Oracle® Cloud

What's New for Oracle Cloud Infrastructure Process Automation

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Learn about the new features and enhancements of Oracle Cloud Infrastructure Process Automation.

> **Note:**
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> - To learn about which version of Oracle Cloud Infrastructure Process Automation you're using, select the **About** option located under the user name icon in the upper right corner of the Oracle Cloud Infrastructure Process Automation user interface.
> - To learn about new and changed endpoints for Oracle Cloud Infrastructure Process Automation REST API, see REST API for Oracle Cloud Infrastructure Process Automation.

Topics:

25.02—February 2025

Feature	Description
Enforce comments with custom actions	With this release, process designers can set a task level property in the designer to ensure that users provide a comment when performing custom actions on a task. These comments allow users to provide a context or a reason that explains why the action was taken. See Configure Action Rules. Additionally, the audit and task action APIs support the mandatory comments. See REST API for Oracle Cloud Infrastructure Process Automation.
Task history and audit	With this release, the task history and instance audit pages display comments associated with custom and system task actions. This feature helps you to understand the actions taken on a task based on the history and comments.
Process Migration from Oracle Integration Gen 2	The migration tool that migrates process applications from Oracle Integration Cloud Gen 2 instances to Oracle Cloud Infrastructure Process Automation can now migrate input data associations of task properties. The migration tool is now enhanced to support data associations with human tasks that involve external user interfaces such as Oracle Visual Builder.

Feature	Description
Oracle Integration 3 Upgrade	You can now attach a standalone process instance to Oracle Integration 3 to ensure that you have a single integrated environment after upgrade. The Oracle Integration Generation 2 Upgrade user interface has been enhanced to support this feature. The Process upgrade section now displays the Attach an OCI Process Automation instance option that allows you to enter an OCID of the OCI Process Automation instance. If you select this option, instead of creating a new instance, the upgrade process attaches your existing standalone OCI Process Automation instance to Oracle Integration 3. See Prepare for Upgrade.
Process instance title	The instance title is frequently used to uniquely identify a process transaction. It is dynamically set in the start event of a process. With this release, customers can set the title of their process instance in the message start events.

24.12—December 2024

Feature	Description
Human task variables	With this release, process designers can now use new human task variables. See Human Task Exec Variables in *Using Oracle Cloud Infrastructure Process Automation*.
Process variables	With this release, process designers can now use new process variables. See Process Variables in *Using Oracle Cloud Infrastructure Process Automation*.

24.10—October 2024

Feature	Description
Reusable forms	With this release, process designers can now define form componenets and reuse them by embedding them within other forms throughout the process application. For example, you can create an address form componenet to capture address information and reuse it within other forms in the application. See Reuse Forms in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Exclude participants from human tasks	With this release, process designers can now exclude participants from a user task. This functionality allows process designers to prevent unauthorized users from acting on a task. This feature allows process designers to enforce following use cases: • Ensure that a requestor (who is part of an approval group) cannot approve their own request • Ensure that a consecutive task cannot be approved by the same user. See Exclude Participants in *Using Oracle Cloud Infrastructure Process Automation*.
Append to Array	With this release, process designers can now append data elements to an existing array. You can also add an array to another array. See Append to Array in *Using Oracle Cloud Infrastructure Process Automation*.
Support for email templates in notifications	With this release, process designers can use email templates within the notify system activity to send for your information notifications to users. Process designers can create new email templates or modify existing templates to send these email notifications. See Send Notifications in *Using Oracle Cloud Infrastructure Process Automation*.
OAuth Client Credential Flow support	With this release, you can now use OAuth Client Credential Flow supports REST APIs to perform the following functions: • Perform all actions on instances • Send messages to process instances • List and create draft documents • List applications See REST API for Oracle Cloud Infrastructure Process Automation.
New APIs for start timer event	With this release, you can now use the new REST APIs to pause and resume start timer events. See REST API for Oracle Cloud Infrastructure Process Automation.
Approver username in task outcome	With this release, users can see the name of the approver in the task outcomes.
Default assignee for request info action	With this release, when a user requests for more information on a user created task, by default the task is assigned to the task creator. The requestor can view the user name of the task creator.

