connections to the other application as needed.
4. Create Event Monitoring Integration using the connections created and activate. Refer to this example: Using the Oracle Enterprise Performance Management Cloud Adapter with Oracle Integration.

Setting Up the Integration Without Integration Cloud

> **Note**
>
> If you are planning to use Integration Cloud, skip this step.

Configure the integration tool which you are planning to use.

1. Review the REST API, Update Task Status for Event Monitoring in *REST APIs for Oracle Fusion Cloud EPM*
2. Configure the integration tool to call the REST API to close the Event Monitoring task passing the parameters for the event.

For more information, see Update Task Status for Event Monitoring in *REST APIs for Oracle Fusion Cloud EPM*.

Completing the Integration Setup in Task Manager

Use these steps to complete the Integration setup in Task Manager.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left, and verify that the new Integration is displayed.
3. In Task Manager, click **Schedules**, and create a new Schedule in Pending state. See Manually Creating Schedules.
4. Create the event monitoring task and add it to the schedule. See Creating Tasks.
5. From **Schedules**, select and open the schedule.
6. Trigger the action that generates the event in the external application (for example, EBS). If you are not using Integration Cloud but other integration tool, invoke the REST API from the integration tool.

   > **Note**
   >
   > Pass the parameters as expected by the integration type, event, parameters, otherwise the task will not be considered if they do not match.

7. Wait for the task to be completed.
8. **Optional:** To monitor the status of the Integration in Integration Cloud Services, log in to Integration Cloud and navigate to **Monitoring**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Working with Integrations

Related Topics

- Creating Integrations
- Viewing Integrations
- Editing Integrations
- Searching for Integrations
- Validating Integrations
- Deleting Integrations

Creating Integrations

When you create Integrations, you select End-User as the Execution type. Users can then create task types based on the defined Integrations, or validate the Integrations.

To create an Integration:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **New**.

Add information to the following sections:

- Setting Integration Properties
- Setting Integration Parameters

Setting Integration Properties

You can set properties for the Integration such as the associated application and End User tasks.

For an End User task, you can select the single sign-on (SSO) Parameter option to enable users to access an external web application without being prompted for authentication. You can use an SSO parameter for an external application if that application is integrated with the Oracle EPM System SSO framework.

To set Integration properties:

1. Select the Integration to edit.
2. In **Properties**, for **Name**, enter a name for the Integration. You can enter a maximum of 80 characters.
3. Enter a **Code**, for example, `HFM_CONS` for the Hyperion Financial Management Consolidate integration task. You can enter a maximum of 90 characters.

   The code is used to execute the Integration and to map updates to an Integration.
4. **Optional:** In **Description**, enter a description for the integration task. You can enter a maximum of 255 characters.
5. In **Connection**, select an application to which the task belongs.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> You can maintain the list of applications from the Manage Connections icon in the Manage Connections dialog box.

6. For **Execution Type**, select **End User** and select options:
   - **End User Endpoint**: To enter parameters for an **End User** task, the **End User Endpoint** should contain these parameters in these formats:

     $*Parameter Type Code*$, for example `$COLORS$`. The system replaces the parameter tokens in the **End User Endpoint** with the information you specified for the task parameters.
   - **Optional: Show in-line**: Select whether to display the URL in line within the Task Actions dialog.
   - **Optional: SSO Parameter**: Specify the name of the SSO parameter for your application to include when executing the End User task URL to the external application. If you do not specify an SSO parameter, the system uses the End User URL.
7. **Optional:** Click **Parameters**.

Setting Integration Parameters

Task Manager integration parameters enable the application to pass information to the end point to control how the end point should perform its action. For example, when you run a consolidation, your program can pass which application to run the consolidation against, and the dimension selections for the consolidation. You set the parameter values defined in the Integrations in the task or Task Type using the integration.

Each parameter definition requires a name, description, unique code, type, and whether a value is required. The parameter code is the token that replaces the parameter in the execution URL for user tasks, or the parameter name that is passed to the execution web service for system-automated integrations. Required values must have a value for all tasks in a schedule before the schedule can be set to Open.

The Parameter Type controls the parameter value and how the user enters the value in the task field.

To set Integration parameters:

1. In the **New Integration** dialog box, click **Parameters**.
2. Click ➕ **New**.
3. Enter a **Name** for the parameter.
4. Enter a **Parameter Code**.
5. Enter a parameter **Tooltip**.
6. From the **Parameter Type** list, select a type, and enter additional information for the parameter:
   - **Checkbox**: Boolean value
   - **Date**: Date value
   - **Integer**: Numeric value in whole numbers
   - **Number**: Numeric value in whole numbers or fractions

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Options Group**: Checkbox for a predefined set of values
- **Static List**: Predefined set of text values
- **Task Information**: Task information. For example, Assignee, duration, start and end dates
- **Text**: Free-form text value.
- **EPM Artifact**: Name of the artifact, such as the form or report

7. If the parameter requires a value, select **Required**.
8. Click **OK** to save the parameter.
9. Click **Save and Close** to save the Integration.

Viewing Integrations

You can view the properties and parameters of imported Integrations. You can specify which columns to display, or show all. You can also reorder columns, sort columns by ascending or descending order, or change the column widths.

To view the properties and parameters of imported integrations:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
   The Integrations page is displayed.
3. Click the integration name for which you want to view the properties and parameters.
   The View Integration dialog box displays the **Properties** tab by default. Click the **Parameters** tab to view the associated parameters for the integration. For information about the fields, see Setting Integration Properties and Setting Integration Parameters.

To display columns, on the Integrations page, click **View**, then **Columns**, and then select an option:

- To display all columns, select **Show All**.
- To display specific columns, select or deselect the column names.

To reorder columns, on the Integrations page, click **View**, and then **Reorder Columns**. Select columns and use the **Up** and **Down** arrows to change the order.

To sort columns, on the Integrations page, hover over a column header until the **Sort** icons display, then click **Sort Ascending** or **Sort Descending**.

To change column widths, on the Integrations page, hover over the column header dividers until the arrows display. Drag the columns to the desired width.

Editing Integrations

You can't edit the pre-built Integrations provided by default by the system. You can only edit custom-built integrations that you created.

For an End User type, you can edit the endpoint, change the point of view, or change the list of values.

To edit an Integration:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Select an Integration, and click **Edit**.
4. Edit the Integration.
5. Click **Save and Close**.

Searching for Integrations

You can use the Search box on the Integrations page to find Integrations. You can enter full or partial names on which to search.

To search for Integrations:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. In the **Search** box, enter full or partial search criteria for the Integration.
4. Press **Enter**.

   To reset the list to display all Integrations, clear the **Search** box and then press **Enter**.

Validating Integrations

You can test and validate Task Manager integration definitions through a test schedule and adding a task to the schedule.

To validate an Integration:

1. In Task Manager, click **Schedules**, then click **New** to create a Schedule in Pending state. See Manually Creating Schedules.
2. Add a task based on the integration to be validated to the schedule. See Creating Tasks.
3. From **Schedules**, select and open the schedule.
4. From **Tasks**, click **Schedule**. Select the schedule and view the Task.
5. For Event Monitoring Task, trigger the action that generates the event in the external application (for example, EBS). If you are not using Integration Cloud but other integration tool, invoke the REST API from the integration tool.

Deleting Integrations

You can delete Integrations that you no longer need. However, you can't delete pre-built Integrations provided by default and you can't delete an Integration while it is associated with a Task Type.

To delete an Integration:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Select an Integration to delete.
4. Click **Delete**.
5. At the confirmation prompt, click **Yes**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Managing Connections

Integrations are assigned connections for the external products to which they link. From the Manage Connections module, you can maintain a list of connections associated with the Integrations. You can search on and sort the list by connection.

- Adding Connections
- Editing Connections
- Deleting Connections

Adding Connections

You can add connections to associate with an Integration Type. You can also specify the security policy to use for an Integration Type.

> **Note**
>
> Multi-factor authentication (MFA) is not supported for Connections.

In addition, you can specify application-level tokens and values for all Integration Types in an application. When you specify an application-level token in an end-user URL or web service WSDL, the system replaces the token with the value defined for that token in the application. For example, you can specify tokens with values for server and port, and the system automatically applies those values to the Integration Types in the application.

To add a connection:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **Manage Connections**.
4. Click **New**.
5. Complete the **New Integration Properties** and **Parameters**, then click **Save and Close**.
6. **Optional:** To add an application-level token, click **Manage Connections**. Click **New** or select a Connection and click **Edit**. In the **Application Tokens** table, click **Add**. Enter a **Token Name** and optionally a **Token Value**, and then click **OK**.

> **Tip**
>
> To remove a token, click **Delete**.

Editing Connections

You can edit the name of a connection, the security information, and application-level tokens.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> You cannot add or modify application tokens for seeded applications. You can only edit the token values.

You also use the Edit Connections dialog to enable pre-built Integrations. After you enable the Integration and fill in the parameters, you can then create tasks using Task Types for the enabled Integrations.

To edit a connection:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **Manage Connections**.
4. Select a connection, and click **Edit**.
5. To enable a pre-built Integration, select the connection, select **Enabled**, and fill in the parameters.

   You can enable or disable a connection at any time.
6. Edit the settings or tokens as needed, and click **OK**.

Deleting Connections

You can delete connections that you no longer need for Integrations. You cannot delete a connection while it is associated with an Integration Type. You must modify the properties for each Integration Type that references the connection before you can delete the connection.

> **Note**
>
> You cannot delete seeded Integration connections.

To delete a connection:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Integrations** tab on the left.
3. Click **Manage Connections**.
4. Select a connection, and click **Delete**.

Managing Alert Types for Task Manager

Alert Types

While performing a task, users might encounter issues such as a hardware failure, access problem, system failure, and so on.

Administrators can create Alert Types for categories of possible issues. Each Alert Type defines a procedure that is used to capture critical information about the issue, and assigns key personnel to resolve it.

Copyright © 2022, 2026, Oracle and/or its affiliates.

For example, an administrator can create an Alert Type called Access Issue, which contains questions to users for more detailed information. The administrator defines a workflow for the Alert Type with an assignee to resolve the issue, and a backup assignee if desired.

Using Alert Types to Create Alerts

When users encounter an issue and create an alert for it, they select from a list of predefined Alert Types to identify the issue. The alert is then sent to the assignee defined in the Alert Type.

For example, a user has a task due and can't access their assigned tasks. The user selects an Alert Type, such as Access Issue, which sends the alert to the predefined assignee to resolve their issue.

To manage Alert Types, see these topics:

- Creating Alert Types
- Editing Alert Types
- Viewing Alert Types
- Searching for Alert Types
- Deleting Alert Types

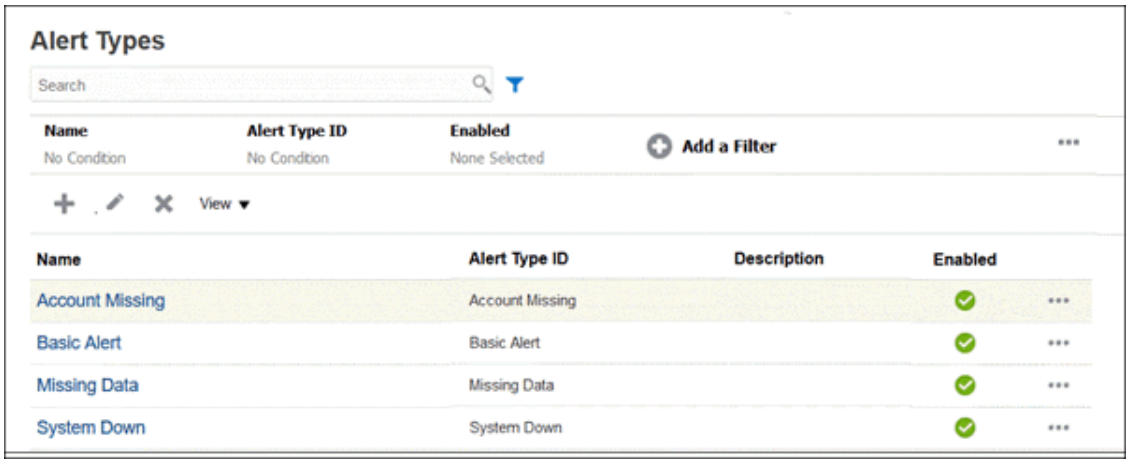
Creating Alert Types

When users encounter issues that prevent them from performing a task such as a hardware problem or system failure, they can create alerts for the issue.

Administrators can create Alert Types for categories of possible issues, such as System Down, and so on. When you create an Alert Type, you define the properties such as name, description, Alert Type ID, any instructions that you want to include for users, and additional questions to users for more details. You set up the workflow with an assignee, optional backup assignee, and any additional viewers for the Alert Type.

Using information gathered from Alert Types that users select, you can analyze the types of issues that users encounter during the business cycle and make changes to prevent them in future cycles.

You can view the list of the Alert Types that you have created, and edit and delete them from the Alert Types page.



To create an alert type:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Click **New**.
4. Enter the necessary information on the Alert Type tabs:
   - Setting Alert Type Properties
   - Specifying Alert Type Instructions
   - Selecting the Alert Type Workflow
   - Assigning Alert Type Viewers
   - Adding Questions for Alert Types
   - Applying Alert Type Attributes
   - Viewing Alert Type History

Setting Alert Type Properties

The **Properties** tab enables you to specify the alert type name and description, and associate it with Task Manager object, such as a task or schedule. An individual alert can be associated with multiple objects.

You can place restrictions on the relationship between the alert and its associated object. Not all restrictions can be applied to all objects.

Table 28-18 Alert Restrictions

Restriction	Description	Example
None	No restrictions on the status of the object and the status of the alert	A user raises a 'slow performance' alert while working on a reporting task. While this affects how long the task takes, it does not prevent the task from completing normally. Even if the task completes, the user still wants the alert open until the performance issue is resolved.
Prevent Workflow	Workflow on the object cannot proceed forward (no submits, approvals, and so on) until the alert is closed. This does not prevent claims or rejections (workflow moving backward). It also does not prevent an Administrator or Owner from forcing the workflow forward.	A user raises an alert that the reporting system is down. This will prevent any work on reporting tasks until the alert is resolved. Preventing workflow includes preventing status changes from Pending to Open and Open to Closed.
Prevent Close	The object cannot be moved into a closed state until the alert is closed. However, intermediate workflow may proceed. This does not prevent an Administator or Owner from closing or 'force closing'.	A user raises an alert that some comparison data is missing for a reporting task. While this does not prevent the report from being created and going through initial approvals, the report should not be fully signed off until it can be compared to the missing data.

Copyright © 2022, 2026, Oracle and/or its affiliates.

An object may have multiple alerts with different restrictions. If this is the case, the following rules will apply in order of precedent:

1. If any open alert associated with the object has a Prevent Workflow restriction, Prevent Workflow will stop the object's (for example, a Task) workflow until the alert is closed.
2. If any open alert associated with the object has a Prevent Close restriction, then the object cannot be closed until the alert(s) is closed.

In addition, an alert may be associated with multiple objects. If it has more than one Prevent Close restriction to different objects, the alert will only be closed when the last object is closed.

To set alert type properties:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Click **New** to open **New Alert Type**, which will default to the **Properties** tab.
4. For **Name**, enter an alert type name. You can enter a maximum of 80 characters.
5. Enter an **Alert Type ID**. You can enter a maximum of 80 characters.

   An Alert Type ID is required, and must be unique.
6. **Optional:** For **Description**, enter an alert type description. You can enter a maximum of 255 characters.
7. **Optional:** From the **Associated With** drop-down list, select an object, such as a task, with which to associate the alert.
8. **Optional:** For **Restrictions**, enter any restrictions for the alert. For example, if you select **Prevent Close** for an alert on a task, the user can't complete the close task until the alert is complete.

   If you select **All Types** for **Associated With**, no restrictions are available.
9. Select from the following values for both **Period Selection** and **Year Selection**:
   - **Required** – The user is required to associate the Alert with a Year or Period.
   - **Visible** – The user may associate the Alert with a Year or Period.
   - **Hidden** – The property is hidden and the Alert will not be associated with a Year or Period.

   These options indicate how Periods and Years are associated with an Alert.
10. **Optional:** In **Automatic Priority Escalation**, specify when priority should be automatically updated for each level:
    - **Priority**: Every priority level except the lowest should be displayed.
    - **Enabled**: Indicate whether the automatic escalation is turned on or off. This is off by default and off for all upgraded alerts.
    - **Days**: Specify the number of days before the automatic escalation occurs.
11. Select **Allow Remove Associations** option to remove an existing association from an Alert. If you unselect this option, you will not be able to remove existing associated artifacts from the Alert.
12. Click **Enabled** to enable the alert type.

    Only alert types that are Enabled are displayed in the list of available Alert Types and available for selection when creating new alerts.
13. Click an Alert Type tab and continue entering information.

Copyright © 2022, 2026, Oracle and/or its affiliates.

When you are done entering the Alert Type information, click **Save and Close**.

> **Note**
>
> You cannot create an alert on an existing alert.

- Specifying Alert Type Instructions
- Selecting the Alert Type Workflow
- Assigning Alert Type Viewers
- Adding Questions for Alert Types
- Applying Alert Type Attributes

Specifying Alert Type Instructions

You can specify instructions in an alert type to help users understand what they need to do for the alert. You can add additional references from File and URL attachments.

To specify instructions for an alert type:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. From the New or Edit dialog, select the **Instructions** tab.
4. In **Instructions**, enter instruction text for the alert type.

To add a reference:

1. In the **References** section, click **Attach a file** or **Attach a link**.
   - **Attach a file**

     Click **Choose File** to select and attach the file. For **Name**, enter a name or use the filename. Click **OK.**
   - **Attach a link**

     Enter the **URL**, then enter a **Name** for the URL; for example: https://www.oracle.com, Oracle. Click **OK**.
2. Click an Alert Type tab and continue entering information.

   When you are done entering the alert type information, click **Save and Close**.

   - Selecting the Alert Type Workflow
   - Assigning Alert Type Viewers
   - Adding Questions for Alert Types
   - Applying Alert Type Attributes

Selecting the Alert Type Workflow

The Workflow section contains the Assign ee and Approver assignments. You can also select Backup users.

To select the Alert Type workflow:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. From the New or Edit dialog, click the **Workflow** tab.
4. For **Assignee**, click **Select a User** and select an assignee.

   The assignee is the user or group assigned to work on the alert when one is created of this type. If you do not specify an assignee, the user who creates the alert will need to fill one in.
5. **Optional: For Backup User**, select a backup user for the assignee:
   a. On the Home page, select **Tools**, then **Access Control**, and then **Task Manager Users**.
   b. Edit the assignee ID and change the **Status** field to **Unavailable**.
   c. Then from the Alert Types **Workflow** tab, you can select a backup user.

   The Backup User is the backup individual assigned to work on the alert if the main assignee is out of office. You must have previously assigned an assignee and a backup assignee.
6. **Optional:** For **Notification Assignee**, specify a user to be notified of the alert. This is usually an external user. All notifications sent to the Alert Assignee will be sent to this user.
7. Click **Add** to add an Approver, and enter this information for the Approver:
   - **User Name**
   - **Backup User**: You can specify a default backup Approver user for the alert if the main Approver is out of the office. This is not required.

   Level displays the approvers in the order they were entered. You can reorder the Approver list by selecting an approver and clicking the arrow buttons to move them up or down in the list.

   You can add one or more levels of default Approver users or groups for the alert when one is created of this type. These are not required. If you do not specify Approvers, the user who creates the alert has the option to add them.
8. Click an Alert Type tab and continue entering information.

   When you are done entering the Alert Type information, click **Save and Close**.

   - Assigning Alert Type Viewers
   - Adding Questions for Alert Types
   - Applying Alert Type Attributes

Assigning Alert Type Viewers

The Viewers tab enables you to assign Viewer rights for alert types. Viewers have read-only access.

To assign Viewer rights:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Click **New** or **Edit** and click on the **Viewers** tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Click **Add** and select the name of the user or group that will have View access to the alert.

   The system opens the Member Selector. It is editable for external Viewers.

5. Select a **Notification Priority** to indicate at what alert priority the users will be alerted via email.

   Notifications will be sent for the priority level or higher. So if set to High, notifications will be sent only when the alert is set to High. If set to Low, then they will be notified for all priority types (Low, Medium, High). If this is blank (default), no notification will be sent.

6. Click an Alert Type tab and continue entering information.

   When you are done entering the Alert Type information, click **Save and Close**.

   - Adding Questions for Alert Types
   - Applying Alert Type Attributes

Adding Questions for Alert Types

When you create an Alert Type, you may want a user to answer questions about their actions before they indicate the Alert Type is complete. For example, you may ask if a certain process was followed when completing that task. Questions can be set to the Administrator, Assignee, Approver, Owner, or Viewer roles. This allows key details to be gathered from the user experiencing the issue.

You can specify various types of questions, such as Text, Number, or True/False, and indicate whether they are required. If a question is required, the user must respond or they cannot submit the task for approval. You can also order the questions by using the Move Up and Move Down buttons.

To add a question:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. From the **New** or **Edit** dialog, select the **Questions** tab.
4. Click **New**.
5. For **Question**, enter text for the question, with a maximum of 4000 characters.
6. From the **Type** list, select a question type:
   - **Date**
   - **Date/Time**
   - **Integer**
   - **List**

     Enter a list of valid responses to the question.
   - **Multi-Line Text**

     The maximum length should be less than 4,000 characters.

     Select Multi-Line Text, and then enter the **Number of Lines**, from 3 to 50 lines. Multi-Line Text determines how many lines of text are visible without scrolling, on the Actions dialog boxes.
   - **Number**

Copyright © 2022, 2026, Oracle and/or its affiliates.

If you select **Number**, select number formatting options:

- For **Decimal Places**, enter a value for the number of decimal places to display.
- Select the **Thousands Separator** option if you want numbers to display a thousands separator (for example, 1,000.00)
- From the **Currency Symbol** list, select a currency symbol; for example, $ (United States of America Dollar).
- From the **Negative Number** list, select how to display negative numbers; for example, (123).
- From the **Scale** list, select a scale value for numbers; for example, 1000.

- **Text**
- **True/False**
- **User**
- **Yes/No**

7. Assign the **Role** (Owner, Assignee, Approver, Viewer) of the user who should answer the question.
8. If the question is required, select **Required**.

   Required indicates that the question must be answered by the user before they can proceed. Required questions can be set for Assignees, Approvers, and Owners. This is disabled for the System Administrator and Viewer role.
9. Click **OK**.
10. **Optional:** To change the order of questions, select a question, then click **Move To Top**, **Move Up**, **Move Down**, or **Move To Bottom**.
11. **Optional:** To edit a question, select the question and click **Edit**. To remove a question, select the question and click **Delete**.
12. Click an Alert Type tab and continue entering information.

    When you are done entering the Alert Type information, click **Save and Close**.

- Applying Alert Type Attributes
- Viewing Alert Type History

Applying Alert Type Attributes

When you select an attribute, you can set a value for the attribute based on the attribute type. You can later filter by the attribute value.

For example, you may have a List attribute named Sales Region with the values of North, South, East, and West. The current alert type applies only to the West Sales Region, so you can add the Sales Region attribute and set it to "West".

To apply an attribute:

1. On the Home page, click **Application,** and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Click **New** or **Edit**, and select the **Attributes** tab.
4. Click **Add**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. From the **Attribute** list, select an attribute.
6. From **Value**, depending on the attribute, select a value for the attribute from a drop-down list, or enter a value.
7. **Optional:** To change access for the attribute, select a **Role** and **Access**.
8. Click **Save and Close**.
9. To edit other alert type information, see these topics:
    - Setting Alert Type Properties
    - Specifying Alert Type Instructions
    - Selecting the Alert Type Workflow
    - Assigning Alert Type Viewers
    - Adding Questions for Alert Types

Viewing Alert Type History

The system maintains a history of alert type actions. The History tab displays the components that were created or updated, the modification type, the old and new values, the user who made the modification, and the change date. The information on the History tab is read-only.

To view alert type history:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Edit an alert type and select the **History** tab.
4. View the history, then click **Save and Close**.

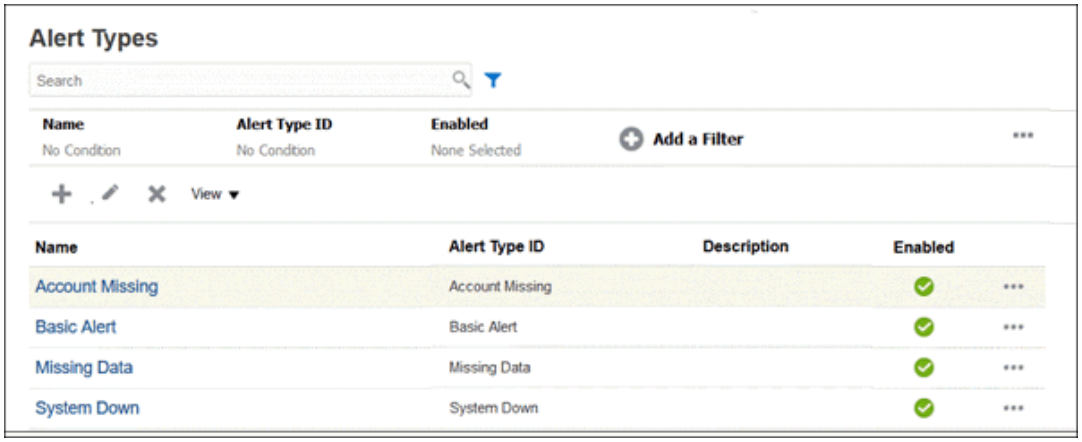
Viewing Alert Types

On the Alert Types page, you can specify which columns to display in the list or display all columns. You can reorder columns, sort columns by ascending or descending order, or change the column widths.

To display columns on the Alert Types page:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Do one or more of the following tasks:
    - To display all columns, select **View**, then **Columns**, and then select **Show All**.
    - To display specific columns, select **View**, then **Columns**, and select or deselect the column names.
    - To reorder columns, select **View**, and then **Reorder Columns**, select columns and use the Up or Down arrows or drag them to change the order.
    - To sort columns, hover over a column header until the Sort icons are displayed, and then click **Sort Ascending** or **Sort Descending**.
    - To change column widths, hover over the column header dividers until the arrows display, and drag the columns to the desired width.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Column Definitions for Alerts

This section provides the definitions for the Alerts columns.

Table 28-19 Column Definitions - Alerts

Column Name	Description
Alerts (Count)	Total count of alerts
Alerts Open (Count)	Total count of open alerts
Alert Type	Type of the alert. Based on the type, you can analyze the types of issues that users encounter during the business cycle and make changes to prevent them in future cycles
Approver 1-10	Approver level
Approver 1-10 (Backup)	Backup approver for the alert
Approver 1-10 (Primary)	Primary approver for the alert
Approver 1-10 End Date (Actual)	Actual end date for each approver level
Approver 1-10 Rejections (Count)	Count of alerts rejected by approvers
Assignee	Assigned user for the alert
Assignee (Backup)	Backup user assigned for the alert
Assignee (Primary)	Primary user assigned for the alert
Assignee End Date (Actual)	Actual end date for the assigned user
Associated Object Type	Type of object associated with the alert
Associated Objects (Count)	Total count of the associated objects for the alert
Closed Date	Date when the alert was closed
Comments (Count)	Total count of comments for the alert
Created By	Name of the user who created the alert
Created On	Date and time when the alert was created
Description	Description of the alert
Duration	Defined alert duration
Duration (Actual)	Actual alert duration
End Date	Effective end date for the alert
ID	Unique identifier for the alert
Last Updated By	Name of the user who last updated the alert
Last Updated On	Date and time when the alert was last updated

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 28-19 (Cont.) Column Definitions - Alerts

Column Name	Description
Name	Name of the alert
Owner	Name of the alert owner, which must be a Service Administrator or Power User.
Owner End Date (Actual)	Actual end date for the alert owner
Period	Period for the alert
Priority	Priority assigned for the alert
Start Date	Effective start date for the alert
Status	Status of the alert
Status (Detailed)	Detailed status of the alert
Status (Icon)	Status of the alert indicated as icon
Year	Year when the alert was created

Editing Alert Types

You can edit the names and descriptions of alert types, and change whether or not they are Enabled. When you enable an alert type, it is displayed in the list of available Alert Types.

To edit an alert type:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Select the alert type and click **Edit**.
4. Edit the required information. For details about the fields, see the following:
   - Setting Alert Type Properties
   - Specifying Alert Type Instructions
   - Selecting the Alert Type Workflow
   - Assigning Alert Type Viewers
   - Adding Questions for Alert Types
   - Applying Alert Type Attributes
   - Viewing Alert Type History
5. Click **Save and Close**.

Searching for Alert Types

You can use the Search function in the Alert Types list to quickly find alert types. You can enter full or partial names on which to search. Using the filter bar, you can control the alert types that are displayed in the list. By default, all alert types are displayed.

To search for alert types:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. To search for an alert type, enter search criteria in the **Search** text box.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. **Optional:** From the filter bar, click on a category to display additional search operators such as **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Starts With**, and **Ends With**.

   You can filter alert types using these categories: **Name**, **Alert Type ID**, **Enabled**, **Description**, **Created By**, **Created On**, **Last Updated By**, or **Last Updated On**.

> **Note**
>
> - Click **Add a Filter** to view all categories.
> - To hide the filter bar, click the **Hide Filter Bar** icon.
> - To clear all filters, click the
>
>   **Filters** icon, and then click **Clear All Filters**.

Deleting Alert Types

You can delete alert types that you no longer need. When an alert type is deleted, alerts that were created with that alert type are not deleted, but lose their alert type assignment.

To delete an alert type:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Alert Types** tab on the left.
3. Select the alert type.
4. Click **Delete**, then at the confirmation message, click **OK**.

Managing Views in Task Manager

You can edit, delete, and publish views within Task Manager. Also, you can set a view as the default. For more information, see:

- Editing Saved Views
- Deleting Views
- Publishing Views
- Setting a Default View
- Working with Views

Viewing Currencies in Task Manager

To view the configured currency codes within Task Manager, from the Home page, click **Application**, **Task Manager**, and then **Currencies**. A list of configured currency codes are displayed.

For each currency, you can view the **Currency Code**, **Currency Symbol**, **Decimal Places**, **Description**, and whether the currency is **Enabled**. For information about these columns, see Task Manager – Currencies.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Using Reports

You can generate custom reports and Cloud EPM system reports for Task Manager.

For more information, see:

- Generating Custom Reports for Task Manager
- Generating Cloud EPM System Reports for Task Manager

Generating Custom Reports for Task Manager

You can create reports for Task Manager. The reports can be generated in PDF, CSV, HTML, or XLSX format.

> **Note**
>
> Task Manager provides sample reports to assist you in getting started. You can use them as templates and can duplicate them as needed, then make modifications or extend access to users. To duplicate a report, select the report, then select **Duplicate** from the ellipsis button . You can then edit the newly created report.

You can also create custom reports. Building custom reports involves four steps and can only be performed by a Service Administrator:

1. Creating a Task Manager Query.
2. Creating a Template.
3. Setting Up a Report Group
4. Creating a Report

To build custom reports, you create a query whose definition can then be exported as an XML file. Import the XML file into Word and use it to create a template document, which must be in RTF format. Then you can set up a report group to group individual reports. Finally, generate the report, which uses both the query and the template you created and can be set with a default output of CSV, PDF, HTML, or XLSX.

After you have built a custom report, the Service Administrator or other users who have been granted access can generate the report. See Generating the Report.

> **Note**
>
> If you are managing your migration from Oracle Classic environment to Oracle Cloud Infrastructure (OCI) and have any custom reports, you may have to update the custom report's query definitions in the Target Service. This is because the internal IDs for objects (for example, Tasks, Journals, Attributes, etc.) may change during the migration. However, in case of Oracle managed migration, there will not be any change in the internal object IDs, so changes to custom report definitions is not required.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating a Task Manager Query

Creating a query is the first step in creating a custom report.

To create queries:

1. From the Home Page, click **Application**, and then click **Task Manager**.
2. Select the **Task Manager Reports** tab on the left.
3. On the **Queries** tab, click **New**.
4. On the **New Query** screen, enter a **Name** and an optional **Description**.
5. From **Type**, select an option:
   - **Parameter Query**: A Parameter Query type is used to present a list of options that you can specify for this parameter's value. Parameter Query allows you to present a list of options used when filling in a parameter's value for a Report Query, where the list of options is not a simple Attribute already defined, but is instead a complex query that you need to define.

     This parameter query example provides a list of all Task Manager periods:

     ```
     SELECT PERIOD_ID, PERIOD_NAME FROM FCC_PERIODSWHERE APP_ID=1
     ```

   - **Report Query**: Select the records to be included in the report. You can apply a security filter, so users see only the data that they are authorized to see based on their roles and the reports to which they are assigned. To apply a Security Filter to a report query, add the following syntax to the end of the query WHERE CLAUSE statement.

     ```
     $FCC_SECURITY_CLAUSE$
     ```

     When using`$FCC_SECURITY_CLAUSE$` in the query, the `FCC_TASKS` must be aliased to `TaskEO`

     Because many predefined queries included with Task Manager have the Security Filter applied, you can use them as examples when building your own.

     For example, the following Report Query specifies scheduled tasks to display Task Code, Name, Assignee and Schedule for all High Priority tasks in the selected schedule.

     ```
     SELECT TaskEO.TASK_CODEAS "$TASK_CODE$",

     TaskEO.TASK_NAMEAS "$NAME$" ,

     ((SELECT CASE WHEN FIRST_NAME IS NULL AND LAST_NAME IS NULL THEN
     USER_LOGIN ELSE FIRST_NAME||' '||LAST_NAME END FROM FCM_USERS WHERE
     USER_ID = (coalesce(AssigneeEO.ACTIVE_USER_ID, AssigneeEO.USER_ID))))AS
     "$ASSIGNEE$" ,

     DeploymentEO.DEPLOYMENT_NAMEAS "$SCHEDULE$"

     FROM FCC_TASKS TaskEO

     LEFT OUTER JOIN FCC_ACCESS AssigneeEO ON (TaskEO.TASK_ID =
     AssigneeEO.SOURCE_ID AND AssigneeEO.ACCESS_TYPE = "AS")

     LEFT OUTER JOIN FCC_DEPLOYMENTS DeploymentEO ON (TaskEO.SOURCE_ID =
     DeploymentEO.DEPLOYMENT_ID)

     WHERE (TaskEO.SOURCE_TYPE = "DEPLOYMENT")

     AND ((((TaskEO.PRIORITY=3 )
     ```


Copyright © 2022, 2026, Oracle and/or its affiliates.

```
AND (TaskEO.SOURCE_ID=~SCHEDULE~ ))))
```

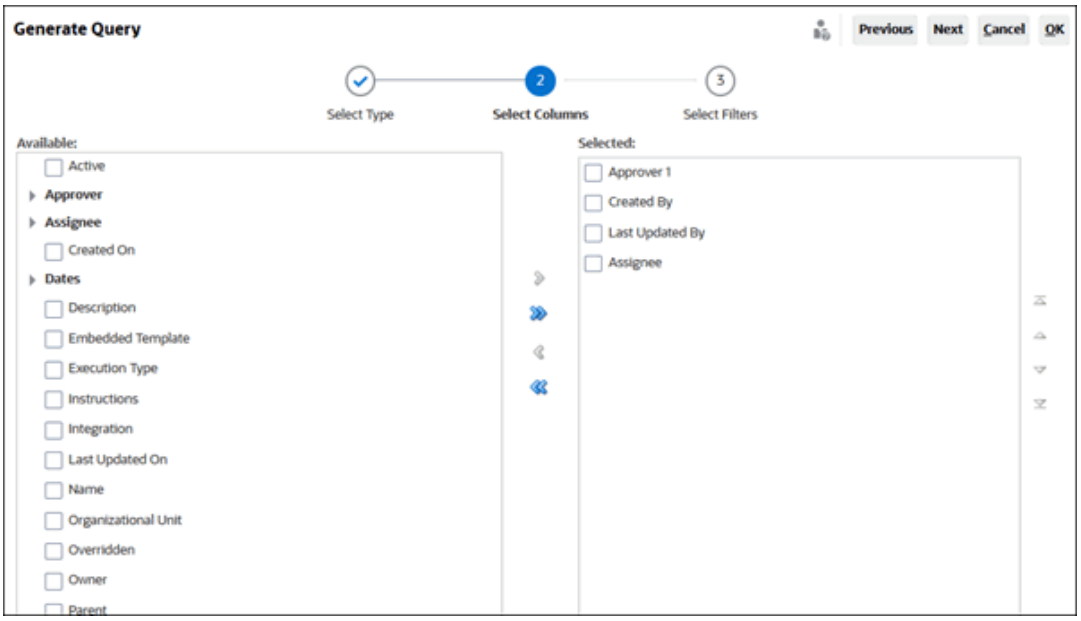
6. Click **Generate Query** to build the query from the New Query dialog. The dialog assists you in creating a query against the database by allowing you to select any existing attribute in the product to be queried and/or filtered against. The system then generates the SQL to match the specified attributes and filters, at which time you can modify and enhance it.

   a. On the **Select Type** screen, select options:

      - From **Query**, select **Template Tasks** or **Schedule Tasks**.
      - **Optional**: Select the **Apply Security** checkbox to automatically apply the user security filter to the generated query. This applies the Security token to the query, to be filled in with the correct SQL when the report is generated.

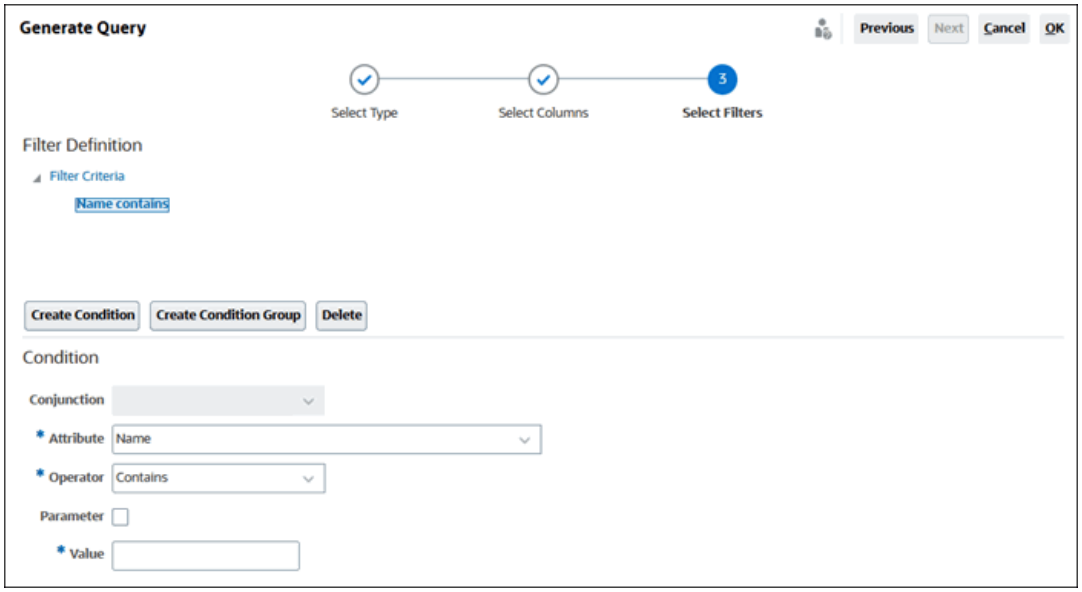
   b. Click **Next**.

7. From **Select Columns**, select the columns to display in the query, and then click **Next**.

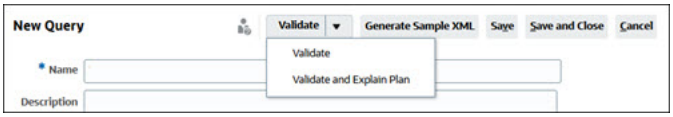


8. From **Select Filters**, click **Create Condition** or **Create Condition Group** and select the conditions to create the filters to create the query.

Copyright © 2022, 2026, Oracle and/or its affiliates.



9. Click **OK**.
10. **Optional**: If you want to use the report in the future, click **Generate Sample XML**.
11. Click **Save**.
12. To test the query for errors:
    - Click **Validate** from the New Query dialog. You can also select **Validate** from the drop-down list.

      The query displays in the Queries tab.

      > **Note**
      >
      > You can easily delete a query, or duplicate a query using the Action menu.

    - Click **Validate and Explain Plan** from the drop-down to validate the query and also generate the execution plan for this query. A .txt file that uses the same name as the query is generated. You can view or download the generated plan.
      Open this file to view the generated plan which contains the sequence of steps that is performed to run this query. If the performance of a query is suboptimal, you can use this plan to understand the cause of the problem and determine the best way to improve the query performance.

      > **Note**
      >
      > By default generation of execution plans is available only for OCI (Gen 2) environments. To enable it for Classic environments, contact Oracle using a service request.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Using Date Parameters

When defining queries for task manager reports, you can define runtime parameters and then pass these parameters to the report query. If your report query references a database column that's defined as a `date` data type, you may need to use the `to_date` function to make sure that the report parameter is correctly interpreted when the system runs the report query.

In the following sample, the system captures a date from the user, and the `to_date` function is used in the where clause to convert the date to the correct format for the query. The where clause entry for the date field is coded as `(TDATASEG.PERIODKEY)=to_date('~POVPERIOD~','YYYY-MM-DD')` to make sure that the date selected from the parameters is interpreted by the system in the correct format.

The full query is:

```
SELECT ENTITY, ENTITYX, ACCOUNT, PERIODKEY, tPOVPartition.PartName AS
Partitionkey,  tPOVCategory.CatKey,  tPOVCategory.CatName,  ACCOUNTX, UD1,
UD1X, UD2, UD2X, UD3, UD3X, UD4, UD4X, UD5, UD5X, UD6, UD6X, UD7, UD7X, UD8,
UD8X, UD9, UD9X, UD10, UD10X, UD11, UD11X, UD12, UD12X, UD13, UD13X, UD14,
UD14X, UD15, UD15X, UD16, UD17X, UD18, UD18X, UD19, UD19X,
UD20,UD20X,DESC1,DESC2,DATAVIEW,CURKEY,AMOUNT,AMOUNTX  from TDATASEG INNER
JOIN tPOVCategory  ON tDataSeg.CatKey = tPOVCategory.CatKey  INNER JOIN
tPOVPartition  ON tDataSeg.PartitionKey = tPOVPartition.PartitionKey
WHERE (((TDATASEG.PERIODKEY)=to_date('~POVPERIOD~','YYYY-MM-DD')) AND
((tPOVCategory.CatKey)=~POVCAT~) AND (~POVRULE~ is NULL or RULE_ID =
~POVRULE~) AND ((tPOVPartition.PartitionKey)=~POVLOC~ ))
```

The Period query is defined as:

```
select periodkey, perioddesc from TPOVPERIOD
```

Modifying A Query

A system administrator can edit a Task Manager query.

1. From the Home Page, click **Application**, and then click **Task Manager**.
2. Select the **Task Manager Reports** tab on the left.
3. Select the **Queries** tab if it's not already selected, and then **Edit** from next to the query you are editing.

> **Note**
>
> If it is locked, ask the System Administrator to unlock.

4. Select Task Manager query.
5. In **Edit Query**, edit the information as needed.
6. After you are done with your changes, click **Save and Close**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Creating a Template

Creating report templates is the second step in generating custom reports. Report templates are created in Microsoft Word with Oracle BI Publisher Desktop installed.

Make sure that you've already generated the sample XML when you created the query. The sample XML file is generated in the Sample XML folder.

To create a report template:

1. Open Microsoft Word with a new document.
2. Select the **BI Publisher** tab, then select the **Sample XML** folder and click **Load Data**.
3. Locate the `SampleQuery.xml` that was generated when you created the query and click **Open**.
   When the message displays, "*Data Loaded Successfully*", click **OK**.
4. Select **Insert**, and then **Table Wizard**.
5. Select **Table** and click **Next**.
6. Select the default data set and click **Next**.
7. Select the desired fields to show in the report and click **Next**.
8. Select **Group By**, select the fields to group by, and then click **Next**.
9. Select **Sort By**, select the fields to sort by, and then click **Finish**.
10. Save the template as an `.rft` file; for example: `SampleQuery.rtf`.

