Oracle® Cloud

Using the Oracle JD Edwards EnterpriseOne Adapter with Oracle Integration

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Preface

This guide describes how to configure the Oracle JD Edwards EnterpriseOne Adapter as a connection in an integration in Oracle Integration.

Note:
The information in this guide applies to all of your Oracle Integration instances. It doesn’t matter which edition you’re using, what features you have, or who manages your cloud environment. You’ll find what you need here, including notes about any differences between the various flavors of Oracle Integration when necessary.

Topics
• Audience
• Documentation Accessibility
• Related Resources
• Conventions

Audience
This guide is intended for developers who want to use the Oracle JD Edwards EnterpriseOne 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.

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.

Related Resources
See these Oracle resources:
• Oracle Cloud
  http://cloud.oracle.com
• Using Integrations in Oracle Integration
• Using the Oracle Mapper with Oracle Integration

Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
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</thead>
<tbody>
<tr>
<td>boldface</td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td>italic</td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
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?
- Workflow to Create and Add an Oracle JD Edwards EnterpriseOne Adapter Connection to an Integration

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 Oracle Integration Adapters Certification Matrix under section Oracle Integration Adapters Certification at the top of the page:

Oracle Integration Adapters Certification Matrix

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.
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<th>Step</th>
<th>Description</th>
<th>More Information</th>
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<td>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.</td>
<td>Create an Oracle JD Edwards EnterpriseOne Adapter Connection</td>
</tr>
<tr>
<td>2</td>
<td>Create the integration. When you do this, you add trigger and invoke connections to the integration.</td>
<td>Create Integrations and Add the Oracle JD Edwards EnterpriseOne Adapter Connection to an Integration</td>
</tr>
<tr>
<td>3</td>
<td>Map data between the trigger connection data structure and the invoke connection data structure.</td>
<td>Map Data of Using Integrations in Oracle Integration</td>
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<tr>
<td>4</td>
<td>(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).</td>
<td>Manage Lookups of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>5</td>
<td>Activate the integration.</td>
<td>Manage Integrations of Using Integrations in Oracle Integration</td>
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<tr>
<td>6</td>
<td>Monitor the integration on the dashboard.</td>
<td>Monitor Integrations of Using Integrations in Oracle Integration</td>
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<td>7</td>
<td>Track payload fields in messages during runtime.</td>
<td>Assign Business Identifiers for Tracking Fields in Messages and Manage Business Identifiers for Tracking Fields in Messages of Using Integrations in Oracle Integration</td>
</tr>
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<td>8</td>
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</table>
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 Oracle JD Edwards EnterpriseOne WSIL full path URL. This information is required when configuring the 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:

     \[\text{Jas\_Hostname}\text{:port/jde/E1Menu.maf}\]

  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. Use the value for the Environment parameter to create the WSIL URL to use. For this example, JPD920 is the Environment parameter.

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

Use this WSIL URL when creating your connection, as described in Configure Connection Properties.

- 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. You select the agent group when you create the connection. See Configure an Agent Group.

Create a Connection

The first step in creating an integration is to create the connections to the applications with which you want to share data.

1. In the navigation pane, click Integrations, then click 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.)

The Create Connection — Select Adapter dialog is displayed.

3. Select an adapter from the dialog. You can also search for the type of adapter to use by entering a partial or full name in the Search field, and clicking Search.

The Create New Connection dialog is displayed.

4. Enter the information to describe the connection.

   - 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 letters to the Identifier field. If you modify the identifier name, do not include a blank space (for example, Sales Opportunity).
   - Select the role (direction) in which to use this connection (trigger, invoke, or both). Only the roles supported by this adapter are displayed for selection. When you select a role, only the connection properties and security policies appropriate to that role are displayed on the Connections page. If you select an adapter that supports both invoke and trigger, but select only one of those roles, then try to drag the adapter into the section you did not select, you receive an error (for example, configure an Oracle Service Cloud (RightNow) Adapter as only an invoke, but drag the adapter to the trigger section).
   - Enter an optional description of the connection.
5. Click Create.
   Your connection is created and you are now ready to configure connection details, such as email contact, connection properties, security policies, connection login credentials, and (for certain connections) agent group.

Add a Contact Email

   You can add an optional contact email address for notifications.
   1. In the Email Address field, enter an optional email address. You do not receive automatic notifications at this address.
   2. In the upper right corner, click Save.

Configure Connection Properties

   Enter connection information so your application can process requests.
   1. Click Configure Connectivity.
   2. Enter the WSIL URL for the connection in the WSIL URL field.
   3. Click OK.
   4. Configure connection security.

Configure Connection Security

   Use this procedure to configure security for your Oracle JD Edwards EnterpriseOne Adapter connection.
   1. Click Configure Security
The Credentials dialog is displayed. The Security Policy field displays JD Edwards EnterpriseOne Security Policy. This value cannot be changed.

2. Complete these fields:
   a. In the Username field, enter the user name for the JD Edwards EnterpriseOne account.
   b. In the Password field, enter the password for the JD Edwards EnterpriseOne account.
   c. In the Confirm Password field, enter the password for the JD Edwards EnterpriseOne account.
   d. In the Environment field, enter the name of the JD Edwards EnterpriseOne environment.
   e. In the Role field, enter the role type that can access the JD Edwards EnterpriseOne environment.

3. Click OK.

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 On-Premises Agent Installer and About Agents and Integrations Between On-Premises Applications and Oracle Integration in Using Integrations in Oracle Integration.

Test the Connection

Test your connection to ensure that it is successfully configured.