24.08—August 2024

Feature	Description
Business exceptions	With this release, process designers can now model a process to handle business exceptions. Business exceptions are faults that are explicitly modelled by process designers. These exceptions can define non-technical errors that could occur during the execution of a process flow. Business exceptions can represent logical errors such as an item out of stock and insufficient funds. Process designers can throw these exceptions in a process whenever a functional error is encountered. These errors are then caught and handled appropriately through event subprocesses or boundary events. See Create a Business Exception in *Using Oracle Cloud Infrastructure Process Automation*.
Action rules in human tasks	Process designers can now control the system actions that assignees can perform on a task. This functionality is important when you want to control the end-user behavior to prevent confusions or deviations from an intended business flow. For example, with this feature you can prevent an assignee from reassigning the task. See Configure Action Rules in *Using Oracle Cloud Infrastructure Process Automation*.
Assign to previous approver in human tasks	With this release, process designers can implement a task approval pattern such that successive tasks of an initial task are always assigned to the initial approver. This functionality helps limit the interactions between an assignee and an approver. For example, in the banking industry, you can implement a process design such that once a bank employee claims a task, all subsequent tasks of the initial task are limited to the same bank employee and the approver. See Assign Human Task Activitiesin *Using Oracle Cloud Infrastructure Process Automation*.
Task form modernization	With this release, the user interface usability of start and task detail forms in Workspace has been enhanced. Workspace users can view details of a task and additionally use icons in the vertical bar on the right side of the task form to access and act on information like comments, documents and history. See View and Complete Tasksin *Using Oracle Cloud Infrastructure Process Automation*.
New APIs for bulk migration to Oracle Integration 3	With this release, you can now use the new migration REST APIs to migrate all the process artifacts from Oracle Integration Cloud Gen 2 instances to Oracle Cloud Infrastructure Process Automation. See REST API for Oracle Cloud Infrastructure Process Automation.
Process Automation recipe store	In this release, we have added a new Update Drivers License recipe.

24.06—June 2024

Feature	Description
Discover integrations in Oracle Integration 3 Projects	Process designers can now discover and use integrations within Oracle Integration 3 projects. The Process Automation wizard uses service registration credentials to browse for active integrations within Oracle Integration projects to invoke. Using the wizard, developers can easily call and invoke active integrations without the need of configurations such as defining endpoints and specifying authentication settings. See Use Integrations Within Oracle Integration 3 Projects in *Using Oracle Cloud Infrastructure Process Automation*.
Schedule processes with the timer start event	With this release, a new timer start event has been added that allows scheduling of repetitive process flows that can be used in business use cases such as sending an email to remind employees to submit their timesheet every week. You can now configure hourly, daily, weekly, and monthly schedules based on UTC timezone. See Timer Start Event in *Using Oracle Cloud Infrastructure Process Automation*.
Apply stylesheets to forms	With this release, process designers can add multiple stylesheets to a Process Automation application, thus allowing you to easily apply an organization's branding and styling details to forms. You can import a stylesheet, make changes to the stylesheet in the CSS editor, apply it to a form, and then preview the form. See Work with CSS in *Using Oracle Cloud Infrastructure Process Automation*.
Attach documents in start forms	You can now attach documents to start forms. This feature allows business users to attach documents while initiating a process flow. These attached documents can be made available to human tasks or other process flows for further processing.
New decision application and decision service APIs	With this release, process designers can use APIs to perform management operations such as import, clone, version, and activate decision applications. Additionally, developers can use the new decision service APIs to perform tasks such as listing the active decision applications. See Decision Service APIs and Decision Application APIs in REST API for Oracle Cloud Infrastructure Process Automation.
Service registration for Oracle Integration Generation 2	With this release, administrators can use the service registration feature to connect Oracle Cloud Infrastructure Process Automation Standalone or Fusion instances with either *Oracle Integration 3* or *Oracle Integration Generation 2*.

24.04—April 2024

Feature	Description
Import Oracle Integration Generation 2 process and decision applications	Oracle Cloud Infrastructure Process Automation now allows you to import process and decision applications that are created in Oracle Integration Generation 2. You can now import .exp and .dmn files that are created from Oracle Integration Generation 2. See Import an Application in *Using Oracle Cloud Infrastructure Process Automation*.
Intelligent Document Processing enhancements	Process Automation allows you to reference an uploaded document in subsequent human tasks. You can use this feature in business scenarios where approvers may want to cross check the extracted data with the previously uploaded document before they can take a decision. See Implement Intelligent Document Processing in Forms in *Using Oracle Cloud Infrastructure Process Automation*.
Decision table enhancements	In decision tables, in addition to using functions in the decision table column headers, now Process Automation allows you to use built-in functions and user defined decision functions in decision table cells. See Define Decision Table Input in *Using Oracle Cloud Infrastructure Process Automation*.
Process Automation start form embed-ability enhancements	From this release, to enhance data security, we added support to pass Base64 encoded format of data through query parameters to embedded start forms. See Embed a Start Form in an External Application in *Using Oracle Cloud Infrastructure Process Automation*.
Out of office enhancements	Process Automation administrators can now create and manage out of office records on behalf of Workspace users. See Manage Out of Office Records in *Using Oracle Cloud Infrastructure Process Automation*.
Managing a Process Automation instance	You can now start and stop a Process Automation instance. Use this feature if you do not want to use a Process Automation instance for a period of time. See Start or Stop a Process Automation Instance in *Administering Oracle Cloud Infrastructure Process Automation*.