For more information about creating RTF templates, see Creating RTF Templates.

Setting Up a Report Group

Creating report groups is the third step in generating custom reports. A report group enables you to group individual reports together so that you can organize reports in folder structures.

> **Note**
>
> Nested Report Groups are not supported.

After a report group has been created, you can modify it if necessary. You can duplicate a report group but its name must be unique. You can also delete a report group, however, deleting a report group deletes all reports associated with that group.

To create report groups:

1. From the Home Page, click **Application**, and then click **Task Manager**.
2. Select the **Task Manager Reports** tab on the left.
3. From the **Report Groups** tab, click **New**.
4. In the **New Report Group** window, enter:
   - **Name**: Enter a group name for the group of reports.
   - **Description**
   - **Display to User**: Select if you want this report group displayed to the user.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The **Display to User** option enables report writers to have a group of reports hidden while they are working on them.

5. On the **Reports** tab, reorder or edit reports that have been added to the report group using the Move icons

.
6. Click **Save and Close**.

Creating a Report

Creating report definitions is the fourth step in generating reports. Users can create reports from the queries and assign them to groups.

To create report definitions:

1. From the Home Page, click **Application**, and then click **Task Manager**.
2. Select the **Task Manager Reports** tab on the left.
3. Select **Reports**, and then click **New**.
4. In **New Report**, enter:
   - **Name**
   - **Description**
   - **Query**: Select a query.
   - **Template**: Click **Browse** and then browse to a report template. You can upload any supported Oracle Business Intelligence Publisher template format. See Creating a Template.
   - **Report Group**: Select the Group Name for the report from the drop-down menu.
   - **Display to User**: Select if you want the report displayed to a user.
   - **Output Format**: Select a report output format that BI Publisher supports from one of the following options:
     - **xlsx**: Not supported for graphs.
     - **html**: Not supported for graphs and charts.
     - **pdf**
     - **csv**: Does not use a template and is better at faster data retrieval.
     - **csv (Formatted)**: Is best suited for a simple data table with formatted data and does not support images, graphics, or styling in the template.

> **Note**
>
> The **csv (Formatted)** output format takes additional time to generate the report to honor template formatting when compared to the **csv** format. Therefore, you can select **csv** to generate the data quickly or **csv (Formatted)** to generate formatted template based data.

5. To complete the report definition, you must set the parameters and access:
   a. For Parameters, select the **Parameters** tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Parameters from the query are identified and added to the list. Update the following:

- **Display Name**
- **Parameter Type**: The available options are:
  - **Task Manager Attribute**
  - **Text**
  - **Date**
  - **Date/Time**
  - **Number**
  - **Query**
  - **Integer**
  - **True/False**
  - **Yes/No**
  - **User**
- **Display To User**: Clear the checkbox if you do not want the parameter to be displayed and want the value to be used. You can use a single query to create multiple reports. In such scenarios, few parameters are hidden and values defined in the **Parameters** tab are used.
- **Attribute/Query**: For Attributes, the drop-down lists the attributes for Task Manager. For Query, the drop-down lists all queries of the **Parameter Type**. This can be used to make parameters such as dynamic LOVs. See Creating a Task Manager Query
- **Parameter Value**: The default value is displayed.

b. For Access, select the **Access** tab.

c. From the drop-down lists, select the **Application Module**, then select a **Role** for the Application Module.
For example, you can select Task Manager for the Application Module, then select to assign access to the Power User role.

You can use **Add** or **Remove** to change the list of users who can access the report.

> **Note**
>
> The report must be granted access to at least one application module for the report to display in the corresponding **Reports** tab.

6. Click **Save and Close**.

Searching and Filtering Queries, Report Groups, or Reports

Using the search field and filter options, you can control the records that you see in the list of queries, report groups, or reports.

To filter queries, report groups, or reports:

1. From the Home Page, click **Application**, and then click **Task Manager**.
2. Select the **Task Manager Reports** tab on the left.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Select the **Queries**, **Report Groups**, or **Reports** tab.
4. Enter search criteria in the **Search** text box.
5. **Optional:** From the filter bar, click on a category to display additional search operators such as **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Starts With**, and **Ends With**.

> **Note**
>
> - Click **Add a Filter** to view all categories.
> - To hide the filter bar, click the **Hide Filter Bar** icon.
> - To clear all filters, click the
>
> **Filters** icon, and then click **Clear All Filters**.

Generating the Report

Generating reports is the final step in the process. After a Service Administrator has built the custom report, any user or group granted access can generate the report.

A Service Administrator can also use REST API commands to generate a report. For detailed information, see Generate Report for Financial Consolidation and Close and Tax Reporting in *REST APIs for Oracle Fusion Cloud EPM*. For large reports, the `runAsync` parameter for report generation in REST API allows reports to run asynchronously (value of true).

To generate reports:

1. From the Home Page, click **Tasks**, and then select the **Reports** tab on the left.
2. Click the **Task Manager Reports** tab.
3. Select the report you want to generate. You can use the quick **Search** option to find a report under a selected group.
4. For **Output Format**, select from the following:
   - **xlsx**: Not supported for graphs.
   - **html**: Not supported for graphs and charts.
   - **pdf**
   - **csv**: Does not use a template and is better at faster data retrieval.

     > **Note**
     >
     > For reports that contain more than 10,000 records, it is recommended to use the **csv** format.

   - **csv (Formatted)**: Is best suited for a simple data table with formatted data and does not support images, graphics, or styling in the template.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The **csv (Formatted)** output option takes additional time to generate the report to honor template formatting when compared to the **csv** format. Therefore, you can select **CSV** to generate the data quickly or **csv (Formatted)** to generate formatted template-based data.

5. Click **Generate**.
6. Enter the **Name**, and then select the **Schedule** and **Period** from the drop down menus.
7. Click **Generate**.
   When done, the system displays a "Completed Successfully" status message.

> **Note**
>
> - Click **Back** to preserve the parameter values that you have selected and regenerate the report.
> - Click **Reset** to clear the parameter values that you have selected and regenerate the report.

8. Select **Open with** or **Save File** to save the ZIP file.

The report generation process uses a backend job framework that runs report jobs in the background. If the report has an error, for example, if the size is greater than the recommended size, you see a message stating the error in the Generate Report dialog before the report is generated. For reports with very large number of records, it is recommended to use filtering to break the report down to fewer records.

Understanding Reports Security

This topic describes the security for standard reports and custom reports in Task Manager.

> **Note**
>
> A Service Administrator can also use REST API commands to generate user details report. For detailed information, see Generate User Details Report for Financial Consolidation and Close and Tax Reporting in *REST APIs for Oracle Fusion Cloud EPM*.

Standard (Predefined) Reports Security

A security clause is in all standard report queries. This means that the reports have a security filter enforced on these reports by default. For example, Power User security (established under **Access Control**), to allow access to certain tasks is enforced on reports. A Power User with access to only certain tasks can only see reports for those tasks.

Administrators can edit reports to give users access to a report using the **Access** tab in the **Edit Report** dialog. This ensures that if you allow users to see reports, they can only see data appropriate for them as determined by the Administrator.

The security clause is also included as part of the following predefined **Task Manager** reports:

- At Risk Tasks

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Task Compliance Analysis
- Early Tasks
- Late Tasks
- Task Performance Analysis by Organizational Unit
- Rejected Tasks
- Task Audit Trail
- Users with Late Tasks

Assigning User Access to Standard Reports

An Administrator can decide to give access to standard reports to various users. This is done by using the **Access** tab on the **Edit Report** dialog.

To grant users access to a report:

1. From the Home Page, click **Application**, and then click **Task Manager**.
2. Select the **Task Manager Reports** tab on the left.
3. From **Reports**, select the report you want, and from **Actions**, select **Edit**.
4. On the **Edit Report** dialog, under **Access**, you can use **Add** or **Remove** to change the list of users who can access that report.
5. Click **Save** or **Save and Close**.

Custom Reports Security

For custom reports, you can determine when you create your query whether you want to have a security clause inserted into the query and then assign access to the report to users. This means that the creator of the report determines who should be given access.

Using Task Manager Report Binders

Task Manager report binders enable you to create a history of all activities that occurred as part of a schedule, for example, the Corporate Q1 Close. You use filters to specify the schedule, tasks to include, and which task information to include.

Information for all tasks that meet the binder filter criteria are output in HTML to a ZIP file. They contain HTML and other files. When you extract the ZIP file, a directory structure is formed, in which you can access the HTML file to view the report binder. Because the report is self-contained in one file, it can easily be copied, printed, or emailed for internal or external reviews.

Generating Report Binders

The Generate Report Binder dialog box enables you to specify the parameters needed to create a report. When you open a schedule in a view and run Generate Report Binder, the report binder is applied to the current view and incorporates only the tasks within the current filtered view.

The report binder is generated and returned through the browser as a document. When you run Generate Report Binder, you have the option to open it immediately or to save it to disk as a ZIP file.

Copyright © 2022, 2026, Oracle and/or its affiliates.

You can generate report binders for multiple schedules at a time. This can be helpful if your application has a large number of schedules.

To generate a report binder:

1. From the list of Schedules, select one or more schedules for which to generate a report binder.
2. From the **Actions** dropdown, select **Generate Report Binder**.
3. For **Report Binder Name**, enter a name.
4. For **Description**, enter a binder description.
5. From **Optional Components**, select the task components that you want to display in the report:
   - **Alerts**
   - **Comments**
   - **Attachments**

   > **Note**
   >
   > Including attachments in the report greatly increases the size of the report and may impact the performance.

6. Click **Generate**.
7. From File Download, select **Save**.

   The Save As dialog box is displayed, and the ZIP file name is displayed at the bottom.
8. Select a directory for the ZIP file, click **Save**, then **Close**.

Viewing Report Binders

When you generate a report binder, it is output in one zipped file. The ZIP file name is the name that you specified for the Report Binder. The report pages are merged into an HTML report, with page breaks for sections as required, so that the report can be printed with a print command. If you choose to include attachments, a separate attachment appendix, containing links to attachments with corresponding tasks and alerts, is created, which you can print separately. All attachments are downloaded to separate folders.

If you saved the report binder as a ZIP file, you can extract everything from the ZIP, which creates a directory structure with the same name as the report binder. You can see the report binder by opening the HTML page in the directory. The first report page contains information on the report binder, the schedule, and displays a list of tasks and alerts available in the report binder. You can navigate to the Tasks section to see task details such as status, Assignee, start and end dates, and duration. If a task has not started, the projected (scheduled) date is displayed. Each task is a link to a Task Detail page. By default, it includes sections for Attributes, Instructions, Questions, Workflow, Predecessors, and History. If you selected the options to include Alerts and Comments when you generated the report binder, those sections are also displayed.

The first page also contains a list of alerts into which you can drill further. From the Alert Detail page, you can navigate to the associated task.

To view report binders:

1. Navigate to the directory in which you downloaded the ZIP file, and double-click the file.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Extract the ZIP files to the desired directory.
3. Navigate to that directory and locate the subdirectory that matches the ZIP file name.
4. From the subdirectory, double-click *report_binder_name*.html to view the report binder.

Generating Cloud EPM System Reports for Task Manager

Reports provides a user-friendly, robust report development framework along with an enriched report viewer experience. Using Reports' Tables, you can incorporate Task Manager data within the Cloud EPM Reports platform – Reports, Books, and Bursting.

For more information, see:

- Designing Reports in *Designing with Reports*
- Task Manager Attributes List in *Cloud EPM System Reporting Schema Reference Guide*

Working with Views and Filters

This chapter describes how to create, manage, and use views and filters.

Related Topics

- Working with Filters
- Working with Views

Working with Filters

Use filters to limit the records displayed in your views and reports.

Related Topics

- About Filters
- Viewing the Existing Saved Filters
- Creating a New Filter
- Using the Filter Bar to Adjust Your View
- Clearing Filter Conditions
- Removing a Filter
- Editing a Filter
- Duplicating a Filter
- Saving a Filter
- Applying a Saved Filter
- Publishing a Filter
- Deleting a Filter
- Displaying Columns for Filters
- Reordering Columns for Filters

About Filters

Filters control the records that you see in list views and reports.

Copyright © 2022, 2026, Oracle and/or its affiliates.

You can provide values for the attributes that you want to filter on and the operator to use for filtering. Typical operators include the following: equal to, not equal to, starts with, ends with, contains, greater than, less than, and so on. The available operators depends on the attribute's data type. For example, operators for filtering text values are different than the operators for filtering numeric values. Filters are combined together using and logic, which means only those records that meet all filter criteria are displayed.

You can also create more complex filters using and as well as or logic and grouping logic to determine the order in which filters are applied.

You can save a filter for future use. However, for setting up your views, saved lists can be used. See Working With List Views.

Service Administrators and power users can publish filters so that they are accessible to other users and these are then marked as Public. Service Administrators and power users can use saved filters to test rules.

Where Are Filters Used in Task Manager

There are many locations within Task Manager where filters can be used.

The filters functionality remains consistent throughout these different areas:

- Schedule Tasks
- Templates
- Schedules
- Task Types
- Alert Types
- Views
- Attributes

Viewing the Existing Saved Filters

Filter definitions that were saved are available in the Filters tab of Configuration.

To view saved filters:

1. From **Home**, click **Application**, and then **Task Manager**.
2. Click **Filters** to see existing filters.
   Public filters are marked with a green check mark.

Creating a New Filter

You create a new filter to control the display of rows as per your requirement.

To create a new filter:

1. From **Home**, click **Application**, then **Task Manager**, and then **Filters**. You can also go to any of the following pages to create a filter:
   - **Tasks > Schedule Tasks**. Click **...** on the right side and then **Manage Filters**.
   - **Tasks > Supplemental Data Tasks**. Click **...** on the right side and then **Manage Filters**.
   - **Tasks > Alerts**. Click **...** on the right side and then **Manage Filters**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Click New (+) to add a new filter. The New Filter dialog appears.
3. In **Name**, enter a unique name for the filter.
4. In **Description**, enter a description (optional) for the filter.
5. In **Type**, select the type of filter being created.
6. In the Filter Definition section, click **Create Condition** to create a condition that will be used to filter data. You can specify multiple conditions and condition groups.
   For each condition, specify the following:
   - (Condition Groups only) Conjunction: Select **And** or **Or**. These state how this condition or group relate to prior sibling conditions or groups. This field is enabled only if the selected node is not the first child of its parent node.
   - Attribute: An attribute is a field or value that a condition will be comparing to a value for inclusion in the result set of a filter. However, for the case of a filter, an attribute denotes more than the list of user-defined attributes.
   - Operator: States the type of evaluation to perform against the attribute. For example, Equals, Between, Does not Equal, Greater than, Is blank, Is not blank, Less than, Not between, Starts With, Ends With.
   - Value: Specifies what values to compare the attribute against. The type of attribute determines what input field is available.

Using the Filter Bar to Adjust Your View

The filter bar works across many different areas to filter data displayed in a list. You can add multiple filters to a list.

Here's an example of the filter bar on the Filter configuration. Note that the default of All is used. This means that all objects are displayed unless you choose to make a selection of filter attributes.

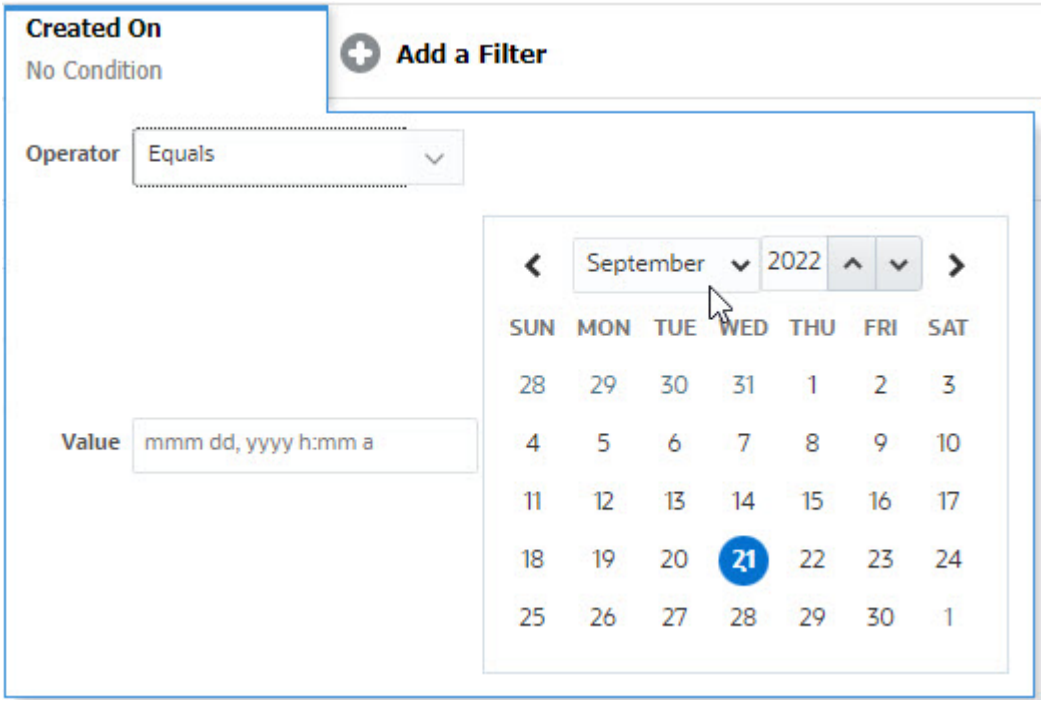
To add a filter to your list:

1. Click **+ Add a Filter** to display a list of attributes that you can use to filter data.
   The list of attributes is different, depending on the list page on which you are adding the filter.
2. Select the filter attribute you'd like to add.
   The selected attribute appears on the filter bar.

Using a Date Range

Some filter attributes have a date range. For example, if you want to add another filter attribute to the filter bar, such as **Created On**, you can use the date range feature. Narrow your view by using a date value and then use the **Operator** field to set the conditions for dates values that meet this criteria.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Clearing Filter Conditions

When you clear a filter, the conditions applied by this filter on the displayed data are removed.

After adding the filter to the Filter bar, you can do one the following to clear the filter conditions:

- Hover on each filter, click the *** icon, and click **Clear** to clear and reset the condition for the specific filter.
- Click the *** icon on the right side of the Filter bar and select **Clear All Filters**. The conditions for all the filters in the Filter bar are cleared and reset.

Removing a Filter

You can remove a filter from the Filter bar.

Removing a filter also clears the conditions applied by the filter on the listed data.

To remove a filter from the filter bar:

1. Click the icon *** adjacent to the filter.
2. Click **Remove** to remove the filter from the Filter bar.

On a few pages, you can't remove the default filters.

Editing a Filter

Edit a filter to modify its definition.

To edit a filter:

1. Open the Filters page.

   From the Home page, click **Application**, then **Task Manager**, and then **Filters**.

   You can also edit filters when you click **…** and then **Manage Filters** on a page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Select the filter you want to edit and click the icon.
   The Edit Filter dialog is displayed.
3. Update the required information.
4. Click **OK**.
   The filter details are updated.

Duplicating a Filter

You duplicate a filter to create a copy of an existing filter.

To duplicate a filter:

1. On the Filters page, select the filter you want to duplicate and click the icon.
   A copy of the filter is displayed on the page.
2. Click the copied filter.
   The Edit Filter window is displayed.
3. Update the required information.
4. Click **OK**.
   The filter details for the copied filter are updated.

Saving a Filter

Saving a filter definition enables you to easily reuse these filter settings when required (instead of manually setting up filters when required).

By default, filters are saved as private filters. To enable other users to use the same saved filters, you can publish the filters.

To save a filter:

1. Use the **Add a Filter** to create a filter for the required attributes.
2. From the Actions menu, select **Save Filter**.
   The Save Filter dialog appears.
3. In **Name**, enter a unique name for the filter.
4. In **Description**, enter an optional description for the filter.
   Notice that the Filter Definition section displays the selected filter conditions.
5. Click **OK**.

Applying a Saved Filter

You can apply saved filters to restrict the displayed data. All the saved filters are displayed when you click the **...** icon on the top-right side of a page. Click any of these filters to apply it for the data. The data will be displayed based on the defined filter conditions.

Publishing a Filter

Service Administrators can publish a filter to make it available to other users. Publishing a filter marks it as **Public**.

To publish a filter:

1. On the Filters page, select the filter you want to publish, and click the icon.

Copyright © 2022, 2026, Oracle and/or its affiliates.

A message asking for confirmation is displayed.

2. Click **Yes**.
A copy of the filter is created and the **Public** column displays icon indicating the filter is published.

> **Note**
>
> Only Power Users and Administrators can publish filters.

Deleting a Filter

Delete a filter to remove its definition from the system.

To delete a filter:

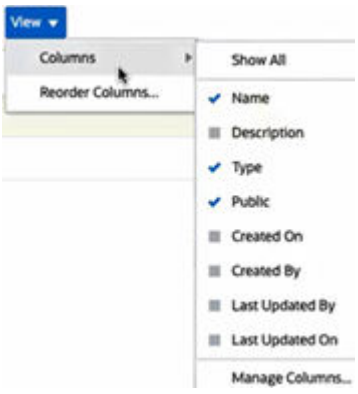
1. On the Filters page, select the filter you want to delete and click the icon.
A message is displayed asking for confirmation.
2. Click **Yes**.
The filter is deleted.

Displaying Columns for Filters

To display the columns for the filters:

1. On the Filters page, click **View** and then **Columns**.
2. Select the columns you want to display or click **Show All** to display all the columns.

You can click **Manage Columns** and hide or show the columns that are displayed in **View > Columns**.



Reordering Columns for Filters

To reorder the columns:

1. On the Filters page, click **View** and then click **Reorder Columns**.
2. Select the column name that you want to reorder and use the following icons to move it to the required position:
   - : Move selected items to top of the list

Copyright © 2022, 2026, Oracle and/or its affiliates.

- : Move selected items up one in the list
- : Move selected items down one in the list
- : Move selected items to bottom of the list

3. Click **OK**.
   The columns are displayed based on the specified order.

Working with Views

Views provide multiple ways to visualize and analyze your data.

Related Topics

- About Views
- Working With List Views
- Working with Pivot Views
- Working with Chart Views
- Saving Views
- Editing Saved Views
- Publishing Views
- Setting a Default View

About Views

Oracle Fusion Cloud Enterprise Performance Management products provide you with great flexibility in the ways in which you can visually view your data.

Types of Views

- List view: Provides a table display of information in columns and rows for the objects which meet the filter conditions on the page.
- Gantt chart: Displays a timeline for a schedule that graphically represents the duration of tasks and the dependencies between them. You can use the Gantt chart to see the status of predecessor tasks to other tasks.
- Calendar: Displays schedule tasks in traditional calendar format by Month, Week, or Day. After you select the Calendar View, use the calendar icons to select Month, Week, or Day. In the Calendar View, you can also see the Day Label in the Day header.
- Pivot view: Allows you to create summaries of numeric attribute data by attribute value.
- Chart view: Displays data in the form of charts.

Use the View selector ( ) to move between views.

Choosing the Compact Display of Views

When you're viewing items in a List, Gantt, or Pivot view, you've the ability to view the data in a compact format. The **Compact** option works as a toggle switch and displays more rows of information. Click **Compact** from the **View Selector** to display the records in a compact format.

If you save a view, your choice of Compact will also be saved.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Objects for Which Views are Available

Views are available for the following objects in Task Manager:

- Schedule Tasks: Contains the list of scheduled tasks for Task Manager
- Alerts: Contains the list of alerts and provides drill-down to the alert details

About Filtering Data in Views

You can use filters to restrict the data displayed in the views. Filters can be created at run time (after the data is displayed), or when designing the chart or pivot view.

You can filter data in the following ways:

- Filter bar in a view

  Using filters from the Filter bar enables users to dynamically decide the criteria that must be applied to the view data. The specified filter condition is applied at run time, after the view is generated and the display is updated to reflect the applied condition. See Using the Filter Bar to Adjust Your View.

  For example, add a filter to the Filter bar in the Tasks list with the Assignee column selected. You can use this filter to dynamically filter the chart data by selecting one or more assignees.

- **Filter** in the **Layout** tab of the Edit Pivot or Edit Chart dialogs
  This filter is added by the view designer. The specified conditions are applied on the data before the data is included in the pivot view or chart view. You can create a filter for each data set listed in the **Legend (Series)** section. See Setting the Chart Layout.

  For example, if you create a filter condition for a data set with Status set to Open, only open tasks are included when charting that data set.

Working With List Views

Use list views to display records in a simple tabular form.

Related Topics

- About List Views
- Customizing the List View
- Task Manager Example: Customizing the List View for Schedule Tasks

About List Views

List views present records for on screen viewing and provide drill-down capabilities to the record details. They display objects in a vertical list, in the form of rows and columns.

To see more rows displayed in the list view, use **Compact** from the **View Selector** at the right hand side.

List views provide the following reporting features:

- Columns can be added to or removed from the view and re-ordered.
- Filters can be applied to limit the records included in the list.
- List views can be printed or exported to Excel for ad-hoc reporting.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Customizing the List View

The list view displays with the default columns selected. You can easily change the default columns to customize your view.

To customize a list view:

1. Display the list view for the required object.
2. In the **Actions** drop-down, select **Select Columns**.

   The Select Columns dialog appears. The columns that are currently displayed are listed in the **Selected** section.
3. In the **Available** section, select the attributes that must be included in the list view and use the arrow keys to move them to the **Selected** section.
4. Click **OK**.

Task Manager Example: Customizing the List View for Schedule Tasks

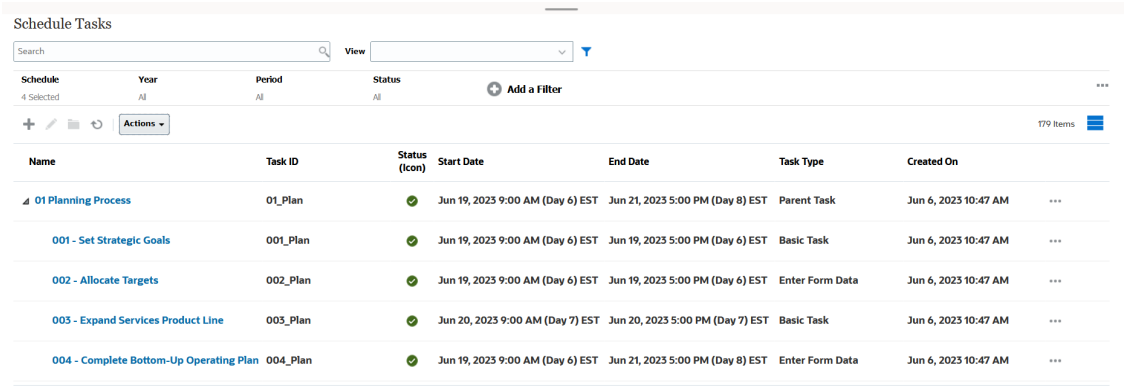
Assume that you want to see more information such as when was the task created.

Use the following steps:

1. From **Home**, click **Tasks** and then click **Schedule Tasks**.
2. From the **Actions** drop-down, click **Select Columns**.

   The Select Columns dialog appears. Use this to add additional columns to view information about the tasks.
3. In **Available**, scroll down the list, select **Created On**, and use the arrow keys to move it to **Selected** on the right side.
4. Click **OK**.

   The Schedule Tasks page displays the **Created On** column for the tasks.



Working with Pivot Views

Use pivot views to summarize your data.

Related Topics

- About Pivot Views
- Customizing a Pivot View
- Example: Viewing Organizational Units Based on Task Status

Copyright © 2022, 2026, Oracle and/or its affiliates.

About Pivot Views

A pivot view enables you to create summaries of the attribute data.

There is a default layout for each object that supports pivot views. However, you can customize the pivot view based on your requirement.

Click each summary value displayed in the pivot view to drill down and view the records that comprise the total.

Customizing a Pivot View

You can customize a pivot view to summarize the data based on your business requirement. Data can be grouped by a maximum of two attributes.

To customize a pivot view:

1. Display the pivot view for the required object.
2. Click the **Edit** icon at the top-right.

   The Edit Pivot dialog appears. It contains three tabs: **Properties**, **Layout**, and **Columns**.
3. In the **Properties** tab, enter the basic view properties. See Setting Pivot View Properties.
4. In the **Layout** tab, specify the details of how data must be grouped. See Setting Pivot View Layout.
5. In the **Columns** tab, enter the data labels and the sorting order for the data. See Specifying Pivot View Columns.
6. Click **OK**.

> **Note**
>
> If you drill down into a record, update one or more details, save it, and return to the pivot view, these changes are not visible. You must refresh the pivot view to see the latest updates.

Setting Pivot View Properties

Use the **Properties** tab of the Edit Pivot dialog to set the basic properties of a pivot view.

To set the pivot view properties:

1. In **Background**, select one of the following:
   - **No Fill**: No background color is used
   - **Solid**: Select the color to be used as the background color. You can optionally select a color in **Gradient**.
2. In **Header Color** and **Header Size**, select a color and font size for the pivot view header.
3. In **Data Color** and **Data Size**, select a color and font size for the data displayed in the pivot view.
4. Select **Missing Values as Zero** to display a zero when data values are missing.
   This includes missing data values and values that are missing because of an applied filter.
5. In **Period**, select one of the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Selection**: Use the selection from the Period filter as-is.
- **Latest in Selection**: Use the latest Period chronologically in the filter.
- **Prior from Selection**: Create a new filter of the prior X periods based on the latest period in the filter.

  The Period selection allows you to fine tune the list of Periods for the particular pivot view. This can be done so that pivot views sharing the same global period filter can display different amounts of data, or to make it easier to show a distribution of period data based on a single local period selection.

Setting Pivot View Layout

The **Layout** tab specifies how data in the pivot view must be summarized. Filters can also be applied on the data that is considered for summarizing.

Specify the following layout details:

1. In the **X Axis** section, specify details about the primary grouping to use in the view.
   - In **Type**, select one of the following: None, Attribute, Date, User, Yes/No, or True/False.

     If you set the **Type** to Attribute, in **Attribute 1**, select the attribute that must be used to group data. For example, Organizational Unit.

     Optionally, you can create another subgroup, within the **Attribute 1** group, by selecting another attribute in **Attribute 2**.
   - In **Sort**, select the attribute and the order on which data must be sorted.
   - Select **Swap Rows and Columns** to swap the display of rows and columns in the grid.
2. In the **Legend (Series)** section, click the **Add** icon to create one row for each attribute for which you want to summarize data. This summary is created within the specified **Type**. There must be at least one row in this section.

   For each row, specify the following details:
   - In **Value**, select the attribute whose data must be summarized. For example, Approvers (Count).
   - In **Aggregation**, select the aggregation operation to be performed on the summarized data. It will default to the aggregation method specified on the attribute that you selected. The supported aggregation methods are Average, Count, Maximum, Minimum, and Sum.

     > **Note**
     >
     > If you select a non-numeric attribute in **Value**, the only **Aggregation** available is **Count**.

   - In **Categories**, optionally select the attribute by which the data is summarized, within the **Value** group.
   - In **Group By**, select an attribute from the list. This is applicable only when **Type** is set to a value other than Attribute.
   - Click **Filter** to apply a filter on the data that is included in the pivot view. This filter is first applied on the data and then the data is summarized using the specified criteria.

     By default, the first clause in a filter condition is displayed as the label for this filter.
3. Click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Considerations When Using Aggregation

For Task Manager example, see Example: Viewing Organizational Units Based on Task Status

Specifying Pivot View Columns

Use the **Columns** tab to customize the labels and order of data displayed in the pivot view.

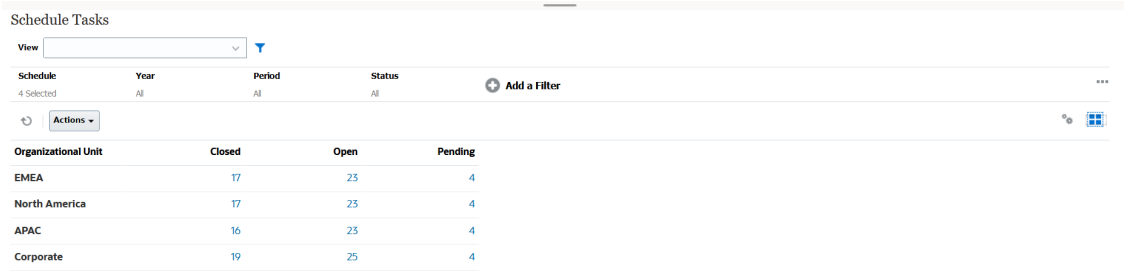
Each row in this tab will be displayed as a column in the pivot view. The number of rows is determined by what is specified in **X Axis** and **Categories** in the **Layout** tab.

To customize the display of the pivot view:

- In **Label**, enter the label that must be displayed for this column.
- Select **Sort** to sort the pivot data by this column. Click the icon next to this option to sort in ascending or descending order.
- Use the arrows on the right to change the order in which the columns are displayed. This list of columns are displayed from left to right in the pivot view.

Example: Viewing Organizational Units Based on Task Status

This example describes how to create a pivot view that groups organizational units based on the status of the tasks. The following image displays the Pivot view.



Use the following steps to create the above Pivot view:

1. In the Home page, click **Tasks** to display the Schedule Tasks page.
2. Click the icon and select **Pivot View**.
3. Click the **Edit** icon to configure the Pivot view as per your requirement.
4. On the **Properties** tab:
   - **Background**: No Fill
   - **Header Size**: 13
   - **Data Size**: 14
   - **Period**: Selection
5. On the **Layout** tab:
   - In **X-Axis**:
     - In **Type**, select **Attribute**.
     - In **Attribute1**, select **Organizational Unit**.
     - In **Sort**, select **Organizational Unit** from the first drop-down list and then select **Descending** from the second drop-down list.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- In **Legend (Series)**:
  - In **Value**, select **Task**.
  - In **Categories**, select **Status**.

6. On the **Columns** tab, select the displayed labels.
7. Click **OK**.

Working with Chart Views

Chart views enable you to visualize your data.

Related Topics

- Overview of Chart Views
- Creating Chart Views
- Example: Creating a Chart to Display Task Status by Month
- Example: Creating a Chart to Display Plan versus Actual End Date
- Example: Creating a Chart to Display Task Execution by Organization Unit

Overview of Chart Views

Related Topics

- About Chart Views
- About Chart View Properties
- Types of Chart Views

About Chart Views

A chart provides a visual representation of data.

Charts are generated dynamically based on your business process data. Click an area within a chart, for example, an area within a pie chart, to drill-down and view details about the information summarized by that area. The chart and pivot view layouts are linked, allowing you to quickly switch between the chart or pivot view.

When you configure settings for a chart view, the system remembers these settings. If you close the chart view, perform other actions in your business process, and then return to the chart view, the chart is displayed using the previous settings.

Multiple types of chart views are available to provide a graphical representation of your tasks. See Types of Chart Views.

About Chart View Properties

Chart properties include basic details such as the type of chart, chart orientation, and background. The properties that you can set for a chart depend on the type of chart.

Chart Property	Applicable Chart Types	Description
Type	All	Type of chart See Types of Chart Views.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Chart Property	Applicable Chart Types	Description
Background	Area, Bar, Column, Combination, Doughnut, Line, Pie, Tile	Background color used in chart This color applies to the entire chart area, from border to border. You can choose not to use a background color, in which case a white background is used for the chart. If you specify a background color, an optional gradient also can be specified.
Label Position	Area, Bar, Column, Combination, Line	Location of the data labels in relation to the elements The options available depend on the type of chart. For example, bar charts have the following label options: No Label, Center, Inside Edge, or Outside Edge.
Bar Label Position	Combination	Location of the data labels in the bar chart
Grid Lines	Area, Bar, Column, Combination, Line	Grid lines used to divide the chart area
Orientation	Area, Bar, Column	Orientation of the chart - Vertical or Horizontal
Missing Values as Zero	Area, Combination, Line, Tile	Displays a zero (instead of a blank) when the data for a particular element is missing When you select this option, all missing values are displayed as zero. This includes missing data values and values that are missing because of an applied filter.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Chart Property	Applicable Chart Types	Description
Dual-Y Axis	Area, Bar, Column, Combination, Line	Appears on the opposite side of the chart from the primary Y-axis The scale of the secondary Y-axis reflects the values for the associated data series. While the secondary Y-axis can be used with any line and bar chart type, it is more commonly used with the combination chart type, which helps to distinguish the data series that are plotted on the secondary Y-axis. For example, select **Bar** for the primary Y-axis and **Line** for the secondary Y-axis. When the data values in a chart vary widely from data series to data series, or when you have mixed types of data (for example, currency and percentages), you can plot one or more data series on a secondary (vertical) Y axis. You can also plot the secondary Y-axis as a split dual chart, where the secondary Y-axis appears with its data series below the original chart. In this case you can use any bar or line chart type.
Line Weight	Combination, Line	Width of the line in the chart The default is 5 pixels.
Bar Label Position	Combination	Position of the label for the data set displayed as a bar chart
Display as Percentage	Doughnut, Pie	Values for each data set displayed in terms of percentages (instead of as a numerical value)
3D chart	Pie, Tile	3-dimensional chart format

Types of Chart Views

You can create the following types of chart views:

- Area

  Displays a shaded area to represent each data set

- Bar

  Displays a graphical summary of multiple data values for comparison purposes

  Bar charts can be plotted vertically or horizontally

- Column

Copyright © 2022, 2026, Oracle and/or its affiliates.

Displays stacked bars that represent different data sets on top of each other

The height of the resulting bar shows the combined result of the data sets.

- Combination

  Provides a visualization that lets you merge into one chart any combination of bar, line, and area charts.

  Use this type when you have two different sets of data that are plotted on the y-axis. You can add a secondary Y-axis on the opposite side from the primary Y-axis. Adding a secondary Y-axis lets you display the scale for one measure that doesn't scale appropriately with the other measures on the chart; for example, showing a percentage measure and a currency measure on the same chart.

- Doughnut

  Displays a circular graph which is divided into segments to compare data sets to one another

  The blank center displays the sum of all data sets.

- Line

  Enables users to visualize a trend in data over intervals of time

- Pie

  Displays a circular graph which is divided into slices to compare data sets with one another

- Tile

  Enables users to select specific values from a data set, to display in separate tiles

  It emphasis a small number of data points or an individual data point.

The default chart view is a Bar chart. You can customize your chart display and change the default chart view.

Creating Chart Views

Create charts to portray your application's data graphically.

To create a chart view:

1. Display the chart view for the required object.
2. From the **View Selector** at the top-right of the page, select **Chart View**.

   If this is the first time you're accessing the chart view, the default chart view layout is displayed.
3. Click **Edit** at the top-right to display the Edit Chart dialog. It contains three tabs: **Properties**, **Layout**, and **Legend**.
4. In the **Properties** tab, specify the required chart properties, as described in About Chart View Properties.
5. Enter the information required to create the chart, as described in the following topics:
   - Setting the Chart Layout
   - Setting the Chart Axis
   - Setting the Chart Legend
6. Click **OK** to save the chart definition and then display the chart.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Click any area within the chart view to drill-down and display all the records that are aggregated by the selected area. The records are displayed in the Details dialog. You can click any link within this dialog to access the details of that individual record.

> **Note**
>
> If you drill down into an individual record, update one or more details, save it, and return to the chart view, these changes are not visible. You must refresh the chart view to see the latest updates.

Setting the Chart Layout

Use the **Layout** tab to specify the data sets that must be plotted on the x-axis and y-axis of the chart.

To set the chart layout:

1. Open the **Layout** tab of the Edit Chart dialog.
2. In the **X Axis** section, specify the data that must be plotted on the x-axis of the chart.
   - In **Type**, select the type of data. Options include None, Attribute, Date, User, Yes/No, and True/False.
   - If you set the **Type** to **Attribute**, you must specify at least one attribute that is plotted on the x-axis. You can specify a maximum of two attributes.

     In **Attribute 1**, select the first attribute to plot on the x-axis. Optionally, in **Attribute 2**, select the second attribute to plotted on the X axis. The various combinations of Attribute 1 and Attribute 2 values are plotted.
   - In **Sort**, select **Ascending** or **Descending** to sort your X axis data.
3. In the **Legend (Series)** section, specify one or more data sets that must be plotted along the Y axis of the chart view.

   For example, if you define three data sets, then three values are plotted on the y-axis.

   Within each data set, you can perform aggregation operations or group data. Optionally, you can apply a filter to restrict the data that is selected when computing the aggregation on the data set.

   For each data set in this section, specify the following:
   - In **Value**, select the value that must be plotted. For example, Amount or Status.
   - In **Aggregation**, select the aggregation that must be performed on the selected value. The supported aggregation methods are Average, Count, Maximum, Minimum, and Sum. See "Considerations When Using Aggregation" at the end of this topic.
   - (Optional) In **Categories**, select the attribute that must be used to categorize data within the data set. Use Categories to break your graph into more smaller details.
   - (Optional) In **Group By**, select the attribute by which Date type data is grouped.

     If **Group By** is set to a date, a new column **Date Aggregation** is displayed.
   - (Optional) In **Filter**, click the Filter icon to add a filter condition. This condition further refines the data shown for the data set within the chart view. It is applied before the data is included in the chart view. For example, if your **Value** is set to Tasks, you can create a filter to only plot tasks with a status of Open.

     By default, the first clause in a filter condition is displayed as the label for this filter.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Click **OK** to save the chart view settings.

Examples

For Task Manager, see:

- Example: Creating a Chart to Display Task Status by Month
- Example: Creating a Chart to Display Plan versus Actual End Date
- Example: Creating a Chart to Display Task Execution by Organization Unit

Setting the Chart Axis

Chart Axis properties affect the visual display of the chart's axis labels. You can create a title and label for the X axis, and the primary and secondary Y axis of the chart. You can also edit the text and number format of the Y axis, and define a custom range for both Y axes.

> **Note**
>
> This tab doesn't display for chart views with **Type** set to Doughnut, Pie, or Tile.

To define the chart axis:

1. Open the **Axis** tab of the Edit Chart dialog.
2. Select **X Axis** and specify the following (only for chart views with **Type** set to Date in the **Layout** tab):
   - **Interval:** Select **Auto**, **Daily**, **Monthly**, or **Yearly**.
   - **Maximum:** Select **Auto** or **Fixed**. For **Fixed**, select a date.
   - **Minimum:** Select **Auto** or **Fixed**. For **Fixed**, select a date.
3. Click **Y Axis** and specify **Auto** or **Fixed** for the following: **Minimum**, **Maximum**, **Major Unit**, and **Minor Unit.**
4. If **Dual Y Axis** is selected for the chart in the **Properties** tab, click **Dual-Y Axis** and specify the **Minimum**, **Maximum**, **Major Unit**, and **Minor Unit**.
5. Click **OK** to save the chart view settings.

Setting the Chart Legend

Legend properties affect the visual display of the chart's legend.

You can change the position of the legend, as well as display a title for the legend, change the background and border colors, and edit the font and format of chart labels.

For a Combination chart, the **Legend** tab contains one new column named **Type**. You can select the type for each configured legend (series). For example, **Type** = **Bar** for one legend and **Type** = **Line** for the other.

To define the chart legend:

1. Open the **Legend** tab of the Edit Chart dialog.
2. In **Legend Position**, select the position of the data labels in relation to the elements in a chart.

   The available options are **No Legend**, **Left**, **Right**, **Top**, or **Bottom**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. In **Palette**, select the color palette used when displaying the chart view.
4. In the **Series** table, one row is displayed for each legend specified in the **Layout** tab.

