

Oracle® Cloud

Using the Oracle JD Edwards EnterpriseOne Adapter with Oracle Integration Generation 2



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Preface

This guide describes how to configure this adapter as a connection in an integration in Oracle Integration.



Note:

The use of this adapter may differ depending on the features you have, or whether your instance was provisioned using Standard or Enterprise edition. These differences are noted throughout this guide.

Topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Diversity and Inclusion](#)
- [Related Resources](#)
- [Conventions](#)

Audience

This guide is intended for developers who want to use this adapter in integrations in Oracle Integration.

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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Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and

partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Resources

See these Oracle resources:

- Oracle Cloud
<http://cloud.oracle.com>
- *Using Integrations in Oracle Integration Generation 2*
- *Using the Oracle Mapper with Oracle Integration Generation 2*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Understand the Oracle JD Edwards EnterpriseOne Adapter

Review the following conceptual topics to learn about the Oracle JD Edwards EnterpriseOne Adapter and how to use it as a connection in integrations in Oracle Integration. A typical workflow of adapter and integration tasks is also provided.

Topics:

- [Oracle JD Edwards EnterpriseOne Adapter Capabilities](#)
- [What Application Version Is Supported?](#)
- [Oracle JD Edwards EnterpriseOne Adapter Use Cases](#)
- [Workflow to Create and Add an Oracle JD Edwards EnterpriseOne Adapter Connection to an Integration](#)



Note:

There are overall service limits for Oracle Integration. A service limit is the quota or allowance set on a resource. See [Service Limits](#).

Oracle JD Edwards EnterpriseOne Adapter Capabilities

With just a few clicks the Oracle JD Edwards EnterpriseOne Adapter allows integration with Oracle JD Edwards EnterpriseOne servers. With the Oracle JD Edwards EnterpriseOne Adapter you can complete the integration quickly without the need to hire a team of Oracle JD Edwards EnterpriseOne applications programming specialists.

Oracle JD Edwards EnterpriseOne Adapter supports the Business Service object type described at [this site](#). Customized business objects are also supported.

Oracle JD Edwards EnterpriseOne Adapter is one of many predefined adapters included with Oracle Integration. You can configure Oracle JD Edwards EnterpriseOne Adapter as a trigger or an invoke in an integration in Oracle Integration.

What Application Version Is Supported?

For information about which application version is supported by this adapter, see the [Connectivity Certification Matrix](#).

See [Connectivity Certification Matrix](#).

Oracle JD Edwards EnterpriseOne Adapter Use Cases

Common use cases for the Oracle JD Edwards EnterpriseOne Adapter are as follows:

- Synchronize Sales Cloud to JDE, such as account, product, and bill of material.
- Push an opportunity created in Sales Cloud to JD Edwards EnterpriseOne so a quote can be created in the JD Edwards EnterpriseOne order management system.
- Integrate new sales orders that are initiated in CPQ to JD Edwards EnterpriseOne for fulfillment and billing.

Workflow to Create and Add an Oracle JD Edwards EnterpriseOne Adapter Connection to an Integration

You follow a very simple workflow to create a connection with an adapter and include the connection in an integration in Oracle Integration.

Step	Description	More Information
1	Create the adapter connections for the applications you want to integrate. The connections can be reused in multiple integrations and are typically created by the administrator.	Create an Oracle JD Edwards EnterpriseOne Adapter Connection
2	Create the integration. When you do this, you add trigger and invoke connections to the integration.	Create Integrations and Add the Oracle JD Edwards EnterpriseOne Adapter Connection to an Integration
3	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data in <i>Using Integrations in Oracle Integration Generation 2</i>
4	(Optional) Create lookups that map the different values used by those applications to identify the same type of object (such as gender codes or country codes).	Manage Lookups in <i>Using Integrations in Oracle Integration Generation 2</i>
5	Activate the integration.	Manage Integrations in <i>Using Integrations in Oracle Integration Generation 2</i>
6	Monitor the integration on the dashboard.	Monitor Integrations in <i>Using Integrations in Oracle Integration Generation 2</i>
7	Track payload fields in messages during runtime.	Assign Business Identifiers for Tracking Fields in Messages and Manage Business Identifiers for Tracking Fields in Messages in <i>Using Integrations in Oracle Integration Generation 2</i>
8	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors in <i>Using Integrations in Oracle Integration Generation 2</i>

2

Create an Oracle JD Edwards EnterpriseOne Adapter Connection

A connection is based on an adapter. You define connections to the specific cloud applications that you want to integrate.