24.02—February 2024

Feature	Description
Support for external applications in roles	Process Automation now supports authorizing external applications that use OAuth client credential flows in roles so that machine to machine flows can be implemented. See Users, Groups and Permissions in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Create custom data types in decision applications	In decision applications, in addition to manually creating custom data types, Process Automation now lets you import a JSON sample or schema to create custom data types. See Define Custom Data Types in *Using Oracle Cloud Infrastructure Process Automation*.
New error events in event subprocess	Exception and error handling in Process Automation has been enhanced with additional support for error end and error boundary events. See Error End Event, Error Boundary Event, and Terminate End Event in *Using Oracle Cloud Infrastructure Process Automation*.
Out of office in Workspace	In Workspace, users can now create multiple records of their leave periods so that their assigned tasks can be automatically reassigned to other users or roles during their absence. See Out of Office in *Using Oracle Cloud Infrastructure Process Automation*.
Contextualized Process Automation start forms	Process Automation now allows data to be passed through query parameters to embedded start forms so that pre-populated start forms are loaded in external applications. See Embed a Start Form in an External Application in *Using Oracle Cloud Infrastructure Process Automation*.
Usability improvements in Designer	You can now search for nodes in decision models on the canvass. The search highlights all the nodes that match the search term.
Usability improvements in Workspace	The user interface for Process Automation Tasks in the Workspace had been enhanced. The tab based user interface now lets you quickly switch between tabs to search for required information like comments, documents, previous history, and additional information.
Process Automation recipe store	In this release, we have added a new Create Expense Reports recipe.

23.12—December 2023

Feature	Description
Process Automation recipe store	Process Automation now offers some prebuilt, ready-to-use applications called *recipes*. Using recipes, you can jump start your application design since all resources and components required for the application are preconfigured and provided in the recipe. Browse the Process Automation recipe store while creating an application from a recipe. Depending on your requirement, select one of the available recipes to quickly create an application from it. See Create an Application from a Recipe in *Using Oracle Cloud Infrastructure Process Automation*. In this release we have added the following new recipes: • Manage Absence Request • Manage Discount Requests • Manage Credit-Increase Requests • Manage Uniform Requests
Decision applications	From this release, we'll support the creation of decision applications. Decision applications are decision-only applications. Process Automation designers can now model complex decision logic in decision applications, and after activation these can be reused by other process applications. The activated decision applications with already modeled logic can be called by multiple process applications as *external decisions*. With this we have extended our decision service support to beyond the scope of the application in which they're created. The REST API endpoints of these external decision services can also be called by external clients. See the following topics in *Using Oracle Cloud Infrastructure Process Automation*: • Work with Decision Applications • Understand Local and External Decisions • Create a Local or External Decision
Enhancements in Document Understanding control	The following enhancements have been added to the document understanding control: • support for intelligent document processing of invoices and receipts. • ability to show warnings for fields with low confidence score. • ability to hide empty fields. • ability to render PDFs in a PDF viewer in runtime. • ability to use the control in tables and repeatable sections of forms. See Configure Document Understanding Controls in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Enhancements in business search	From this release, the new business search that was available in the Tasks page, will also be available in the Tracking page of Workspace. With the new business search, you can query based on business data and apply advanced search options to find specific process instances in the Tracking page. See Find a Process in *Using Oracle Cloud Infrastructure Process Automation*. In addition, we have also improved the search experience in the Tasks page by introducing auto-suggestions for business search enabled fields while searching for tasks. See About Business Search in *Using Oracle Cloud Infrastructure Process Automation*.
Receive activity with correlation support	A new system activity called Receive activity is now available for structured processes. You can use the receive activity paired with send activity to communicate between asynchronous processes. We have also introduced the ability to set up *correlation* in receive activities using which you can identify an instance of a process and send response message to that specific instance. See the following topics in *Using Oracle Cloud Infrastructure Process Automation*: • Use Send and Receive • Communicate Between Processes Using Correlation • Example of Using Correlation with Send and Receive
Event Subprocess activity	A new system activity called Event Subprocess is now available in structured processes. Event subprocesses can be used to handle runtime exception errors due to service invocation failures in service task, integration and form upload activities. See Handle Errors with Event Subprocesses in *Using Oracle Cloud Infrastructure Process Automation*.
Ability to escalate a human task	Now, while modeling human tasks in design time, you can define if you want to automatically escalate a task to other users or/and roles if the assigned task is not acted upon during a certain interval of time in runtime. See Configure Task Escalation or Expiration in *Using Oracle Cloud Infrastructure Process Automation*. In Workspace, you can also manually escalate a task. Learn more about the Escalate action in the task actions table in Perform Task Actions.
Support for alter flow in graphical view of Analytics	In Analytics graphical view, you can now see if the process flow is altered by manual intervention. Graphical depiction of altered flows help you analyze and troubleshoot as to why the intended process flow was altered. See View Analytics for Activities in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Process level OpenAPI	From this release onwards, OpenAPI Specification (OAS 3.0) will be available for processes in Process Automation. This specification will be specific to each process and describe all life-cycle operations that can be performed. By introducing OpenAPI specifications for our process endpoints, we aim to significantly reduce the effort required in: • understanding existing process APIs, their resources, and operations; and more specifically in defining the dynamic payload structure required to initiate each individual process. • configuring external REST clients or applications such as Visual Builder or Oracle Integration; so that they can seamlessly interact with processes. When you activate a process application that contains a process that starts with message start or form start event, you'll see a reference to the OpenAPI specification for the process under the REST API section of the activation pane.
Changes in application overwrite and deployment experience	To prevent inadvertent data loss during deployment, we made the deactivation and overwrite experience for applications more explicit. Now you can take informed decisions before deactivating and deploying an already activated application. See Deactivate an Application Version in *Using Oracle Cloud Infrastructure Process Automation*.