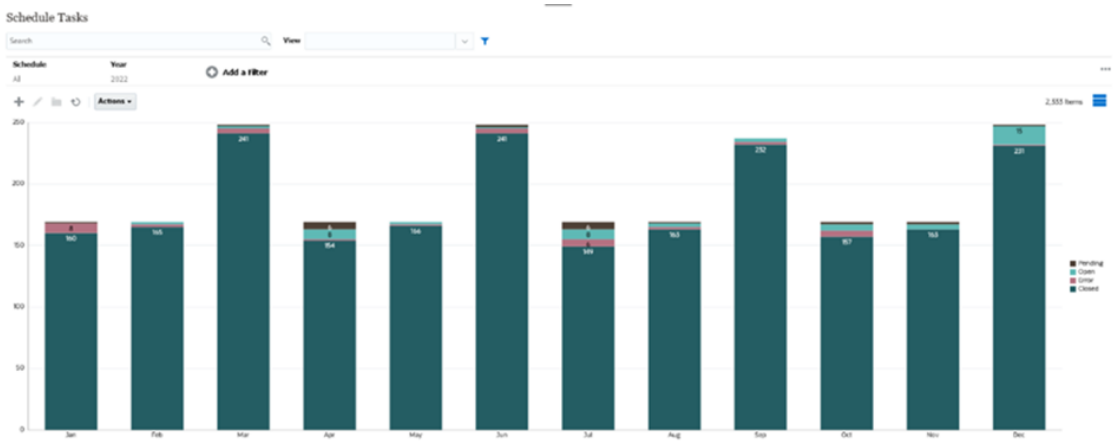
   For each data set:

   - In the **Label**, enter the label that must be displayed for this data series in the chart.
   - Select **Dual-Y** for the data series that must be displayed on the secondary Y axis.
5. Click **OK** to save the chart view settings.

Example: Creating a Chart to Display Task Status by Month

This example creates a chart which summarizes the completion status of all tasks by period. This can help identify if there are certain tasks which are not completed period over period.

The generated chart is displayed below. Click any area within the chart to drill down and view of the individual records that comprise that aggregated area.

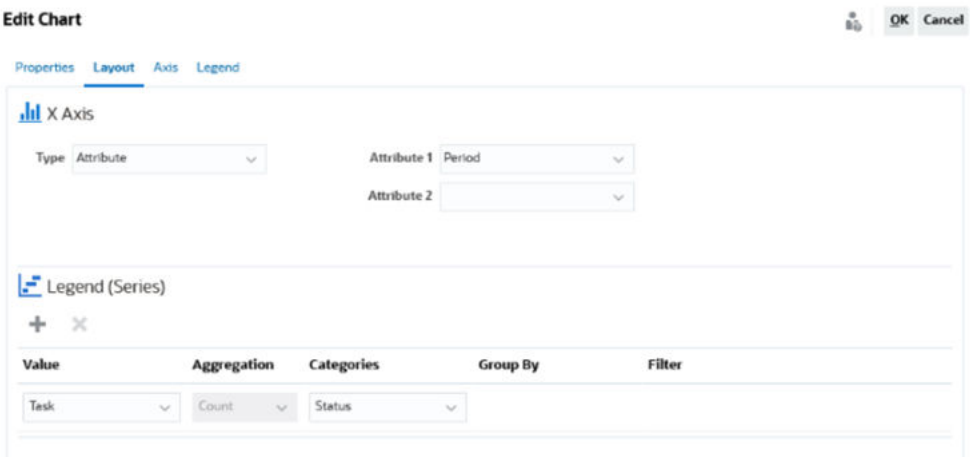


To create this chart:

1. From the Home page, click **Tasks**. Click **Schedule Tasks** to display the Task List.
2. From the **View Selector** at the top-right of the page, select **Chart View**.

   The Chart view appears, with a default chart displayed.
3. Click **Edit** at the top-right to display the Edit Chart dialog.
4. In the Properties tab, specify the following:
   - In Type, select **Column**.
   - Deselect **Grid Lines**.
   - In Period, select **Selection**.
5. In the **Layout** tab, specify the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.



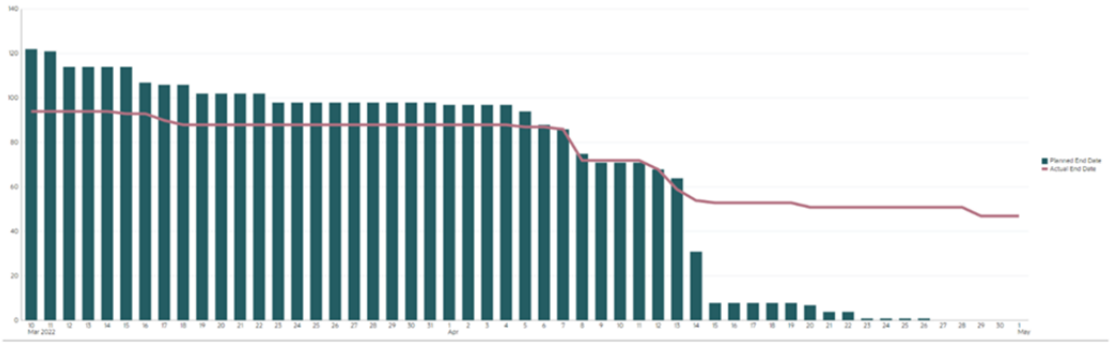
- In the **X-Axis** section:
  - In **Type**, select **Attribute**.
  - In **Attribute1**, select **Period**.
- In the **Legend (Series)** section:
  - In **Value**, select **Task**.
  - In **Categories**, select **Status**.

6. In the **Axis** tab, leave the default settings as is.
7. In the **Legend** tab, specify the following:
   - In **Legend Position**, select **Right**.
   - In **Palette**, select **Redwood**.
8. Click **OK**.

Example: Creating a Chart to Display Plan versus Actual End Date

This example visualizes Tasks planned vs actual completion over time - allowing you to see if your schedules are running ahead or behind schedule. The chart shows all of the tasks end dates that fall on or after a certain date. This will show a large number of tasks within the beginning of the schedule and gradually go down until the final task in the schedule.

The generated chart is displayed below. Click any area within the chart to drill down and view of the individual records that comprise that aggregated area.

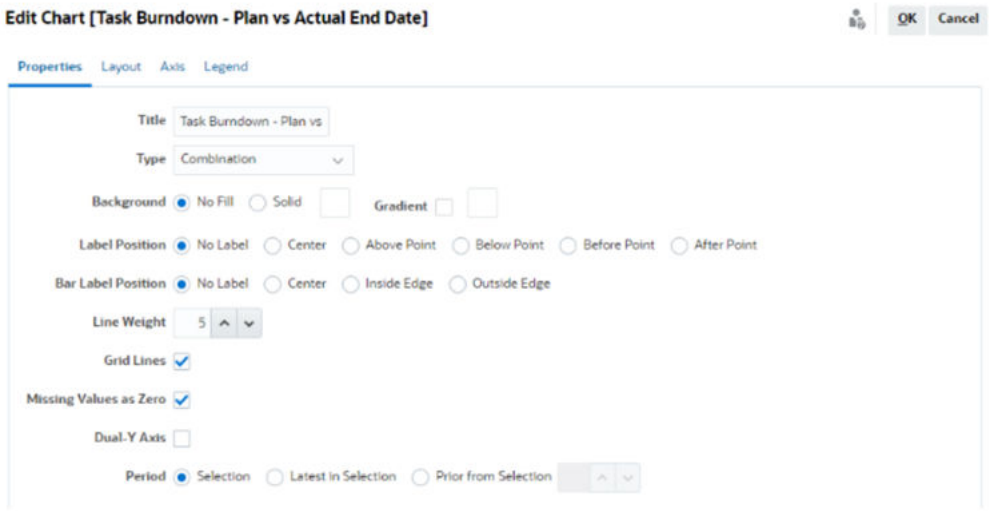


To create this chart:

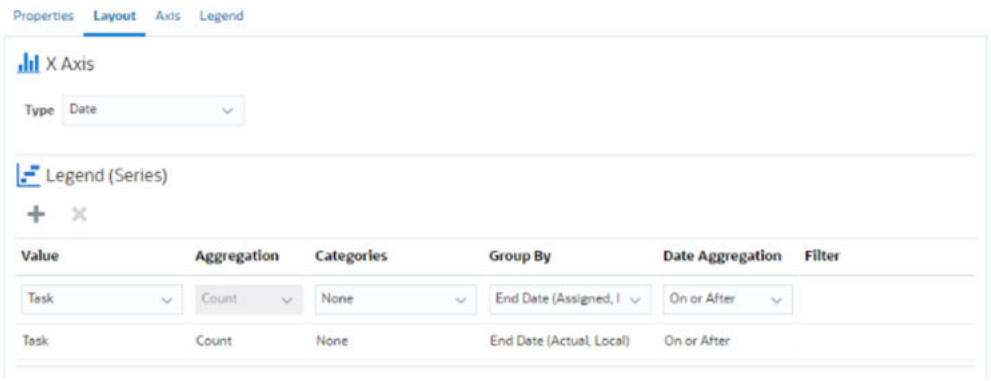
1. From the Home page, click **Tasks**, and then click **Schedule Tasks** to display the Task List.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. From the **View Selector** at the top-right of the page, select **Chart View**.
   The Chart view appears with a default chart displayed.
3. Click the **Edit** icon at the top-right to display the Edit Chart dialog.
4. In the **Properties** tab, specify the following:



   - In **Type**, select **Combination**.
   - In **Background**, select **No Fill.**
   - In **Label Position**, select **No Label**.
   - In **Bar Label Position**, select **No Label**.
   - Select **Line Weight** as **5**.
   - Select **Grid Lines**.
   - Deselect **Dual Y Axis**.
   - In **Period**, select **Selection**.
5. In the **Layout** tab, specify the following:



   - In the **X-Axis** section, for **Type**, select **Date**.
   - In the **Legend (Series)** section, enter 2 values:
     For the first entry:
     - In **Value**, select **Task**.
     - In **Categories**, select **None**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- In **Group By**, select **End Date (Assigned)**
- In **Date Aggregation**, select **On or After**.

For the second entry:

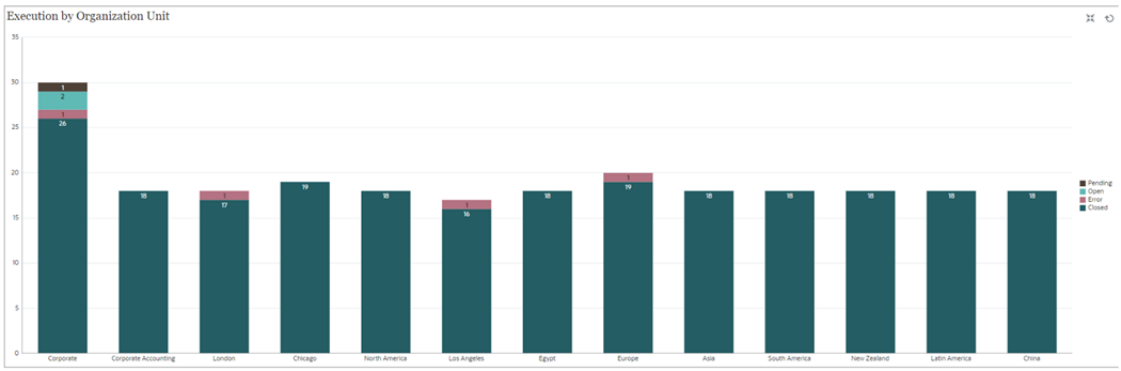
- In **Value**, select **Task**.
- In **Categories**, select **None**.
- In **Group By**, select **End Date (Actual, Local)**
- In **Date Aggregation**, select **On or After**.

6. In the **Axis** tab, leave the default settings as is.
7. In the **Legend** tab, specify the following:
   - In **Legend Position**, select **Right**.
   - In **Palette**, select **Redwood**.
8. Click **OK**.

Example: Creating a Chart to Display Task Execution by Organization Unit

This example creates a chart which shows task completion by organization unit allows you to monitor how each organization is doing completing their tasks.

The generated chart is displayed as shown. Click any area within the chart to drill down and view of the individual records that comprise that aggregated area.

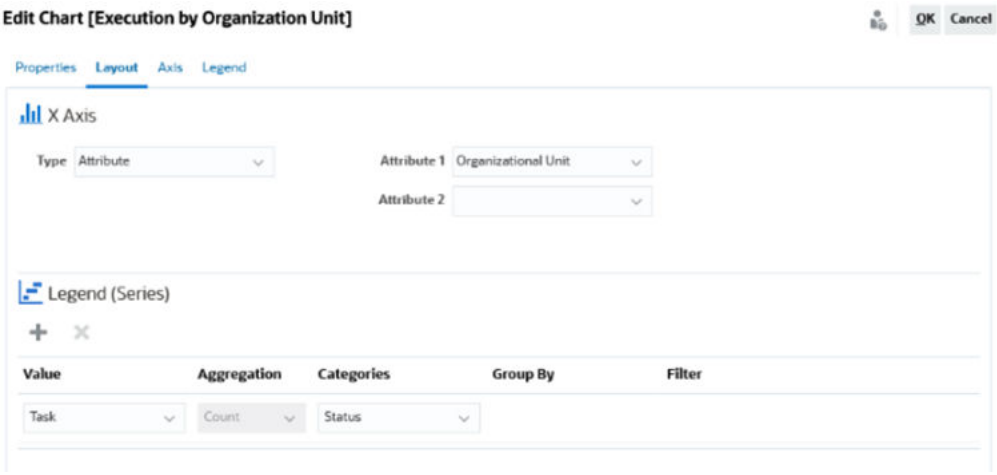


To create this chart:

1. From the Home page, click **Tasks.** Click **Schedule Tasks** to display the task list.
2. From the **View Selector** at the top-right of the page, select **Chart View**.

   The Chart view appears, with a default chart displayed.
3. Click **Edit** at the top-right to display the Edit Chart dialog.
4. In the **Properties** tab, specify the following:
   - In **Type**, select **Column**.
   - Deselect **Grid Lines**.
   - In **Period**, select **Selection**.
5. In the **Layout** tab, specify the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.



- In the **X-Axis** section:
  - In **Type**, select **Attribute**.
  - In **Attribute1**, select **Organizational Unit**.
- In the **Legend (Series)** section:
  - In **Value**, select **Task**.
  - In **Categories**, select **Status**.

6. In the **Axis** tab, leave the default settings as is.
7. In the **Legend** tab, specify the following:
   - In **Legend Position**, select **Right**.
   - In **Palette**, select **Redwood**.
8. Click **OK**.

Working With Gantt Chart Views

Gantt charts displays a timeline for a schedule that graphically represents the duration of tasks and the dependencies between them. You can view the predecessor relationships between tasks. Bars represent duration, and arrows represent dependencies. You can also see the parent-child task relationships in the hierarchy.

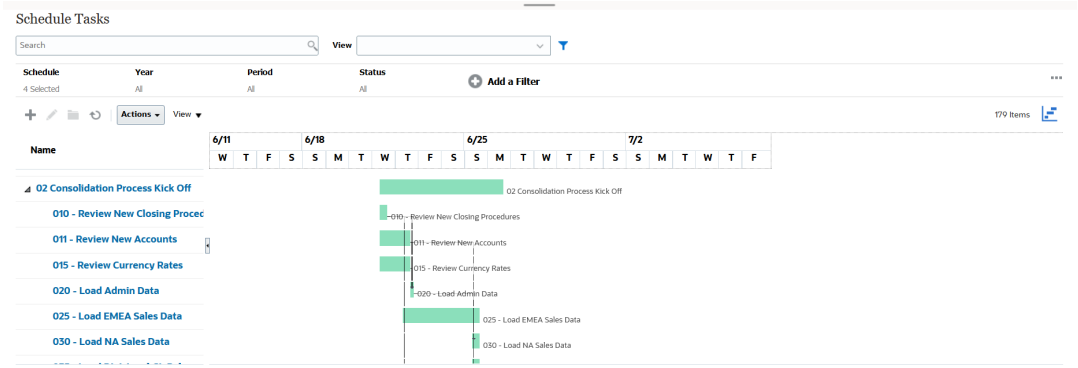
You might choose to use the Gantt Chart view when you create a template to see the predecessor relationships between the tasks, or to verify the precedence order after adding tasks to a schedule.

Gantt Chart view is available for **Scheduled Tasks**.

To view the data in a Gantt Chart:

1. On the Home page, click **Tasks**, and then click **Schedule Tasks**.
2. Click the **View Selector** icon and choose **Gantt Chart**.
   The schedule tasks data is displayed in the Gantt Chart view as shown.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Working With Calendar Views

Calendar views display all the scheduled tasks in a traditional calendar format based on month, week, or day.

The Month view displays the days in standard calendar format.

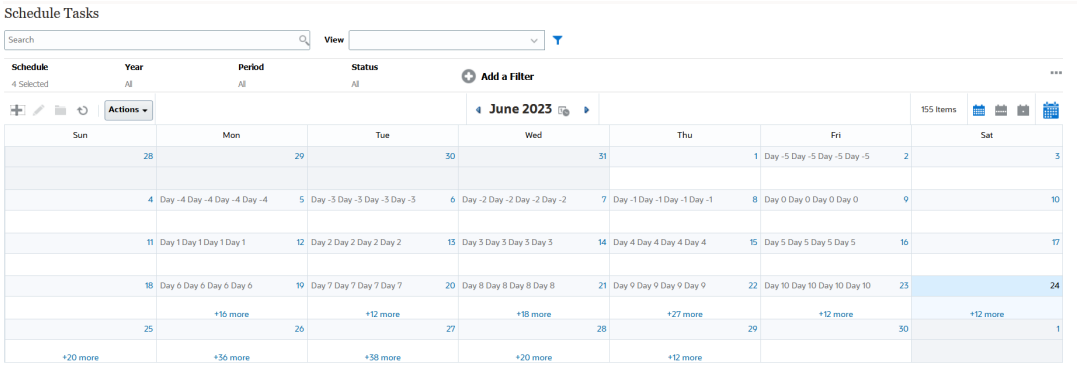
The Week view displays the tasks of the specified week. The top section displays tasks that span multiple days. The second section displays tasks that are contained within one day. The tasks are displayed vertically, spanning the hours of the day.

The Day view is focused on one 24-hour day.

To view the scheduled tasks in Calendar View:

1. On the **Home** page, click **Tasks**, and then click **Schedule Tasks**.
2. Click the **View Selector** icon and choose **Calendar View**.
   The schedule tasks data is displayed in the Calendar view. Use the calendar icons to select Month, Week, or Day. In the Calendar View, you can also see the Day Label in the Day header.

   The following image shows the scheduled tasks in a Calendar View for a month.



Saving Views

Saving a view enables you to save your view definition and settings. When you need to display data in the format set by this view, you can use the saved view, instead of again setting the required view properties.

The scope of a saved view is limited to the object on which it is based. For example, if you create a saved view with Tasks, you can't use it with journals. A saved view on a particular supplemental data set can't be used with a different data set. So, you can only use it with certain forms or within a collection.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To save a view:

1. Adjust the view to see the data you would like by adjusting filters, columns or sorting on your list. See Using the Filter Bar to Adjust Your View.
2. From **Actions**, click **Save View**.
3. In the Save View dialog, enter a Name (can enter a maximum of 80 characters) and an optional description (can enter a maximum of 255 characters).
4. Click **OK**.

You can see all the saved lists by clicking the **View** drop-down selector.

Editing Saved Views

Edit a saved list view, pivot view, or chart view to modify its name and definition.

To edit a view:

1. From the Home page, click **Application**, **Task Manager**, and then **Views**.

   A list of available views is displayed.
2. Select a particular view and click the **Edit** icon. You can also click the **...** icon for a view and select **Edit**.
3. Update the required information and click **OK**.

Deleting Views

An Administrator or Power User can delete a view.

To publish a view:

1. From the Home page, click **Application**, **Task Manager**, and then **Views**.

   A list of available views is displayed.
2. Select a view that you want to delete and click the **Delete** icon. You can also click the **...** icon for a view and select **Delete**.

   The deleted view no longer appears in the list of views.

Publishing Views

An Administrator or Power User can publish a view to make a private view available to other users. The saved view is duplicated and there is now a private and public version.

To publish a view:

1. From the Home page, click **Application**, **Task Manager**, and then **Views**.

   A list of available views is displayed.
2. Select a particular view and click the **Publish** icon. You can also click the **...** icon for a view and select **Publish**.

   The saved view is duplicated and there is now a private and public version. The public version will show a check mark in the **Public** column.

Setting a Default View

A Service Administrator or Power User can set a published, saved, view as the default view.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The first time a user opens a view, the default view is displayed. The system then remembers the view settings that were used. So, when you open a view subsequently, it is displayed with the settings that were used most recently.

To set a default view:

1. From the Home page, click **Application**, then **Task Manager**.
2. Click the **Views** tab to display the Views page.
3. Select the view that you want to set as default and then click the **Set Default** icon. Or, click the **Actions** menu for the view that you want to set as default and select **Set Default**.

> **Note**
>
> You can use the **Set Default** action for a published list view. The Administrator or Power User sets the view as the default so that the saved list view will not only be available to all users of that view type, but it will also be selected by default when a user opens that view type.

Exporting List Views and Pivot Views

You can export the records in list views or pivot views to Microsoft Excel.

To export a list view or pivot view:

1. Navigate to the list view or pivot view that must be exported.
2. Click **Actions**, and then **Export to Excel**.

The exported data is stored in an Excel file and can be downloaded. The format of the Excel file is .xls or .xlsx, depending on the **Export to Excel** setting.

Managing Dashboards

Related Topics

- Overview of Operational Dashboards
- Viewing and Opening Operational Dashboards
- Operational Dashboards: Design Mode
- Creating Operational Dashboards
- Setting the Object Type Within Operational Dashboards
- Specifying View Options for Operational Dashboards
- Editing Operational Dashboards
- Duplicating Operational Dashboards
- Deleting Operational Dashboards
- Exporting Operational Dashboards
- Importing Operational Dashboards
- Running Operational Dashboards
- Displaying Columns for Viewing Operational Dashboards

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Reordering Columns for Viewing Operational Dashboards
- Applying Filters to Data Displayed Within Operational Dashboards

Overview of Operational Dashboards

Dashboards provide enhanced reporting capabilities. They enable users to chart, evaluate, and (in some cases) even change key business data.

About Operational Dashboards

Operational dashboards provide greater visibility into your business process.

Each dashboard can have a maximum of four views. This includes list views, pivot views, or chart views. You can open a maximum of 10 dashboards at a time. Service Administrators, or any user who is granted either the Operational Dashboards - Manage role or Dashboard - Manage role can create and edit dashboards. The dashboard creator can also control access to the dashboard by granting permissions to one or more users, groups, or teams. Users who have been granted access to a dashboard can run the dashboard and view its data. The access only allows a user to view the dashboard. It doesn't extend their access to the underlying data. Therefore, a user can only view records based on their own access within the service.

Features of Operational Dashboards

Dashboards provide the following features:

- Visualize data interactively with a wide variety of chart types
- Obtain both high-level and detailed insights into the performance of your business processes
- Create filters at the dashboard level and at the individual view level
  Filters created at the dashboard level are applied to all the views within the dashboard. After this, filters defined at the view level (if any) are applied.
- Control access to viewing dashboards

Viewing and Opening Operational Dashboards

Viewing Existing Dashboards

To view the dashboards, from **Home**, click **Tasks**, then **Dashboards**.

The Operational Dashboards page appears with the list of existing dashboards.

Opening a Dashboard

To open a dashboard:

1. Access the Operational Dashboards page. This page displays the list of existing Operational dashboards
2. (Optional) Use the **Search** box to search for a particular dashboard.
3. Click the name of the dashboard to open.

   The dashboard opens within a new dynamic tab next to the Operational Dashboard tab.

You can perform the following actions on the dashboard:

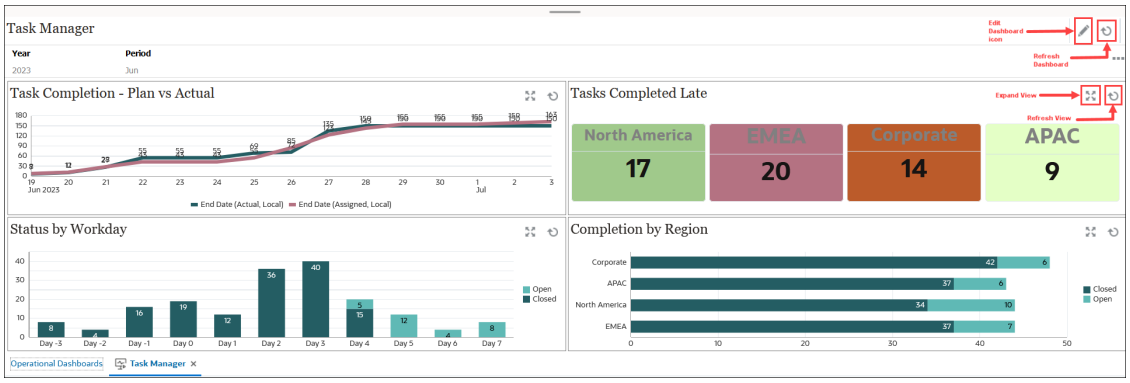
Copyright © 2022, 2026, Oracle and/or its affiliates.

- Click any area or total, in any view, to drill down into the individual records that comprise that area or total.
- Edit the dashboard settings using the icon.
- Refresh all the views in the dashboard using the icon (at the dashboard level).
- Use filters that were created at the dashboard level. See Applying Filters to Data Displayed Within Operational Dashboards.

On each view in the dashboard, you can:

- Refresh all the views in the dashboard using the icon (at the dashboard level).
- Expand or collapse views in dashboard views using the icon.
- Use filters that were defined at the view level. See Applying Filters to Data Displayed Within Operational Dashboards.

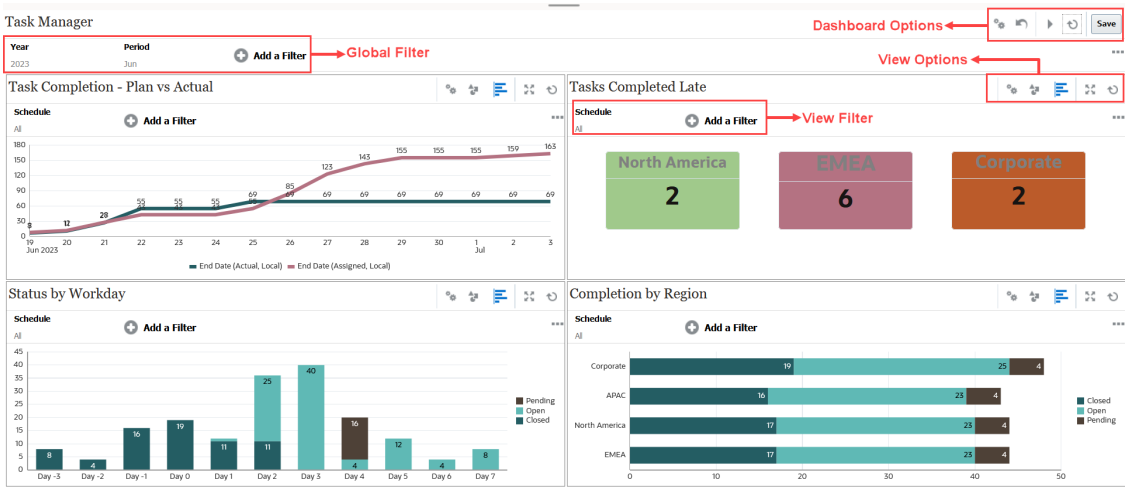
The following image shows the options available when you open a dashboard.



Operational Dashboards: Design Mode

The design mode of a dashboard enables you to configure and manage your dashboard and its components (chart views, list views, and pivot views).

This image shows the design mode of an operational dashboard. This dashboard contains one chart view and one pivot view.



Copyright © 2022, 2026, Oracle and/or its affiliates.

At the top-right are these options to manage the dashboard:

- **Settings**
  Edit the properties of the dashboard.
- **Revert**
  Revert changes made to the dashboard properties.
- **Run**
  Run the dashboard.

  Dynamically fetches and displays data in the dashboard. Only users who have been granted permissions can view the dashboard's data.

  In Run mode, users will see only the **Refresh** and **Expand** options.
- **Refresh**
  Refreshes the data displayed in the dashboard, including all the contained views.
- Save **Save**
  Saves the changes made to the dashboard properties.

Each view (list, chart, or pivot) within the dashboard contains these options:

- **Settings**
  Edit the properties of the chart, list, or pivot view.
- **Object Type**
  Options are: Tasks and Alerts
- **View Selector**
  Options are: Chart View, List View, or Pivot View.
- **Expand**
  Displays the view in the entire dashboard area.

  This option is shown only when a dashboard contains more than one view.
- **Refresh**
  Refreshes the data displayed in the view.

Creating Operational Dashboards

Service Administrators and users who have been granted the Operational Dashboards - Manage granular role can create dashboards.

To create a dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.

   The Operational Dashboards page appears, with the list of existing dashboards.
2. Click the **New** icon.

   The new dashboard is opened in a new tab. It contains the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- A default name, in the format New Dashboard #.
- One empty view (list view, pivot view, or chart view)
- Two sets of icons (at the top-right) that correspond to the options for the dashboard and the view within the dashboard. See Operational Dashboards: Design Mode.
- A filter for filtering data at the dashboard level. Click **Add a Filter** to add filters.

3. In the set of icons that correspond to the dashboard, click the **Settings** icon.

   The Edit Dashboard dialog appears.

4. In the **Properties** tab, specify the required dashboard properties.

   See Defining Operational Dashboard Properties.

5. Click the **Access** tab to give access to this dashboard for users, groups, or teams. Users who are granted access can run this dashboard and view its data.

   See Defining Access to Operational Dashboards.

6. Click **OK**.

   A separate area, with its corresponding icons, is shown for each area specified by the dashboard layout. For example, if you set **Layout** to **Grid**, the page shows four separate areas.

7. For each area within the dashboard, set the object type based on which you want to visualize the data. See Setting the Object Type Within Operational Dashboards.
8. For each area within the dashboard, click the select the **View Selector** icon and specify the type of view. See Specifying View Options for Operational Dashboards.
9. For each view, click **Settings** and specify the settings for that view.
   - See Creating Chart Views.
   - See Working With List Views.
   - See Working with Pivot Views.
10. Click **Save** to save the dashboard settings.

Defining Operational Dashboard Properties

Dashboard properties include name, description, borders, background, and layout.

To define a dashboard's properties:

1. Open the **Properties** tab of the Edit Dashboard dialog.
2. In **Name**, enter a unique name for the dashboard.
3. In **Description**, enter an optional description for the dashboard.
4. Select **Borders** to display borders around each view in the dashboard.
5. Select **Global Filter Bar** to include a global filter bar in the dashboard. This filter bar is applicable to all the views within the dashboard.
6. Select **Show Filter Bars** to display the view-level filters when you run the dashboard.
7. In **Background**, select one of the following:
   - No Fill
   - Solid: Select the color that must be used as the background color. Optionally, select **Gradient**, and then select a color.

Copyright © 2022, 2026, Oracle and/or its affiliates.

8. In **Layout**, specify the number of regions (one for each view) into which the dashboard is divided. The maximum number of regions is four.

   Select one of the following:

   - Single
     Displays a single view
   - Horizontal
     Displays two views, one below the other

     Use **Horizontal Split** to specify how the screen area is split between the two views.
   - Vertical
     Displays two views, one beside the other

     Use **Vertical Split** to specify how the screen area is split between the two views. For example, if you set **Vertical Split** to 30, the chart displayed at the top of the dashboard uses 30% of the dashboard space. The second chart uses the remaining 70% of the dashboard.
   - Grid
     Displays four views in the dashboard

9. Click **OK** to save the dashboard settings.

Defining Access to Operational Dashboards

Service Administrators and users who have been granted the Operational Dashboards - Manage role can grant access to this dashboard for specific users, groups, or teams. Such users can run the dashboard and view its data.

To add access for running a dashboard:

1. Open the **Access** tab of the Edit Dashboard dialog.

   By default, there is one entry for the user who created the dashboard.

2. Click the **Add** icon.

   The **Select User** dialog is displayed.

3. Click the **Select User** icon, and select one of the following: **Users**, **Groups**, or **Teams**.

   The default selection is **Users**.

4. Enter the name or description and click **Search**.

   - You can click **Search** to display the entire list of available users, groups, or teams. For example, if you don't know the name of a group, select Group using the **Select User** icon and then click **Search**. The list of available groups is displayed.
   - When selecting users, click **Advanced** to display the **User ID** and **Email** fields. You can also use these attributes while searching for users.

5. Double-click the username, group name, or team name to provide access.

   The selected name appears on the **Access** tab. You can click this name to view the details.

6. Click **OK** to save the dashboard settings.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Service Administrators and users who have been granted the Task Manager - Manage Dashboards granular role can view and edit all dashboards.

To remove access for running a dashboard:

1. Open the **Access** tab of the Edit Dashboard dialog for the dashboard whose access is being set.

   The users, groups, and teams who have been granted permissions to run the dashboard are listed under **Name**.
2. Click the name of the user, group, or team for whom permissions to run the dashboard must be revoked.

   To select multiple items, press and hold the **Ctrl** key and then select the required items.
3. Click **Remove** and then **OK**.

Setting the Object Type Within Operational Dashboards

After setting the properties and access for the dashboard, you can select the data type to report on or visualize for each view.

All the data, metadata, filters, and so on in the view will be based on this object type. Each view can have only one object type, but it may vary between views.

In Enterprise Profitability and Cost Management, these object types are available:

- Tasks
- Alerts

To specify the object type:

1. Open an operational dashboard from the Operational Dashboard page.
2. Click the **Object** icon and select the required object.
3. Click **Save** to save the settings.

If you change the object type, all the settings in the region will be reset.

Specifying View Options for Operational Dashboards

Within a dashboard, after specifying the object type, you can select the view such as List View, Pivot View, or Chart View to display the data within the dashboard.

To specify the view option:

1. On the Operational Dashboards page, open the dashboard for which you want to specify the view options.
2. Click the **View Selector** icon and choose any of the following:
   - List View
   - Pivot View
   - Chart View

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. Click the **Settings** icon corresponding to the **View Selector** icon and specify the view options.
   - For List Views, see Working With List Views .
   - For Pivot Views, see Working with Pivot Views.
   - For Chart Views, see Creating Chart Views.

   The data is displayed within the dashboard based on the specified view settings.
4. Click **Save**.

Editing Operational Dashboards

Service Administrators can edit a dashboard and modify its properties and access permissions.

To edit a dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.
2. Click the dashboard that you want to edit and then click the **Edit** icon or you can click the **Actions** icon and then click **Edit**.
   The Dashboard Designer appears.

   Additionally, if you're viewing the dashboard in run mode, you can click the **Edit** icon to switch to design mode.
3. Click **Settings** to display the Edit Dashboard dialog.
4. Modify the required properties using the **Properties** and **Access** tabs.
   See Defining Operational Dashboard Properties and Defining Access to Operational Dashboards.
5. Click **OK**.

Duplicating Operational Dashboards

To duplicate a dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.
2. Select the dashboard that you want to duplicate and then click the **Duplicate** icon. You can also click the **Actions** icon and then click **Duplicate**.
   The Copy of <Dashboard name> tab opens in the Dashboard Designer.
3. Specify the properties, access, and view options.
4. Click **Save** to save the dashboard.

Deleting Operational Dashboards

To delete a dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.
2. Click the dashboard that you want to delete and then click the **Delete** icon. You can also click the **Actions** icon and then click **Delete**.

   A message is displayed asking for confirmation.
3. Click **Yes**.

   The dashboard is deleted and no longer appears on the Operational Dashboard page.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Exporting Operational Dashboards

You can export dashboard definitions to an XML file. Using the export functionality, you can copy a dashboard definition from one business process to another.

> **Note**
>
> You must have the Manage Dashboard privilege to export the operational dashboards.

To export a dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.

   The Operational Dashboards page is displayed.
2. Select one or more dashboards that you want to export and then click the **Export** icon.
   The Export Dashboards dialog is displayed.
3. Select one of the following:
   - **All Rows**: Export all existing operational dashboards
   - **Selected Rows**: Export the dashboards that you had selected in the previous step.
4. Click **Export**.

   The specified dashboards are exported as a JSON file, with the name *Dashboard.json*.

Importing Operational Dashboards

Service Administrators can import dashboards that were previously exported using the **Export** option

> **Note**
>
> You must have the Manage Dashboard privilege to import the operational dashboards.

To import a dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.

   The Operational Dashboards page is displayed.
2. Click **Import**.
   The Import Operational Dashboards dialog is displayed.
3. In **File**, click **Browse** and specify the JSON file that contains the dashboard that you want to import..
4. Click **Import**.
   The **Status** field displays the status of the import.
5. If the import completed successfully, click **OK**.

The imported dashboard is displayed in the Operational Dashboards page.

If the import file contains dashboards that have the same name as those in the Dashboards page, then these dashboards are updated.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Running Operational Dashboards

Users can run dashboards for which they have been granted access.

When a dashboard is run, the latest data is displayed in the various charts and pivot views in the dashboard.

To run a dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.

   The Operational Dashboards page is displayed.
2. Do one of the following:
   - Click the dashboard you want to run and then click the **Run** icon.
   - Click the **Actions** icon for the dashboard you want to run and select **Run**.
   - Open a dashboard and click the **Run** icon.

     The dashboard is displayed in runtime mode in a new tab with the latest data.
3. If required, filter the displayed data. See Applying Filters to Data Displayed Within Operational Dashboards.

Displaying Columns for Viewing Operational Dashboards

To display the columns to view the dashboards:

1. On the Operational Dashboard page, click **View** and then **Columns**.
2. Click **Show All** to display all the columns or select specific columns.

To show or hide displayed columns:

1. Click **View** > **Columns** > **Manage Columns.**
2. Move the required columns between **Hidden Columns** and **Visible Columns** using the move icons to show or hide the displayed columns.

Reordering Columns for Viewing Operational Dashboards

You can reorder columns to display them in a different order.

To reorder columns:

1. On the Operational Dashboard page, click **View** and then click **Reorder Columns**.
2. Select the column name that you want to reorder and use the following icons to move it to the required position:
   - : Move selected items to top of the list
   - : Move selected items up one in the list
   - : Move selected items down one in the list
   - : Move selected items to bottom of the list
3. Click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The columns are displayed based on the specified order.

Copying a URL for Operational Dashboards

You can copy a URL for an operation dashboard to enable access to the dashboard.

To copy a URL for an operational dashboard:

1. From **Home**, click **Tasks**, then **Dashboards**.

   The Operational Dashboards page is displayed.
2. Click the **Actions** icon for the dashboard to copy the URL, and then click **Copy URL**.
3. Copy the displayed URL. The URL will enable direct access to the dashboard.

Applying Filters to Data Displayed Within Operational Dashboards

You can use filters to restrict the data displayed in a dashboard and its views.

Use the **Show/Hide** toggle icon next to the **Search** box to display or hide the filter bar.

In the Filter bar, you can do the following to filter the displayed dashboards:

- Add additional filters
- Specify the condition for each filter
- Clear or Remove a filter
- Clear All Filters

To restrict data displayed in a dashboard:

1. Run the dashboard and display its data.
2. If a global filter was configured for this dashboard, use this to filter data displayed in all the views in the dashboard.
3. For any view, use the filter defined on a view to filter data displayed in that view.

The global filter is first applied to all the views in the dashboard. Then, for each view, the filter defined for that view is applied.

For more information about each of these features, see Working with Filters.

Example: Task Manager Operational Dashboard

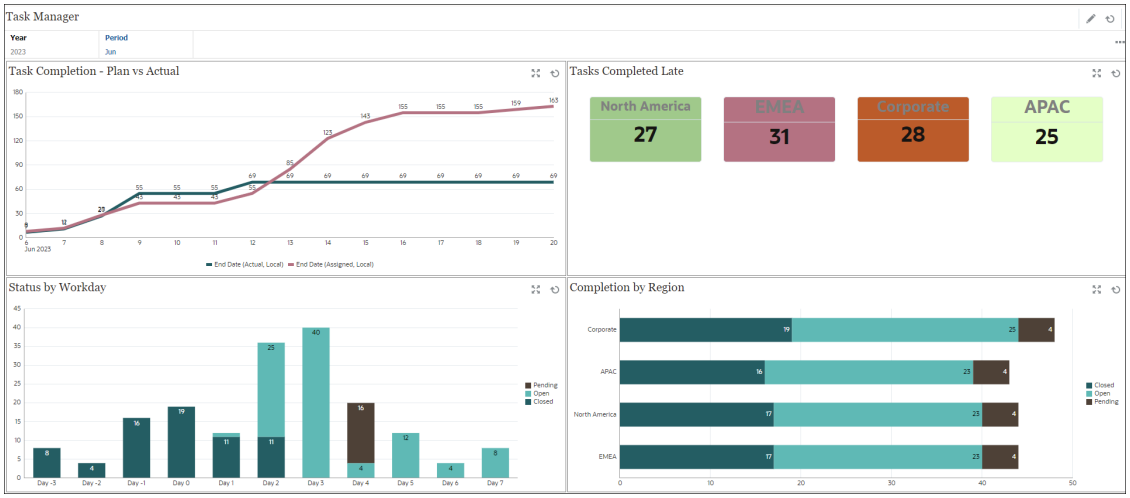
This example shows how to create a dashboard.

The dashboard uses these views for Task Manager:

- Chart View: Task Completion - Plan vs Actual
- Chart View: Tasks Completed Late
- Chart View: Status by Workday
- Chart View: Completion by Region

The completed dashboard is shown in the screenshot. You can click any area in any view to drill down into the individual records that comprise that area.

Copyright © 2022, 2026, Oracle and/or its affiliates.



In this example, to create the dashboard:

1. From **Home**, select **Tasks**, and then click **Operational Dashboard**.

   The existing operational dashboards are displayed.

2. Click the **New** icon to create a new dashboard.

   A new dashboard is created with a default name and is opened in a new tab.

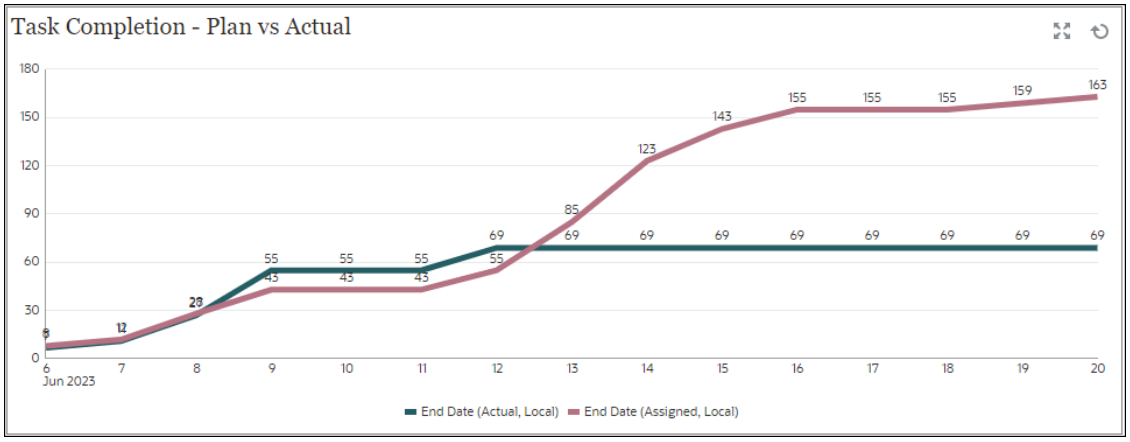
3. Click the **Settings** icon for the dashboard and update the properties on the **Properties** tab:
   - **Name**: Task Manager
   - **Borders**: Select this checkbox
   - **Global Filter Bar:** Select this checkbox
   - **Background**: No fill
   - **Layout**:
     - **Grid**: Select this check box.
     - **Horizontal Split:** 50
     - **Vertical Split**: 50
4. To create the chart view on the top left, see Chart View: Task Completion - Plan vs Actual.
5. To create the chart view on the top right, see Chart View: Tasks Completed Late.
6. To create the chart view on the bottom left, see Chart View: Status by Workday.
7. To create the chart view on the bottom right, see Chart View: Completion by Region.
8. Click **Save** to save the dashboard.

Chart View: Task Completion - Plan vs Actual

This example shows task completion over time, allowing you to see if your tasks are running ahead or behind schedule.