Topics:

- [Prerequisites for Creating a Connection](#)
- [Create a Connection](#)
- [Upload an SSL Certificate](#)

Prerequisites for Creating a Connection

You must satisfy the following prerequisites to create a connection with the Oracle JD Edwards EnterpriseOne Adapter.

- [Know the WSIL Full Path URL](#)
- [Know the Oracle JD Edwards EnterpriseOne Application Details](#)
- [Know the Agent Group to Associate with the Oracle JD Edwards EnterpriseOne Adapter](#)

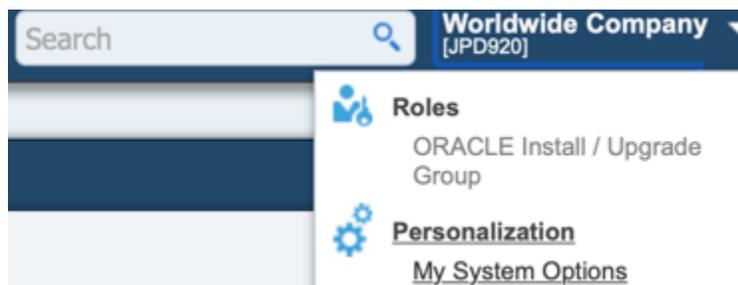
Know the WSIL Full Path URL

Know the Oracle JD Edwards EnterpriseOne WSIL full path URL. This URL is required when configuring the connection properties in [Configure Connection Properties](#). To get the WSIL full path URL, perform the following steps:

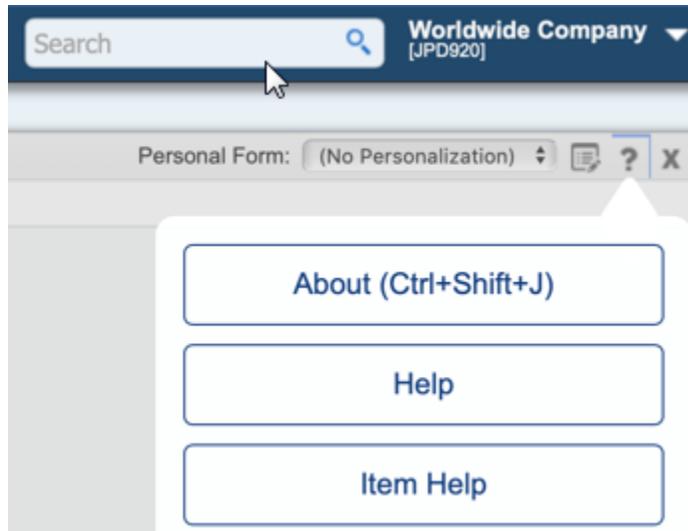
1. Log in to Oracle JD Edwards EnterpriseOne. The URL is as follows:

Jas_Hostname:port/jde/E1Menu.maf

2. Select **My System Options** from the upper right menu.



3. This launches a **My System Options - User Default Revisions** application.



3. Launch the About page from the upper right help menu icon to find the environment parameter value.
4. Copy the value for the **Environment** parameter and remove the **J** from the front to create the WSIL URL to use. For this example, **PD920** is the **Environment** parameter to use in the URL.

About

Application Information	
Application:	P0085
Version:	

Form Information	
Form:	W0085N
SubForms:	None
Help Identifier:	8514
Product Code:	H95
Form Process Type:	F1
Mode:	1
Generated by:	JPD920
Generated In:	
Date:	Tue Jul 16 10:17:09 UTC 2019

Other	
EnterpriseOne Tools Release:	9.2.1
User Name:	JDE
Environment:	JPD920
Display list of all hotkeys	

5. Enter this WSIL URL in the **WSIL URL** field when creating your connection, as described in [Configure Connection Properties](#).