23.10—October 2023

Feature	Description
Support for intelligent document processing in forms	We have added intelligent document processing capabilities in forms with a new control called Document Understanding. The document understanding control uses out of the box pretrained AI models from Oracle Cloud Infrastructure (OCI) Document Understanding AI service to detect, classify, and extract texts from documents uploaded to it. In this release, we are supporting two document types: passports and driver licenses. The extracted text from passports and drivers licenses can then be used for process routing, approval, or can be sent to a downstream system. See Implement Intelligent Document Processing in Forms in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Support for a new more powerful and contextual search experience based on business data	We now support a new search in Workspace which is much more powerful and gives you a rich search experience by providing the ability to do complex searches with fields including business critical fields that are defined in design time, standard query operators, wild cards, fuzzy term search, and more. See the following topics in *Using Oracle Cloud Infrastructure Process Automation*: • Search for a Task • Configure Searchable Fields Based on Business Data • Apply Advanced Search Filters
Enhancements in Process Automation Analytics: Graphical view for process details and more	In this release, we added support for graphical view of processes in the Activity list page. Some of the highlights of graphical view are: • Ability to see the sequence flow of activities in structured and dynamic processes where different activities are represented with different nodes. • Ability to filter activity nodes in the process flow based on errors, in-progress counts and time. • Ability to view transition counts between two nodes. We also added support for inline subprocesses, multi-instance activities, call activities, upload form activities, and stages in the graphical and list view of structured/dynamic processes. See View Analytics for Activities in *Using Oracle Cloud Infrastructure Process Automation*. In addition to the ability to navigate contextually from Analytics view to the Tracking page, from this release onwards users can also navigate contextually from the Tracking page to Analytics view. See Analytics: Instance Tracking in *Using Oracle Cloud Infrastructure Process Automation*.
Ability to embed a start form in an external application	We have added the support for embedding a start form in an external application. This ensures seamless user experience as users are always in the context of their primary application and don't need to navigate to Process Automation Workspace to invoke a process instance. See Embed a Start Form in an External Application in *Using Oracle Cloud Infrastructure Process Automation*.
Support for Send activity in structured processes	A new system activity called the Send activity is now available for structured processes. Using the send activity, you can start a number of asynchronous processes and communicate with them from the main process. See Use a Send Activity in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Workspace improvements	• In the Audit window, users can now view for which activity the process instance flow was altered, who performed the alter flow action, when was the alter flow action performed, and also if any comment (reason) was added for altering the flow. • While updating the attributes of a data object in Alter Flow window, syntax errors will be highlighted to users. Thus users can now easily identify errors and correct them in the code editor. • In the Audit window, each activity has its own icon that helps in clearly identifying the type of activity. • Audit timestamp now also includes seconds.