The chart includes all of the task end dates that fall on or before a certain date. It also shows the status of completing those tasks.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Within the dashboard, top left view:

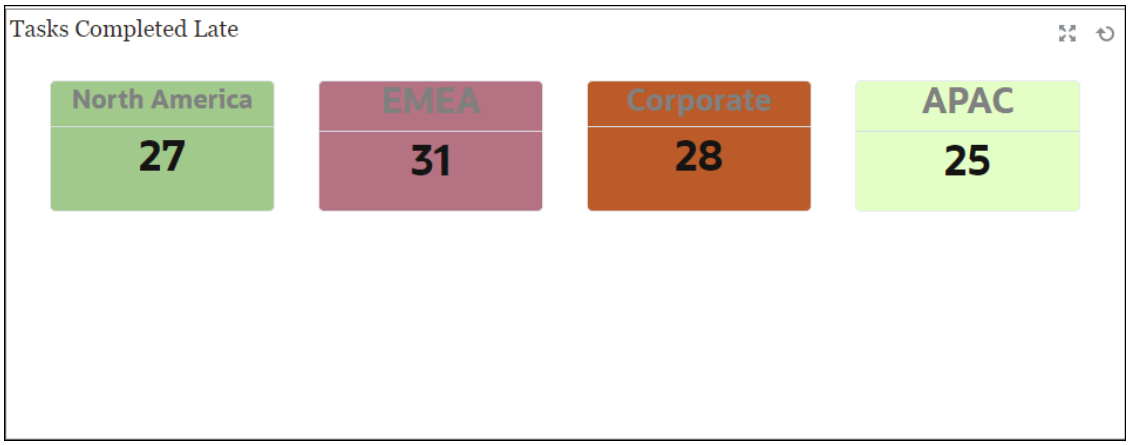
1. Click the **Object Type** icon and select **Tasks**.
2. Click the **View Selector** icon and select **Chart View**.
3. Click the **Settings** icon and specify the following:
   - On the **Properties** tab:
     - **Title**: Task Completion - Plan vs Actual
     - **Type**: Line
     - **Background**: No fill
     - **Label Position**: Above Point
     - **Line Weight**: 5
     - **Grid Lines**: Select this check box
     - **Period**: Selection
   - On the **Layout** tab:
     - **X-Axis**:
       - **Type**: Date
       - **Sort**: X-Axis from the first drop-down menu and Descending from the second drop-down menu
     - **Legend (Series)**:
       - First row, add:
         - **Value**: Task
         - **Aggregation**: Count
         - **Categories**: None
         - **Group By**: End Date (Actual , Local)
         - **Date Aggregation**: On or Before
       - Click **New** and add another row. Specify the following:
         - **Value**: Task
         - **Aggregation**: Count
         - **Categories**: None
         - **Group By**: End Date (Assigned, Local)

Copyright © 2022, 2026, Oracle and/or its affiliates.

        - **Date Aggregation**: On or Before
    - On the **Axis** tab:
        - Select **X Axis**.
        - Interval : Daily
        - **Minimum**: Auto
        - **Maximum**: Auto
    - On the **Legend** tab:
        - **Legend Position**: Bottom
        - **Palette**: Redwood
        - Select the default labels for each series: **End Date (Actual , Local)** and **End Date (Assigned, Local)**
        - Select the default colors for each series.
4. Click **OK**.

Chart View: Tasks Completed Late

This example shows the tasks completed behind schedule in various organizational units.



Within the dashboard, top left view:

1. Click the **Object Type** icon and select **Tasks**.
2. Click the **View Selector** icon and select **Chart View**.
3. Click the **Settings** icon and specify the following:
    - On the **Properties** tab:
        - **Title**: Tasks Completed Late
        - **Type**: Bar
        - **Background**: No fill
        - **Label Position**: Inside Edge
        - **Orientation**: Vertical
        - **Period**: Selection
    - On the **Layout** tab:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **X-Axis**:
  - **Type**: Date
  - **Sort**: X-Axis from the first drop-down menu and **Ascending** from the second drop-down menu
- **Legend (Series)**:
  - **Value**: Task
  - **Aggregation**: Count
  - **Categories**: Organizational Unit
  - **Filter**: Ever Been Late (Assignee) does not equal No

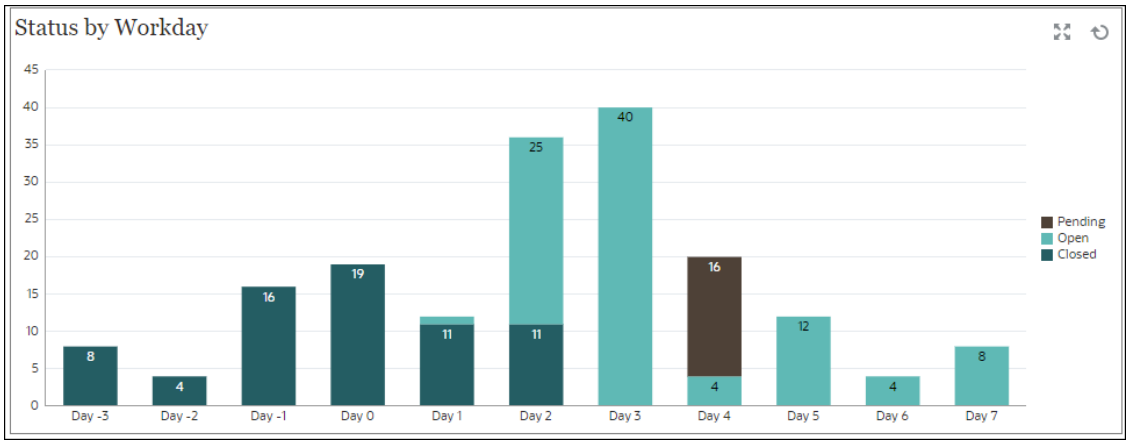
- On the **Axis** tab, select the default options for X axis.
- On the **Legend** tab, select the default options.

4. Click **OK**.

Chart View: Status by Workday

This example chart shows task completion based on a custom Workday attribute.

In this example, the custom attribute was added previously and defined with values for days -15 through 35. All tasks were then assigned a work day based on their planned completion.



Within the dashboard, bottom left view:

1. Click the **Object Type** icon and select **Tasks**.
2. Click the **View Selector** icon and select **Chart View**.
3. Click the **Settings** icon and specify the following:
   - On the **Properties** tab:
     - **Title**: Status by Workday
     - **Type**: Column
     - **Background**: No fill
     - **Label Position**: Inside Edge
     - **Orientation**: Vertical
     - **Grid Lines**: Select this check box

Copyright © 2022, 2026, Oracle and/or its affiliates.

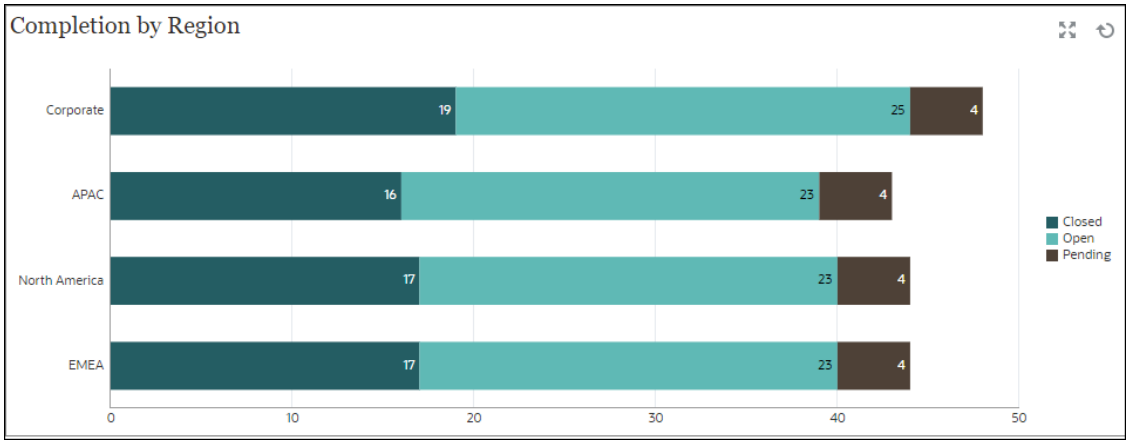
- **Period**: Selection

- On the **Layout** tab:
  - **X-Axis**:
    - **Type**: Attribute
    - **Attribute 1**: Workday (This custom attribute must have been added previously for it to display in the list.)
    - **Sort**: Workday from the first drop-down menu and Ascending from the second drop-down menu.
  - **Legend (Series)**: In first row, add:
    - **Value**: Task
    - **Aggregation**: Count
    - **Categories**: Status
  - **Y Axis**: Select this check box.
  - **Minimum**: Auto
  - **Maximum**: Auto
  - **Major Unit**: Auto
  - **Minor Unit**: Auto
- On the **Legend** tab:
  - **Legend Position**: Right
  - **Palette**: Redwood
  - Select the default labels for each series: **Closed**, **Error**, **Open**, and **Pending**.
  - Select the default colors for each series.

4. Click **OK**.

Chart View: Completion by Region

This example chart shows task completion based on region. In this example, the custom Organizational Unit attribute was added previously and defined with values for tasks completed based on the region.



Within the dashboard, bottom left view:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Click the **Object Type** icon and select **Tasks**.
2. Click the **View Selector** icon and select **Chart View**.
3. Click the **Settings** icon and specify the following:
   - On the **Properties** tab:
     - **Title**: Completion by Region
     - **Type**: Column
     - **Background**: No fill
     - **Label Position**: Inside Edge
     - **Orientation**: Horizontal
     - **Grid Lines**: Select this check box
     - **Period**: Selection
   - On the **Layout** tab:
     - **X-Axis**:
       - **Type**: Attribute
       - **Attribute 1**: Organizational Unit

         (This custom attribute must have been added previously for it to display in the list.)
       - **Sort**: Organizational Unit from the first drop-down menu and Descending from the second drop-down menu.
     - **Legend (Series)**:
       - **Value**: Task
       - **Aggregation**: Count
       - **Categories**: Status
   - On the **Axis** tab:
     - **Y Axis**: Select this check box.
     - **Minimum**: Auto
     - **Maximum**: Auto
     - **Major Unit**: Auto
     - **Minor Unit**: Auto
   - On the **Legend** tab:
     - **Legend Position**: Right
     - **Palette**: Redwood
     - Select the default labels for each series: **Closed**, **Error**, **Open**, and **Pending**.
     - Select the default colors for each series.
4. Click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

29

Using Task Manager

Task Manager provides centralized monitoring of all tasks and provides a visible, automated, repeatable system of record for running an application. Administrators set up tasks in Task Manager.

Related Topics

- Working with Task Manager
- Working with Alerts
- Working with Views and Filters
- Working With Operational Dashboards

Working with Task Manager

Related Topics

- Task Manager Overview
- Working with Tasks

Task Manager Overview

Task Manager helps to define, execute, and report the interdependent activities of a business process. It provides centralized monitoring of all tasks and provides a visible, automated, and repeatable system of record for running a business process.

You can:

- Define the tasks and schedule to ensure the most efficient task flow.
- Automate the business process, track status, and provide notifications and alerts.
- Notify users by email for delinquencies, due dates, and status changes.
- Monitor business process status from a dashboard.
- Act quickly to fix errors and delays.
- Analyze the effectiveness of the business process.

Example 29-1 Video

Your Goal	Watch This Video
Learn the features of Oracle Cloud EPM Task Manager, common terms used, and a typical Oracle Cloud EPM Task Manager process flow.	Overview: Task Manager in Oracle Cloud EPM

Working with Tasks

Related Topics

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Accessing Tasks
- Updating Task Information
- Managing Tasks
- Working with Tasks in Smart View

Example 29-2 Video

Your Goal	Watch This Video
Learn the features of Oracle Cloud EPM Task Manager by navigating through the sections of a task.	Overview: Navigating Tasks in Oracle Cloud EPM Task Manager

Accessing Tasks

Related Topics

- Viewing Tasks from the Home Page
- Viewing Tasks from the Schedule Tasks Page
- Viewing the Worklist for Task Manager

Viewing Tasks from the Home Page

The Home page displays a summary of tasks assigned to you and their status, such as **Open**, **Late**, **Due Today**, or **Due in 7 Days**. A number to the left of the status indicates the number of tasks with that status. If your administrator has enabled the **Upcoming Tasks** option, you can also see items in the upcoming workflow, as well as tasks currently available. When you click a link in the Tasks summary panel, the Tasks page opens, where you can further filter the list of tasks.

You can filter the list of tasks by **Year** and **Period**, or you can select **All**, to display items from any year or period in the Worklist.

From **Tasks** on the Home page, you can view these tasks and their details:

- **Worklist** displays all tasks for a specified POV that you're authorized to view. Alerts and their status are also displayed at the top of the list on the Worklist page and in the Summary panel.
- **Schedule Tasks** displays tasks for Task Manager .
- **Alerts** displays an Alerts List and enables you to create and work with alerts.

Viewing Tasks from the Task Actions Page

You can also view and update tasks from the Task page, which you can launch from a link in your email notification.

The Task page shows a status icon with a description that indicates the current task status. The Alert page shows a status icon with a description of the current status of an alert.

Viewing the Worklist for Task Manager

The Worklist displays all tasks for a selected schedule or template for a specified POV which you're authorized to view, including tasks for Task Manager. The tasks are listed, and can be easily filtered to display only the ones in which you are interested.

Copyright © 2022, 2026, Oracle and/or its affiliates.

A schedule containing the selected dates for the task is created by the Administrator.

A Summary of the status for All Tasks/Forms or My Tasks/Forms is displayed, as well as a dashboard for the source of the tasks/forms.

From Worklist, you can perform the following tasks:

- Export to Excel
- Open Tasks
- Submit Tasks
- Force Close or Abort a Task
- Reassign a Task

Search and Filter Capability

An easy way to filter the items within your list is to use the **Search** field. It will search across any of the displayed columns in the list, excluding dates and icon based columns. For example, you could search for a user to see all items where the user has been assigned as the Assignee or Approver (in case of Task Manager). The search will return any item where the search term is found in any displayed column.

You can also use the specific filtering capability to access particular items using the **Filter** bar or click **Add a Filter** and then set the filters you want per attribute.

To view the Worklist:

1. From the Home page, click **Tasks**. Click **Worklist**.
2. **Optional:** In **Search**, perform the following steps to locate a task:
   - Click the Tasks icon to toggle the display between All Tasks or My Tasks.
   - Type the name of the required task. You can search on any field (text or numeric) on the Worklist, except for **Date**.
3. **Optional:** Click the **Filter** icon next to **Search** to hide or show the filter bar. Click on the right side of the filter bar to clear all filters.
4. **Optional:** Use the drop-down on the upper right side of the screen to select any filters you want to use to manage the worklist:
   - **Type**
   - **Name**
   - **Description**
   - **Status (Detailed)**
   - **Status**
   - **My End Date**
5. **Optional:** Click the following dimension names to modify the POV:
   - **Year**
   - **Period**
   - **Due**: (None Selected, Late, Seven Days, or Today)
   - **Status**: (None Selected, Closed, Open, or Pending)
   - **Source**: (Alerts, Tasks, Forms, Journals, or Reassignment Request)

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> Click multiple entries to add multiple options. Click the selected entry again to remove it from the list.

6. **Optional:** Click next to a task to open a selected task and view its details. Select the icons to add or modify options, such as **Properties**, **Instructions**, **Alerts**, and so on.
7. Under **Actions**, you can perform one of the following actions:
   - **Submit Task**. See #unique_1064.
   - **Abort Task**: Cancel a task, as opposed to performing a forced close, to prevent successors from continuing and to keep the process moving:
     - When a Finish-to-Start or Finish-Error-to-Start predecessor is canceled, its successors remain as Pending. To keep the process moving, you must edit the successors to remove the canceled predecessor and to start the successors.
     - When a Finish-to-Finish or Finish-Error-to-Finish predecessor is canceled, to keep the process moving, the task owner, schedule owner, or administrator must force a close of the successor.
   - **Force Close Task**: **Force** a task with a status of **Open** or **Error** to have a status of **Close**.
   - **Request Reassignment**: Temporarily or permanently reassign a task to another user.
   - **Refresh**

Viewing Tasks from the Schedule Tasks Page

From the Schedule Tasks page, you can search and filter the tasks. You can change views to display a visual representation of the data or display the data as rows and columns.

To view tasks from the Schedule Tasks page:

1. From the Home page, click **Tasks**, then click the **Tasks** tab on the left.
2. **Optional:** In **Search**, type the name of the required task. It will search across the columns in the list, except for dates and any icon-based columns.
3. Select a **Schedule** for the task.
   If you select multiple schedules that are using the same POV, all tasks from all schedules for that POV are displayed.
4. **Optional:** Create a filter to view the tasks. See Working with Filters.
5. **Optional:** Change the POV by clicking the selection under the dimension name to display valid values.

> **Note**
>
> Click multiple entries to add multiple options. Click the selected entry again to remove it from the list.

6. **Optional:** On the right side of the screen, click the icon and select a view. See Working with Views
7. Review the selected tasks.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> The Task Content area varies depending on the task definition. If the task has an end user or automation integration, the content area either displays the embedded web page or the automation details. If there are instructions defined on the task, the instructions are displayed within the content area. If there are no integrations or instructions defined, the task displays the task properties. There's no property or preference to override this behavior.

Updating Task Information

You can update information for tasks with the Open status. You can answer questions, add comments, and attach references. You can also view status, priority, owner, assignee, schedule, start and end date, instructions, supporting documents or Web links, and workflow. The workflow shows the approval chain of the task and displays the user name, access role (assignee or approver), status, and dates on which users performed their actions. If an administrator has included instructions with references for which there are links, you can link directly to the task.

Related Topics

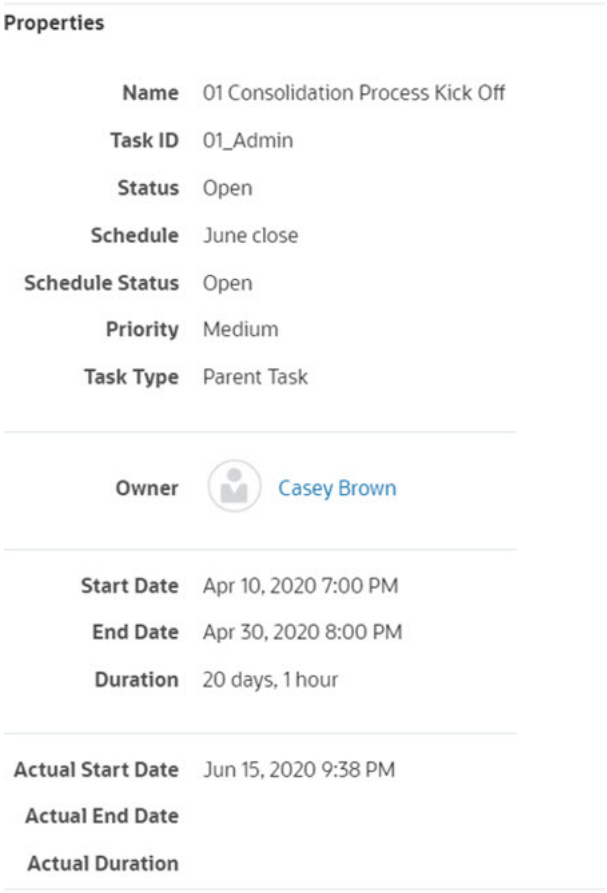
- Viewing Task Properties
- Viewing Instructions
- Viewing Task Alerts
- Viewing Task Attributes
- Viewing Task Questions
- Adding, Editing, and Deleting Comments for Tasks
- Viewing Related Tasks
- Viewing Parameters
- Viewing Task History

Viewing Task Properties

To view the task properties of a particular task:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Double-click a task to open it.
3. Click the **Properties** tab on the right.

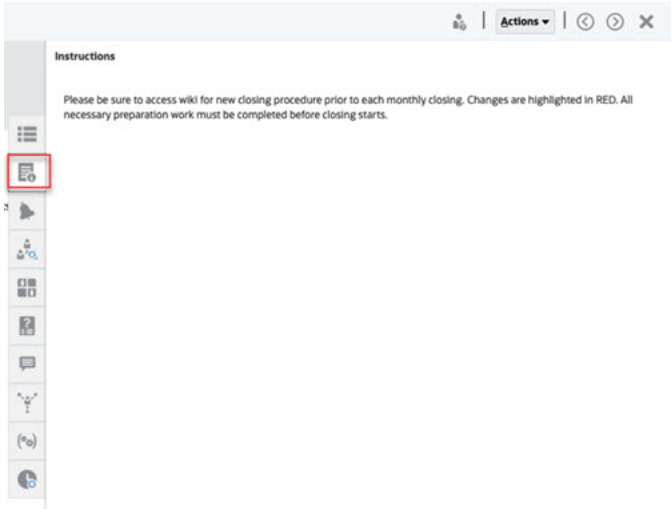
Copyright © 2022, 2026, Oracle and/or its affiliates.



Viewing Instructions

To view task instructions on a particular task:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Double-click a task to open it.
3. Click the **Instructions** tab on the right.

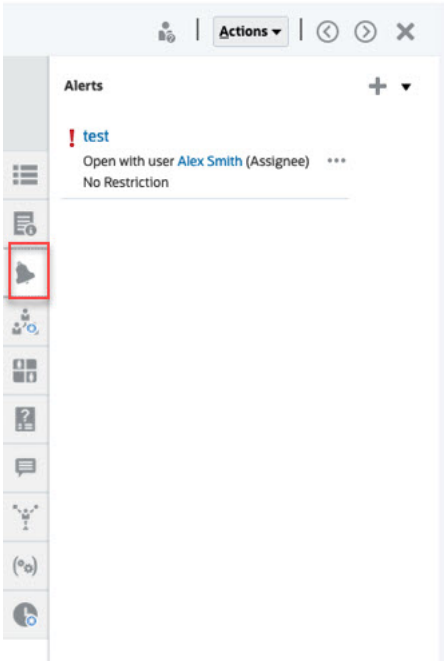


Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Task Alerts

To view the alerts on a particular task:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Double-click a task to open it.
3. Click the **Alerts** tab on the right.
   See also: Working with Alerts

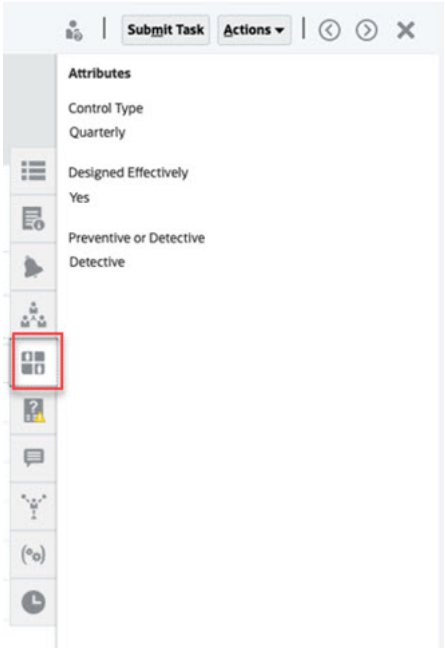


Viewing Task Attributes

To apply an attribute on a particular task:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Double-click a task to open it.
3. Click the **Attributes** tab on the right.

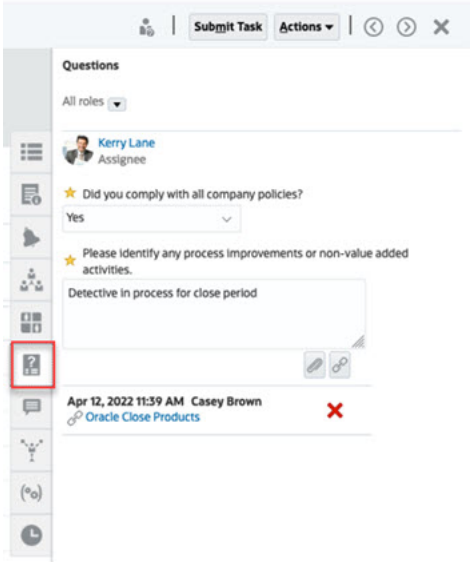
Copyright © 2022, 2026, Oracle and/or its affiliates.



Viewing Task Questions

To view or answer questions on a particular task:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Double-click a task to open it.
3. Click the **Questions** tab on the right.

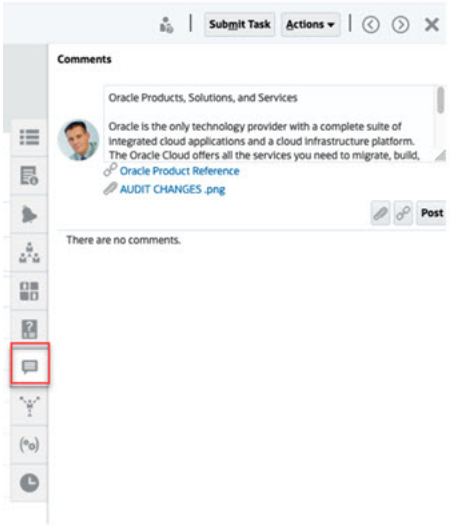


Adding, Editing, and Deleting Comments for Tasks

To view comments for a particular task:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Double-click a task to open it.
3. Click the **Comments** tab on the right.

Copyright © 2022, 2026, Oracle and/or its affiliates.



From the Tasks page, you can add comments for any task and also attach references. You can also add a reference file or URL to multiple tasks at one time and create comments.

This table describes the activities you can perform based on the status of the activity and your role:

> **Note**
>
> Users with the same access role on a task can create, edit, delete, and manage each other's comments.

Table 29-1 Permissions Based on Role and Status

Role	Status: Open with Assignee	Status: Open with Approver	Status: Closed
Assignee	• Can add comments • Can delete comments at their level • Can edit and delete comments that they created	• Can add comments • Can edit and delete comments that they created	Can add comments
Approver	• Can add comments • Can edit and delete comments that they created	• Can add comments • Can delete comments at their level • Can edit and delete comments that they created	Can view comments
Administrator, Schedule Owner, or Task Owner	• Can add comments • Can edit their own comment • Can delete any comment	• Can add comments • Can edit their own comment • Can delete any comment	Can add comments

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 29-1 (Cont.) Permissions Based on Role and Status

Role	Status: Open with Assignee	Status: Open with Approver	Status: Closed
Viewer	• Can add comments • Can edit and delete comments that they created	• Can add comments • Can edit and delete comments that they created	Can view Comments

> **Note**
>
> - Bulk upload of a local file or URL to multiple tasks creates a comment since an attachment must be associated with a comment in Task Manager.
> - For users to be able to edit and delete their own comments, an Administrator must have allowed this by turning on the **Allow Comment Editing and Deleting** setting.

Adding Comments for Tasks

To add comments for a task:

1. Select a task from your Worklist or from within Schedule Tasks. Click **Actions** and then either select **Open** or double-click the task in the list page.

   > **Note**
   >
   > The selected task must be in the **Open** status not in **Pending** status.

2. Click the **Comments** tab on the right side.
3. In the text box, enter a comment.

   > **Note**
   >
   > To delete a comment, select it and click **Delete** or select **Actions**, and then click **Delete Comment**.

4. **Optional:** To add an attachment to an external document or a web page to the comment, select one of the following options:
   - Click the **Attach a file** icon to browse to select a file as the attachment.
   - Click the **Attach a Link** icon to add the **URL** and **Name** of the attachment.
5. Click **Post** to save the comment.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> If you want to add an attachment (file or URL) to multiple tasks at one time, you can perform this action from the **Schedule Tasks** view. Highlight more than one row or select the tasks using the Shift key to select the ones you want. Then click **Actions**, then **Add Reference**, and then choose either **File** or **URL**.

Editing Comments for Tasks

To edit comments for a task:

1. Select a task from your Worklist or from within Schedule Tasks. Click **Actions** and then either select **Open** or double-click the task in the list page.

   > **Note**
   >
   > The selected task must be in the **Open** status not in **Pending** status.

2. Click the **Comments** tab on the right side.
3. Click the **Actions** (…) icon for the comment that you want to edit and click **Edit**.
4. Modify the text and click the **OK** icon to save the comment.

   > **Note**
   >
   > You can't modify attached files or URLs for the comment

Deleting Comments for Tasks

To delete comments for a task:

1. Select a task from your Worklist or from within Schedule Tasks. Click **Actions** and then either select **Open** or double-click the task in the list page.

   > **Note**
   >
   > The selected task must be in the **Open** status not in **Pending** status.

2. Click the **Comments** tab on the right side.
3. Click the **Actions** (…) icon for the comment that you want to delete and click **Delete**. The comment is deleted and no longer appears for the task.

Viewing Related Tasks

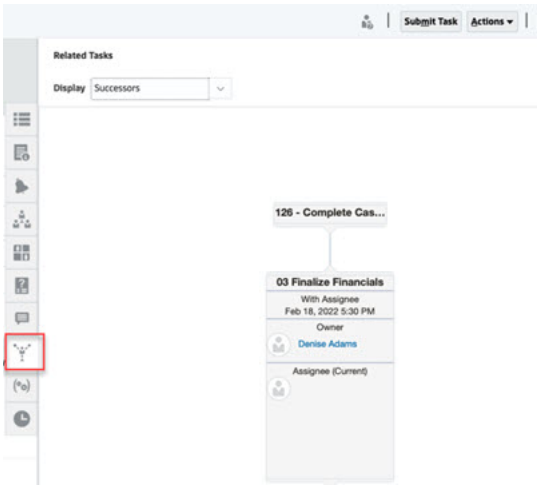
The **Related Tasks** section enables you to view the predecessor and successors for a task. The predecessor/successor tasks show the Task Assignees and Task Owners for the dependent tasks.

Related Tasks also displays prior runs of the task in other schedules. This enables you to view comments or references from the prior task, which may help you complete the current task run. From the **Prior Tasks** list, you can click on a task name to launch the Task Actions dialog box for that task and you can reassign a task to another user.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To view related tasks:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Double-click a task to open it.
3. Click the **Related Tasks** tab on the right.
4. From **Display**, select **Predecessors** or **Successors**.
5. Optional: To view information on a prior run of the task, click a task in the **Prior Task** list.
6. Optional: To reassign the task, click **Reassign** and select the user to whom you want to assign the task.
7. When finished, click **Close**.

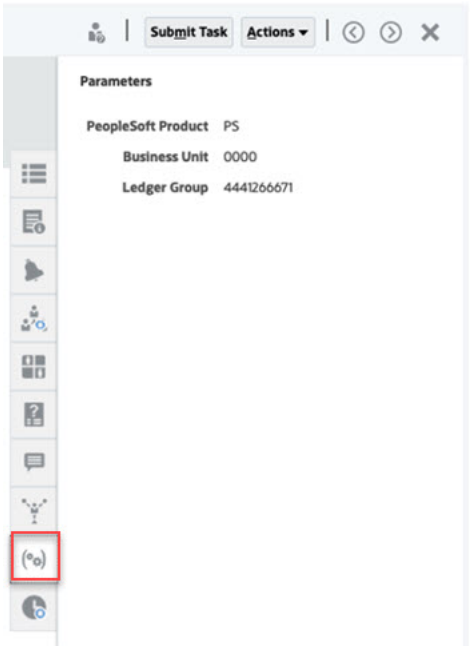


Viewing Parameters

To view the parameters of a particular task:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Double-click a task to open it.
3. Click the **Parameters** tab on the right.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Viewing Task History

For each task, the system retains a history of the changes made to it; for example, a shift in dates or change in ownership. Each change record includes the field, modification type such as added, created, or changed, the old and new values, the user who made the change, and the date on which the change was made. The information on this tab is read-only.

To view task history:

1. On the Home page, click **Tasks**, and then **Tasks**.
2. Select a task.
3. Select the **History** tab on the right.
4. When you finish, click **Save and Close**.

Managing Tasks

Related Topics

- Submitting Tasks
- Approving or Rejecting Tasks
- Reassigning Tasks
- Canceling Tasks
- Setting Tasks to Force Close Status

Submitting Tasks

To submit tasks:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Select the tasks that you need to submit.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To multiselect, press **Ctrl** for random selection or press **Shift** while you click the first and last row in a range.

3. Select **Submit Task**. A warning is displayed that this will complete the task. Click **Yes** to proceed.
4. Review any errors, and click **OK**.

Approving or Rejecting Tasks

To approve or reject tasks:

1. On the Home page, click **Tasks**, and then click **Tasks**.
2. Select the tasks that you need to approve or reject.

   To select multiple tasks, press **Ctrl**, or press **Shift** while you click the first and last row in a range.
3. Highlight the selected task, and under **Actions**, select **Set Status**, and then select **Approve** or **Reject**.
4. Review any errors, and click **OK**.

Claiming or Releasing Tasks

You can claim and release a single task or multiple tasks at a time in Task Manager. Users who are associated with tasks can claim or release tasks.

The ability to claim a task from another user is required to accommodate cases where a claim has occurred; however, the user with the claim can't complete the role functions (for example, because of an absence).

When a task is claimed, the Assignee changes to the person who claimed.

When a task is released, the Assignee is no longer associated with the task.

> **Note**
>
> If the Service Administrator has enabled the bulk update feature, you can claim or release multiple tasks at a time.

Claiming or Releasing a Task Using Task Actions Menu

To claim or release a task from the task **Actions** menu:

1. On the Home page, click **Tasks**, and then click **Schedule Tasks**.
2. Click the task that you want to claim or release or select the task and click the **Open** icon.
3. From the **Actions** menu, click **Claim** or **Release**.
   A pop-up message asking for confirmation is displayed.
4. Click **Yes**.
   A confirmation message is displayed indicating the task was claimed or released successfully.
5. Click **Close** to close the dialog box.
6. Review and fix the errors, and then perform the same steps again to claim or release the tasks.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Claiming or Releasing Task from Task List

To claim or release tasks from the Task List:

1. On the Home page, click **Tasks**, and then click **Schedule Tasks**.
2. Select the task that you want to claim or release.
   To multiselect, press **Ctrl** for random selection or press **Shift** while you click the first and last row in a range. The selected tasks are highlighted.
3. From **Actions**, click **Update**, and then click **Claim** or **Release**.
   A pop-up message asking for confirmation is displayed.
4. Click **Yes**.
   The Task Action Results dialog box displays information about the status, number of tasks selected, tasks considered, tasks processed successfully, and tasks that were unsuccessful. The status are:
   - Processing
   - Completed Successfully
   - Completed with Errors

   A visual indicator shows the completion percentage. For tasks processed unsuccessfully, the dialog box displays the errors. You can click the **Export to Excel** icon and export the displayed errors to an excel file.
5. Click **Close** to close the dialog box.
6. Review and fix the errors, and then perform the same steps again to claim or release the tasks.

Reassigning Tasks

Task assignees can reassign their tasks to other users. For example, if an assignee has planned to be out of the office for vacation, then the assignee can reassign their tasks to another user.

When tasks are reassigned, email notifications are sent immediately to reassigned users.

> **Note**
>
> **Request Reassignment** isn't available for Administrators or Task Owners because they can edit the task to assign it to another assignee or approver.

To reassign a task:

1. From the Home page, click **Tasks**, and then click **Worklist**.
2. On the Worklist, select the task for which responsibility is to be reassigned.
3. On the selected Task page, select **Actions**, and then click **Request Reassignment**.
4. From **To User**, click **Select User** to select the user who is assuming responsibility for the task.
5. Under **Reassign**, select the appropriate option:
   - **Selected Tasks** only
   - **Selected and Future Tasks** to permanently transfer responsibility.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Enter the **Justification** for the transfer of responsibility, such as vacation, transfer of roles, and so on.

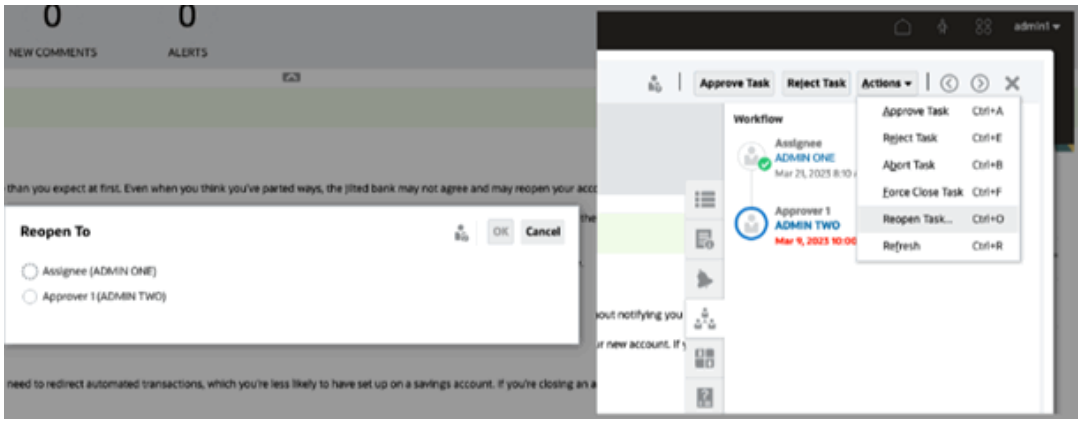
6. Click **OK**.

Reopening Tasks

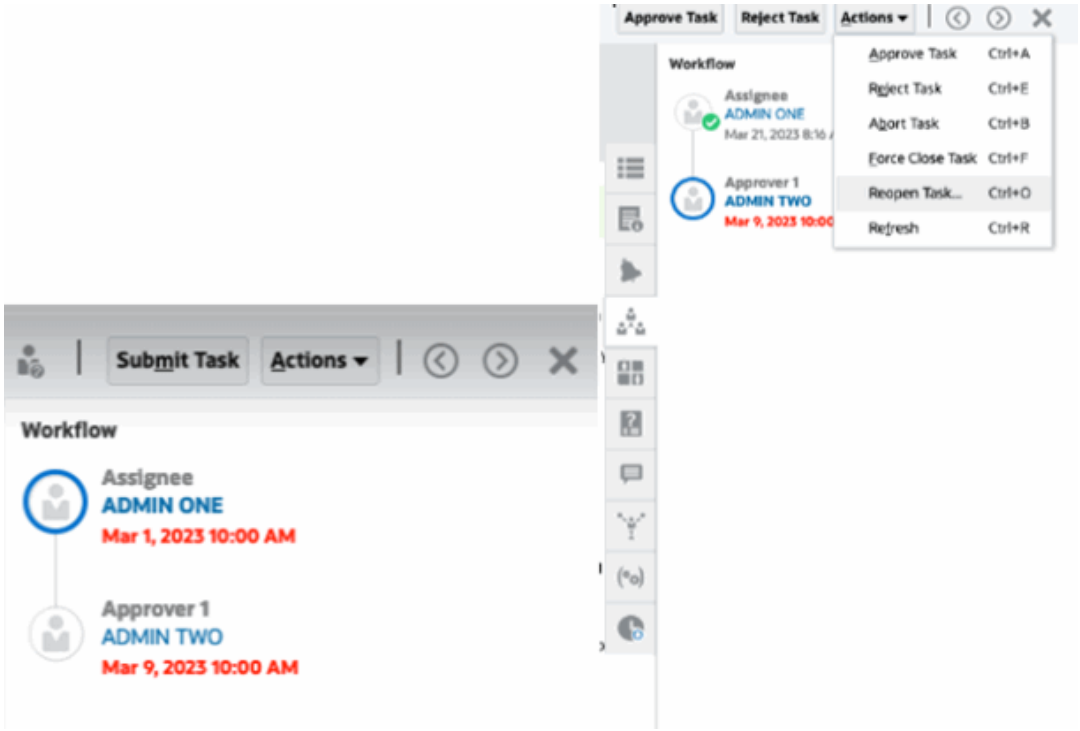
The Administrators and Power Users can reopen closed and open tasks. If the Administrator provides permission, the other users for example, the Assignees and Approvers can also reopen tasks that are in their workflow. See Managing Task Manager System Settings in *Administering Financial Consolidation and Close*.

For Administrators and Power Users:

- If the task is closed, you will be given the option of which workflow level to open the task. For example, if you reopen a task where the Assignee is ADMIN ONE and the Approver 1 is ADMIN TWO, you will get the option of returning the workflow to either ADMIN ONE or ADMIN TWO.



- If the task is open, it will be reverted one level in the workflow. For example, if the task is open to ADMIN TWO and then if you reopen it, it will be reverted to ADMIN ONE.

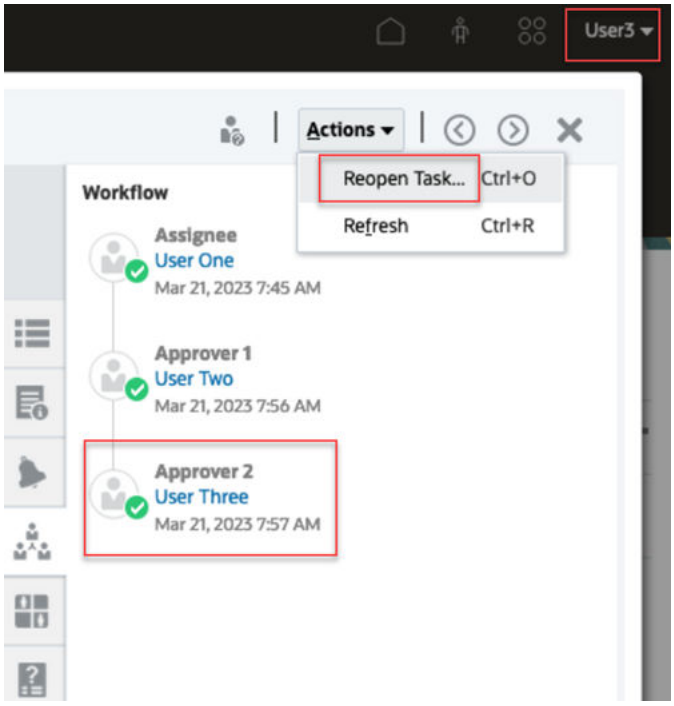


Copyright © 2022, 2026, Oracle and/or its affiliates.

See also Reopening Tasks and Reopening Manual and Automated Tasks in *Administering Financial Consolidation and Close*.

For Users:

Whether the task is closed or open to a later workflow stage, it will be reopened to the user's workflow. For example, if the task is open and currently with Approver 2 and User Two reopened it, it would revert to Open with Approver 1. If User One reopened it, it would revert to Open with Assignee.



Canceling Tasks

Task owners and the Service Administrator can stop a running task at any time. When you cancel a task, the task status changes to Closed. Pending tasks with the task as a predecessor can't run. If you've a sequence of tasks and you want to cancel the entire sequence, you can cancel the first task in the sequence.

To cancel a running task:

1. From your task list, select a task that you want to stop.
2. From the **Properties** tab, select **Actions**, then **Abort**.

Setting Tasks to Force Close Status

To stop a task but allow other tasks to run, if you're the task owner or Service Administrator, you can force a task with a **Open** or **Error** status to **Closed** status. For example, if you've an automated task with an error, and you've reviewed the error for that task, but want subsequent tasks to run, you can force the **Closed** status.

Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Tip**
>
> If you don't want the subsequent tasks to start, remove the predecessor links before force closing the tasks.

To set a task to Force Close status:

1. From your task list, select the task that you want to close.
2. From the **Properties** page, select **Actions**, then click **Force Close Task**.

The status of the task changes to **Closed**.

Working with Tasks in Smart View

Related Topics

- Creating Connections to the Smart View Extensions
- Updating Tasks from Smart View

Creating Connections to the Smart View Extensions

You can use Oracle Smart View for Office to connect to your worklist and update Task Manager tasks within Excel.

You must create private connections to use with the extensions.

> **Note**
>
> Before you begin, ensure that you have installed Smart View, and the Smart View Extensions for Task Manager . See the Downloading and Installing Clients in *Getting Started Guide for Administrators*.

To create connections to the extensions:

1. In the Smart View panel, select **Private Connections**, and then, at the bottom of the panel, select **Create new connection**.
2. When prompted, select **Smart View HTTP Provider** to display the **Add Connection** wizard.
   You can create one connection at a time in the wizard.
3. In **Add Connection - URL**, use the following syntax for the private connection, and then click **Next**.
   - For Task Manager:
     `http(s)://serviceURL/HyperionPlanning/cm/svp`
   - When prompted, provide your login credentials: domain name, user name, and password to sign in.
   - In **Add Connection - Application/Cube**, navigate to the application and database to work with, select it, and then click **Next**.
   - In **Add Connection - Name/Description**, enter a name for the connection and an optional description.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Click **Finish**.
- Repeat these steps to create another connection.
  See Updating Tasks from Smart View

Updating Tasks from Smart View

Using Oracle Smart View for Office, you can work directly with Task Manager tasks and schedules.