 **Note:**

This URL is for the business services server. To find the server name and port, log in to the JD Edwards EnterpriseOne Server Manager Console and select the EnterpriseOne business services server managed instance.

```
https://Business_Services_Server:port/Environment/wsil.jsp
```

Know the Oracle JD Edwards EnterpriseOne Application Details

- Know the user name, password, role, and environment for connecting to the Oracle JD Edwards EnterpriseOne application. This information is required when configuring connection security. See [Configure Connection Security](#).
- Know the name of the Oracle JD Edwards EnterpriseOne environment and the role type that can access the environment.

Know the Agent Group to Associate with the Oracle JD Edwards EnterpriseOne Adapter

Know the agent group to associate with the Oracle JD Edwards EnterpriseOne Adapter. You select the agent group when you create the connection. See [Configure an Agent Group](#).

Create a Connection

Before you can build an integration, you have to create the connections to the applications with which you want to share data.

To create a connection in Oracle Integration:

1. In the left navigation pane, click **Home > Integrations > Connections**.
2. Click **Create**.

 **Note:**

You can also create a connection in the integration canvas of:

- An orchestrated integration (See Define Inbound Triggers and Outbound Invokes.)
 - A basic routing integration (See Add a Trigger (Source) Connection.)
3. In the Create Connection — Select Adapter dialog, select the adapter to use for this connection. To find the adapter, scroll through the list, or enter a partial or full name in the **Search** field and click  **Search**.
 4. In the Create Connection dialog, enter the information that describes this connection.
 - a. Enter a meaningful name to help others find your connection when they begin to create their own integrations. The name you enter is automatically added in capital

Configure an Agent Group

Configure an agent group for accessing the service hosted on your premises behind the fire wall.

1. Click **Configure Agents**.
The Select an Agent Group page appears.
2. Click the name of the agent group.
3. Click **Use**.

To configure an agent group, you must download and install the on-premises connectivity agent. See *Download and Run the Connectivity Agent Installer and About Connectivity Agents and Integrations Between On-Premises Applications and Oracle Integration in Using Integrations in Oracle Integration Generation 2*.

Test the Connection

Test your connection to ensure that it's configured successfully.

1. In the page title bar, click **Test**. What happens next depends on whether your connection uses a Web Services Description Language (WSDL) file.

If Your Connection...	Then...
Doesn't use a WSDL	The test starts automatically and validates the inputs you provided for the connection.
Uses a WSDL	A dialog prompts you to select the type of connection testing to perform: <ul style="list-style-type: none"> • Validate and Test: Performs a full validation of the WSDL, including processing of the imported schemas and WSDLs. Complete validation can take several minutes depending on the number of imported schemas and WSDLs. No requests are sent to the operations exposed in the WSDL. • Test: Connects to the WSDL URL and performs a syntax check on the WSDL. No requests are sent to the operations exposed in the WSDL.

2. Wait for a message about the results of the connection test.
 - If the test was successful, then the connection is configured properly.
 - If the test failed, then edit the configuration details you entered. Check for typos, verify URLs and credentials, and download the diagnostic logs for additional details. Continue to test until the connection is successful.
3. When complete, click **Save**.

Upload an SSL Certificate

Certificates are used to validate outbound SSL connections. If you make an SSL connection in which the root certificate does not exist in Oracle Integration, an exception is thrown. In that case, you must upload the appropriate certificate. A certificate enables Oracle Integration

to connect with external services. If the external endpoint requires a specific certificate, request the certificate and then upload it into Oracle Integration.

To upload an SSL certificate:

1. In the left navigation pane, click **Home > Settings > Certificates**. All certificates currently uploaded to the trust store are displayed in the Certificates dialog. The



link enables you to filter by name, certificate expiration date, status, type, category, and installation method (user-installed or system-installed). Certificates installed by the system cannot be deleted.

Certificates Upload			
Q 6 Certificates			
Installed By: User			
Name	Type	Category	Status
mykey3 EXPIRES IN 1 MONTH	X.509	Identity	Configured
mykey2 EXPIRED	X.509	Identity	Configured
recert1586867745048 EXPIRES IN 4 YEARS	X.509	Trust	Configured
recert1586863610817 EXPIRES IN 4 YEARS	X.509	Trust	Configured
recert1586857607511 EXPIRES IN 4 YEARS	X.509	Trust	Configured
recert1586857416600 EXPIRES IN 4 YEARS	X.509	Trust	Configured