23.08—August 2023

Feature	Description
Support for the Subprocess activity	In this release, we have added a new system activity called Subprocess activity. The subprocess activity enables designers to make complex business processes more readable by grouping related activities within smaller inline subprocesses. Designers can now hide complexities in the inline subprocesses thus improving the readability of the overall business process. Another key consideration for grouping activities in a subprocess is that it enables you to take collective action via a boundary event. See About Subprocesses in *Using Oracle Cloud Infrastructure Process Automation*.
Support for the Upload Form activity	Expanding the different ways in which we allow users to download and save forms, we have added a new system activity called Upload Form in this release. The Upload Form activity allows you to directly upload a form's snapshot during process execution to an external service for auditing or archiving purposes. See Configure an Upload Form Activity in *Using Oracle Cloud Infrastructure Process Automation*.
Alter Flow support from Workspace user interface	In addition to the ability to alter the flow of a process with REST APIs (that was introduced in a previous release), from this release onwards users can also alter the flow of a process instance using the Workspace user interface. See Alter the Flow of a Process in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Enhancements in Process Automation Analytics	• We have added the ability for users to directly navigate to the instance Tracking page from the Analytics user interface. As the filters applied in the Analytics page are propagated to the instance Tracking page, while investigating errors and bottlenecks in an analytics report you can now contextually navigate to an instance's Tracking page to troubleshoot and resolve errors or bottlenecks by accessing the instance's audit in the Tracking page. See Analytics: Instance Tracking in *Using Oracle Cloud Infrastructure Process Automation*. • In addition to the ability to view analytics reports for human task and service task activities, users can now view analytics reports for integration activities too. • From this release onwards, we will support application deactivation semantics in Analytics. In-line with the current behavior for transaction and audit data in Process Automation, we will purge analytics data whenever a process application is deactivated. This ensures that test data generated throughout the development process is cleaned up.
Other enhancements in Workspace	• We now offer a unified audit experience for both structured and dynamic processes. For example, in both structured and dynamic processes you'll be able to view the request and response payloads for service tasks and input/output data for human tasks. • We've enhanced the search capability in the Tracking page by introducing two new filters in the Advanced Filter fields: **Application version** and **Process Name**. You can now streamline and power your search by specifying the version of the process application and the name of the structured or dynamic process.

23.06—June 2023

Feature	Description
Ability to view analytics report for activities in a process	Expanding the Analytics capability in Process Automation, we have added the ability to view analytics report for activities within a process. This is in addition to the capability of viewing application and process level analytics that we added in the previous release. See View Analytics for Activities in *Using Oracle Cloud Infrastructure Process Automation*. For certain activities like human task activity or service task activity, you can also drill down further to view detail analytics reports for the activity. See View Analytics for a Human Task Activity and View Analytics for a Service Task Activity in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Support for Abstract activity and Draft property in structured processes	In this release, we have added a new system activity called Abstract activity. An abstract activity is a modeling placeholder for another activity in a structured process and is useful when you aren't sure about the implementation details of some activity in your process. The draft property is useful when you want to test structured processes with unimplemented activities. Using the draft property ensures that validation is skipped for unimplemented activities and you can test the rest of the process flow in runtime. See Use Abstract Activity and About Draft Property in *Using Oracle Cloud Infrastructure Process Automation*.
Ability to export a form as PDF	You can now download and save forms that are associated with human tasks as PDFs in runtime. See Export Forms as PDF in *Using Oracle Cloud Infrastructure Process Automation*.
Other enhancements in Designer	Some other enhancements in Designer that we have introduced in this release are: • Support for dynamically assigning activities by using user name, user ID, role name or role ID in an expression. • Support for creating human task activities without associated forms.

Feature	Description
Usability improvements in modeling decisions	In Designer, we improved the user experience while modeling decisions by adding the following enhancements: • Ability to copy and paste a decision table. • Improved user query and search auto complete list in fields by: – Showing relevant suggestions that starts with only the query string typed by the user. – Highlighting the non-matching part of the user's typed query in the list items. – Improving object selection when searching through hierarchy with '.'. • Improved modeling experience in the decision definition pane for data intensive decision logic by: – Making the first output column in a decision table always sticky, so that the column is always visible regardless of the number of input columns. – Improving scrolling experience of decision tables embedded in other controls. – Ensuring table controls are independent of decision table scroll. • Improved rendering logic of errors and warnings by focusing on errors first and then warnings. Also, added lazy loading feature in error list to improve performance. • Improved user experience in the Test Decision Model pane with the following: – Types of attributes are indicated in the fields so that users can understand what input type to enter. – If there are list of values, allowed values are displayed in a drop-down list. – If the input is a date, date picker is displayed for the user to select. – If the input is boolean, true and false options are displayed
Usability improvements to the Tasks and Tracking pages in Workspace	In Workspace, we improved the user experience in the Tasks and Tracking user interfaces by adding various filter options on these pages. To know more about the enhancements to these pages, see the following in *Using Oracle Cloud Infrastructure Process Automation*. • Work on Tasks • Track Processes