Your schedules and tasks for the selected period are displayed. You can only see those tasks and schedules for which you're authorized. This is the **Display My Tasks** view of the worklist, so not all the tasks that you've visibility to see will be shown. Depending on your current role (example, Assignee, Preparer, or Approver), the options such as **Approve** or **Reject** will change to match the associated role. If you've different roles, then you may need to log in as the specific role to perform different operations.

> **Note**
>
> Before you begin, you must install Smart View and the Smart View Extension for Task Manager, and create a private connection to use with the extension. See the Downloading and Installing Clients in *Getting Started Guide for Administrators* and Creating Connections to the Smart View Extensions.

When you click a schedule from the list, the system displays a list of the tasks that you're currently working on. After a task has been submitted or approved, it's no longer displayed on the list.

The available actions depend on your user role:

- **Assignee**: Submit Task
- **Approver**: Approve and Reject Task
- **Assignee or Approver**: Reassign Task

If you submit a task that is incomplete, for example, you must answer questions first, a validation error displays when you submit the task. You can double-click on the task or row to open the task and finish completing it.

For information on working with Smart View, see *Oracle Smart View for Office User's Guide*.

Watch the video Managing Tasks Using Smart View

To update tasks from Smart View:

1. Launch Excel, then select the **Smart View** tab, and then select **Panel**.
2. In the Smart View panel, select **Private Connections**.
3. In the **Private Connections** panel, select the **Task Manager** connection from the drop-down menu.
4. When prompted, provide your login credentials: domain name, user name, and password to sign in.
5. Under **Private Connections**, select a schedule.
6. You can open the task in the following ways:
   - Under **Name**, double-click the task that you want to view and open the **Task** dialog.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Use the following options from the **Task Manager** ribbon or from the new **Quick Actions** column in a schedule sheet:
  - **Open**: Open the task details in the Task dialog. You can use this open as an alternative to double-clicking a task row in the schedule sheet to launch the **Task** dialog.
    For integrated tasks, use the embedded task links available in the task details within the **Task** dialog to navigate to the relevant tasks.
  - **Open in Browser**: Open the integrated tasks in the web application within a browser. If you've not logged in to the web application in the current session, you will be prompted to establish a connection and log in as a one-time requirement. Thereafter, you can open the integrated tasks directly in the browser, view the task details, and take necessary actions.
  - **Open in Excel**: Open the embedded artifacts such as forms and dashboards in Excel. Forms open in a new worksheet within the same workbook and dashboards open in a new workbook.

7. Select the appropriate option for the selected task:
   - **Submit Task**
   - **Approve**
   - **Reject**
   - **Reassign Task**

Working with Alerts

During the course of running a business process, you may encounter roadblocks that affect your progress. For example, you may encounter a hardware or system failure, or software or data issues. You can create an alert to indicate problems in the process, attach it to a task or schedule, and assign a quick workflow to deal with it. You can approve or reject alerts for which you're assigned as the Approver.

You can view alerts from tasks on the Worklist, or from the Alerts List, and drill into alerts to display the alert details. You can edit and delete alerts that you no longer need.

See these topics:

- Creating Alerts
- Updating Alerts
- Creating an Alert on a Schedule
- Alert Actions
- Viewing Alerts from Alert List
- Deleting Alerts

Creating Alerts

You can create an alert from an object in Task Manager such as a task, schedule, or form if you've access to it, or you can create it from the Alert List. You specify an Alert Type and other information, and the alert is created when you submit it from the Actions dialog box.

If needed, you can create alerts on alerts. For example, you can create sub-alerts for a "System Down" issue to work separately on network and power issues.

Copyright © 2022, 2026, Oracle and/or its affiliates.

When you create an alert on an object, only **Alert Types** specific to that object, and generic **Alert Types** are available (for example, **Basic Alert**). When you create an alert directly from the Alert List, only generic Alert Types are available.

When you create an alert, it will initially be in **Open with Owner** status.

> **Note**
>
> Alerts can remain in the **Open** status even if they're associated with locked objects (periods, schedules, and so on).

Here's the table that provides the Alers workflow.

Table 29-2 Alerts Workflow

Role	Actions
Owner (user who initiated the alert)	Submit Reopen (sends alert back to Owner)
Assignee	Submit Request Information (sends alert back to Owner)
Approver1	Approve Reject (sends alert back to Assignee)
Approver*N*	Approve Reject (sends alert back to Assignee)

To create an alert:

1. Use one of these methods:
   - Navigate to the artifact (task or alert), open the artifact, and then click the **Alerts** tab.
   - For Schedules, edit the Schedule, and then click the **Alerts** tab.
   - For Supplemental Data Forms, edit the form, and then click the **Alerts** tab.
   - Raise a general alert from the Alert List, which is only associated with a year and period.
2. Click **New** (**+**).
3. Enter a unique **Name** for the alert, for example, Data Corrupted. You can enter a maximum of 80 characters.
4. From **Type**, select an Alert Type from the list of administrator-defined Alert Types, for example, Data Issue.

   When you select an Alert Type, your alert will inherit any instructions, workflow users, attributes, questions, and viewers defined in that Alert Type.

   The **Owner** is the name of the user creating the Alert.

   The **Assignee** is the person responsible for resolving the alert. This may be a user, group, or team. The default assignee is inherited from the **Alert Type**.

   The **Notification Assignee** is the person to whom the alert notifications are sent similar to the notifications sent to the Alert Assignee. The default notification assignee is inherited from the **Alert Type**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

The **Approver** is also inherited from the **Alert Type**.

5. From **Year**, select a year. If the alert is created from an object that already has a **Year** associated with it, this value can't be changed.
6. From **Period**, select a period. If the alert is created from an object that already has a **Period** associated with it, this value can't be changed.
7. For **End Date**, specify a due date for the alert. This is usually populated based on the object the alert was created on. You must set an End Date.
8. From the **Priority** list, select a priority for the alert: **High**, **Medium**, or **Low**.

   For **Instructions**, the system displays any instructions that were included in the Alert Type. These are read-only.

   The Basic Alert does not have instructions.
9. For **Description**, enter a description for the alert, for example "Data has been corrupted". You can enter a maximum of 255 characters.
10. **Optional:** To add references to support the alert description:
    a. Click **Attach a file**, select and attach a file, and then click **OK**.
    b. Click **Attach a link**, enter a URL name, then enter the URL; for example: Oracle, https://www.oracle.com, and then click **OK**.
11. To create the alert, click **OK**.

    When you click **OK** in the **Create Alert** dialog box, the Alert Actions dialog box will open in the **Open with Owner** status. The Owner can then click **Submit** to change it to **Open with Assignee** status, or **Close** (X) the dialog box.

Updating Alerts

When you open an alert from the Alerts list, you can view the instructions, answer any required questions, and add comments or viewers.

If needed, you can create alerts on alerts. For example, this would allow you to create sub-alerts for a "System Down" issue to work separately on network and power issues.

After you've completed updating the alert information, you can perform actions on the alert, depending on your role and the alert status. See Alert Actions.

To update alert information:

1. On the Home page, click **Tasks**, and then click the **Alerts** tab on the left to open the **Alerts** main page.
2. From the Alert list, select and open an alert.
3. **Optional:** To update the alert properties, select the **Properties** drawer on the right, and edit the properties as needed.

   If you are the Owner, you can edit the **Name**, **Priority**, **Owner**, **End Date**, and **Description**.

   If you are the Approver, you can edit the **Name** and **Priority**.
4. **Optional:** Select the **Instructions** drawer on the right, and if any instructions are attached to the alert, perform the required instructions.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. **Optional:** Click the **Workflow** drawer on the right to view the current progress of the task as it is worked on by the assigned users. You can click the **Select User** icon and change the **Assignee**, **Notification Assignee**, and **Approver**.

6. **Optional:** Select the **Associated Objects** drawer on the right to view any objects that are associated with the alert, such as a task, schedule, or an associated alert.

7. **Optional:** Click the **Alerts** drawer on the right to create or select an existing alert.
   - To create a new alert for the alert, click **Create Alert** and enter the alert information. See Creating Alerts.
   - To associate an existing alert with the object, click **Existing Alert** and select an alert from the Alert list.

     By default, the alerts from the current period are displayed. You can change the filter to select alerts from any period.

8. **Optional:** Click the **Attributes** tab on the right to view the attributes relevant to your role on the alert. If an attribute list is available, you can select an attribute for the alert.

9. **Optional:** Click the **Questions** tab on the right to view and answer any questions required for the alert.

   If you're the Owner (the user who created the alert), you can also be asked questions. This allows key details to be gathered from the user experiencing the issue.

10. **Optional:** Click the **Comments** tab on the right to enter a new comment, and then click **Post**.

    If there are saved comments, they are displayed in chronological order under the entry area, with the latest comments first. If there are more than three comments, the system displays a **Show All Comments** link.

    To attach a file or link to a URL as a reference:
    - Click **Attach a file**, select and attach a file, and then click **OK**.
    - Click **Attach a link**, enter a URL, and click **OK**.

11. **Optional:** Click the **Viewers** tab on the right to add viewers to the alert.
    - To select viewers from the Member Selector, click **Add** , enter or select the name of the user, group, or team that will have view access to the alert, and then click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- To add a user outside the system who must be notified about the alert, click **Add External User** . Enter a user's **Email Address**, select a **Notification Priority**, and then click **OK**.

  > **Note**
  >
  > An external user won't have any visibility or access to the alert, they'll only receive notifications about it.
  >
  > Notifications will be sent for the priority level or higher. For example, if set to **High**, the notification will only be sent when the alert is set to **High**. If set to **Low**, then they will be notified for all priority levels (**Low**, **Medium**, and **High**).

12. **Optional:** Click the **History** tab to view all actions performed since the alert was created. This is a read-only tab.
13. To select an action for the alert, see Alert Actions.

Creating an Alert on a Schedule

When you're working with schedules, you may encounter an issue that affects your progress, and you can create an alert.

To create an alert on a schedule, you must have Edit capabilities on a schedule as either the Owner or System Administrator.

To create an alert on a schedule:

1. On the Home page, click **Application**, and then click **Task Manager**.
2. Click the **Schedules** tab on the left.
3. Select the schedule and click **Edit**.

   If you don't have edit rights, the **Properties** icon is displayed intead of an **Edit** icon.
4. Click the **Alerts** tab.
5. Click **Create Alert** to create an alert, or click **Existing Alert** to associate an existing alert from the Alert List.

   See Creating Alerts.

Alert Actions

The actions available for an alert depend on its ownership, status, and the security rights assigned to the user. For example, you can request information, submit, approve, claim, or reassign an alert, depending on your role and access.

This table lists the actions available and the required roles.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 29-3 Alert Actions and Available Roles

Action	Description	Role
Request Information	Allows the Assignee to send the alert back to the Owner to request more information	Assignee
Submit Alert	Allows the Owner or Assignee to submit the alert	Owner, Assignee
Approve Alert	Allows the Approver to approve the alert	Approver
Reject Alert	Allows the Approver to reject the alert	Approver
Claim Alert	Allows a team member assigned to the alert to claim it. Only available when the alert Assignee or Approver is assigned to a team instead of an individual. Claiming may be done even if the alert is claimed by another team/group member.	Assignee team member
Release Alert	Allows a team member to release a currently claimed alert	Current claimed assignee team member
Reassign	Allows an Administrator to reassign the alert to another user	Administrator
Force Close Alert	Allows an Administrator to change an alert status to Closed, regardless of the current status	Administrator
Refresh	Updates the alert with latest comments, status, and so on	All

To perform an action on an alert:

1. On the Home page, click **Tasks**, and then click the **Alerts** tab on the left to open the **Alerts** main page.
2. From the Alert list, select and open an alert and make sure the required information is completed.
3. From the **Actions** menu, select an available action.
    - **Request Information**
    - **Submit**
    - **Approve**
    - **Claim**
    - **Release**
    - **Reassign**
    - **Request Reassignment**
    - **Force Close**
    - **Refresh**

Copyright © 2022, 2026, Oracle and/or its affiliates.

Viewing Alerts from Alert List

You can view and work with alerts from the Alerts list. The list displays the alert name, status, priority, end date, alert type, and other information.

To access the Alerts list:

1. On the Home page, click **Tasks**.
2. Click **Alerts** from the left navigation.
   The Alerts page displays any existing alerts for the specified period. You can open and work with the alert.

You can filter the list and select the columns that you want to display.

> **Note**
>
> - Alerts and their status are also displayed at the top of the list on the **Worklist** tab.
> - If you've previously accessed the Alerts list, the filters that you had selected, including the **Year** and **Period** filter, are displayed. However, you've the option to remove the **Year** and **Period** filter bar and add any other filters.
>   If you're accessing the Alerts list for the first time, you'll not see the **Year** and **Period** within the filter bar. Instead, the **Status** filter is displayed by default. This enables you to view all alerts that you need to work on, regardless of the period with which the alerts are associated.
> - The Alert Actions banner shows a status icon with a description that indicates the current status of the alert.

When you open an alert, the system displays the alert information and a work area. The top bar displays the object name. The Alert name is displayed above the parent object (task, schedule, and so on). The **Actions** menu contains available action options depending on your role and the workflow for the alert. See Alert Actions.

If one of these actions is available, it's displayed as a separate button in the top bar:

- **Submit**
- **Approve**
- **Reject**
- **Claim**
- **Release**
- **Request Information**
- **Reopen**

The Summary board displays a graphic summary of the alert status. The items displayed depend on the workflow.

- **Days Left** - Indicates the days left before the alert is due to be resolved. If a user is currently working on a alert, it will show the days remaining for their part of the workflow. Otherwise, it will show the overall days remaining.

  If there are only hours left, this is displayed as **Hours Left** or **Minutes Left**. If it's beyond the **End Date** value, then it displays **Days Past Due**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Priority** - Displays the current priority of the alerts.
- **New Comments** - Displays the number of comments that you've not yet viewed.
- **Questions** - Displays the number of questions that you are required to answer before submitting or approving the alert.
- **Attributes** - Displays the number of attributes you're required to set before submitting or approving the alert.
- **Alerts** - Displays the number of open alerts associated with this alert.

To view alerts:

1. From a task, click the **Alerts** tab on the right side.
2. Click an alert name to drill down and view additional detail about the alert, or select an alert and click **Open**.
3. **Optional:** To search for an alert, in the **Search** box, enter search criteria.
4. **Optional:** To select columns to display, from **Actions** in the **Alerts** tab, click **Select Columns**, and select the columns to display, or select **Show All**.
5. **Optional**: To export alerts, from the **Actions** menu, click **Export to Excel**.
6. To create an alert, see Creating Alerts.
7. To perform an action on the alert, see Alert Actions.
8. To refresh the alert list, click **Refresh**.

Deleting Alerts

You can delete alerts that you no longer need if you're an Administrator or Alert Owner. You must also have access to the object associated with the alert.

You can delete multiple alerts at the same time.

To delete an alert:

1. On the Home page, click **Tasks**, and then click the **Alerts** tab on the left to open the **Alerts** main page.
2. From the Alerts list, select and open an alert.
3. Select **Actions**, and then click **Delete**, or select **Delete** from the row **Actions** menu.
4. From the confirmation prompt, click **Yes**.

Working with Views and Filters

This chapter describes how to create, manage, and use views and filters.

Related Topics

- Working with Filters
- Working with Views

Working with Filters

Use filters to limit the records displayed in your views and reports.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Related Topics

- About Filters
- Viewing the Existing Saved Filters
- Creating a New Filter
- Using the Filter Bar to Adjust Your View
- Clearing Filter Conditions
- Removing a Filter
- Editing a Filter
- Duplicating a Filter
- Saving a Filter
- Applying a Saved Filter
- Publishing a Filter
- Deleting a Filter
- Displaying Columns for Filters
- Reordering Columns for Filters

About Filters

Filters control the records that you see in list views and reports.

You can provide values for the attributes that you want to filter on and the operator to use for filtering. Typical operators include the following: equal to, not equal to, starts with, ends with, contains, greater than, less than, and so on. The available operators depends on the attribute's data type. For example, operators for filtering text values are different than the operators for filtering numeric values. Filters are combined together using and logic, which means only those records that meet all filter criteria are displayed.

You can also create more complex filters using and as well as or logic and grouping logic to determine the order in which filters are applied.

You can save a filter for future use. However, for setting up your views, saved lists can be used. See Working With List Views.

Service Administrators and power users can publish filters so that they are accessible to other users and these are then marked as Public. Service Administrators and power users can use saved filters to test rules.

Where Are Filters Used in Task Manager

There are many locations within Task Manager where filters can be used.

The filters functionality remains consistent throughout these different areas:

- Schedule Tasks
- Templates
- Schedules
- Task Types
- Alert Types
- Views

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Attributes

Viewing the Existing Saved Filters

Filter definitions that were saved are available in the Filters tab of Configuration.

To view saved filters:

1. From **Home**, click **Application**, and then **Task Manager**.
2. Click **Filters** to see existing filters.
   Public filters are marked with a green check mark.

Creating a New Filter

You create a new filter to control the display of rows as per your requirement.

To create a new filter:

1. From **Home**, click **Application**, then **Task Manager**, and then **Filters**. You can also go to any of the following pages to create a filter:
   - **Tasks > Schedule Tasks**. Click **...** on the right side and then **Manage Filters**.
   - **Tasks > Supplemental Data Tasks**. Click **...** on the right side and then **Manage Filters**.
   - **Tasks > Alerts**. Click **...** on the right side and then **Manage Filters**.
2. Click New (+) to add a new filter. The New Filter dialog appears.
3. In **Name**, enter a unique name for the filter.
4. In **Description**, enter a description (optional) for the filter.
5. In **Type**, select the type of filter being created.
6. In the Filter Definition section, click **Create Condition** to create a condition that will be used to filter data. You can specify multiple conditions and condition groups.
   For each condition, specify the following:
   - (Condition Groups only) Conjunction: Select **And** or **Or**. These state how this condition or group relate to prior sibling conditions or groups. This field is enabled only if the selected node is not the first child of its parent node.
   - Attribute: An attribute is a field or value that a condition will be comparing to a value for inclusion in the result set of a filter. However, for the case of a filter, an attribute denotes more than the list of user-defined attributes.
   - Operator: States the type of evaluation to perform against the attribute. For example, Equals, Between, Does not Equal, Greater than, Is blank, Is not blank, Less than, Not between, Starts With, Ends With.
   - Value: Specifies what values to compare the attribute against. The type of attribute determines what input field is available.

Using the Filter Bar to Adjust Your View

The filter bar works across many different areas to filter data displayed in a list. You can add multiple filters to a list.

Copyright © 2022, 2026, Oracle and/or its affiliates.

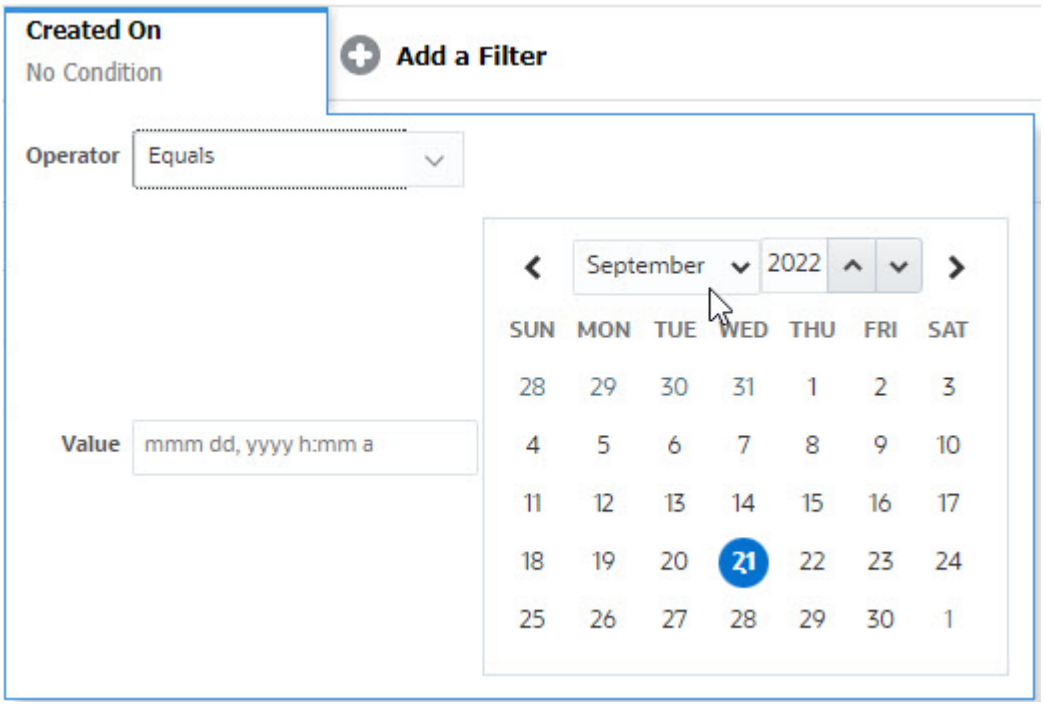
Here's an example of the filter bar on the Filter configuration. Note that the default of All is used. This means that all objects are displayed unless you choose to make a selection of filter attributes.

To add a filter to your list:

1. Click **+ Add a Filter** to display a list of attributes that you can use to filter data.
   The list of attributes is different, depending on the list page on which you are adding the filter.
2. Select the filter attribute you'd like to add.
   The selected attribute appears on the filter bar.

Using a Date Range

Some filter attributes have a date range. For example, if you want to add another filter attribute to the filter bar, such as **Created On**, you can use the date range feature. Narrow your view by using a date value and then use the **Operator** field to set the conditions for dates values that meet this criteria.



Clearing Filter Conditions

When you clear a filter, the conditions applied by this filter on the displayed data are removed.

After adding the filter to the Filter bar, you can do one the following to clear the filter conditions:

- Hover on each filter, click the *** icon, and click **Clear** to clear and reset the condition for the specific filter.
- Click the *** icon on the right side of the Filter bar and select **Clear All Filters**. The conditions for all the filters in the Filter bar are cleared and reset.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Removing a Filter

You can remove a filter from the Filter bar.

Removing a filter also clears the conditions applied by the filter on the listed data.

To remove a filter from the filter bar:

1. Click the icon *** adjacent to the filter.
2. Click **Remove** to remove the filter from the Filter bar.

On a few pages, you can't remove the default filters.

Editing a Filter

Edit a filter to modify its definition.

To edit a filter:

1. Open the Filters page.

   From the Home page, click **Application**, then **Task Manager**, and then **Filters**.

   You can also edit filters when you click **...** and then **Manage Filters** on a page.

2. Select the filter you want to edit and click the icon.
   The Edit Filter dialog is displayed.
3. Update the required information.
4. Click **OK**.
   The filter details are updated.

Duplicating a Filter

You duplicate a filter to create a copy of an existing filter.

To duplicate a filter:

1. On the Filters page, select the filter you want to duplicate and click the icon.
   A copy of the filter is displayed on the page.
2. Click the copied filter.
   The Edit Filter window is displayed.
3. Update the required information.
4. Click **OK**.
   The filter details for the copied filter are updated.

Saving a Filter

Saving a filter definition enables you to easily reuse these filter settings when required (instead of manually setting up filters when required).

By default, filters are saved as private filters. To enable other users to use the same saved filters, you can publish the filters.

To save a filter:

Copyright © 2022, 2026, Oracle and/or its affiliates.

1. Use the **Add a Filter** to create a filter for the required attributes.
2. From the Actions menu, select **Save Filter**.
   The Save Filter dialog appears.
3. In **Name**, enter a unique name for the filter.
4. In **Description**, enter an optional description for the filter.
   Notice that the Filter Definition section displays the selected filter conditions.
5. Click **OK**.

Applying a Saved Filter

You can apply saved filters to restrict the displayed data. All the saved filters are displayed when you click the **...** icon on the top-right side of a page. Click any of these filters to apply it for the data. The data will be displayed based on the defined filter conditions.

Deleting a Filter

Delete a filter to remove its definition from the system.

To delete a filter:

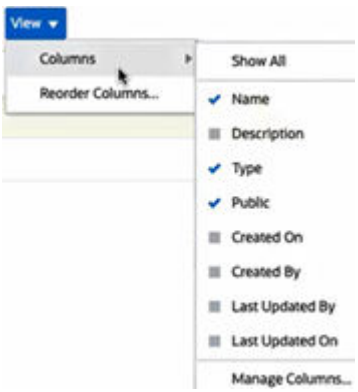
1. On the Filters page, select the filter you want to delete and click the icon.
   A message is displayed asking for confirmation.
2. Click **Yes**.
   The filter is deleted.

Displaying Columns for Filters

To display the columns for the filters:

1. On the Filters page, click **View** and then **Columns**.
2. Select the columns you want to display or click **Show All** to display all the columns.

You can click **Manage Columns** and hide or show the columns that are displayed in **View > Columns**.



Reordering Columns for Filters

To reorder the columns:

1. On the Filters page, click **View** and then click **Reorder Columns**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. Select the column name that you want to reorder and use the following icons to move it to the required position:
   - : Move selected items to top of the list
   - : Move selected items up one in the list
   - : Move selected items down one in the list
   - : Move selected items to bottom of the list
3. Click **OK**.
   The columns are displayed based on the specified order.

Working with Views

Views provide multiple ways to visualize and analyze your data.

Related Topics

- About Views
- Working With List Views
- Working with Pivot Views
- Working with Chart Views
- Working With Gantt Chart Views
- Working With Calendar Views
- Saving Views
- Editing Saved Views
- Setting a Default View

About Views

Oracle Fusion Cloud Enterprise Performance Management products provide you with great flexibility in the ways in which you can visually view your data.

Types of Views

- List view: Provides a table display of information in columns and rows for the objects which meet the filter conditions on the page.
- Gantt chart: Displays a timeline for a schedule that graphically represents the duration of tasks and the dependencies between them. You can use the Gantt chart to see the status of predecessor tasks to other tasks.
- Calendar: Displays schedule tasks in traditional calendar format by Month, Week, or Day. After you select the Calendar View, use the calendar icons to select Month, Week, or Day. In the Calendar View, you can also see the Day Label in the Day header.
- Pivot view: Allows you to create summaries of numeric attribute data by attribute value.
- Chart view: Displays data in the form of charts.

Use the View selector ( ) to move between views.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Choosing the Compact Display of Views

When you're viewing items in a List, Gantt, or Pivot view, you've the ability to view the data in a compact format. The **Compact** option works as a toggle switch and displays more rows of information. Click **Compact** from the **View Selector** to display the records in a compact format.

If you save a view, your choice of Compact will also be saved.

Objects for Which Views are Available

Views are available for the following objects in Task Manager:

- Schedule Tasks: Contains the list of scheduled tasks for Task Manager
- Alerts: Contains the list of alerts and provides drill-down to the alert details

About Filtering Data in Views

You can use filters to restrict the data displayed in the views. Filters can be created at run time (after the data is displayed), or when designing the chart or pivot view.

You can filter data in the following ways:

- Filter bar in a view

  Using filters from the Filter bar enables users to dynamically decide the criteria that must be applied to the view data. The specified filter condition is applied at run time, after the view is generated and the display is updated to reflect the applied condition. See Using the Filter Bar to Adjust Your View.

  For example, add a filter to the Filter bar in the Tasks list with the Assignee column selected. You can use this filter to dynamically filter the chart data by selecting one or more assignees.

- **Filter** in the **Layout** tab of the Edit Pivot or Edit Chart dialogs
  This filter is added by the view designer. The specified conditions are applied on the data before the data is included in the pivot view or chart view. You can create a filter for each data set listed in the **Legend (Series)** section. See Setting the Chart Layout.

  For example, if you create a filter condition for a data set with Status set to Open, only open tasks are included when charting that data set.

Working With List Views

Use list views to display records in a simple tabular form.

Related Topics

- About List Views
- Customizing the List View
- Task Manager Example: Customizing the List View for Schedule Tasks

About List Views

List views present records for on screen viewing and provide drill-down capabilities to the record details. They display objects in a vertical list, in the form of rows and columns.

To see more rows displayed in the list view, use **Compact** from the **View Selector** at the right hand side.

Copyright © 2022, 2026, Oracle and/or its affiliates.

List views provide the following reporting features:

- Columns can be added to or removed from the view and re-ordered.
- Filters can be applied to limit the records included in the list.
- List views can be printed or exported to Excel for ad-hoc reporting.

Customizing the List View

The list view displays with the default columns selected. You can easily change the default columns to customize your view.

To customize a list view:

1. Display the list view for the required object.
2. In the **Actions** drop-down, select **Select Columns**.

   The Select Columns dialog appears. The columns that are currently displayed are listed in the **Selected** section.
3. In the **Available** section, select the attributes that must be included in the list view and use the arrow keys to move them to the **Selected** section.
4. Click **OK**.

Task Manager Example: Customizing the List View for Schedule Tasks

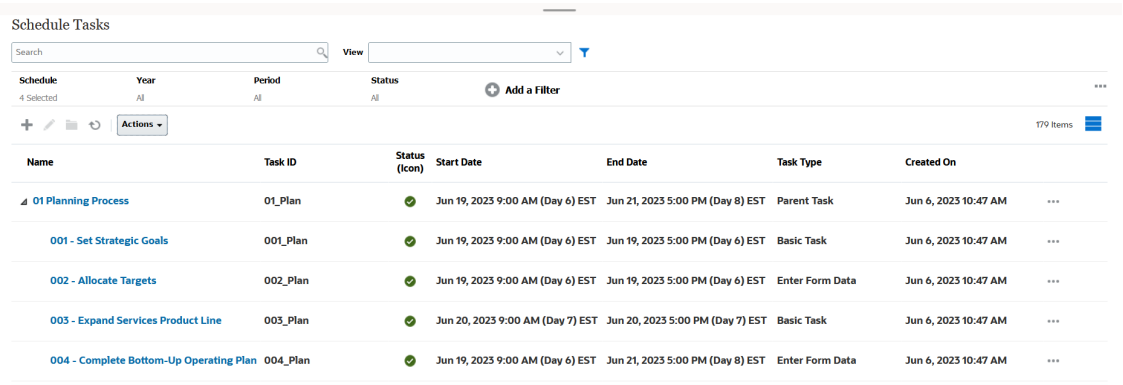
Assume that you want to see more information such as when was the task created.

Use the following steps:

1. From **Home**, click **Tasks** and then click **Schedule Tasks**.
2. From the **Actions** drop-down, click **Select Columns**.

   The Select Columns dialog appears. Use this to add additional columns to view information about the tasks.
3. In **Available**, scroll down the list, select **Created On**, and use the arrow keys to move it to **Selected** on the right side.
4. Click **OK**.

   The Schedule Tasks page displays the **Created On** column for the tasks.



Working with Pivot Views

Use pivot views to summarize your data.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Related Topics

- About Pivot Views
- Customizing a Pivot View
- Example: Viewing Organizational Units Based on Task Status

About Pivot Views

A pivot view enables you to create summaries of the attribute data.

There is a default layout for each object that supports pivot views. However, you can customize the pivot view based on your requirement.

Click each summary value displayed in the pivot view to drill down and view the records that comprise the total.

Customizing a Pivot View

You can customize a pivot view to summarize the data based on your business requirement. Data can be grouped by a maximum of two attributes.

To customize a pivot view:

1. Display the pivot view for the required object.
2. Click the **Edit** icon at the top-right.

   The Edit Pivot dialog appears. It contains three tabs: **Properties**, **Layout**, and **Columns**.
3. In the **Properties** tab, enter the basic view properties. See Setting Pivot View Properties.
4. In the **Layout** tab, specify the details of how data must be grouped. See Setting Pivot View Layout.
5. In the **Columns** tab, enter the data labels and the sorting order for the data. See Specifying Pivot View Columns.
6. Click **OK**.

> **Note**
>
> If you drill down into a record, update one or more details, save it, and return to the pivot view, these changes are not visible. You must refresh the pivot view to see the latest updates.

Setting Pivot View Properties

Use the **Properties** tab of the Edit Pivot dialog to set the basic properties of a pivot view.

To set the pivot view properties:

1. In **Background**, select one of the following:
   - **No Fill**: No background color is used
   - **Solid**: Select the color to be used as the background color. You can optionally select a color in **Gradient**.
2. In **Header Color** and **Header Size**, select a color and font size for the pivot view header.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. In **Data Color** and **Data Size**, select a color and font size for the data displayed in the pivot view.
4. Select **Missing Values as Zero** to display a zero when data values are missing.
This includes missing data values and values that are missing because of an applied filter.
5. In **Period**, select one of the following:
    - **Selection**: Use the selection from the Period filter as-is.
    - **Latest in Selection**: Use the latest Period chronologically in the filter.
    - **Prior from Selection**: Create a new filter of the prior X periods based on the latest period in the filter.

      The Period selection allows you to fine tune the list of Periods for the particular pivot view. This can be done so that pivot views sharing the same global period filter can display different amounts of data, or to make it easier to show a distribution of period data based on a single local period selection.

Setting Pivot View Layout

The **Layout** tab specifies how data in the pivot view must be summarized. Filters can also be applied on the data that is considered for summarizing.

Specify the following layout details:

1. In the **X Axis** section, specify details about the primary grouping to use in the view.
    - In **Type**, select one of the following: None, Attribute, Date, User, Yes/No, or True/False.

      If you set the **Type** to Attribute, in **Attribute 1**, select the attribute that must be used to group data. For example, Organizational Unit.

      Optionally, you can create another subgroup, within the **Attribute 1** group, by selecting another attribute in **Attribute 2**.
    - In **Sort**, select the attribute and the order on which data must be sorted.
    - Select **Swap Rows and Columns** to swap the display of rows and columns in the grid.
2. In the **Legend (Series)** section, click the **Add** icon to create one row for each attribute for which you want to summarize data. This summary is created within the specified **Type**. There must be at least one row in this section.

   For each row, specify the following details:
    - In **Value**, select the attribute whose data must be summarized. For example, Approvers (Count).
    - In **Aggregation**, select the aggregation operation to be performed on the summarized data. It will default to the aggregation method specified on the attribute that you selected. The supported aggregation methods are Average, Count, Maximum, Minimum, and Sum.

      > **Note**
      >
      > If you select a non-numeric attribute in **Value**, the only **Aggregation** available is **Count**.

    - In **Categories**, optionally select the attribute by which the data is summarized, within the **Value** group.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- In **Group By**, select an attribute from the list. This is applicable only when **Type** is set to a value other than Attribute.
- Click **Filter** to apply a filter on the data that is included in the pivot view. This filter is first applied on the data and then the data is summarized using the specified criteria.

  By default, the first clause in a filter condition is displayed as the label for this filter.

3. Click **OK**.

Considerations When Using Aggregation

For Task Manager example, see Example: Viewing Organizational Units Based on Task Status

Specifying Pivot View Columns

Use the **Columns** tab to customize the labels and order of data displayed in the pivot view.

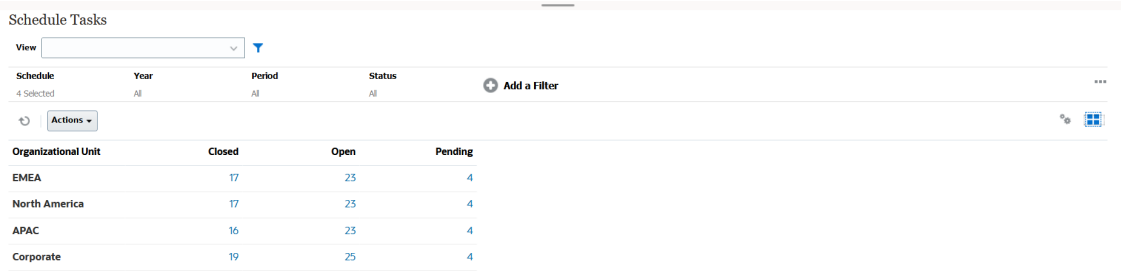
Each row in this tab will be displayed as a column in the pivot view. The number of rows is determined by what is specified in **X Axis** and **Categories** in the **Layout** tab.

To customize the display of the pivot view:

- In **Label**, enter the label that must be displayed for this column.
- Select **Sort** to sort the pivot data by this column. Click the icon next to this option to sort in ascending or descending order.
- Use the arrows on the right to change the order in which the columns are displayed. This list of columns are displayed from left to right in the pivot view.

Example: Viewing Organizational Units Based on Task Status

This example describes how to create a pivot view that groups organizational units based on the status of the tasks. The following image displays the Pivot view.



Use the following steps to create the above Pivot view:

1. In the Home page, click **Tasks** to display the Schedule Tasks page.
2. Click the icon and select **Pivot View**.
3. Click the **Edit** icon to configure the Pivot view as per your requirement.
4. On the **Properties** tab:
   - **Background**: No Fill
   - **Header Size**: 13
   - **Data Size**: 14
   - **Period**: Selection
5. On the **Layout** tab:

Copyright © 2022, 2026, Oracle and/or its affiliates.

- In **X-Axis**:
  - In **Type**, select **Attribute**.
  - In **Attribute1**, select **Organizational Unit**.
  - In **Sort**, select **Organizational Unit** from the first drop-down list and then select **Descending** from the second drop-down list.
- In **Legend (Series)**:
  - In **Value**, select **Task**.
  - In **Categories**, select **Status**.

6. On the **Columns** tab, select the displayed labels.
7. Click **OK**.

Working with Chart Views

Chart views enable you to visualize your data.

Related Topics

- Overview of Chart Views
- Creating Chart Views
- Example: Creating a Chart to Display Task Status by Month
- Example: Creating a Chart to Display Plan versus Actual End Date
- Example: Creating a Chart to Display Task Execution by Organization Unit

Overview of Chart Views

Related Topics

- About Chart Views
- About Chart View Properties
- Types of Chart Views

About Chart Views

A chart provides a visual representation of data.

Charts are generated dynamically based on your business process data. Click an area within a chart, for example, an area within a pie chart, to drill-down and view details about the information summarized by that area. The chart and pivot view layouts are linked, allowing you to quickly switch between the chart or pivot view.

When you configure settings for a chart view, the system remembers these settings. If you close the chart view, perform other actions in your business process, and then return to the chart view, the chart is displayed using the previous settings.

Multiple types of chart views are available to provide a graphical representation of your tasks. See Types of Chart Views.

About Chart View Properties

Chart properties include basic details such as the type of chart, chart orientation, and background. The properties that you can set for a chart depend on the type of chart.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Chart Property	Applicable Chart Types	Description
Type	All	Type of chart See Types of Chart Views.
Background	Area, Bar, Column, Combination, Doughnut, Line, Pie, Tile	Background color used in chart This color applies to the entire chart area, from border to border. You can choose not to use a background color, in which case a white background is used for the chart. If you specify a background color, an optional gradient also can be specified.
Label Position	Area, Bar, Column, Combination, Line	Location of the data labels in relation to the elements The options available depend on the type of chart. For example, bar charts have the following label options: No Label, Center, Inside Edge, or Outside Edge.
Bar Label Position	Combination	Location of the data labels in the bar chart
Grid Lines	Area, Bar, Column, Combination, Line	Grid lines used to divide the chart area
Orientation	Area, Bar, Column	Orientation of the chart - Vertical or Horizontal
Missing Values as Zero	Area, Combination, Line, Tile	Displays a zero (instead of a blank) when the data for a particular element is missing When you select this option, all missing values are displayed as zero. This includes missing data values and values that are missing because of an applied filter.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Chart Property	Applicable Chart Types	Description
Dual-Y Axis	Area, Bar, Column, Combination, Line	Appears on the opposite side of the chart from the primary Y-axis The scale of the secondary Y-axis reflects the values for the associated data series. While the secondary Y-axis can be used with any line and bar chart type, it is more commonly used with the combination chart type, which helps to distinguish the data series that are plotted on the secondary Y-axis. For example, select **Bar** for the primary Y-axis and **Line** for the secondary Y-axis. When the data values in a chart vary widely from data series to data series, or when you have mixed types of data (for example, currency and percentages), you can plot one or more data series on a secondary (vertical) Y axis. You can also plot the secondary Y-axis as a split dual chart, where the secondary Y-axis appears with its data series below the original chart. In this case you can use any bar or line chart type.
Line Weight	Combination, Line	Width of the line in the chart The default is 5 pixels.
Bar Label Position	Combination	Position of the label for the data set displayed as a bar chart
Display as Percentage	Doughnut, Pie	Values for each data set displayed in terms of percentages (instead of as a numerical value)
3D chart	Pie, Tile	3-dimensional chart format

Types of Chart Views

You can create the following types of chart views:

- Area

  Displays a shaded area to represent each data set
- Bar

  Displays a graphical summary of multiple data values for comparison purposes

  Bar charts can be plotted vertically or horizontally
- Column

Copyright © 2022, 2026, Oracle and/or its affiliates.

Displays stacked bars that represent different data sets on top of each other

The height of the resulting bar shows the combined result of the data sets.

- Combination

  Provides a visualization that lets you merge into one chart any combination of bar, line, and area charts.

  Use this type when you have two different sets of data that are plotted on the y-axis. You can add a secondary Y-axis on the opposite side from the primary Y-axis. Adding a secondary Y-axis lets you display the scale for one measure that doesn't scale appropriately with the other measures on the chart; for example, showing a percentage measure and a currency measure on the same chart.

- Doughnut

  Displays a circular graph which is divided into segments to compare data sets to one another

  The blank center displays the sum of all data sets.

- Line

  Enables users to visualize a trend in data over intervals of time

- Pie

  Displays a circular graph which is divided into slices to compare data sets with one another

- Tile

  Enables users to select specific values from a data set, to display in separate tiles

  It emphasis a small number of data points or an individual data point.

The default chart view is a Bar chart. You can customize your chart display and change the default chart view.

Creating Chart Views

Create charts to portray your application's data graphically.

To create a chart view:

1. Display the chart view for the required object.
2. From the **View Selector** at the top-right of the page, select **Chart View**.

   If this is the first time you're accessing the chart view, the default chart view layout is displayed.
3. Click **Edit** at the top-right to display the Edit Chart dialog. It contains three tabs: **Properties**, **Layout**, and **Legend**.
4. In the **Properties** tab, specify the required chart properties, as described in About Chart View Properties.
5. Enter the information required to create the chart, as described in the following topics:
   - Setting the Chart Layout
   - Setting the Chart Axis
   - Setting the Chart Legend
6. Click **OK** to save the chart definition and then display the chart.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Click any area within the chart view to drill-down and display all the records that are aggregated by the selected area. The records are displayed in the Details dialog. You can click any link within this dialog to access the details of that individual record.

> **Note**
>
> If you drill down into an individual record, update one or more details, save it, and return to the chart view, these changes are not visible. You must refresh the chart view to see the latest updates.

Setting the Chart Layout

Use the **Layout** tab to specify the data sets that must be plotted on the x-axis and y-axis of the chart.

To set the chart layout:

1. Open the **Layout** tab of the Edit Chart dialog.
2. In the **X Axis** section, specify the data that must be plotted on the x-axis of the chart.
   - In **Type**, select the type of data. Options include None, Attribute, Date, User, Yes/No, and True/False.
   - If you set the **Type** to **Attribute**, you must specify at least one attribute that is plotted on the x-axis. You can specify a maximum of two attributes.

     In **Attribute 1**, select the first attribute to plot on the x-axis. Optionally, in **Attribute 2**, select the second attribute to plotted on the X axis. The various combinations of Attribute 1 and Attribute 2 values are plotted.
   - In **Sort**, select **Ascending** or **Descending** to sort your X axis data.
3. In the **Legend (Series)** section, specify one or more data sets that must be plotted along the Y axis of the chart view.

   For example, if you define three data sets, then three values are plotted on the y-axis.

   Within each data set, you can perform aggregation operations or group data. Optionally, you can apply a filter to restrict the data that is selected when computing the aggregation on the data set.

   For each data set in this section, specify the following:
   - In **Value**, select the value that must be plotted. For example, Amount or Status.
   - In **Aggregation**, select the aggregation that must be performed on the selected value. The supported aggregation methods are Average, Count, Maximum, Minimum, and Sum. See "Considerations When Using Aggregation" at the end of this topic.
   - (Optional) In **Categories**, select the attribute that must be used to categorize data within the data set. Use Categories to break your graph into more smaller details.
   - (Optional) In **Group By**, select the attribute by which Date type data is grouped.