2. Click **Upload** at the top of the page. The Upload Certificate dialog box is displayed.
3. Enter an alias name and optional description.
4. In the **Type** field, select the certificate type. Each certificate type enables Oracle Integration to connect with external services.
 - **X.509 (SSL transport)**
 - **SAML (Authentication & Authorization)**
 - **PGP (Encryption & Decryption)**

X.509 (SSL transport)

1. Select a certificate category.
 - a. **Trust:** Use this option to upload a trust certificate.
 - i. Click **Browse**, then select the trust file (for example, `.cer` or `.crt`) to upload.
 - b. **Identity:** Use this option to upload a certificate for two-way SSL communication.
 - i. Click **Browse**, then select the keystore file (`.jks`) to upload.
 - ii. Enter the comma-separated list of passwords corresponding to key aliases.

 **Note:**

When an identity certificate file (JKS) contains more than one private key, all the private keys must have the same password. If the private keys are protected with different passwords, the private keys cannot be extracted from the keystore.

- iii. Enter the password of the keystore being imported.
- c. Click **Upload**.

SAML (Authentication & Authorization)

1. Note that **Message Protection** is automatically selected as the only available certificate category and cannot be deselected. Use this option to upload a keystore certificate with SAML token support. Create, read, update, and delete (CRUD) operations are supported with this type of certificate.
2. Click **Browse**, then select the certificate file (.cer or .crt) to upload.
3. Click **Upload**.

PGP (Encryption & Decryption)

1. Select a certificate category. Pretty Good Privacy (PGP) provides cryptographic privacy and authentication for communication. PGP is used for signing, encrypting, and decrypting files. You can select the private key to use for encryption or decryption when configuring the stage file action.
 - a. **Private:** Uses a private key of the target location to decrypt the file.
 - i. Click **Browse**, then select the PGP file to upload.
 - ii. Enter the PGP private key password.
 - b. **Public:** Uses a public key of the target location to encrypt the file.
 - i. Click **Browse**, then select the PGP file to upload.
 - ii. In the **ASCII-Armor Encryption Format** field, select **Yes** or **No**. **Yes** shows the format of the encrypted message in ASCII armor. ASCII armor is a binary-to-textual encoding converter. ASCII armor formats encrypted messaging in ASCII. This enables messages to be sent in a standard messaging format. This selection impacts the visibility of message content. **No** causes the message to be sent in binary format.
 - iii. From the **Cipher Algorithm** list, select the algorithm to use. Symmetric-key algorithms for cryptography use the same cryptographic keys for both encryption of plain text and decryption of cipher text.
- c. Click **Upload**.

3

Add the Oracle JD Edwards EnterpriseOne Adapter Connection to an Integration

When you drag the Oracle JD Edwards EnterpriseOne Adapter onto the integration canvas, the Adapter Endpoint Configuration Wizard wizard appears. Use the wizard to configure the Oracle JD Edwards EnterpriseOne Adapter endpoint properties.

These topics describe the Adapter Endpoint Configuration Wizard pages that assist you with the creation of the Oracle JD Edwards EnterpriseOne Adapter integration as a trigger or invoke.

Topics:

- [Basic Info Page](#)
- [Trigger Operations Page](#)
- [Invoke Operations Page](#)
- [Summary Page](#)

Basic Info Page

You can enter a name and description on the Basic Info page of each adapter in your integration.

Element	Description
What do you want to call your endpoint?	<p>Provide a meaningful name so that others can understand the responsibilities of this connection. You can include English alphabetic characters, numbers, underscores, and hyphens in the name. You can't include the following characters:</p> <ul style="list-style-type: none">• No blank spaces (for example, My Inbound Connection)• No special characters (for example, #;83& or righ(t)now4) except underscores and hyphens• No multibyte characters
What does this endpoint do?	<p>Enter an optional description of the connection's responsibilities. For example:</p> <pre>This connection receives an inbound request to synchronize account information with the cloud application.</pre>

Trigger Operations Page

Select the catalog and operations to perform in the JD Edwards EnterpriseOne application.

Element	Description
Select Catalog	Selects the JD Edwards EnterpriseOne catalog on which to perform the operation.
Selected Port Type	Identifies the JD Edwards EnterpriseOne port type associated with the operation.
Select the Operation	Selects the operation to perform on the catalog.
Request Object	Identifies the request object for the operation.
Response Object	Identifies the response object for the operation.
Fault Object	Identifies the fault object for the operation.