23.04—April 2023

Feature	Description
Use Oracle Cloud Infrastructure Process Automation with Oracle Integration 3	This release continues to expand the way we offer Oracle Cloud Infrastructure Process Automation by introducing a new service type of using Process Automation with Oracle Integration 3 Enterprise Edition. When you use Process Automation with Oracle Integration, the power to integrate and work with cloud applications increases manifold in your process applications with access to integrations that are designed in Oracle Integration. See Use Process Automation with Oracle Integration 3 in *Using Oracle Cloud Infrastructure Process Automation*. To use Process Automation with Oracle Integration 3, you must first enable it in an Oracle Integration instance from the Oracle Cloud Infrastructure (OCI) Console. See Enable Process Automation with Oracle Integration 3 in *Administering Oracle Cloud Infrastructure Process Automation*. For more information, see Oracle Integration 3 documentation on the Oracle Help Center.
Support for Integration activity in Designer	In Designer, we'll support the use of active integrations from Oracle Integration 3 that are designed with REST triggers in your process applications. You can now leverage the capabilities of the rich array of adapters from Oracle Integration in your business processes to connect and exchange data with other services and applications in the cloud. See Work with Integrations in *Using Oracle Cloud Infrastructure Process Automation*.
Ability to register a service such as Oracle Integration from Workspace.	We now support the registration of other cloud services from the Workspace Registered Services page. In this release we are supporting the registration of Oracle Integration 3, and we will continue to expand this support to other cloud services in the future. See Register Services in *Using Oracle Cloud Infrastructure Process Automation*.
Support for Analytics in Workspace	We're introducing analytics into Oracle Cloud Infrastructure Process Automation with this release. Get visualizations of process analytics data in the form of graphs, charts, and maps. With process analytics reports, you can get insights into the performances of your business processes, and identify bottlenecks, gaps, and outliers. This information in turn helps you improve the efficiency of your business processes. See Use Analytics in *Using Oracle Cloud Infrastructure Process Automation*. Also, see the blog.

Feature	Description
Adhoc tasks support in runtime	Users now have the ability to create and manage adhoc tasks on the fly in runtime with REST APIs. These adhoc tasks are like any other user tasks that can be worked upon in runtime. With the introduction of this feature, we have tried to eliminate design-time effort of re-modeling processes and re-deploying process applications whenever there is a need to add tasks to deployed processes and process applications. See REST API endpoints for Adhoc Tasks in *REST API for Oracle Cloud Infrastructure Process Automation*.
Alter Flow support in runtime	This release introduces REST API support for Alter Flow. Process owners and administrators with *Manage* permission can now change the course of a running structured process instance. It caters to scenarios where a process instance has encountered a problem and needs manual intervention. For example, a process instance may need to be moved to another activity in the flow or a current activity has to be retried after modifying some of its existing data attributes. See REST API endpoints for Alter Flow in *REST API for Oracle Cloud Infrastructure Process Automation*. See the blog to explore some use cases for alter flow.
Oracle Assistant	This release expands the artificial intelligence capabilities within Oracle Cloud Infrastructure Process Automation by debuting a new digital assistant named Oracle Assistant. Use the Oracle Assistant to find answers to your Process Automation questions in an interactive and engaging way.
Data transformation support in data association editor	We have added the support for data transformations in the data association editor using which you can now associate and map data types that don't match. See Work with Transformations in *Using Oracle Cloud Infrastructure Process Automation*.
Support for cloning processes	With this release we introduce the ability to clone structured and dynamic processes within process applications in Designer. This feature is helpful when you want to quickly create an exact copy of an existing structured or dynamic process. Cloning copies all design-time metadata for the process. Artifacts such as forms and integrations used in the original process are linked but not cloned, and data associations are retained. See Clone a Structured Process and Clone a Dynamic Process in *Using Oracle Cloud Infrastructure Process Automation*.
Usability improvements in modeling decisions	In Designer, we improved the user experience while modeling decisions by adding the following enhancements: • Sticky table controls in decision tables. • Ease of scrolling and resizing nested decision tables.