     If **Group By** is set to a date, a new column **Date Aggregation** is displayed.
   - (Optional) In **Filter**, click the Filter icon to add a filter condition. This condition further refines the data shown for the data set within the chart view. It is applied before the data is included in the chart view. For example, if your **Value** is set to Tasks, you can create a filter to only plot tasks with a status of Open.

     By default, the first clause in a filter condition is displayed as the label for this filter.

Copyright © 2022, 2026, Oracle and/or its affiliates.

4. Click **OK** to save the chart view settings.

Examples

For Task Manager, see:

- Example: Creating a Chart to Display Task Status by Month
- Example: Creating a Chart to Display Plan versus Actual End Date
- Example: Creating a Chart to Display Task Execution by Organization Unit

Setting the Chart Axis

Chart Axis properties affect the visual display of the chart's axis labels. You can create a title and label for the X axis, and the primary and secondary Y axis of the chart. You can also edit the text and number format of the Y axis, and define a custom range for both Y axes.

> **Note**
>
> This tab doesn't display for chart views with **Type** set to Doughnut, Pie, or Tile.

To define the chart axis:

1. Open the **Axis** tab of the Edit Chart dialog.
2. Select **X Axis** and specify the following (only for chart views with **Type** set to Date in the **Layout** tab):
   - **Interval:** Select **Auto**, **Daily**, **Monthly**, or **Yearly**.
   - **Maximum:** Select **Auto** or **Fixed**. For **Fixed**, select a date.
   - **Minimum:** Select **Auto** or **Fixed**. For **Fixed**, select a date.
3. Click **Y Axis** and specify **Auto** or **Fixed** for the following: **Minimum**, **Maximum**, **Major Unit**, and **Minor Unit.**
4. If **Dual Y Axis** is selected for the chart in the **Properties** tab, click **Dual-Y Axis** and specify the **Minimum**, **Maximum**, **Major Unit**, and **Minor Unit**.
5. Click **OK** to save the chart view settings.

Setting the Chart Legend

Legend properties affect the visual display of the chart's legend.

You can change the position of the legend, as well as display a title for the legend, change the background and border colors, and edit the font and format of chart labels.

For a Combination chart, the **Legend** tab contains one new column named **Type**. You can select the type for each configured legend (series). For example, **Type** = **Bar** for one legend and **Type** = **Line** for the other.

To define the chart legend:

1. Open the **Legend** tab of the Edit Chart dialog.
2. In **Legend Position**, select the position of the data labels in relation to the elements in a chart.

   The available options are **No Legend**, **Left**, **Right**, **Top**, or **Bottom**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

3. In **Palette**, select the color palette used when displaying the chart view.
4. In the **Series** table, one row is displayed for each legend specified in the **Layout** tab.

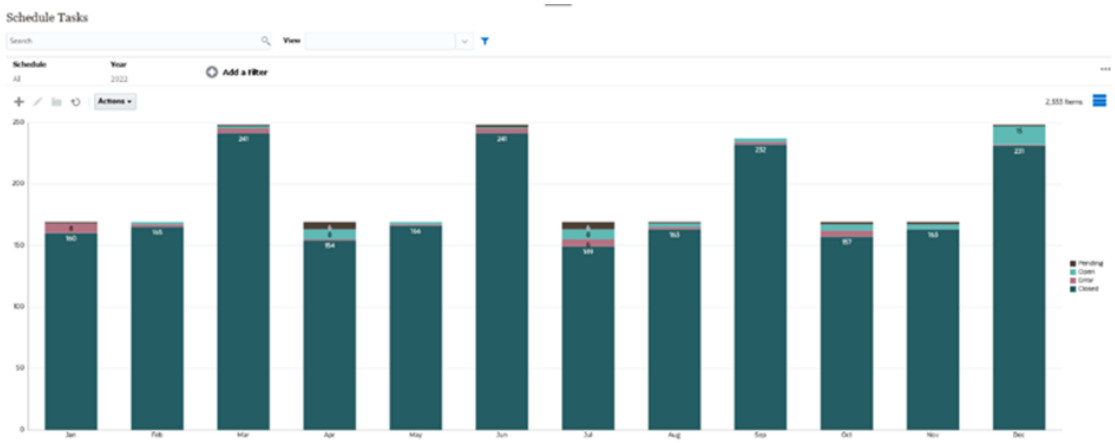
   For each data set:

   - In the **Label**, enter the label that must be displayed for this data series in the chart.
   - Select **Dual-Y** for the data series that must be displayed on the secondary Y axis.
5. Click **OK** to save the chart view settings.

Example: Creating a Chart to Display Task Status by Month

This example creates a chart which summarizes the completion status of all tasks by period. This can help identify if there are certain tasks which are not completed period over period.

The generated chart is displayed below. Click any area within the chart to drill down and view of the individual records that comprise that aggregated area.

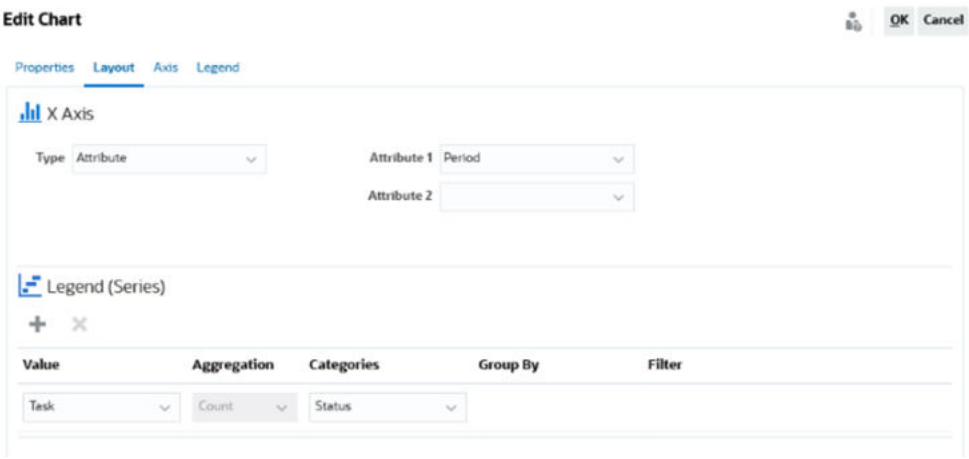


To create this chart:

1. From the Home page, click **Tasks**. Click **Schedule Tasks** to display the Task List.
2. From the **View Selector** at the top-right of the page, select **Chart View**.

   The Chart view appears, with a default chart displayed.
3. Click **Edit** at the top-right to display the Edit Chart dialog.
4. In the Properties tab, specify the following:
   - In Type, select **Column**.
   - Deselect **Grid Lines**.
   - In Period, select **Selection**.
5. In the **Layout** tab, specify the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.



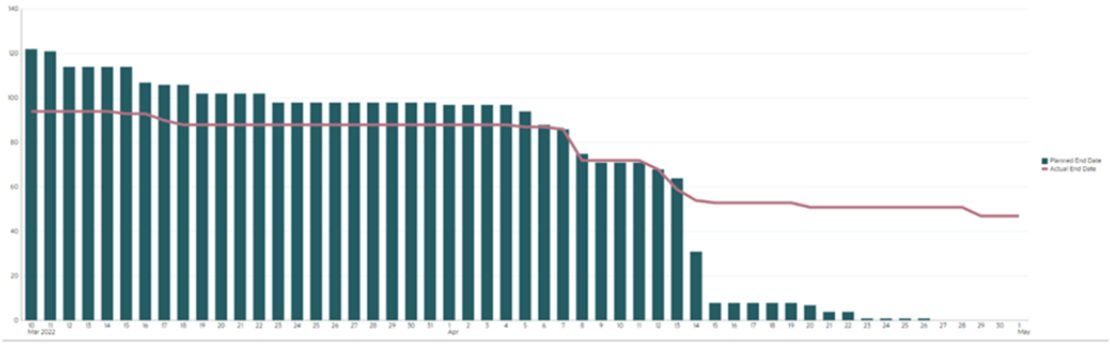
- In the **X-Axis** section:
  - In **Type**, select **Attribute**.
  - In **Attribute1**, select **Period**.
- In the **Legend (Series)** section:
  - In **Value**, select **Task**.
  - In **Categories**, select **Status**.

6. In the **Axis** tab, leave the default settings as is.
7. In the **Legend** tab, specify the following:
   - In **Legend Position**, select **Right**.
   - In **Palette**, select **Redwood**.
8. Click **OK**.

Example: Creating a Chart to Display Plan versus Actual End Date

This example visualizes Tasks planned vs actual completion over time - allowing you to see if your schedules are running ahead or behind schedule. The chart shows all of the tasks end dates that fall on or after a certain date. This will show a large number of tasks within the beginning of the schedule and gradually go down until the final task in the schedule.

The generated chart is displayed below. Click any area within the chart to drill down and view of the individual records that comprise that aggregated area.

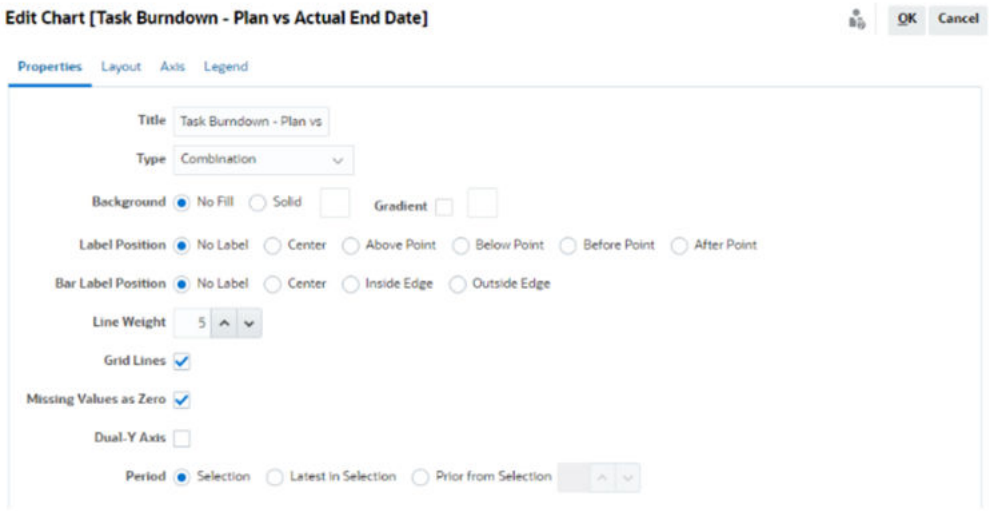


To create this chart:

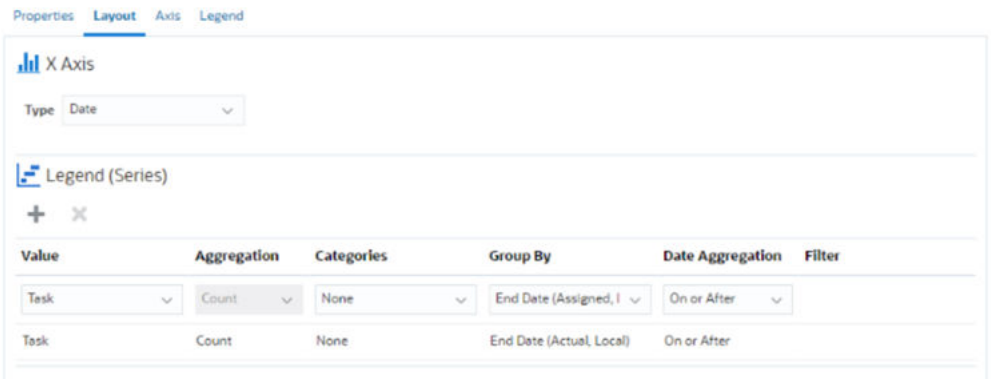
1. From the Home page, click **Tasks**, and then click **Schedule Tasks** to display the Task List.

Copyright © 2022, 2026, Oracle and/or its affiliates.

2. From the **View Selector** at the top-right of the page, select **Chart View**.
   The Chart view appears with a default chart displayed.
3. Click the **Edit** icon at the top-right to display the Edit Chart dialog.
4. In the **Properties** tab, specify the following:



   - In **Type**, select **Combination**.
   - In **Background**, select **No Fill.**
   - In **Label Position**, select **No Label**.
   - In **Bar Label Position**, select **No Label**.
   - Select **Line Weight** as **5**.
   - Select **Grid Lines**.
   - Deselect **Dual Y Axis**.
   - In **Period**, select **Selection**.
5. In the **Layout** tab, specify the following:



   - In the **X-Axis** section, for **Type**, select **Date**.
   - In the **Legend (Series)** section, enter 2 values:
     For the first entry:
     - In **Value**, select **Task**.
     - In **Categories**, select **None**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- In **Group By**, select **End Date (Assigned)**
- In **Date Aggregation**, select **On or After**.

For the second entry:

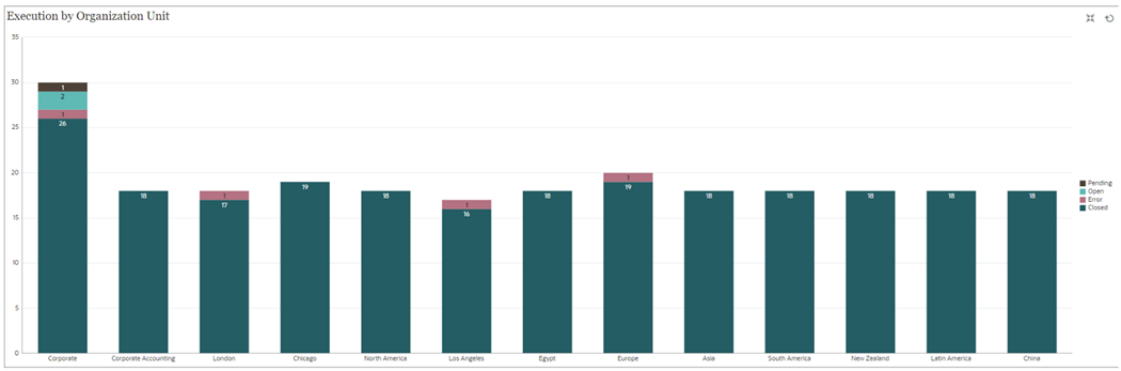
- In **Value**, select **Task**.
- In **Categories**, select **None**.
- In **Group By**, select **End Date (Actual, Local)**
- In **Date Aggregation**, select **On or After**.

6. In the **Axis** tab, leave the default settings as is.
7. In the **Legend** tab, specify the following:
   - In **Legend Position**, select **Right**.
   - In **Palette**, select **Redwood**.
8. Click **OK**.

Example: Creating a Chart to Display Task Execution by Organization Unit

This example creates a chart which shows task completion by organization unit allows you to monitor how each organization is doing completing their tasks.

The generated chart is displayed as shown. Click any area within the chart to drill down and view of the individual records that comprise that aggregated area.

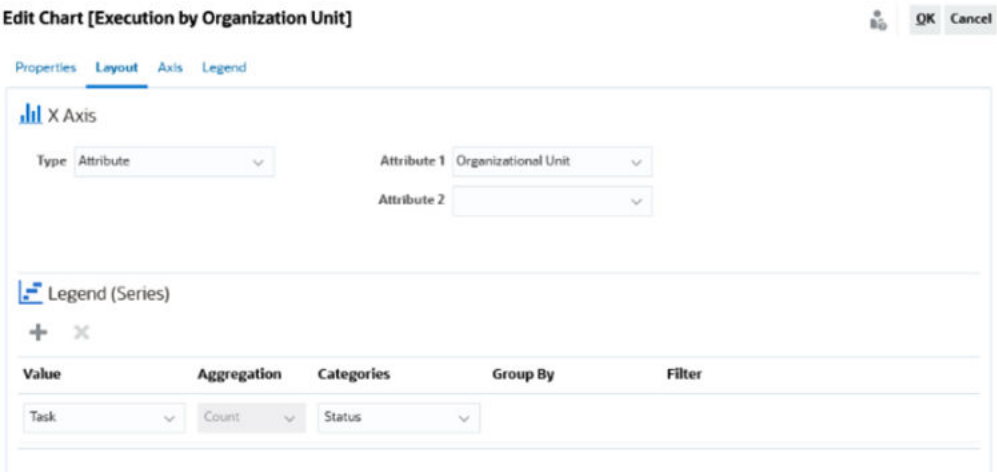


To create this chart:

1. From the Home page, click **Tasks.** Click **Schedule Tasks** to display the task list.
2. From the **View Selector** at the top-right of the page, select **Chart View**.

   The Chart view appears, with a default chart displayed.
3. Click **Edit** at the top-right to display the Edit Chart dialog.
4. In the **Properties** tab, specify the following:
   - In **Type**, select **Column**.
   - Deselect **Grid Lines**.
   - In **Period**, select **Selection**.
5. In the **Layout** tab, specify the following:

Copyright © 2022, 2026, Oracle and/or its affiliates.



- In the **X-Axis** section:
  - In **Type**, select **Attribute**.
  - In **Attribute1**, select **Organizational Unit**.
- In the **Legend (Series)** section:
  - In **Value**, select **Task**.
  - In **Categories**, select **Status**.

6. In the **Axis** tab, leave the default settings as is.
7. In the **Legend** tab, specify the following:
   - In **Legend Position**, select **Right**.
   - In **Palette**, select **Redwood**.
8. Click **OK**.

Working With Gantt Chart Views

Gantt charts displays a timeline for a schedule that graphically represents the duration of tasks and the dependencies between them. You can view the predecessor relationships between tasks. Bars represent duration, and arrows represent dependencies. You can also see the parent-child task relationships in the hierarchy.

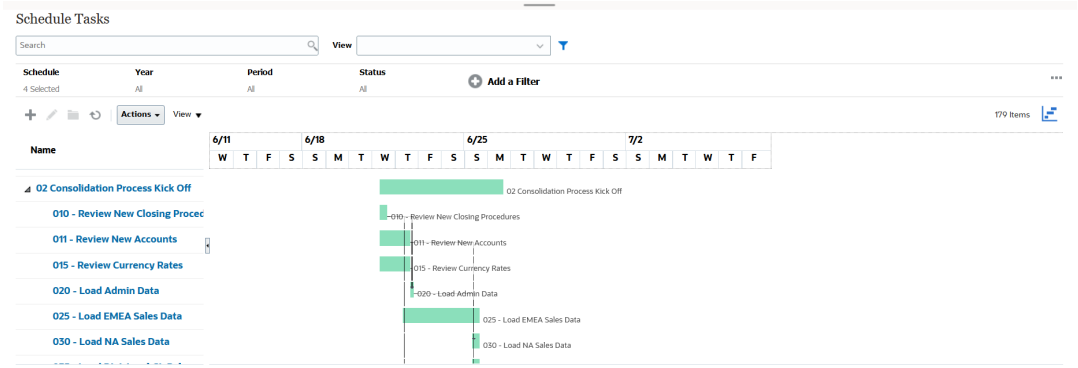
You might choose to use the Gantt Chart view when you create a template to see the predecessor relationships between the tasks, or to verify the precedence order after adding tasks to a schedule.

Gantt Chart view is available for **Scheduled Tasks**.

To view the data in a Gantt Chart:

1. On the Home page, click **Tasks**, and then click **Schedule Tasks**.
2. Click the **View Selector** icon and choose **Gantt Chart**.
   The schedule tasks data is displayed in the Gantt Chart view as shown.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Working With Calendar Views

Calendar views display all the scheduled tasks in a traditional calendar format based on month, week, or day.

The Month view displays the days in standard calendar format.

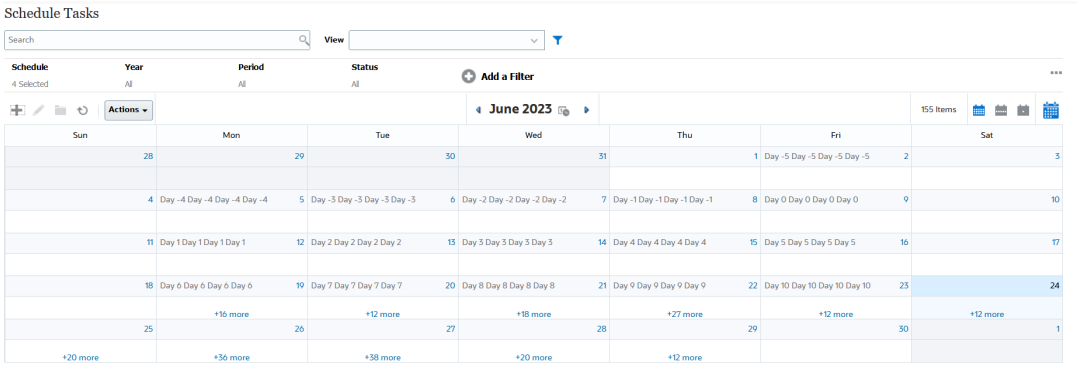
The Week view displays the tasks of the specified week. The top section displays tasks that span multiple days. The second section displays tasks that are contained within one day. The tasks are displayed vertically, spanning the hours of the day.

The Day view is focused on one 24-hour day.

To view the scheduled tasks in Calendar View:

1. On the **Home** page, click **Tasks**, and then click **Schedule Tasks**.
2. Click the **View Selector** icon and choose **Calendar View**.
   The schedule tasks data is displayed in the Calendar view. Use the calendar icons to select Month, Week, or Day. In the Calendar View, you can also see the Day Label in the Day header.

   The following image shows the scheduled tasks in a Calendar View for a month.



Saving Views

Saving a view enables you to save your view definition and settings. When you need to display data in the format set by this view, you can use the saved view, instead of again setting the required view properties.

The scope of a saved view is limited to the object on which it is based. For example, if you create a saved view with Tasks, you can't use it with journals. A saved view on a particular supplemental data set can't be used with a different data set. So, you can only use it with certain forms or within a collection.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To save a view:

1. Adjust the view to see the data you would like by adjusting filters, columns or sorting on your list. See Using the Filter Bar to Adjust Your View.
2. From **Actions**, click **Save View**.
3. In the Save View dialog, enter a Name (can enter a maximum of 80 characters) and an optional description (can enter a maximum of 255 characters).
4. Click **OK**.

You can see all the saved lists by clicking the **View** drop-down selector.

Editing Saved Views

Edit a saved list view, pivot view, or chart view to modify its name and definition.

To edit a view:

1. From the Home page, click **Application**, **Task Manager**, and then **Views**.

   A list of available views is displayed.
2. Select a particular view and click the **Edit** icon. You can also click the **...** icon for a view and select **Edit**.
3. Update the required information and click **OK**.

Setting a Default View

A Service Administrator or Power User can set a published, saved, view as the default view.

The first time a user opens a view, the default view is displayed. The system then remembers the view settings that were used. So, when you open a view subsequently, it is displayed with the settings that were used most recently.

To set a default view:

1. From the Home page, click **Application**, then **Task Manager**.
2. Click the **Views** tab to display the Views page.
3. Select the view that you want to set as default and then click the **Set Default** icon. Or, click the **Actions** menu for the view that you want to set as default and select **Set Default**.

> **Note**
>
> You can use the **Set Default** action for a published list view. The Administrator or Power User sets the view as the default so that the saved list view will not only be available to all users of that view type, but it will also be selected by default when a user opens that view type.

Working with Dashboards

Related Topics

- Dashboard Overview

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Task Overview Dashboard
- Compliance Dashboards
- Working With Operational Dashboards

Dashboard Overview

You can monitor Task Manager information using the following dashboards:

- **Task Manager Overview**
- **Compliance**

The Dashboards feature is enabled if you've access to at least one of these dashboards.

Watch the following video for an introduction to Dashboards.

Dashboards Overview

Task Overview Dashboard

The Task Manager Overview dashboard displays status for Task Manager tasks.

Task Manager Overview

To view the Task Manager Overview status:

1. On the Home page, from **Dashboards**, click **Task Overview**.
   On the Home page, click **Tasks**, then click the **Overview** tab on the left.
2. From the POV, select a **Year** and **Period**.
3. From the **Tasks** drop-down list, select a task, or select **All** to view all tasks.

   The system displays the number of **Open Tasks**, **Late**, and **On Time** tasks.

   > **Note**
   >
   > The dashboard shows Task details for schedules with an open or closed status.

4. Click on a status to drill down into the list of tasks with that status.

   From the list of tasks, if you've access rights to a task, you can click the task name to directly open and work with the task.
5. Filter the tasks by selecting **View By**, then select an option:
   - **Priority**
   - **Schedule**
   - **Task Type**
   - **Organizational Unit**
6. **Optional:** Sort the list of tasks using one of these methods:
   - **Count (Ascending)**
   - **Count (Descending)**

Copyright © 2022, 2026, Oracle and/or its affiliates.

- **Alphabetic (Ascending)**
- **Alphabetic (Descending)**
- **Attribute Order (Ascending)**
- **Attribute Order (Descending)**

Compliance Dashboards

Compliance Dashboard provides metrics on how well the company achieved their compliance objectives, distinguishing those tasks that were completed on time from those that were late, and providing a count of those that were approved or rejected. You can view user performance metrics based on user and organizational unit.

Task Manager Compliance Dashboard

To view the Task Manager Compliance dashboard:

1. On the Home page, click **Tasks**, and then click the **Compliance** tab on the left.
2. From the Point of View, select a **Year** and **Period**.
3. From the **Tasks** drop-down list, select a task, or select **All** to view all tasks.

   The pie charts display the following status for tasks: number of Completed Tasks, Percentage of tasks Prepared On Time, Percentage of tasks Approved On Time, number of Rejected Tasks, and number of Alerts.
4. Click on one of the status charts to view the list of tasks with that status.

   From the list of tasks, if you've access rights to a task, you can click the task name to directly open and work with the task.
5. Filter the tasks by selecting **View By**, then select an option:
   - **User**: You can click on a user name to view User Details.
   - **Organizational Unit**
6. From **Performance**, select task performance metrics:
   - **Preparation**
   - **Approval**
7. **Optional:** To change the order of tasks listed, from **Order By**, select:
   - **User**
   - **On Time**
   - **Late**
   - **Rejections**

Working With Operational Dashboards

Related Topics

- Overview of Operational Dashboards
- Viewing and Opening Dashboards

Copyright © 2022, 2026, Oracle and/or its affiliates.

Overview of Operational Dashboards

Dashboards provide enhanced reporting capabilities. They enable users to chart, evaluate, and (in some cases) even change key business data.

About Operational Dashboards

Operational dashboards provide greater visibility into your business process.

Each dashboard can have a maximum of four views. This includes list views, pivot views, or chart views. You can open a maximum of 10 dashboards at a time. Service Administrators, or any user who is granted either the Operational Dashboards - Manage role or Dashboard - Manage role can create and edit dashboards. The dashboard creator can also control access to the dashboard by granting permissions to one or more users, groups, or teams. Users who have been granted access to a dashboard can run the dashboard and view its data. The access only allows a user to view the dashboard. It doesn't extend their access to the underlying data. Therefore, a user can only view records based on their own access within the service.

Features of Operational Dashboards

Dashboards provide the following features:

- Visualize data interactively with a wide variety of chart types
- Obtain both high-level and detailed insights into the performance of your business processes
- Create filters at the dashboard level and at the individual view level
  Filters created at the dashboard level are applied to all the views within the dashboard. After this, filters defined at the view level (if any) are applied.
- Control access to viewing dashboards

Viewing and Opening Dashboards

Viewing Existing Dashboards

To view the dashboards, from **Home**, click **Tasks**, then **Operational Dashboards** .

The Operational Dashboards page appears with the list of existing dashboards.

Opening a Dashboard

To open a dashboard:

1. Access the Operational Dashboards page. This page displays the list of existing operational dashboards.
2. (Optional) Use the **Search** box to search for a particular dashboard.
3. Click the name of the dashboard that must be opened.

   The dashboard opens within a new dynamic tab next to the Operational Dashboards tab.

You can perform the following actions on the dashboard:

- Click any area or total, in any view, to drill down into the individual records that comprise that area or total.

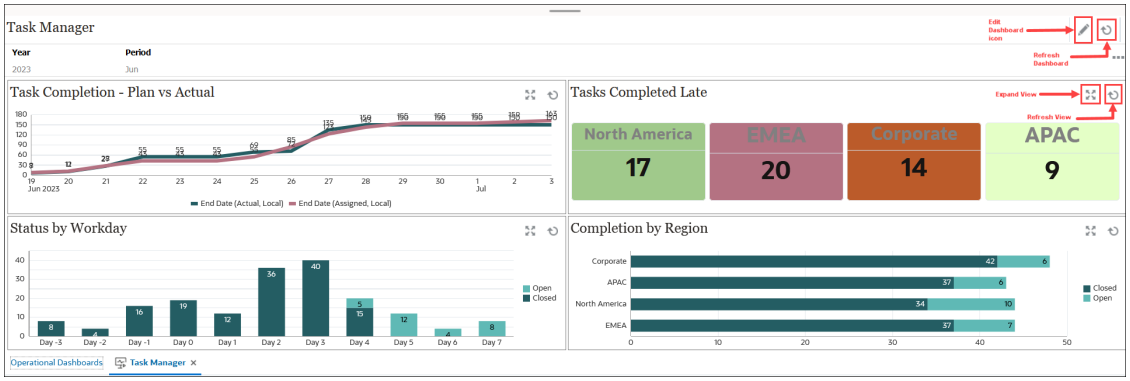
Copyright © 2022, 2026, Oracle and/or its affiliates.

- Edit the dashboard settings using the icon.
- Refresh all the views in the dashboard using the icon (at the dashboard level).

On each view in the dashboard, you can:

- Refresh a view in the dashboard using the icon (at the dashboard level).
- Expand or collapse a view in the dashboard using the icon.

The following image shows the options available when you open a dashboard.



Copyright © 2022, 2026, Oracle and/or its affiliates.

Part X
Appendices

Related Topics

- Best Practices
- Frequently Asked Questions (FAQ) about Enterprise Profitability and Cost Management
- Using the Member Selector
- Naming and Character Restrictions
- Migrating from Profitability and Cost Management to Enterprise Profitability and Cost Management

Copyright © 2022, 2026, Oracle and/or its affiliates.

30

Best Practices

Best practices describe effective ways to use a feature. The following table provides links to the best practices discussed in this guide.

Category	Best Practice For	See this Section
Using Profitability and Cost Management (PCM) Agent	Forming user requests	User Request Best Practices
Creating and Managing Applications	Designing an application	Application Design Best Practices
Managing Dimensions	Designing dimensions	Best Practices When Designing Dimensions
Creating and Managing Rules	Creating Rule Sets	Rule Set Design Best Practices
Creating Allocation Rules	Defining an allocation rule source and destination	Best Practices for Allocation Rule Source and Destination
	Defining an allocation rule driver	Best Practices for Allocation Rule Drivers
	Defining an allocation rule offset	Best Practices for Allocation Rule Offsets
Creating Custom Rules	Creating a custom rule	About Creating Custom Rules
Viewing Rule Balancing Reports	Designing data forms for rule balancing	Best Practices for Designing Rule Balancing Data Forms
Calculation Performance	Altering calculation performance characteristics and behavior in certain special cases	Preferences Related to Calculation Performance
Troubleshooting Database Refresh Issues	Optimizing ASO cubes	Optimizing Aggregate Storage Option Cubes
	Improving cube performance	Improving Cube Performance

Copyright © 2022, 2026, Oracle and/or its affiliates.

31

Frequently Asked Questions (FAQ) about Enterprise Profitability and Cost Management

This FAQ provides links to resources for frequently asked questions about tasks in Enterprise Profitability and Cost Management.

> **Note**
>
> For frequently asked questions covering various topics related to Oracle Fusion Cloud Enterprise Performance Management, see Getting Started with Oracle Enterprise Performance Management Cloud for Administrators.

Frequently Asked Questions

- What are the differences between Enterprise Profitability and Cost Management and Profitability and Cost Management?
- How do you enable Non-Empty Tuples (NET) in Enterprise Profitability and Cost Management?

What are the differences between Enterprise Profitability and Cost Management and Profitability and Cost Management?

Review the key differences between Enterprise Profitability and Cost Management and Profitability and Cost Management in the tutorial titled Migrating from Profitability and Cost Management to Enterprise Profitability and Cost Management. Once you open the tutorial, navigate to Task 1: Comparing Profitability and Cost Management to Enterprise Profitability and Cost Management.

How do you enable Non-Empty Tuples (NET) in Enterprise Profitability and Cost Management?

To enable NET in Enterprise Profitability and Cost Management:

1. Ask Support to file a status 60 bug with the development team for the request; include "NET" in the bug subject.
2. Development generates a UUID key and enters it in the bug. Use this key in a substitution variable that you create to enable NET.
3. Create a substitution variable:
   a. Select **Tools**, then **Variables**, and click the **Substitution Variables** tab.
   b. Click + to create a new substitution variable, and enter the following information:
      - **Cube**: Leave the cube at the default value of **All Cubes**.
      - **Name**: Enter **EPCM_CALC_NONEMPTY_TUPLE** as the variable name.
      - **Value**: Enter the UUID key supplied by development as the variable value.

        Here's the sample UUID key: `4fdb37ee-764c-3627-9bf1-1abe2356ca9e`

Copyright © 2022, 2026, Oracle and/or its affiliates.

c. Click **Save**.

4. Repeat Step 3 on each pod where you want to enable NET.

Copyright © 2022, 2026, Oracle and/or its affiliates.

32

Using the Member Selector

Related Topics

- About Selecting Members
- Selecting a Dimension
- Defining Member Display Options
- Searching for Members
- Filtering Which Members Are Displayed
- Making Member Selections
- Selecting Members

About Selecting Members

You select members in the **Select Members** dialog box. The options in the dialog box may differ slightly depending on the feature for which you are selecting members.

You can select members to use with the following features:

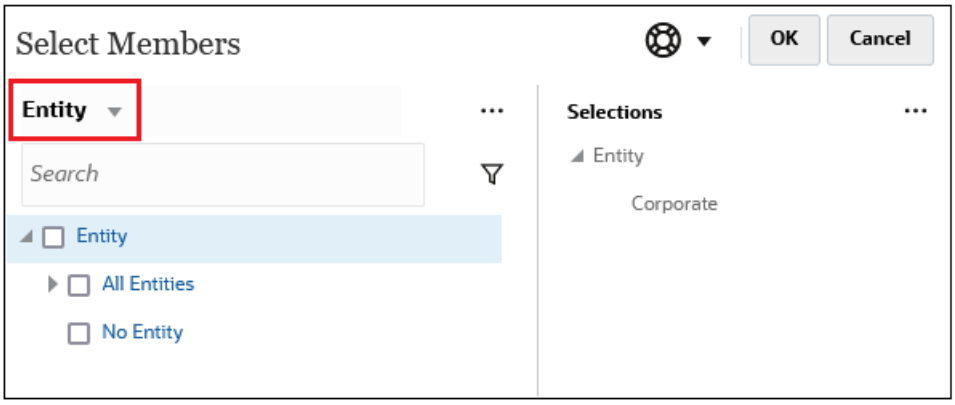
- **Models:** Use member selection to specify default members in a model context.
- **Rule Sets:** Use member selection to specify default members in a rule set context.
- **Allocation Rules:** Use member selection to define the intersections for the allocation source and destination, driver, and allocation offset.
- **Custom Rules:** Use member selection to define the target members for which to perform a calculation in a custom rule.
- **Forms 2.0:** Use member selection to define the rows, columns, and the point of view to use in a form, and to select members for business rules run-time prompts.
- **Dashboards 2.0:** Use member selection to define the Global or Local POV, and to select members for business rules run-time prompts.
- **Ad hoc grids:** Use member selection to define the POV, rows, and columns, and to set the user variables, substitution variables, and attributes in an ad hoc grid.

> **Note**
>
> Forms 1.0 and Dashoards 1.0 use a different member selector. See Selecting Members.

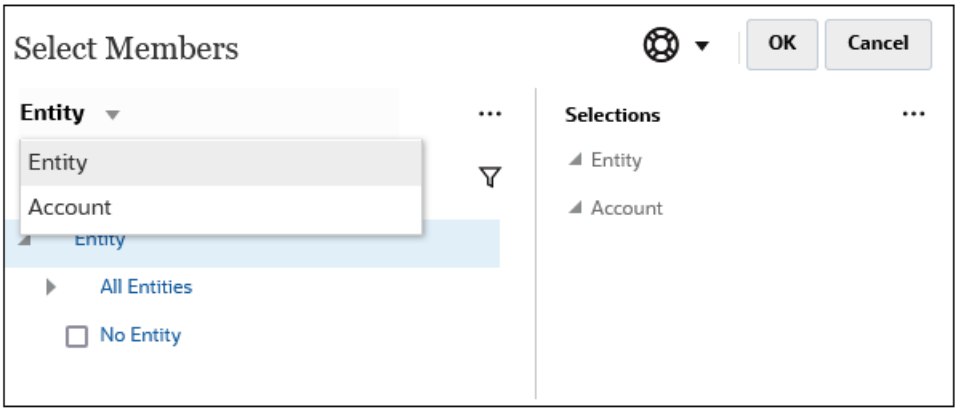
Selecting a Dimension

The dimension for which you are selecting a member is displayed at the top of the **Select Members** dialog box.

Copyright © 2022, 2026, Oracle and/or its affiliates.

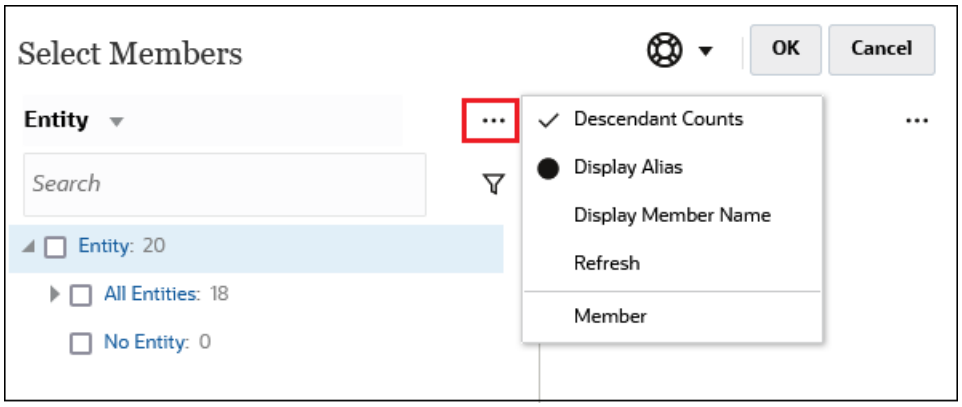


In certain situations you may be able to select a member for more than one dimension. To do this, click the drop-down to select the desired dimension. For example, if you are selecting members for both the Entity and Account dimensions, both Entity and Account are displayed in the drop-down.



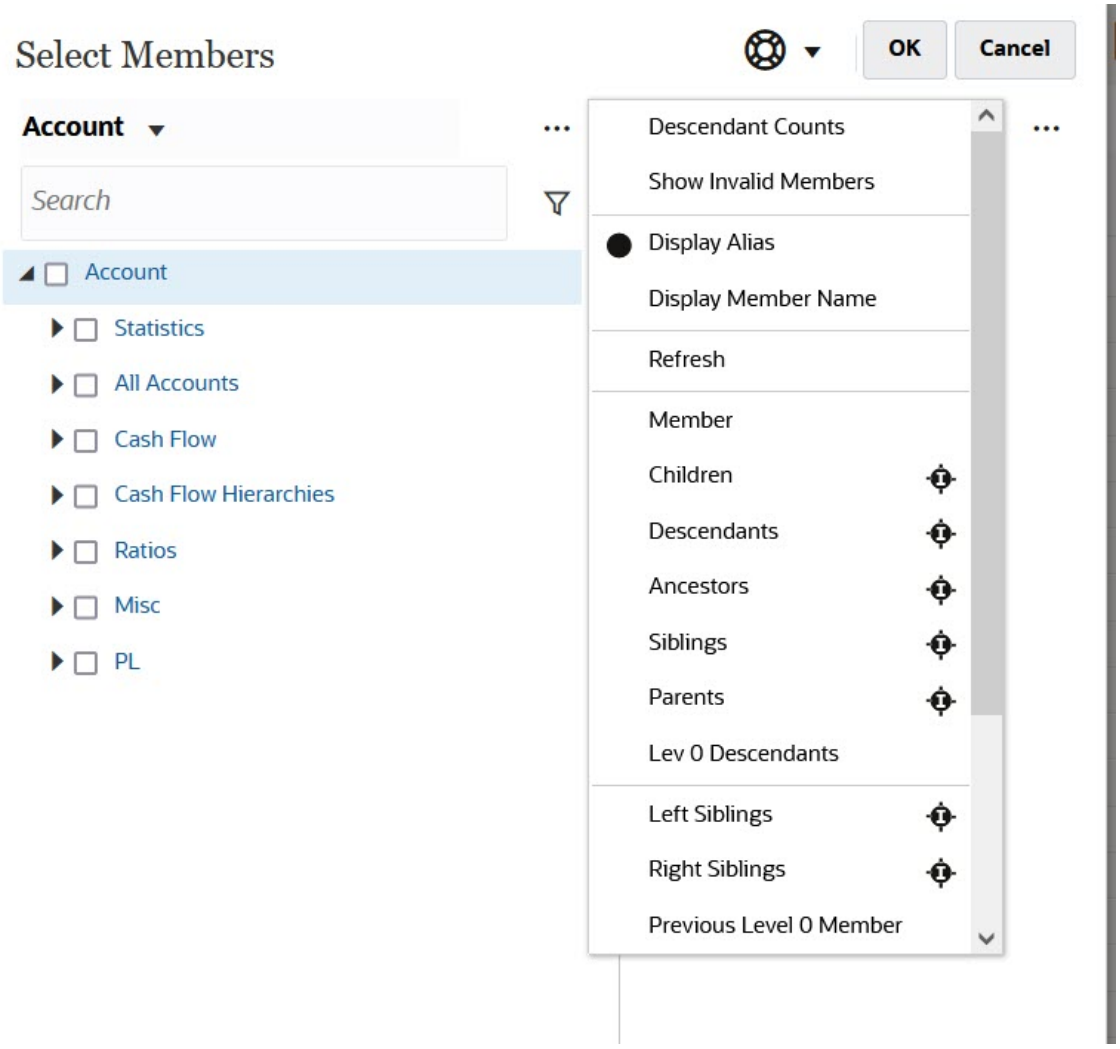
Defining Member Display Options

Click (Available Items) to select whether to display members by alias or by member name, and whether to display the number of descendants for each member.



In some places, additional options are available:

Copyright © 2022, 2026, Oracle and/or its affiliates.



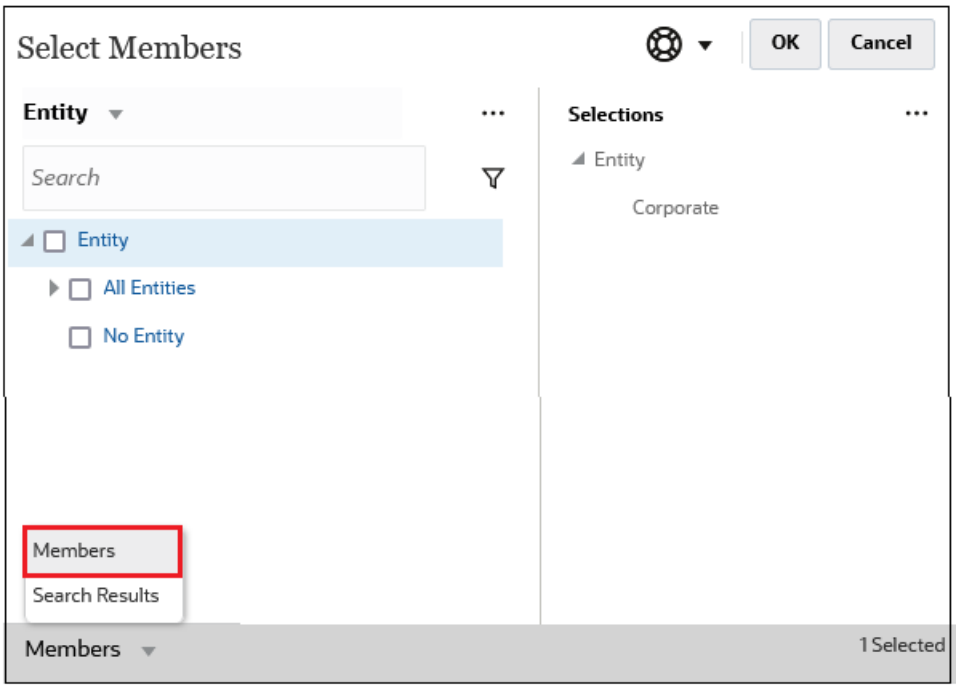
You have the option to **Show Invalid Members**.