Invoke Operations Page

Select the catalog and operations to perform in the JD Edwards EnterpriseOne application.

Element	Description
Select Catalog	Selects the JD Edwards EnterpriseOne catalog on which to perform the operation.
Selected Service	Identifies the JD Edwards EnterpriseOne service associated with the operation.
Selected Port	Identifies the JD Edwards EnterpriseOne port associated with the operation.
Select the Operation	Selects the operation to perform on the catalog.
Request Object	Identifies the request object for the operation.
Response Object	Identifies the response object for the operation.
Fault Object	Identifies the fault object for the operation.

Summary Page

You can review the specified adapter configuration values on the Summary page.

Element	Description
Summary	<p>Displays a summary of the configuration values you defined on previous pages of the wizard.</p> <p>The information that is displayed can vary by adapter. For some adapters, the selected business objects and operation name are displayed. For adapters for which a generated XSD file is provided, click the XSD link to view a read-only version of the file.</p> <p>To return to a previous page to update any values, click the appropriate tab in the left panel or click Back.</p> <p>To cancel your configuration details, click Cancel.</p>

4

Troubleshoot the Oracle JD Edwards EnterpriseOne Adapter

Review the following topics to learn about troubleshooting issues with Oracle JD Edwards EnterpriseOne Adapter.

Topic:

- [Ensure the Login Credential, Role, and Environment Values Entered on the Connection Page Are Correct](#)
- [Failed to assert identity with UsernameToken Error](#)

Additional integration troubleshooting information is provided. See Troubleshoot Oracle Integration in *Using Integrations in Oracle Integration Generation 2* and the [Oracle Integration Troubleshooting page](#) in the Oracle Help Center.

Ensure the Login Credential, Role, and Environment Values Entered on the Connection Page Are Correct

When creating an Oracle JD Edwards EnterpriseOne Adapter connection, ensure that the values you enter for the user name, password, role, and environment are correct. Failure to do so can result in the following error messages.

Error	Resolution
<code>Fault Code :</code> <code>wsse:FailedAuthentication</code> <code>Fault String : Failed to assert identity with UsernameToken.</code>	This error occurs if the connection is created with the wrong user name and password values. Verify that the user name and password values used to create the connection are valid. See Prerequisites for Creating a Connection .

Error	Resolution
<pre>CODE=<code>{http:// schemas.oracle.com/bpel/ extension}remoteFault</code>,SUMMARY= <summary>java.lang.NullPointerExcepti on</ summary> ,DETAIL=<DETAIL><detail><ICS faultVar/><reason>CASDK-0033: Received a SOAP fault while invoking endpoint target: https:// jdeserver.demo.com:443/PD920/ SalesOrderManager. This indicates a processing exception on the service endpoint side. Please check service side logs to further diagnose the problem &lt;! [CDATA[Fault Code : ns0:Server Fault String : java.lang.NullPointerException</pre>	<p>This error occurs if the role value, environment value, or both values entered for the connection are incorrect.</p> <p>Verify that the environment and role values used to create the connection are valid for the user (for example, update the environment from PD920 to JPD920, if necessary).</p> <p>See Prerequisites for Creating a Connection.</p>

The JD Edwards server log may show an error similar to the following:

```
11 Jul 2019 18:56:38,696 [SEVERE] -
[INTEROP] Unable to get initialize
UserSession
java.lang.NullPointerException
11 Jul 2019 18:56:38,696 [SEVERE] -
[INTEROP]
com.jdedwards.system.connector.dynami
c.ServerFailureException
11 Jul 2019 18:56:38,697 [SEVERE] -
[INTEROP] Exception occurred while
validating role and/or environment
in Java
Connector Login method:null
com.jdedwards.system.
connector.dynamic.ServerFailureExcept
ion:
Exception occurred while
validating role and/or environment
in Java Connector Login method:null
```

Failed to assert identity with UsernameToken Error

If you successfully configure and test the Oracle JD Edwards EnterpriseOne Adapter connection in Oracle Integration, but receive the following error during runtime when trying to connect to the GSE JDE environment:

```
Failed to assert identity with UsernameToken
```

Perform the following steps to resolve the error:

1. Check first whether the GSE user has the correct access roles.
2. Restart the JD Edwards Business Service (BSSV) server.