Feature	Description
Other Workspace (runtime) enhancements	Some other improvements in Workspace that we have introduced in this release are: • The ability to filter activities by stage for dynamic processes in the process instance details window under **Tracking**. See Work with Activities in *Using Oracle Cloud Infrastructure Process Automation*. • Identity browser support to display a user's name and email in the runtime search fields. • Ability to terminate a dynamic process and all its child processes from the runtime Tracking page. See End Dynamic Processes in *Using Oracle Cloud Infrastructure Process Automation*.
Deprecated YY date format	We would no longer support the YY format in date time controls. Instead you can use the YYYY formats in date time control. However, we will continue to support date time controls that were already configured with the YY format in forms designed in previous Process Automation versions. See Configure Date and Time Fields in *Using Oracle Cloud Infrastructure Process Automation*.

23.02—February 2023

Feature	Description
Support for OCI Signature Policy in connectors	You can now secure a connector using the Oracle Cloud Infrastructure (OCI) Signature Policy. OCI Signature security policy authenticates the service consumer and ensures that communication between Oracle Cloud Infrastructure Process Automation and the service consumer happens in a secure way. See the following topics in *Using Oracle Cloud Infrastructure Process Automation*: • Configure Security with OCI Signature Policy • Add OCI Signature Policy Credential (Global)
Oracle JET 13 upgrade	Oracle Cloud Infrastructure Process Automation now uses Oracle JET 13. With the migration to the latest JET version, Oracle Cloud Infrastructure Process Automation Designer and Workspace user interfaces now adheres to the latest Oracle Redwood updates, in addition to providing better user experience.

Feature	Description
Usability improvements	We have implemented several usability improvements in Designer and Workspace. **Designer** • In decision modeling, now you can get better error messages during validation that help you to easily troubleshoot any modeling issues. • We have improved error messages during activation to help you resolve any issues that can block activation of process applications. • Several key usability improvements have been made in the expression builder to help you build expressions easily. • In forms, now you can configure a Text Area control such that its height is re-sizable. This gives end users more flexibility while entering information in such fields. **Workspace** • We have improved error messages for task actions to help you troubleshoot any issues related to task actions. • We have improved error messages for task forms to help you troubleshoot any issues related to task forms. • We have improved troubleshooting capability on service task failure by exposing the following HTTP parameters: – HTTP headers (non-security related) – HTTP request body – HTTP response body (containing error)

22.12—December 2022

Feature	Description
Support for multiple file uploads at a time to an external document store	In the previous version of Oracle Cloud Infrastructure Process Automation, users could only upload one file at a time using the file upload control in a file manager control. Now, users can upload upto 5 files simultaneously to an external document store when the **Supports multiple uploads** option is selected while configuring the file upload control. In addition, we have also improved the user experience of configuring the file upload and file list controls by grouping all connector related configurations under a new **Binding** tab. See the following topics in *Using Oracle Cloud Infrastructure Process Automation*: • Configure File Manager Controls • Configure File Upload Control • Configure File List Control
Support for viewing only task level comments	While working on a task in Workspace, now you have the option to filter out comments posted only for that particular task by selecting the **Task Comments** radio button under the Comments section of the task. See Work on Tasks in *Using Oracle Cloud Infrastructure Process Automation*.

Feature	Description
Access Workspace directly from Designer	You can now access Workspace (runtime environment) directly from Designer (design environment). Click the user icon on the top-right of the Designer UI, then click **Workspace**. The Workspace UI opens in another tab of your browser.
Key usability enhancements	• Improved ease of use of the expression builder in Designer. As soon as you choose the object using which you want to build an expression, related suggestions for the next level are displayed. If a function is selected, then parentheses are automatically added and the cursor is placed between the parentheses indicating where the next expression should be entered. Thus you can take cues from the suggestions and build the required expression easily. • Better error messages in Designer and Workspace to help users debug and fix errors quickly.

22.08—September 2022

Feature	Description
New Process Automation workshop	We now have a comprehensive workshop to learn some key Process Automation concepts. Try out the workshop in Oracle LiveLabs or navigate to it from our new Training page. The workshop consists of two labs. In the first lab, learn how to create processes, configure forms, and dynamically populate data in forms using events and connectors. Also understand how data is stored and how data flows within a process by defining data objects and configuring data associations. In the second lab, learn about decisions including how to create a decision, model decision logic, expose decision as a service, and use it in your process. In both labs, you also get to activate, test and run your applications.