You can also show and select members using member relationships. When you click a member relationship option in the **Available Items** menu, the member or members are moved to the **Selections** pane. For more information about member relationships, see Member Relationships.

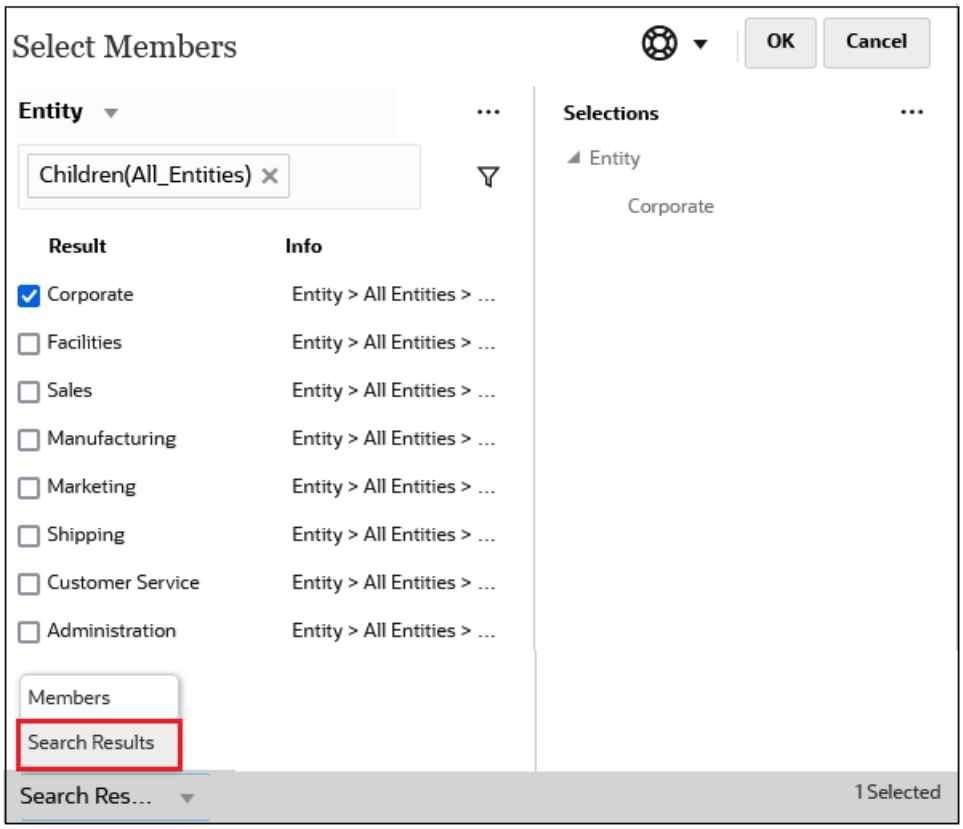
To toggle the display between the hierarchy view and the results of any search or filters, select **Members** or **Search Results** at the bottom left of the screen.

Select Members Dialog Box with the Hierarchy View Displayed

Copyright © 2022, 2026, Oracle and/or its affiliates.



Select Members Dialog Box with Search Results Displayed



In some places, you also have the option to toggle the display to show:

- User Variables
- Substitution Variables

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Attributes

> **Tip**
>
> You can drag the splitter bar between the **Select Members** pane and the **Selections** pane to adjust how the dialog box displays.

Searching for Members

You can search for members in the **Search** field. When searching for a member, you can search for a word, multiple words, or wildcard characters.

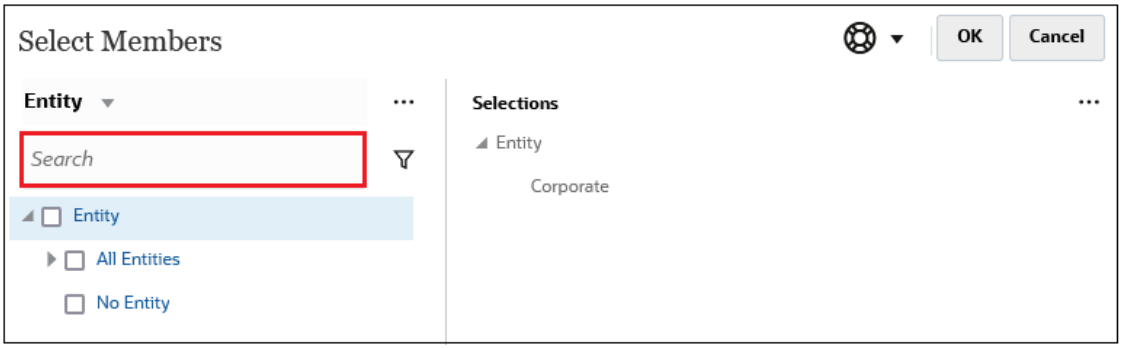
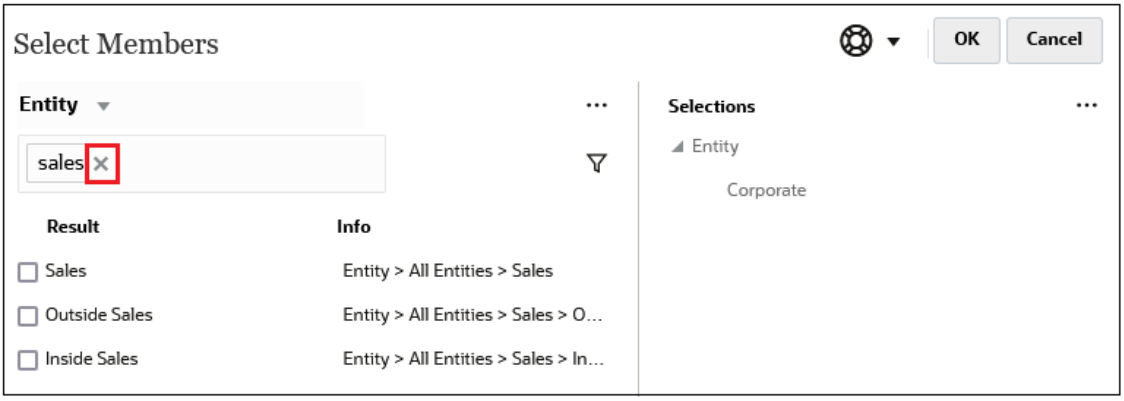


Table 32-1 Valid Wildcard Characters

Wildcard	Description
?	Match any single character
*	Match zero or multiple characters. For example, enter "sale*" to find "Sales" and "Sale" because * includes zero or more characters after the word "sale." The default search uses the * wildcard. For example, entering "cash" searches for "*cash*" and returns "Restricted Cash", "Cash Equivalents", "Cash", and "Noncash Expenses" because the word "cash" appears within each matched item.
#	Match any single number (0-9)
[list]	Match any single character within a specified list of characters. You can list specific characters to use as wildcard. For example, enter [plan] to use all the letters within the brackets as a single wildcard character. You can use the "-" character to specify a range, such as [A-Z] or [!0-9]. To use the "-" character as part of the list, enter it at the beginning of the list. For example, [-@&] uses the characters within the brackets as wildcard characters.
[!list]	Match any single character not found within a specified list of characters. The "-" character can also be used to indicate a range, such as [!A-Z] or [!0-9].

To remove search criteria, click the X next to the search filter.

Copyright © 2022, 2026, Oracle and/or its affiliates.



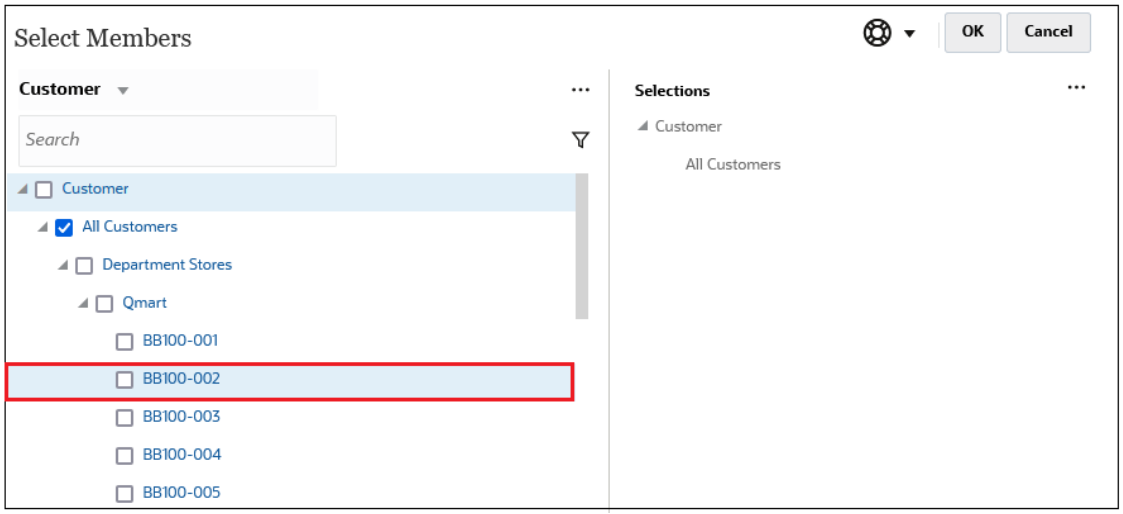
After you perform a search, you can use the Locate Member icon to find a specific member in the hierarchy. This is very useful if you have a large number of members and you need to work with a particular member in its hierarchy position.

To display the Locate Member icon, highlight a member in the search results. To locate the member in the hierarchy, click (Locate Member) to the left of the highlighted member in the **Info** column.

For example, assume you search for **bb100** in the **Customer** dimension, and then click (Locate Member) on the **BB100-02** line.

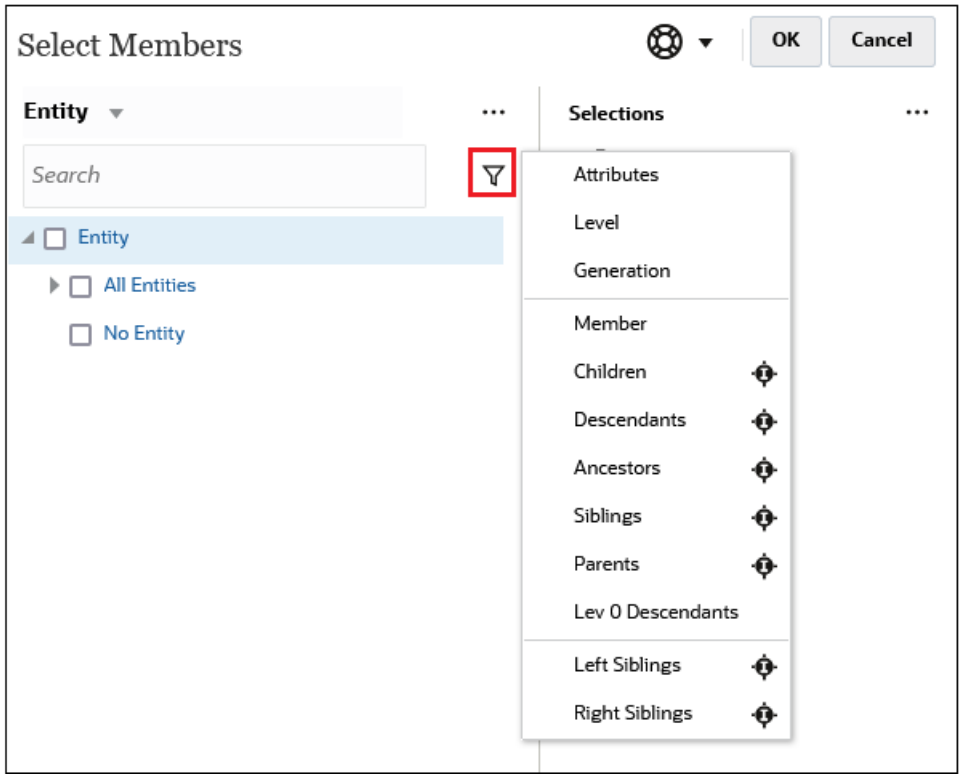
After you click (Locate Member), you are returned to the hierarchy view with **BB100-02** highlighted. At this point, you could select the checkbox next to BB100-02 to move it to the **Selections** pane if desired.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Filtering Which Members Are Displayed

To further filter the members that are displayed, click the Filter icon , and select an option.



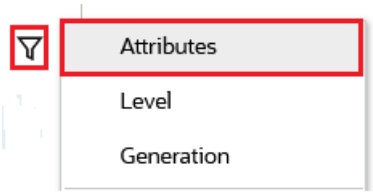
You can filter by a specific attribute, by level, by generation, or by a member relationship.

- Filtering by Attributes
- Filtering by Level
- Filtering by Generation
- Filtering by Member Relationship

Copyright © 2022, 2026, Oracle and/or its affiliates.

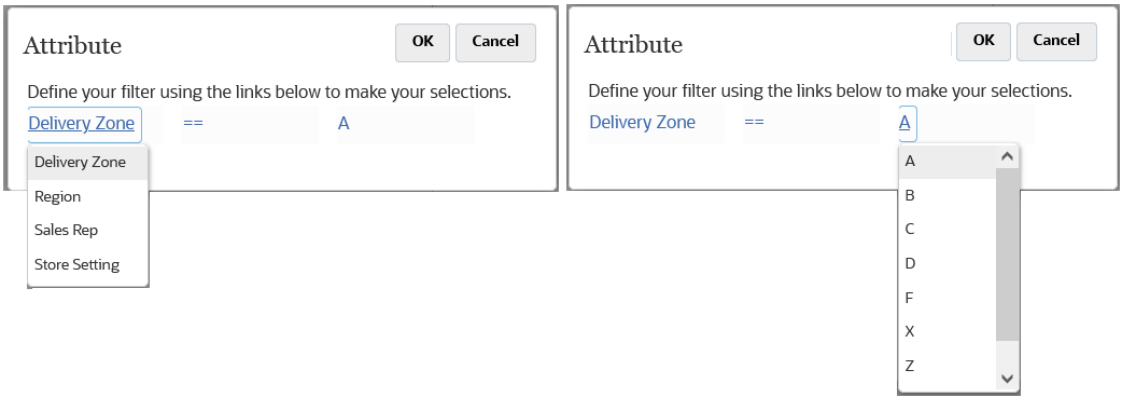
Filtering by Attributes

If attributes are defined, click (Filter) and select **Attributes** to filter the members displayed to specifc attribute values.



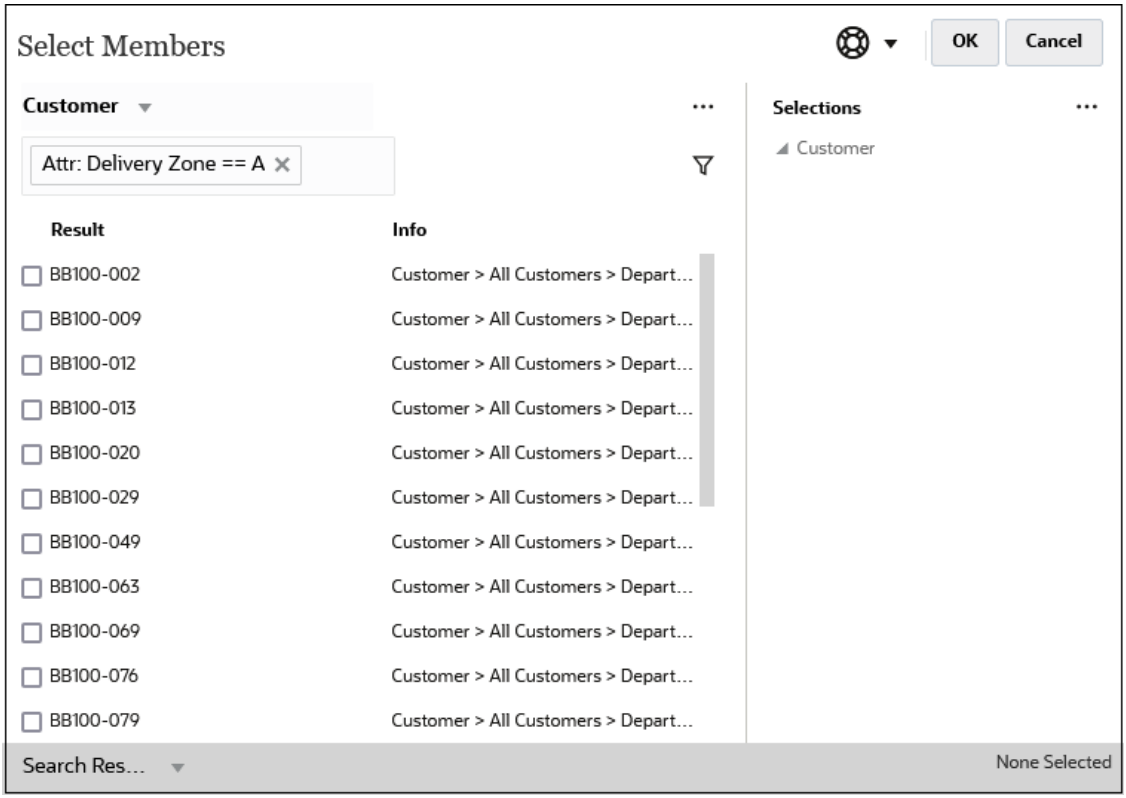
If more than one attribute is defined, click the links in the **Attribute** dialog box to display the available attributes and select the filters. For example, you could filter the results displayed for the **Customer** dimension to **Delivery Zone A**.

Attribute Dialog Box with Delivery Zone and A Selected



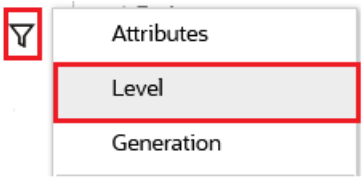
Members for the Customer Dimension Filtered by Delivery Zone A

Copyright © 2022, 2026, Oracle and/or its affiliates.



Filtering by Level

To filter the members displayed to a specific level, click (Filter), and select **Level**.

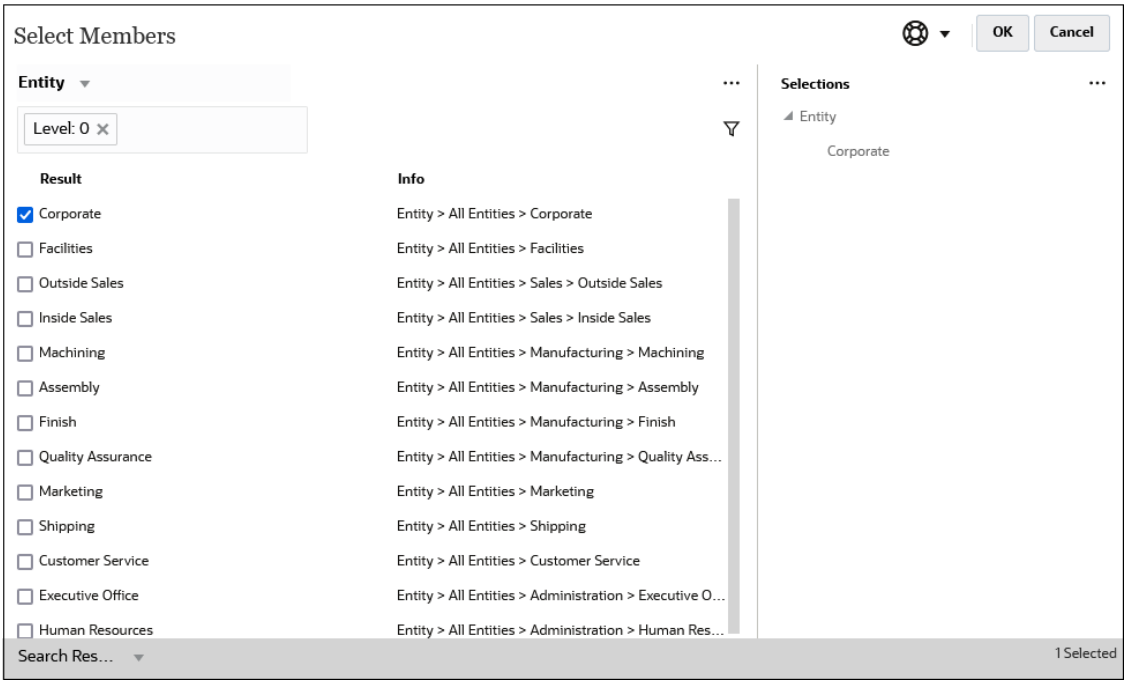


For example, you could filter by **Level 0** members in the **Entity** dimension.

Level Dialog Box with Level 0 Selected

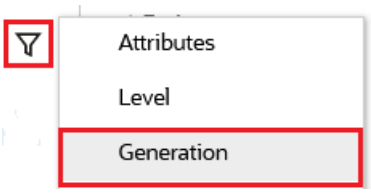
Members for the Entity Dimension Filtered by Level 0

Copyright © 2022, 2026, Oracle and/or its affiliates.



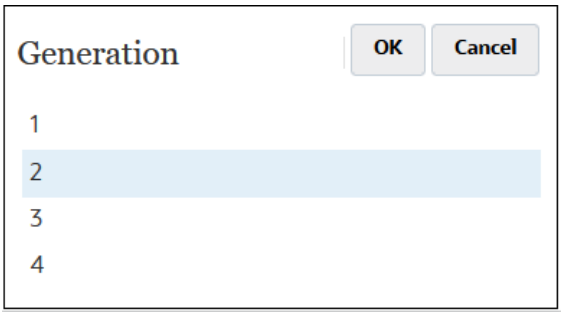
Filtering by Generation

To filter the members displayed to those in a specific generation, click (Filter), and select **Generation**.



For example, you could filter by **Generation 2** members in the **Entity** dimension.

Generation Dialog Box with Generation 2 Selected



Members for the Entity Dimension Filtered by Generation 2

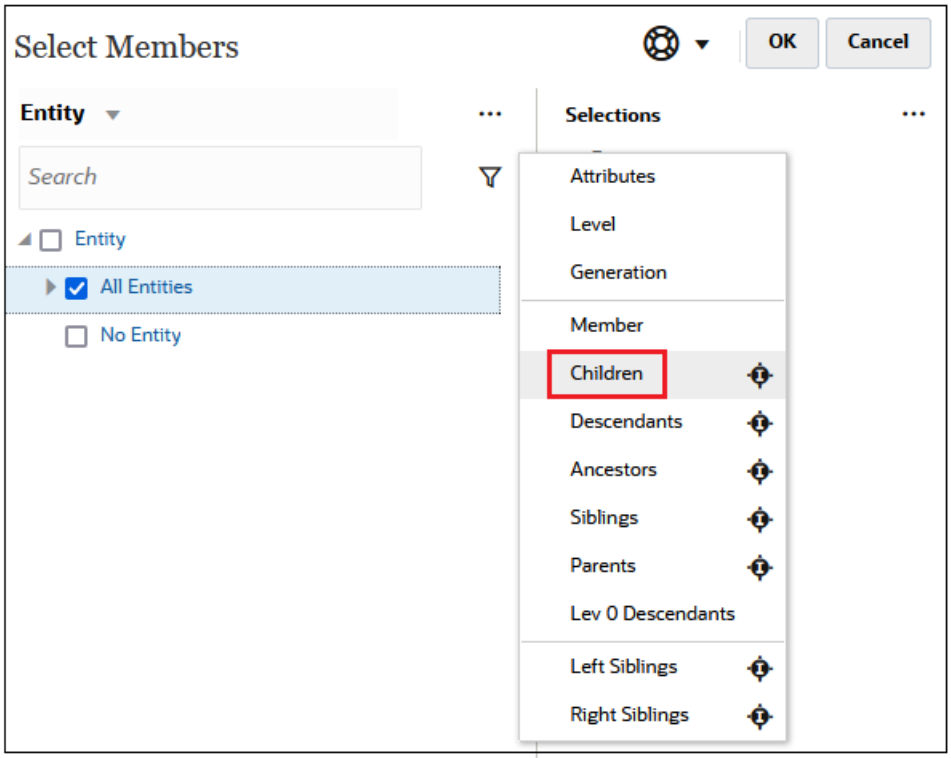
Copyright © 2022, 2026, Oracle and/or its affiliates.

Filtering by Member Relationship

When you filter by member relationship, you can define whether to include the currently-highlighted member in the search results.

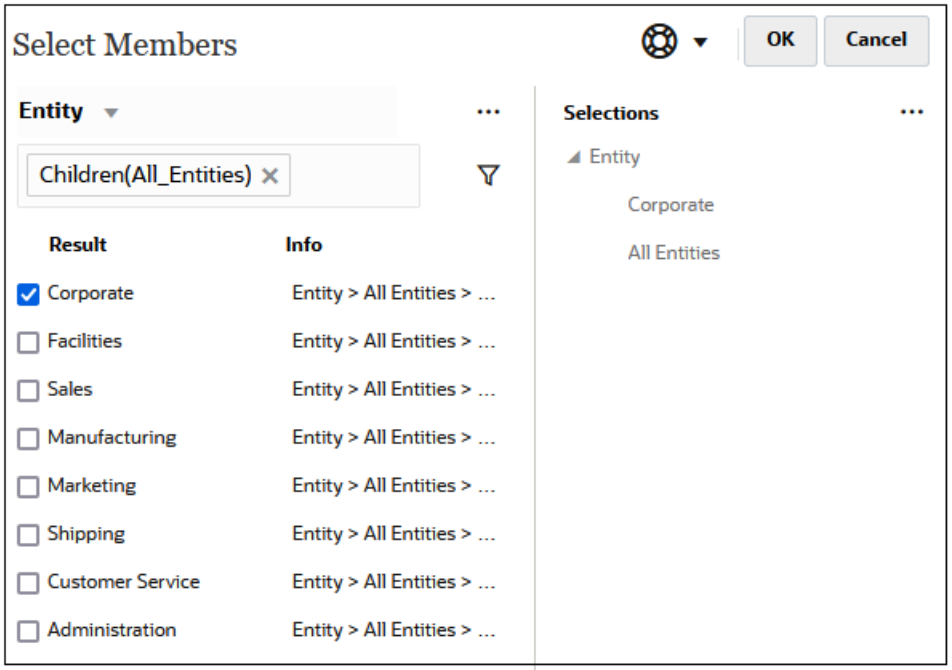
- Click the relationship name to select the related members, *excluding the currently-highlighted member*.

  For example, assume you select **All Entities**, click (Filter), and then select **Children**.



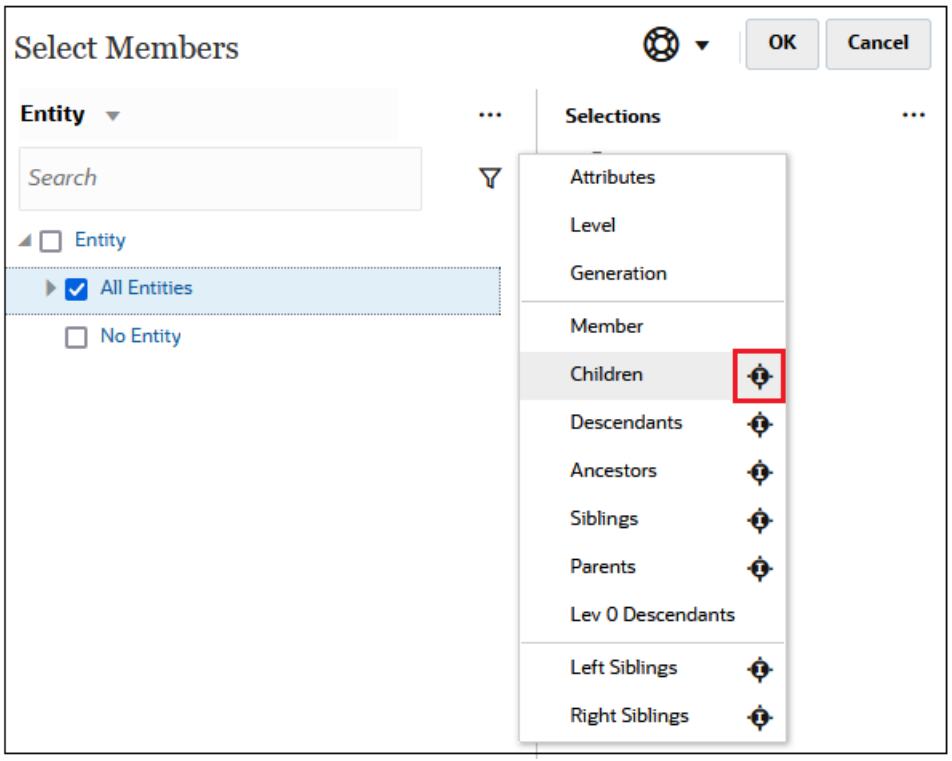
  In this case, the children of **All Entities** are included in the filtered results, but *not* the **All Entities** member.

Copyright © 2022, 2026, Oracle and/or its affiliates.



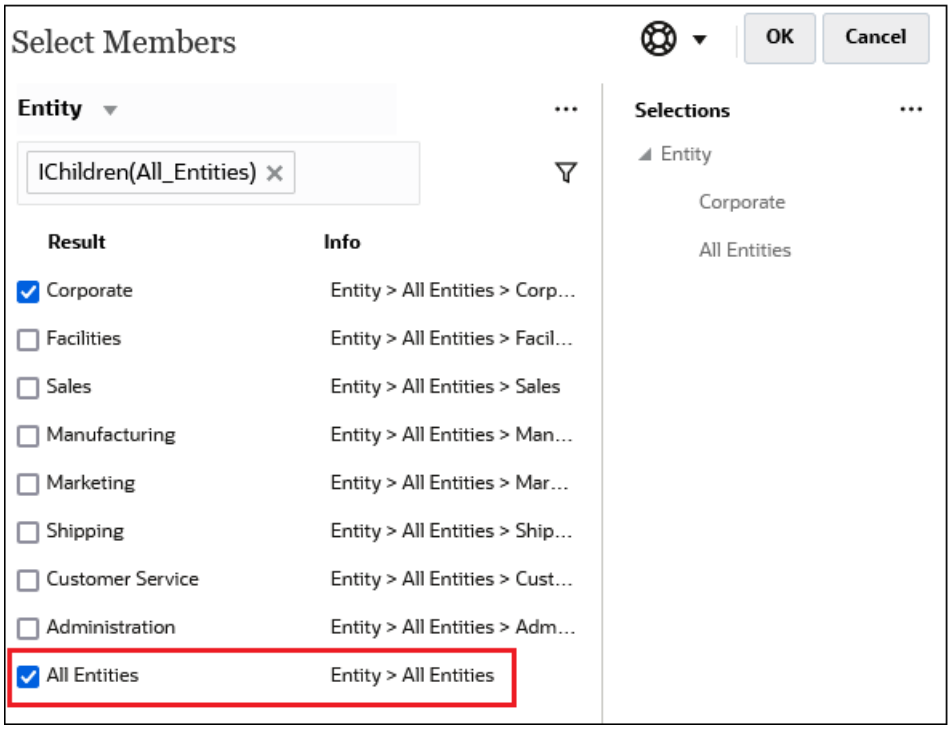
- Click the Include icon to the right of the relationship name to select the related members, *including the currently-highlighted member*.

  For example, assume you select **All Entities**, click (Filter), and then click (Include) next to **Children**.



  In this case, both the children of **All Entities** *and* the **All Entities** member are included in the filtered results.

Copyright © 2022, 2026, Oracle and/or its affiliates.



> **Note**
>
> For more information, see Member Relationships.

Member Relationships

This table describes which members and related members are included during filtering and member selection.

Click the Include icon to the right of the relationship name to select the related members, *including the currently-highlighted member*.

Table 32-2 Member Relationships

Member	Which Related Members Are Included
Member	The selected member
Children	All members in the level immediately below the selected member
Descendants	All descendants of the selected member, excluding the selected member
Ancestors	All members above the selected member, excluding the selected member
Siblings	All members from the same level in the hierarchy as the selected member, excluding the selected member
Parents	The member in the level above the selected member
Level 0 Descendants	All descendants of the selected member that have no children
Left Siblings	The members that appear before the selected member with the same parent

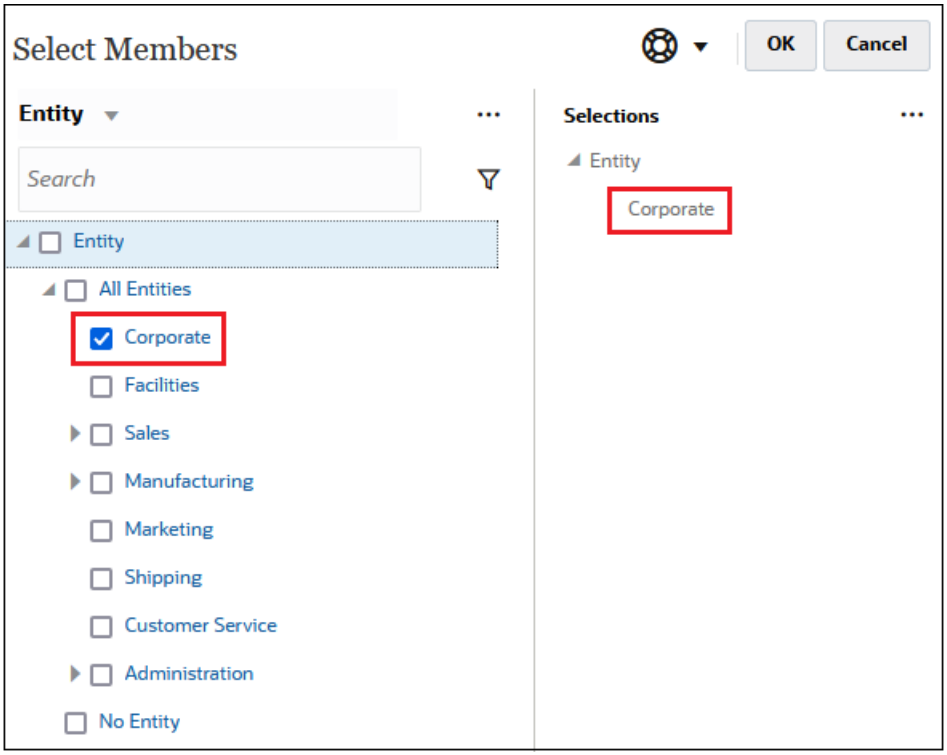
Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 32-2 (Cont.) Member Relationships

Member	Which Related Members Are Included
Right Siblings	The members that appear after the selected member with the same parent
Previous Level 0 Member	The previous level zero member that appears before the selected member Examples: PrevLvl0Mbr(Jan) returns BegBalance; PrevLvl0Mbr(Jul) returns Jun; PrevLvl0Mbr(BegBalance) returns an empty result
Next Level 0 Member	The next level zero member that appears after the selected member Examples: NextLvl0Mbr(Mar) returns Apr; NextLvl0Mbr(Dec) returns an empty result
Previous Generation Member	The member that appears immediately before the selected member within the same generation
Next Generation Member	The member that appears immediately after the selected member within the same generation
Previous Sibling	The member that appears immediately before the selected member with the same parent
Next Sibling	The member that appears immediately after the selected member with the same parent

Making Member Selections

To select a member, click the checkbox next to the member in the **Select Members** dialog box. The selected member displays a check mark and is moved to the **Selections** pane.

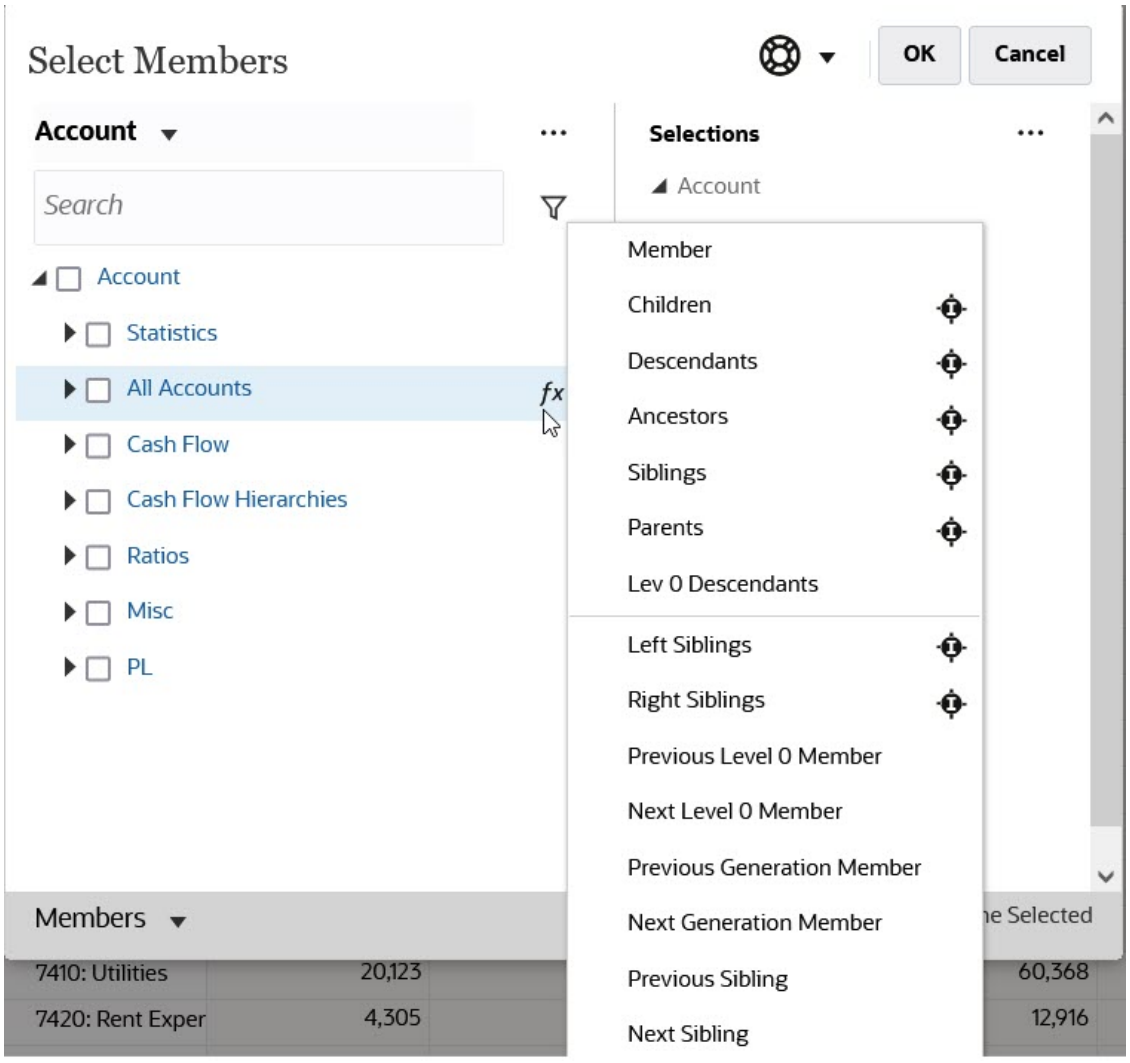


Copyright © 2022, 2026, Oracle and/or its affiliates.

> **Note**
>
> In certain situations, you are limited on the members you can select. For example, if you are specifying the default members for a model context, you can only select Level 0 members.

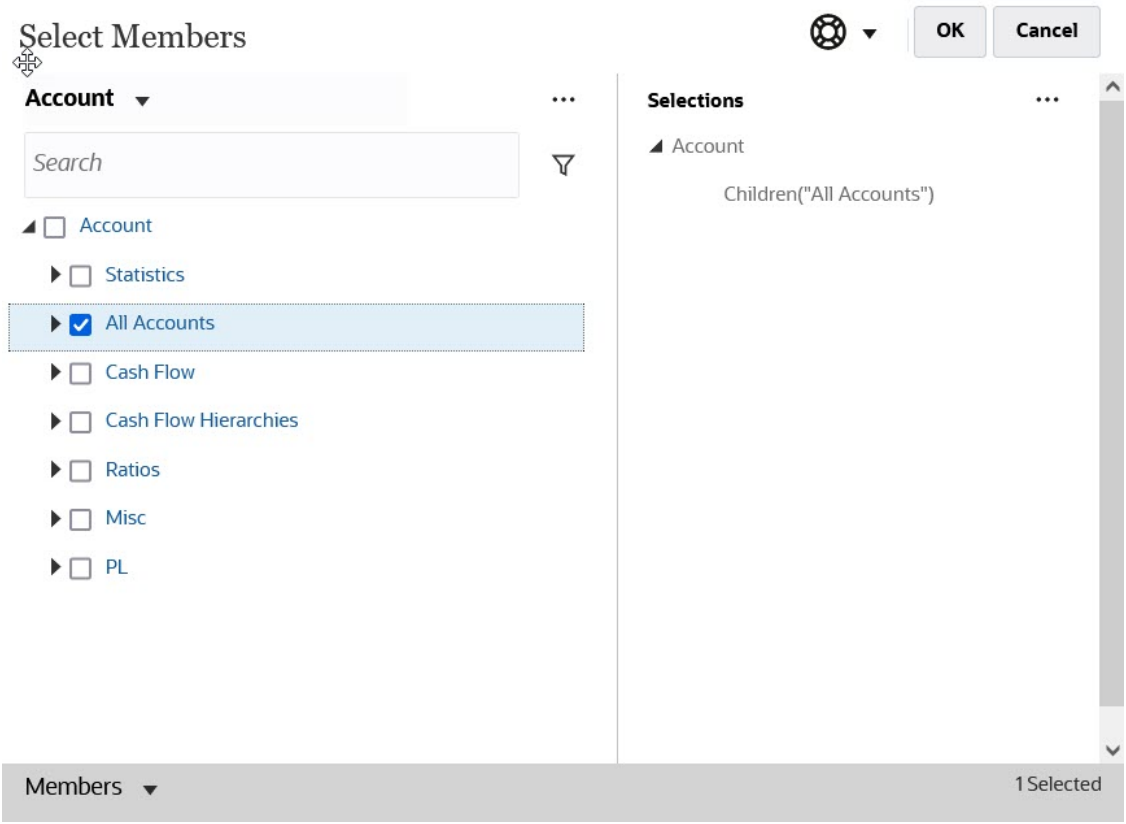
To expand a parent member to see its child members, click the expansion icon to the left of the parent member name. Clicking the expansion icon will not select the parent member.

In some places, you can use the Function Selector in the **Select Members** pane to make member selections. Click the Function Selector next to a member to see the Function Selector menu, and then select a member relationship option.