1. In the upper right corner of the page, click Test.
2. If your adapter connection uses a WSDL, you are prompted to select the type of connection testing to perform:
   • 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.

   If successful, the following message is displayed and the progress indicator shows 100%.
   Connection connection_name was tested successfully.

3. If your connection was unsuccessful, an error message is displayed with details. Verify that the configuration details you entered are correct.
4. When complete, click **Save**, then click **Close**.

## 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 navigation pane, click **Integrations**, then click the `<` arrow next to **Designer**.
2. Click **Settings > Certificates**.

   All certificates currently uploaded to the trust store are displayed in the Certificates dialog. The **Filter By > Type** list displays the following details:
   
   - **Preinstalled**: Displays the certificates automatically installed in Oracle Integration. These certificates cannot be deleted.
   - **Uploaded**: Displays the certificates uploaded by individual users. These certificates can be deleted and updated.

   You can also search for certificates in the **Search** field. The search results are limited to a maximum of ten records sorted by name for performance and usability reasons. To ensure that your search results are more granular, enter as much of the certificate name as possible.

3. Click **Upload** at the top of the page.
4. In the Upload Certificate dialog box, select the certificate type. Each certificate type enables Oracle Integration to connect with external services.
   
   - **Trust Certificate**: Use this option to upload a trust certificate.
     a. Enter a unique alias for the certificate.
     b. Click **Browse**, then select the trust file (for example, `.cer` or `.crt`) to upload.
   
   - **Message Protection Certificate**: Use this option to upload a keystore certificate with SAML token support. Create, read, update, and delete (CRUD) operations are supported on this type of certificate.
     a. Enter a unique alias for the certificate.
     b. Click **Browse**, then select the certificate file (.cer or .crt) to upload.
   
   - **Identity Certificate**: Use this option to upload a certificate for two-way SSL communication.
     a. Click **Browse**, then select the keystore file (.jks) to upload.
     b. Enter the password of the keystore being imported.
     c. Enter the comma-separated list of aliases from the keystore being imported.
     d. Enter the comma-separated list of passwords corresponding to key aliases.
e. If you want to display the passwords in clear text, select **Show Key Password(s)**. This enables you to ensure that you are correctly entering a list of keystore passwords.

5. Click **Upload**.

6. Click the certificate name to view details such as the subject of the certificate, the issuer of the certificate, the date the certificate was issued, and the date the certificate expires.
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.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| What do you want to call your endpoint? | Provide a meaningful name so that others can understand the responsibilities of this connection. You can include English alphabetic characters, numbers, underscores, and dashes in the name. You cannot include the following:  
  - Blank spaces (for example, My Inbound Connection)  
  - Special characters (for example, #;83 or righ(t)now4)  
  - Multibyte characters |
| What does this endpoint do? | Enter an optional description of the connection’s responsibilities. For example: This connection receives an inbound request to synchronize account information with the cloud application. |

Trigger Operations Page

Select the catalog and operations to perform in the JD Edwards EnterpriseOne application.
<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Catalog</td>
<td>Selects the JD Edwards EnterpriseOne catalog on which to perform the operation.</td>
</tr>
<tr>
<td>Selected Port Type</td>
<td>Identifies the JD Edwards EnterpriseOne port type associated with the operation.</td>
</tr>
<tr>
<td>Select the Operation</td>
<td>Selects the operation to perform on the catalog.</td>
</tr>
<tr>
<td>Request Object</td>
<td>Identifies the request object for the operation.</td>
</tr>
<tr>
<td>Response Object</td>
<td>Identifies the response object for the operation.</td>
</tr>
<tr>
<td>Fault Object</td>
<td>Identifies the fault object for the operation.</td>
</tr>
</tbody>
</table>

## Invoke Operations Page

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

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Catalog</td>
<td>Selects the JD Edwards EnterpriseOne catalog on which to perform the operation.</td>
</tr>
<tr>
<td>Selected Service</td>
<td>Identifies the JD Edwards EnterpriseOne service associated with the operation.</td>
</tr>
<tr>
<td>Selected Port</td>
<td>Identifies the JD Edwards EnterpriseOne port associated with the operation.</td>
</tr>
<tr>
<td>Select the Operation</td>
<td>Selects the operation to perform on the catalog.</td>
</tr>
<tr>
<td>Request Object</td>
<td>Identifies the request object for the operation.</td>
</tr>
<tr>
<td>Response Object</td>
<td>Identifies the response object for the operation.</td>
</tr>
<tr>
<td>Fault Object</td>
<td>Identifies the fault object for the operation.</td>
</tr>
</tbody>
</table>

## Summary Page

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

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

Review the following topics to learn about troubleshooting issues with Update Adapter Product Name.

**Topic:**
- **Ensure the Login Credential, Role, and Environment Values Entered on the Connection Page Are Correct**

Additional integration troubleshooting information is provided. See Troubleshoot Oracle Integration Cloud of *Using Integrations in Oracle Integration*.

### 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.

<table>
<thead>
<tr>
<th>Error</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fault Code : wsse:FailedAuthentication&lt;br&gt;Fault String : Failed to assert identity with UsernameToken.</td>
<td>This error occurs if the connection is created with the wrong user name and password values.&lt;br&gt;Verify that the user name and password values used to create the connection are valid.&lt;br&gt;See Prerequisites for Creating a Connection.</td>
</tr>
</tbody>
</table>
Error


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

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.ServerFailureException: Exception occurred while validating role and/or environment in Java: Connector Login method:null

Resolution

This error occurs if the role value, environment value, or both values entered for the connection are incorrect. 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).

See Prerequisites for Creating a Connection.

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