Feature	Description
File Manager control in forms	We have introduced a new control in forms called File Manager using which users can upload files to an external document store as well as list the uploaded files. The file manager control is an enhancement of the previously available file upload control which could only upload files to an external document store. Now with the new file manager control, users can not only upload files but also list the uploaded files and optionally download or delete the listed files in forms. See Configure File Manager Controls in *Using Oracle Cloud Infrastructure Process Automation*. **Note:** If you had used the file upload control available in the previous version of Oracle Cloud Infrastructure Process Automation in a process application, we'll continue to support it. However, the options to update the connector and resource for the control won't be available anymore.
Reminders for user tasks	We now support reminders for human tasks in structured and dynamic processes. If task assignees do not act on their assigned tasks within a specific period of time, notification emails are sent to remind them about their assigned tasks. See Configure Task Reminders in *Using Oracle Cloud Infrastructure Process Automation*.
New date-time operator for simple expressions	A new date-time operator `toTimezone` is available for simple expressions. Use the `toTimezone` operator to return the date-time expressed in the time offset corresponding to the timezone ID provided. See the DateTime table in Work with Expressions in *Using Oracle Cloud Infrastructure Process Automation*.

22.06—July 2022

Feature	Description
File upload control in forms	Users can now upload files to an external document store using the File Upload control in web forms. You use a connector to configure the control's properties and allow users to upload the base64 string of the file content via a POST API call. See Configure File Upload Controls in *Using Oracle Cloud Infrastructure Process Automation*.
User task priority as expression	We now support the use of expressions to dynamically set a value for a task's priority while creating tasks. See Configure the Due Date and Priority in *Using Oracle Cloud Infrastructure Process Automation*.
Form error validation	We now eased the access to form error validation messages by displaying them on top of the form. Users can click a particular message from the error list to navigate to the specific control where the error occurs. See the note about this in Work on Tasks and Work with Activities in *Using Oracle Cloud Infrastructure Process Automation*.

22.04—May 2022

Feature	Description
Complex business types	We now support business types and list of values that you can use to group related data types and define structure for data used in your process applications. See Work with Business Types in *Using Oracle Cloud Infrastructure Process Automation*.
Expiration duration in user tasks	In Designer, you can now set the expiration duration for your user tasks while configuring them in structured and dynamic processes. In Workspace, if a task hasn't been acted upon till the specified expiration duration, a notification email will be sent to the task assignee that the task has expired and the task will move to *Completed* state with the sub-state *Expired*. See Configure Task Expiration in *Using Oracle Cloud Infrastructure Process Automation*.
Decision modeling improvements	We have improved the user experience of modeling decision logic with the introduction of the following new features: • Cut, copy, and paste data at a cell level in non-tabular decisions. • Cut, copy, and paste rows and columns in tabular decisions. See Create Decision Tables in *Using Oracle Cloud Infrastructure Process Automation*. • Use of boxed expression result in context decisions. Previously, context decisions contained only key-value pairs. Now, you can include a boxed expression result in the context and write any logic in it using the keys specified in the context decision. See Create Contexts in *Using Oracle Cloud Infrastructure Process Automation*.

22.02—March 2022

Feature	Description
Conditional data mapping	We now support conditions while configuring data associations. You can control data association executions in runtime by adding conditions while mapping data in the data association editor in Designer. See Define Conditions for Data Associations in *Using Oracle Cloud Infrastructure Process Automation*.
New functions - Identity Service and Get or Else	We have introduced two new types of function categories - *Identity Service* and *Get or Else*. • **Identity Service**: Use the getUserId function to retrieve the user id of a specific user. Use the getUserIds function if you want to retrieve a comma separated list of user ids for a comma separated list of user names. See the **Identity Service** category under **Additional Functions** in Work with Expressions in *Using Oracle Cloud Infrastructure Process Automation*. • **Get or Else**: This function set is useful while dealing with an untrustworthy data source where initialization isn't guaranteed. An object property is requested along with a backup value. The backup value is used if the first argument corresponds to a missing node or an uninitialized value. See the **Get or Else** category under **Additional Functions** in Work with Expressions.
Dynamically assign tasks to a number of users	You can now dynamically assign a task to a number of users by using comma separated list of user Ids or by using the IdentityService.getUserIds function in an expression while assigning the task. See Assign Human Tasks in *Using Oracle Cloud Infrastructure Process Automation*.

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.

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Oracle Cloud *What's New for Oracle Cloud Infrastructure Process Automation*,
F58648-18

Documentation for Oracle Cloud Infrastructure Process Automation that describes new and changed features.