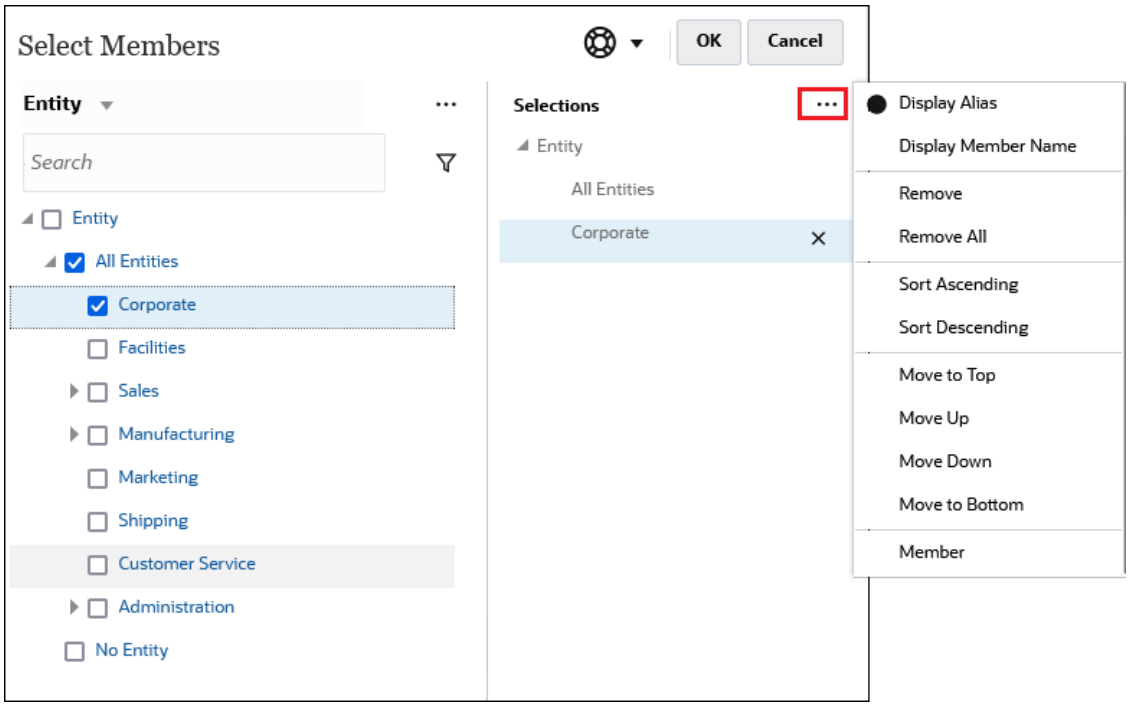


For example, if you click the Function Selector next to All Accounts, and then click **Children**, then Children("All Accounts") is added to the **Selections** pane.

Copyright © 2022, 2026, Oracle and/or its affiliates.



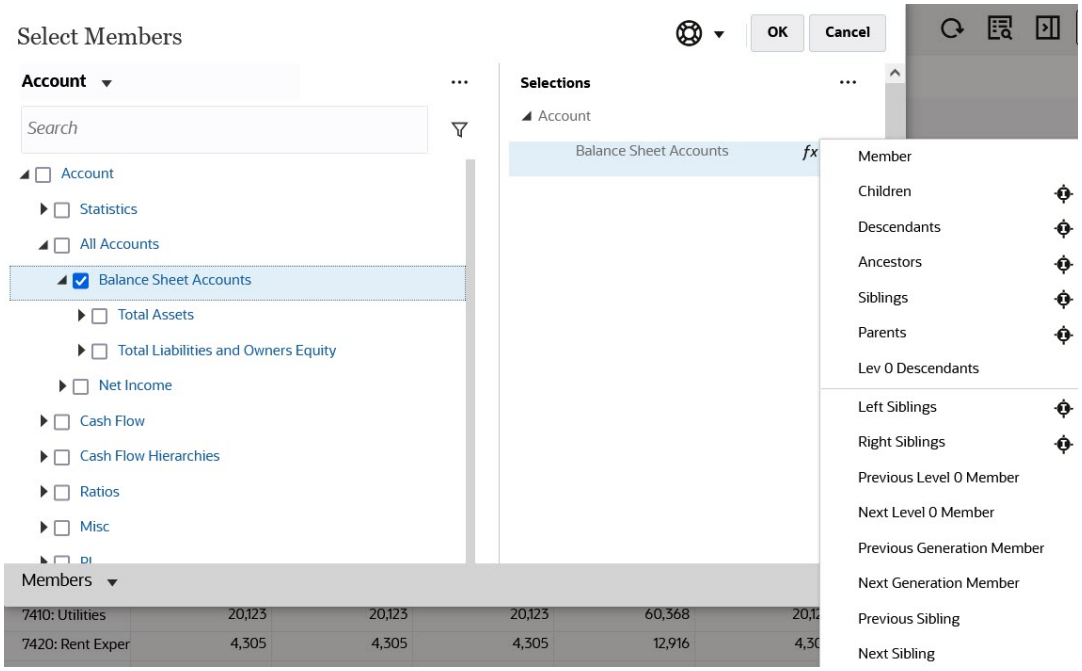
To remove, sort, or move selected members, click (Selected Items) in the **Selections** pane, and select an option. You can also select whether to display the alias or the member name.



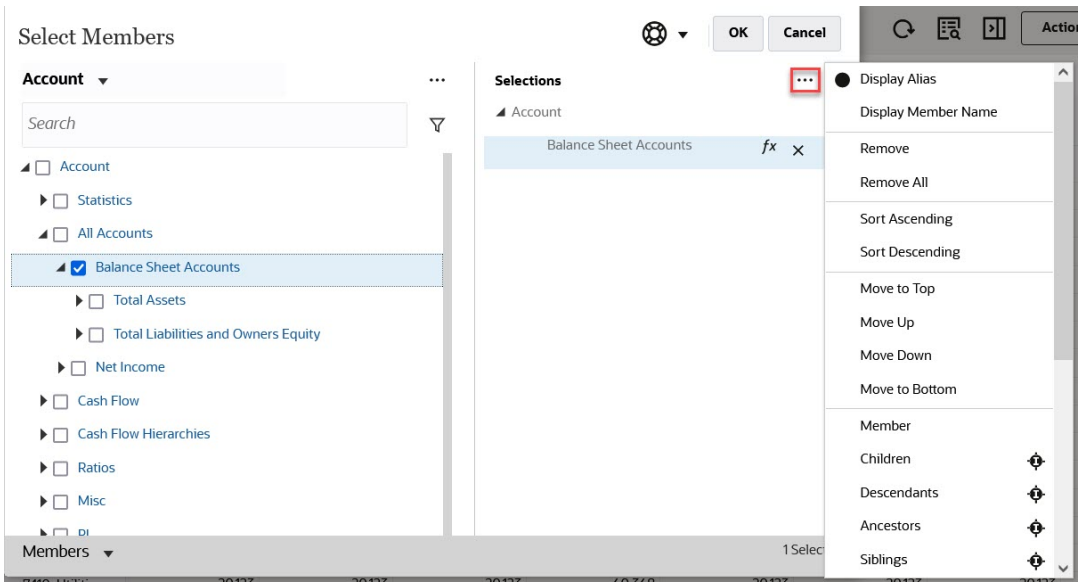
Copyright © 2022, 2026, Oracle and/or its affiliates.

You can add additional members to the **Selections** pane for selected members in several ways:

- Click the Function Selector ƒx next to a selected member to see the Function Selector menu, and then select a member relationship option.



- Select a member in the **Selections** pane, click the **Selected Items** icon ••• , and then click a member relationship option.



For more information about member relationships, see Member Relationships.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Selecting Members

To select members to use in forms:

1. From the members list, select members.
2. **Optional**: Select or enter search criteria.
   a. In the Search box, select options: **Member Name**, **Member Alias**, **Description**, or **UDA**.

      You can also enter all or part of a member name, alias, description, or UDA. Searches include shared members. To search for an exact match, select **Exact** and enter the search string. The search is not case-sensitive. You can search for a word, multiple words, or wildcard characters.

   b. Click (Search).
3. **Optional**: To set how information displays or filter members in the left pane of the Member Selection dialog box for the current session, click one of the following icons above the members list. You can select multiple filters, such as functions and generations.
   - **Search Up**
   - **Search Down**
   - **Display Properties**. Select **Member Name**, **Alias**, **Member Name: Alias**, or **Alias: Member Name**. Or, select **Additional Display Properties**, then **Description** or **Count**. Selected options are displayed in columns in the left and right panes. To remove columns, clear the selections.
   - **Keep only by Functions**. Select an option from the drop-down list.
   - **Keep only by Attributes**. If attributes are defined, select options for **Attributes**, **Operator**, and **Value**, and then click **OK**. Multiple attributes can be selected.
   - **Keep only by levels or generations**. Select **Level** or **Generation**, select the levels or generations to display, and then click **OK**.
   - Refresh the display to remove filters.
4. Click (Add) or (Remove) to select or remove members.

   Only members to which you have access are displayed.
   - **For runtime prompts only**: The displayed hierarchy is for the application and plan type against which the business rule is launched. For runtime prompts, members are displayed that satisfy runtime prompt limits.
   - **For business rules or validation rules having Cross Dimension or Member Range runtime prompts only**: From the **Select Dimension** list, select a dimension that the business rule designer set for this runtime prompt.
   - **For shared members only**: Shared members are displayed in this format: *shared_member.parent_member*`(shared)`. When they are selected on the right side of the dialog box, only the shared member name is displayed.

Copyright © 2022, 2026, Oracle and/or its affiliates.

5. If variables or attributes are defined, click the **Variables** tab to select members for user variables, substitution variables, and attributes. Members of each category are displayed as children. Only members to which the user has read access are displayed in forms.
   - **User Variables**: Select members as described in Selecting User Variables as Members.
   - **Substitution Variables**: Select members as described in Selecting Substitution Variables as Members.
   - **Attributes**: Select attributes based on the values described in the following table. Selecting a non-level 0 attribute selects all level 0 descendants and applies the operator to each, as described in Selecting Attribute Values as Members.

Table 32-3 Attribute Value Selection

Operator	Attribute Values Included
Equal	Equal to the selected attribute
NotEqual	Not equal to the selected attribute
Greater	Greater than the selected attribute
GreaterOrEqual	Greater than or equal to the selected attribute
Less	Less than the selected attribute
LessOrEqual	Less than or equal to the selected attribute

6. Click **OK** to save your selecctions.

About Selecting Members for Forms 1.0 and Dashboards 1.0

Use the Member Selection dialog box to select the members to use with Forms 1.0 and Dashboards 1.0. If variables and attributes are defined, you can also select variables and attributes. You can display and select members by member name, alias, or both. The display options that you define for the Member Selection dialog box override those defined as an application default by an Administrator, and those specified as an application preference.

> **Note**
>
> Models, rule sets, allocation rules, custom rules, Forms 2.0, Dashboards 2.0, and ad hoc grids use a different Member Selector. See Using the Member Selector for more information.

Member Relationships

When you are creating a form, member selection requires you to specify a member relationship. This table describes which members and related members are included during member selection.

Table 32-4 Member Relationships

Relationship	Members Included
Member	The selected member

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 32-4 (Cont.) Member Relationships

Relationship	Members Included
Ancestors	All members above the selected member, excluding the selected member
Ancestors (inc)	The selected member and its ancestors
Children	All members in the level immediately below the selected member
Children (inc)	The selected member and its children
Descendants	All descendants of the selected member, excluding the selected member
Descendants (inc)	The selected member and its descendants
Siblings	All members from the same level in the hierarchy as the selected member, excluding the selected member
Siblings (inc)	The selected member and its siblings
Parents	The member in the level above the selected member
Parents (inc)	The selected member and its parent
Level 0 Descendants	All descendants of the selected member that have no children
Left Siblings	The members that appear before the selected member with the same parent
Left Siblings (inc)	The selected member and its left siblings
Right Siblings	The members that appear after the selected member with the same parent
Right Siblings (inc)	The selected member and its right siblings
Previous Sibling	The member that appears immediately before the selected member with the same parent
Next Sibling	The member that appears immediately after the selected member with the same parent
Previous Level 0 Member	The previous level zero member that appears before the selected member Examples: PrevLvl0Mbr(Jan) returns BegBalance; PrevLvl0Mbr(Jul) returns Jun; PrevLvl0Mbr(BegBalance) returns an empty result
Next Level 0 Member	The next level zero member that appears after the selected member Examples: NextLvl0Mbr(Mar) returns Apr; NextLvl0Mbr(Dec) returns an empty result
Previous Generation Member	The member that appears immediately before the selected member within the same generation
Next Generation Member	The member that appears immediately after the selected member within the same generation

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 32-4 (Cont.) Member Relationships

Relationship	Members Included
Relative	Returns a member relative to the specified member at the same generation with the specified offset. Examples: Relative("Jan", 4) returns May, which is January plus 4 months in a standard monthly Period dimension; Relative("Jan", -2) returns Nov, which is January minus 2 months in a standard monthly Period dimension.
Relative Range	Returns all of the members from the starting member to the offset member when going forward or from the offset member to the starting member when going backwards. Examples: RelativeRange("Jan", 4) returns Jan, Feb, Mar, Apr, May; RelativeRange("Jan", -2) returns Nov, Dec, Jan.

Selecting Members

To select members to use in forms:

1. From the members list, select members.
2. **Optional**: Select or enter search criteria.
   a. In the Search box, select options: **Member Name**, **Member Alias**, **Description**, or **UDA**.

      You can also enter all or part of a member name, alias, description, or UDA. Searches include shared members. To search for an exact match, select **Exact** and enter the search string. The search is not case-sensitive. You can search for a word, multiple words, or wildcard characters.

   b. Click .
3. **Optional**: To set how information displays or filter members in the left pane of the Member Selection dialog box for the current session, click one of the following icons above the members list. You can select multiple filters, such as functions and generations.
   - Search Up
   - Search Down
   - Display Properties. Select **Member Name**, **Alias**, **Member Name: Alias**, or **Alias: Member Name**. Or, select **Additional Display Properties**, then **Description** or **Count**. Selected options are displayed in columns in the left and right panes. To remove columns, clear the selections.
   - Keep only by Functions. Select an option from the drop-down list.
   - Keep only by Attributes. If attributes are defined, select options for **Attributes**, **Operator**, and **Value**, and then click **OK**. Multiple attributes can be selected.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- Keep only by levels or generations. Select **Level** or **Generation**, select the levels or generations to display, and then click **OK**.
- Refresh the display to remove filters.

4. Click (Add) or (Remove) to select or remove members.

   Only members to which you have access are displayed.

   - **For runtime prompts only**: The displayed hierarchy is for the application and plan type against which the business rule is launched. For runtime prompts, members are displayed that satisfy runtime prompt limits.
   - **For business rules or validation rules having Cross Dimension or Member Range runtime prompts only**: From the **Select Dimension** list, select a dimension that the business rule designer set for this runtime prompt.
   - **For shared members only**: Shared members are displayed in this format: *shared_member.parent_member*`(shared)`. When they are selected on the right side of the dialog box, only the shared member name is displayed.

5. If variables or attributes are defined, click the **Variables** tab to select members for user variables, substitution variables, and attributes. Members of each category are displayed as children. Only members to which the user has read access are displayed in forms.

   - **User Variables**: Select members as described in Selecting User Variables as Members.
   - **Substitution Variables**: Select members as described in Selecting Substitution Variables as Members.
   - **Attributes**: Select attributes based on the values described in the following table. Selecting a non-level 0 attribute selects all level 0 descendants and applies the operator to each, as described in Selecting Attribute Values as Members.

   Table 32-5 Attribute Value Selection

Operator	Attribute Values Included
Equal	Equal to the selected attribute
NotEqual	Not equal to the selected attribute
Greater	Greater than the selected attribute
GreaterOrEqual	Greater than or equal to the selected attribute
Less	Less than the selected attribute
LessOrEqual	Less than or equal to the selected attribute

6. Click **OK** to save your selecctions.

Considerations When Selecting Members

When selecting members for forms:

- You can filter members from certain users, restrict their access permissions to members, and then refresh the cube.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- The order of members in the **Selected Members** list determines the order on forms. To change the order, select a member and click the Up or Down Arrow above the selected members list.

  If you select members individually and select their parent first, the parent displays in the form at the top of its member hierarchy. (Note that depending on the number of hierarchy levels, calculating totals for the parent of individually selected members could take several passes, slowing calculations). The parent of members selected by relationship, for example, by I(Descendants), displays at the bottom of the hierarchy.
- In the **Layout** tab of the **Form Management** dialog box, you can open the **Member Selection** dialog box by clicking the member selection icon, or by right-clicking a row or column and selecting **Select Members**.
- You can select different sets of members across the same dimension.
- For forms with multiple dimensions in a row or column, you can set member selection options for a dimension by selecting that dimension from the **Dimensions** drop-down list that is displayed in the Member Selection dialog box for multiple dimensions in a row or column.
- If you click the member selection icon, an option is displayed for **Place Selection in Separate Rows** or **Place Selection in Separate Columns**. This adds the selection to the rows or columns after the last existing row or column on the form. For example, for a form that contains members Acct1, Acct2, and Acct3 in Column A, if you select these members with **Place Selection in Separate Columns** selected, Acct1 is selected for column A, Acct2 for column B, and Acct3 for column C. If you select the members without this option, all of the members are selected for column A.

  This feature is available for single members only, not for members selected with functions, such as Children (inc). For example, if you select Q/IChildren for Column A and select **Place Selection in Separate Columns**, the form layout is not changed.
- All settings except Count are retained after the Member Selection dialog box is closed, and members in the Member Selection dialog box are displayed based on user-defined settings. Members displayed on the Layout tab do not inherit the display settings defined in Member Selection dialog box. Instead, they are displayed using the member name.

Selecting Attribute Values as Members

If attribute members are defined, you can select attribute values on the **Select Members** dialog box. For attribute members, selecting a non-level 0 attribute selects all level 0 descendants and applies the operator to each. For attributes of type numeric, date, and Boolean (where false = 0 and true = 1), evaluation is based on the minimum and maximum values. For text attributes, evaluation is based on the position from top to bottom in the hierarchy. The top position has the lowest value, and the bottom position has the highest value.

Example: Numeric attribute

In this example, the selected operator is applied to each level 0 descendant, based on the numeric value. For example, selecting NotEqual and Small in the Member Selection dialog box includes all values not equal to 1 and not equal to 2, so the selection includes 3, 4, 5, and 6. Selecting Greater and Small includes all values greater than 1 or greater than 2, so the selection includes 2, 3, 4, 5, and 6.

```
Size

Small

1
```


Copyright © 2022, 2026, Oracle and/or its affiliates.

```
2

Medium

3

4

Large

5

6
```

Table 32-6 Example: Numeric Attribute Evaluation

Selected Operator	Selected Attribute Value	Result	Explanation
Equal	Large	5, 6	The Equal operator is applied to all level 0 descendants of Large, which includes 5 and 6.
Less	Medium	1, 2, 3	The Less operator is applied to all level 0 descendants of Medium. This includes values < 3 OR < 4, which results in 1, 2, and 3.
Greater	Medium	4, 5, 6	The Greater operator is applied to all level 0 descendants of Medium. This includes values > 3 OR > 4, which results in 4, 5, and 6.
GreaterOrEqual	Medium	3, 4, 5, 6	The GreaterOrEqual operator is applied to all level 0 descendants of Medium. This includes values >=3 OR >= 4, which results in 3, 4, 5, and 6.
LessOrEqual	Medium	1, 2, 3, 4	The LessOrEqual operator is applied to all level 0 descendants of Medium. This includes values <=3 OR <=4, which results in 1, 2, 3, and 4.
NotEqual	Medium	1, 2, 5, 6	The NotEqual operator is applied to all level 0 descendants of Medium. This includes values not equal to 3 AND not equal to 4, which results in 1, 2, 5, and 6.

Example: Text attribute

For text attributes, the selected operator is applied to each level 0 descendant based on its position in the hierarchy, from top (lowest value) to bottom (highest value).

In this example, Envelope is at the top position and has the lowest value. Packet has the next higher value, followed by Box, Carton, Barrel and Crate. Crate is at the bottom position and has the highest value.

For this text attribute, selecting Less and Small includes values that are less than Envelope or less than Packet. Because Envelope is less than Packet, the resulting selection includes only

Copyright © 2022, 2026, Oracle and/or its affiliates.

Envelope. Likewise, selecting Greater and Large includes values that are greater than Barrel or greater than Crate, so the resulting selection includes only Crate.

```
Containers

Small

Envelope

Packet

Medium

Box

Carton

Large

Barrel

Crate
```

Table 32-7 Example: Text Attribute Evaluation

Selected Operator	Selected Attribute Value	Result	Explanation
Equal	Medium	Box, Carton	The Equal operator is applied to all level 0 descendants of Medium, which includes Box and Carton.
NotEqual	Medium	Envelope, Packet, Barrel, Crate	The NotEqual operator is applied to all level 0 descendants of Medium. This includes values not equal to Box AND not equal to Carton, which results in Envelope, Packet, Barrel, and Crate.
Less	Medium	Box, Packet, Envelope	The Less operator is applied to all level 0 descendants of Medium. This includes everything at a lower position than Carton OR a lower position than Box, which results in Box, Packet, and Envelope.
LessOrEqual	Medium	Envelope, Packet, Box, Carton	The LessOrEqual operator is applied to all level 0 descendants of Medium. This includes everything at the same position as Carton OR at a lower position than Carton, which results in Envelope, Packet, Box, and Carton.

Selecting Substitution Variables as Members

Substitution variables act as global placeholders for information that changes regularly. Substitution variables are especially useful for developing and reporting on rolling forecasts.

Copyright © 2022, 2026, Oracle and/or its affiliates.

When you select substitution variables as members on the form, their values are based on dynamically generated information. For example, you could set the current month member to the substitution variable `CurMnth` so that when the month changes, you need not update the month value manually in the form.

> **Note**
>
> - When you open or calculate values on forms, the application replaces substitution variables with values assigned to them.
> - You create and assign values to substitution variables within the application. These substitution variables are then available in the application when you select members for a form.
> - Substitution variables must be appropriate for the context in forms. For example, you could select a substitution variable named `CurrQtr` with a value of Qtr2 as a member of the Period dimension. It's not valid to select a substitution variable named `CurrYr` for the Years dimension if its value is Feb. You can set substitution variables at the application or cube level.
>
> The same substitution variable can exist on multiple levels; the application uses the first one it finds as it searches in this order:
>
> 1. Cube
> 2. Application
> - You can select from substitution variables if they are enabled for runtime prompts in business rules, and their values match a member set in the runtime prompt for a business rule.
> - The application checks the validity of substitution variables when they are used (for example, when the form is opened). It doesn't check when you design forms, so you should test substitution variables by saving and opening forms.

To specify substitution variables in forms:

1. Create the form.
2. In **Member Selection**, click the **Variables** tab, expand **Substitution Variables**, and then select substitution variables the same way you select members, to move substitution variables to and from **Selected Members**.

   When selected, a substitution variable is preceded by an ampersand (&). For example:

   ```
   &CurrentScenario
   ```
3. Click **OK**.

Selecting User Variables as Members

User variables act as filters in forms, enabling users to focus only on certain members, such as a department. Before you can associate a user variable with a form, you must create the user variable.

When you create forms with user variables, users must select values for the variable before opening forms. For example, if you create a user variable called Division, users must select a division before working in the form. The first time you select a variable for a form, you do it in preferences. Afterward, you can update the variable in preferences or in the form.

Copyright © 2022, 2026, Oracle and/or its affiliates.

To select user variables for forms:

1. Create the form.
2. On **Member Selection**, click the **Variables** tab, expand **User Variables**, and then select user variables the same way you select members, using the arrows to move user variables to and from **Selected Members**.

   User variables are displayed for the current dimension. For example, user variables for the Entity dimension might display as follows:

   ```
   Division = [User Variable]
   ```

   When selected, a user variable is preceded by an ampersand. For example:

   ```
   Idescendants(&Division)
   ```

3. Click **OK**.

Copyright © 2022, 2026, Oracle and/or its affiliates.

33

Naming and Character Restrictions

Related Topics

- Naming Restrictions for Applications and Databases
- Naming Restrictions for Dimensions, Members, and Aliases
- Dimension and Member Names in Calculation Scripts, Report Scripts, Formulas, Filters, and Substitution Variables
- Restrictions for User and Group Names

Naming Restrictions for Applications and Databases

When naming an application, follow these rules:

- Use no more than eight characters for an application's name.
- Don't use spaces or tabs.
- Don't use an underscore (_) as either the first or last character.
- Don't use these special characters:

Table 33-1 Restricted Characters in Application Names

Character	Meaning
*	asterisk
\	backslash
[ ]	brackets
:	colon
,	comma
"	double quotation mark
=	equal sign
>	greater than sign
<	less than sign
.	period
+	plus sign
?	question mark
;	semicolon
'	single quotation mark
/	slash
|	vertical bar

- For application names in relational database environments, don't use extended characters (except for underscores).

Copyright © 2022, 2026, Oracle and/or its affiliates.

- For aggregate storage databases, don't use DEFAULT, LOG, METADATA, or TEMP as application names.

Enter names in the preferred case. Application names are created exactly as entered.

Naming Restrictions for Dimensions, Members, and Aliases

A list of the most common restricted characters is provided in this section. However, Oracle strongly suggests that you review the conventions described in Naming Conventions for Essbase in addition to the information in this section.

When naming dimensions, members, and aliases, follow these rules:

- Use no more than 80 characters for dimension, member, or alias names. The 80-character limit applies to all application types.
- Names are not case-sensitive for dimensions, non-shared members, and aliases. Do not use matching names with only case differences; for example, do not name two members "zzz" and "ZZZ," or a base member "zzz" and a shared member "ZZZ."

  In other words, shared member names must use the same name and case of the base member. When you rename a base member (even if all you do is change the case), the shared member names will be updated to match the base member names.
- Do not use dimension names that are the same name as a member property or a column header in the metadata load file; for example, Data Type.
- HTML tags cannot be used in member names, dimension names, aliases, and descriptions.
- The TAB key is restricted and cannot be used in dimension, member, and alias names.
- The following is a list of characters that are restricted and cannot be used in dimension, member, and alias names:

Table 33-2 Restricted Characters in Dimension, Member, and Alias Names

Character	Meaning
"	quotation mark
[ ]	bracket
\	backslash
/	slash

> **Note**
>
> – Brackets [ ] are permitted but not recommended in block storage outlines. They cause errors when converting to aggregate storage outlines.
>
> – Do not use the ASCII substitute character (zero-width space character) `0x1A` in member names and aliases.

- The following is a list of characters that cannot be used at the beginning of dimension, member, and alias names:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 33-3 Restricted Characters at the Beginning of Dimension, Member, and Alias Names

Character	Meaning
@	at sign
&	ampersand
\	backslash
[ ]	brackets
,	comma
-	dash, hyphen, or minus sign
=	equal sign
<	less than sign
( )	parentheses
.	period
+	plus sign
"	quotation mark
/	slash
_	underscore
|	vertical bar

> **Note**
>
> Member names with the preceding characters are not allowed in business process data export jobs.

- The following characters are not recommended for names or aliases, and cannot be at the beginning or end of a member or alias name. All are in Unicode format.
  - 0x0009 - Horizontal Tab (common tab)
  - 0x000A - Line Feed
  - 0x000B - Vertical Tab
  - 0x000C - Form Feed
  - 0x000D - Carriage Return
  - 0x0020 - Space
  - 0x0085 - Next line
  - 0x00A0 - Non-breaking Space
  - 0x1680 - Ogham Space
  - 0x180E - Mongolian Vowel Separator
  - 0x2000 - EN Quad
  - 0x2001 - EM Quad
  - 0x2002 - EN Space
  - 0x2003 - EM Space
  - 0x2004 - Three Per EM Space

Copyright © 2022, 2026, Oracle and/or its affiliates.

  - 0x2005 - Four Per EM Space
  - 0x2006 - Six Per EM Space
  - 0x2007 - Figure Space
  - 0x2008 - Punctuation Space
  - 0x2009 - Thin Space
  - 0x200A - Hair Space
  - 0x200B - Zero Width Space
  - 0x2028 - Line Separator
  - 0x2029 - Paragraph Separator
  - 0x202F - Narrow Non-breaking Space
  - 0x205F - Medium math space
  - 0x3000 - Ideographic Space
- Spaces cannot be placed at the beginning or end of names.
- For time periods in custom calendars, don't use spaces in prefixes.
- The following cannot be used as dimension, member, or alias names:
  - Calculation script commands, operators, and keywords
  - Function names and function arguments
  - Names of other dimensions and members (unless the member is shared)
  - If Dynamic Time Series is enabled, don't use History, Year, Season, Period, Quarter, Month, Week, or Day.
  - In unique member outlines that contain an attribute dimension, you cannot use Sum, Count, Min, Max, and Avg as member or dimension names. Using these names causes duplicate name conflicts.

    Note

    The members that are created in the attribute calculations dimension (Sum, Count, Min, Max, and Avg) are not considered reserved words because you can change these names in the attribute calculations dimension and then use the standard name in an attribute or standard dimension.

    If the outline is tagged as a duplicate member outline, and an attribute dimension (and, therefore, the attribute calculations dimension) exists before you use Sum, Count, Min, Max, and Avg as a base member, the duplicate name is allowed. However, if, you use Sum, Count, Min, Max, and Avg as a base member before creating an attribute dimension, the duplicate name isn't allowed.
- The following is a list of words that are restricted and cannot be used in dimension, member, and alias names:

Copyright © 2022, 2026, Oracle and/or its affiliates.

Table 33-4 Restricted Words in Dimension, Member, and Alias Names

Restricted Word	Restricted Word	Restricted Word
ALL	AND	ASSIGN
AVERAGE	CALC	CALCMBR
COPYFORWARD	COUNT	CROSSDIM
CURMBRNAME	DIM	DIMNAME
DIV	DYNAMIC	EMPTYPARM
EQ	EQOP	EXCEPT
EXP	EXPERROR	FLOAT
FUNCTION	GE	GEN
GENRANGE	GROUP	GT
ID	IDERROR	INTEGER
LE	LEVELRANGE	LOCAL
LOOPBLOCK	LOOPPARMS	LT
MBR	MBRNAME	MBRONLY
MINUS	MISSING	MUL
MULOP	NE	NON
NONINPUT	NOT	OR
PAREN	PARENPARM	PERCENT
PLUS	RELOP	REQUEST
SET	SKIPBOTH	SKIPMISSING
SKIPNONE	SKIPZERO	STATUS
SUM	TO	TOLOCALRATE
TRAILMISSING	TRAILSUM	TYPE
UMINUS	UPPER	VARORXMBR
XMBRONLY	$$UNIVERSE$$	#MISSING
#MI		

- The following characters should generally be avoided:
  - , (comma)
  - : (colon)
  - [ ] (square brackets)
  - { } (curly braces)
  - / (forward slash)
  - ( ) (parentheses)
  - * (asterisk)
  - ! (exclamation point)
  - > (greater than sign)
  - ; (semicolon)
  - % (percent sign)
  - ~ *(tilde)

Copyright © 2022, 2026, Oracle and/or its affiliates.

Dimension and Member Names in Calculation Scripts, Report Scripts, Formulas, Filters, and Substitution Variables

In substitution variable values, calculation scripts, report scripts, filter definitions, partition definitions, or formulas, you must enclose member names in brackets ([]) when used within MDX statements and in quotation marks (" ") for block storage databases, in these situations:

- The name starts with one or more numerals (for example, 100).
- The name contains spaces or these characters:
  - ampersand (&)
  - asterisk (*)
  - at sign (@)
  - backslash (\ )
  - braces ({ })
  - colon (:)
  - comma (,)
  - dash, hyphen, or minus sign (-)
  - exclamation point (!)
  - equal sign (=)
  - greater than sign (>)
  - less than sign (<)
  - parentheses ( )
  - percent sign (%)
  - period (.)
  - plus sign (+)
  - semicolon (;)
  - slash (/)
  - tilde (~)

In calculation scripts and formulas, enclose member names that are also Essbase keywords in quotation marks (" ") for block storage databases, and in brackets ([ ]) for aggregate storage databases including these member names:

```
BEGIN DOUBLE ELSE END FUNCTION GLOBAL IF MACRO MEMBER RANGE RETURN STRING THEN
```

Enclose in quotation marks names, in calculation scripts, report scripts, or formulas, that contain or start with spaces or these characters: + - * / ( ) : , @ ;) { } [ ] <

Also enclose in quotation marks names that start with numbers. For example:

```
@SUM(ac1, "12345");
```

Restrictions for User and Group Names

User and group names can have up to 80 characters.

Copyright © 2022, 2026, Oracle and/or its affiliates.

Copyright © 2022, 2026, Oracle and/or its affiliates.

34

Integrating Cloud EPM and Cloud EDM with Oracle Guided Learning

Oracle Guided Learning (OGL) offers a robust framework for developing personalized, guided, and contextual training and user onboarding experiences. Beyond the EPM documentation, this versatile toolset includes the options to create custom process guides, display groups, message guides, smart tips, and more. It offers a comprehensive learning interface tailored to meet specific needs within Oracle Fusion Cloud Enterprise Performance Management and Oracle Fusion Cloud Enterprise Data Management environments, enhancing user proficiency and operational efficiency. For a detailed overview, see Introduction & Overview of Oracle Guided Learning in *Oracle Guided Learning User Guide*.

The users have access to OGL Console, which allows them to define content that streamlines adoption by enabling them to design and activate in-application guidance tailored to specific workflows and requirements. For instance, you can create OGL guides for your Navigation Flows.

Configuring Settings in the Environment

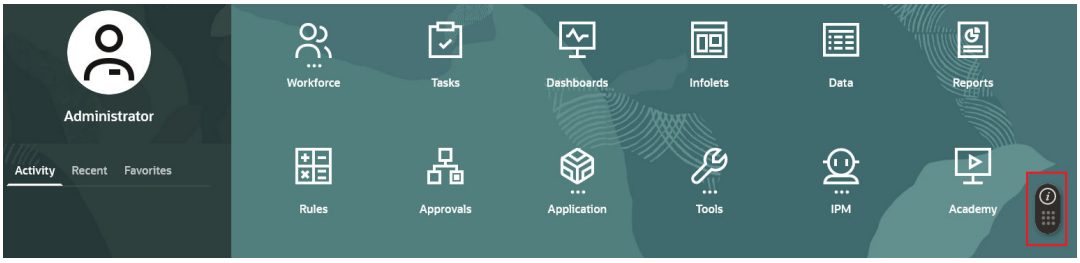
Before proceeding, ensure you have an active OGL account and at least one Application ID (App ID) set up. An App ID is a logical grouping of guides (contents). Each App ID can group guides customized for EPM workflows for a particular application. For setup details, see Getting Started in *Oracle Guided Learning User Guide*.

> **Note**
>
> When integrating an OGL App ID to use OGL Help within a Navigation Flow, configure it solely at the source environment. OGL setup is unnecessary on any of the connected environments.

Follow these steps to integrate an OGL application into your environment:

1. Navigate to **Applications**, then **Settings**
2. Enter the following Oracle Guided Learning Settings:
   - **Application ID**
   - **Server URL** - Depending on the location of your environment, enter the URL:
     - NA: `https://guidedlearning.oracle.com`
     - EMEA: `https://guidedlearning-emea.oracle.com`
     - APAC: `https://guidedlearning-apac.oracle.com`
3. Click **Save**. You'll need to log off and log back in for the OGL widget to display on your screen.

Copyright © 2022, 2026, Oracle and/or its affiliates.



Configuring settings in the OGL Environment

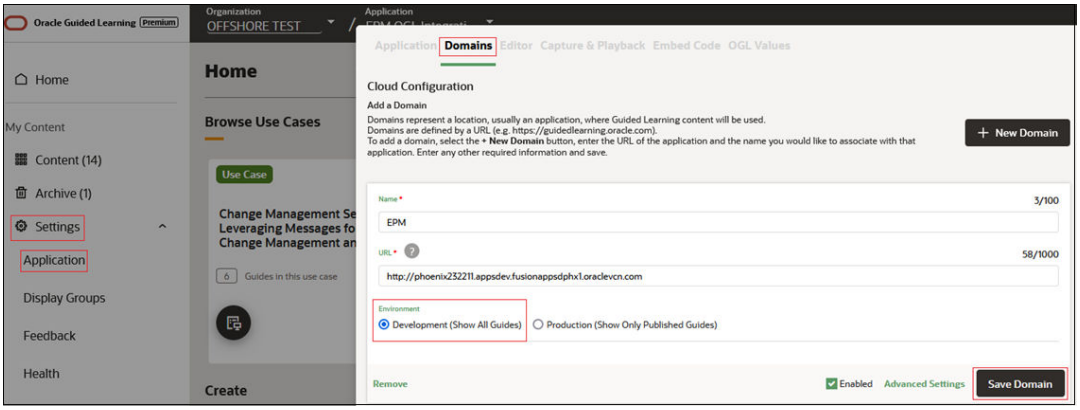
Once the OGL Application is integrated into the Cloud EPM and Cloud EDM environments, the OGL widget will be accessible to the users. Only published guides are visible since the domains by default is configured to Production, which hides the guides that are in development mode.

To allow users to view both published and in-development guides from the environment, change the application's settings as follows:

1. Access the OGL Console application settings. See OGL Console Left Panel in the *Oracle Guided Learning User Guide*.
2. Navigate to the **Domains** tab.
3. Select the **Environment** to **Development** to display all guides.
4. Check the domain status to **Enabled.**

> **Note**
>
> Please make sure to complete the domain entry configuration correctly so that OGL content displays correctly on all applications. Remember OGL content won't appear for domains not listed in OGL Cloud Configuration.

5. Click **Save Domain**.



Key Considerations

- Cloud EPM and Cloud EDM environments are required to perform daily maintenance. Oracle generates a maintenance snapshot, known as an Artifact Snapshot, which captures existing artifacts and data. It's important to note that OGL configuration in Cloud EPM and Cloud EDM is not integrated, and therefor is not included in the Artifact Snapshot. For

Copyright © 2022, 2026, Oracle and/or its affiliates.

more information, see Exporting OGL Guide Content in *Oracle Guided Learning User Guide*.

- If the Cloud EPM and Cloud EDM environments have Network Perimeter setup, the IP address of the OGL server or the outbound IP address of the region that hosts the OGL server must be added to the Network Perimeter. See Outbound IP Addresses of Cloud EPM Data Centers and Regions in *Operations Guide*.

Enabling Context-Based Activation of OGL Guides in Cloud EPM

Oracle Guided Learning (OGL) seamlessly integrates with applications to capture their workflows, enabling precise, in-application guidance tailored to user needs. The **Advanced Setting** feature in the **OGL Editor** further enhances this capability by allowing Service Administrators to:

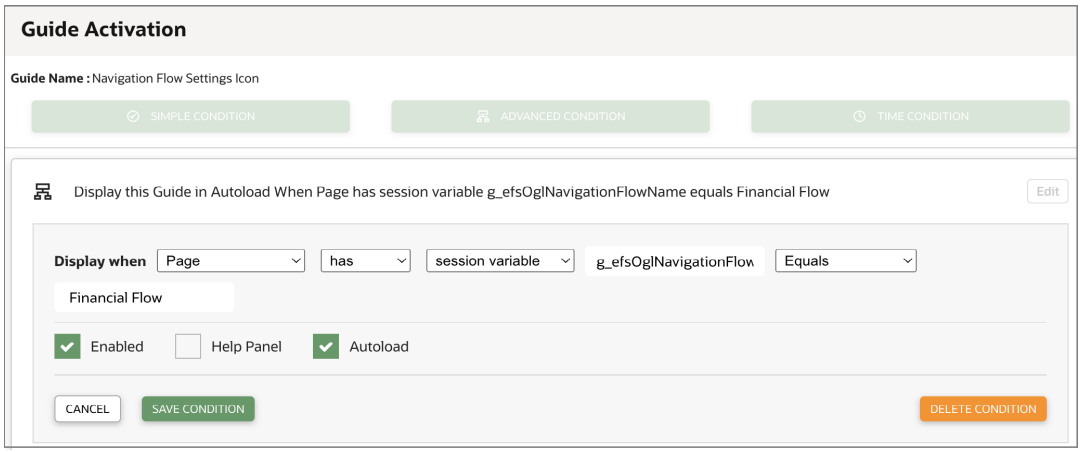
- Configure conditional activation based on Navigation Flow name, cluster ID, card ID, tab, or sub-tab ID.
- Incorporate dynamic content and define custom triggers for guide activation.
- Control visibility and placement of guidance on-screen.

This flexibility ensures that OGL guidance can be fine tuned to meet diverse business requirements within the application environment. Upon integration, Oracle Fusion Cloud Enterprise Performance Management offers the following attributes for activating guides conditionally on pages or components, allowing advanced settings for context-based activation of OGL Guides in the Cloud EPM environments:

Attributes for Context-Based Activation in Cloud EPM

For more information on updating attributes, see Working with the Editors in *Oracle Guided Learning User Guide*.

- **Activating Guides by Navigation Flow Name**: Use the attribute `g_efsOglNavigationFlowName` to activate a guide for specific Navigation Flow. For instance, the following condition activates a guide for all pages within the "Financial Flow" Navigation Flow.

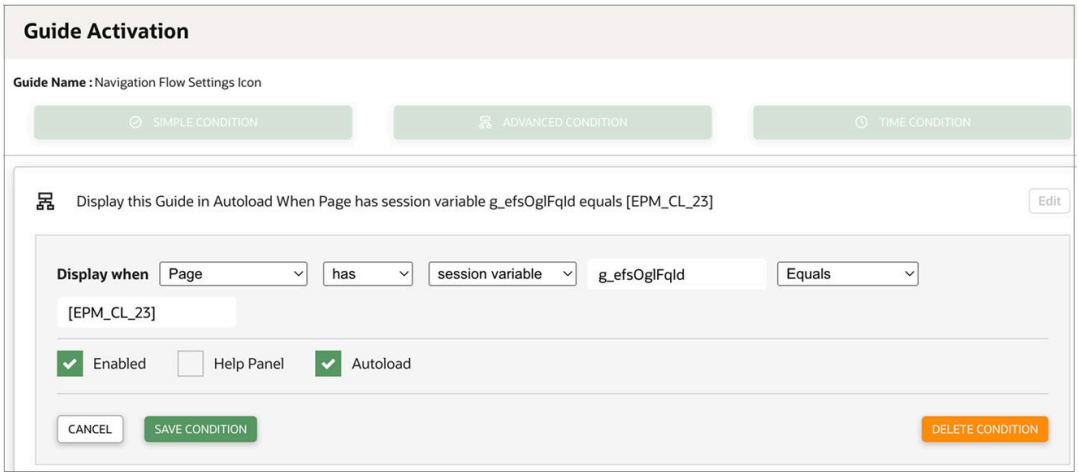


- **Activating Guide Names by Page ID:** The attribute `g_efsOglFqId` enables activation at various levels within the navigation hierarchy:
  - `g_efsOglFqId/<SUB_TAB_ID>` - Activates the guide on the specified sub-tab.

Copyright © 2022, 2026, Oracle and/or its affiliates.

- `g_efsOglFqId/<TAB_ID>/<SUB_TAB_ID>>` - Activates the guides on a sub-tab within a specific tab.
- `g_efsOglFqId/<CARD_ID>/<TAB_ID>/<SUB_TAB_ID>` - Activates the guide on a sub-tab within a tab within a specified card.
- `g_efsOglFqId/<TAB_ID>` - Activates the guides for all the pages within the specified tab.
- `g_efsOglFqId/<CARD_ID>` - Activates the guides for all the pages within the specified card.
- `g_efsOglFqId/<CLUSTER_ID>` - Activates the guides for all the pages within the specified cluster.

For instance, the following activation condition for OGL enables a guide for all pages defined in the cluster ID EPM_CL_23.



Copyright © 2022, 2026, Oracle and/or its affiliates.

35

Migrating from Profitability and Cost Management to Enterprise Profitability and Cost Management

Enterprise Profitability and Cost Management includes improved versions of all the great modeling and allocation capabilities available in Profitability and Cost Management and integrates them with Oracle Cloud EPM Platform features like data forms, dashboards, reports, Data Exchange, Oracle Smart View for Office dimension management, and more.

If you have an existing Profitability and Cost Management application, you can migrate it to Enterprise Profitability and Cost Management. However, because the basic requirements are different between the two, in-place migration is not possible. You can download a migration template that you customize for your existing application, which you then use to generate an application snapshot and data extracts that are compatible with Enterprise Profitability and Cost Management. You can then either manually upload the snapshot and data to an Enterprise Profitability and Cost Management instance, or allow the system to automatically complete the migration.

Review the following tutorial for information on how to migrate an existing Profitability and Cost Management application to a separate instance of Enterprise Profitability and Cost Management.

Tutorial

Your Goal	Learn How
Learn how to migrate an existing Profitability and Cost Management application to a separate instance of Enterprise Profitability and Cost Management.	Migrating from Profitability and Cost Management to Enterrise Profitability and Cost Management

Copyright © 2022, 2026, Oracle and/or its affiliates.