Oracle® Cloud
Using the SuccessFactors Adapter
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This guide describes how to configure and add the SuccessFactors Adapter to an integration in Oracle Integration Cloud Service.
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Preface

Using the SuccessFactors Adapter describes how to configure the SuccessFactors Adapter as a connection in an integration in Oracle Integration Cloud Service.

Topics:

• Audience
• Related Resources
• Conventions

Audience

Using the SuccessFactors Adapter is intended for developers who want to use the SuccessFactors Adapter in Oracle Integration Cloud Service integrations.

Related Resources

For more information, see these Oracle resources:

• Oracle Cloud
  http://cloud.oracle.com
• Using Oracle Integration Cloud Service
• Using the Oracle Mapper
• Getting Started with Oracle Cloud
• Managing and Monitoring Oracle Cloud
• Oracle Public Cloud Machine documentation in the Oracle Help Center:
  http://docs.oracle.com

Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></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>Convention</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td><em>italic</em></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>
Getting Started with the SuccessFactors Adapter

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

Topics

- About the SuccessFactors Adapter
- About Oracle Integration Cloud Service
- About Oracle Integration Cloud Service Connections
- About Oracle Integration Cloud Service Integrations
- Typical Workflow for Creating and Including an Adapter Connection in an Integration

About the SuccessFactors Adapter

The SuccessFactors Adapter enables you to create an integration in Oracle Integration Cloud Service.

SuccessFactors provides cloud-based, human capital management (HCM) software using the Software as a Service (SaaS) model.

The SuccessFactors Adapter is one of many predefined adapters included with Oracle Integration Cloud Service. You can configure the SuccessFactors Adapter as an invoke connection in an integration in Oracle Integration Cloud Service. For information about Oracle Integration Cloud Service, connections, and integrations, see the following sections:

- About Oracle Integration Cloud Service
- About Oracle Integration Cloud Service Connections
- About Oracle Integration Cloud Service Integrations

What Application Version Does the SuccessFactors Adapter Support?

The SuccessFactors Adapter is compatible with SuccessFactors version SFAPI 1.2.

About Oracle Integration Cloud Service

Oracle Integration Cloud Service is a complete, secure, but lightweight integration solution that enables you to connect your applications in the cloud. It simplifies connectivity between your applications, and can connect both your applications that
live in the cloud and your applications that still live on premises. Oracle Integration Cloud Service provides secure, enterprise-grade connectivity regardless of the applications you are connecting or where they reside.

Oracle Integration Cloud Service provides native connectivity to Oracle Software as a Service (SaaS) applications, such as Oracle Sales Cloud, Oracle RightNow Cloud, and so on. Oracle Integration Cloud Service adapters simplify connectivity by handling the underlying complexities of connecting to applications using industry-wide best practices. You only need to create a connection that provides minimal connectivity information for each system. Oracle Integration Cloud Service lookups map the different codes or terms used by the applications you are integrating to describe similar items (such as country or gender codes). Finally, the visual data mapper enables you to quickly create direct mappings between the trigger and invoke data structures. From the mapper, you can also access lookup tables and use standard XPath functions to map data between your applications.

Once you integrate your applications and activate the integrations to the runtime environment, the dashboard displays information about the running integrations so you can monitor the status and processing statistics for each integration. The dashboard measures and tracks the performance of your transactions by capturing and reporting key information, such as throughput, the number of messages processed successfully, and the number of messages that failed processing. You can also manage business identifiers that track fields in messages and manage errors by integrations, connections, or specific integration instances.

About Oracle Integration Cloud Service Connections

Connections define information about the instances of each predefined configuration you are integrating. Oracle Integration Cloud Service includes a set of predefined adapters, which are the types of applications on which you can base your connections, such as Oracle Sales Cloud, Oracle Eloqua Cloud, Oracle RightNow Cloud, and others. A connection is based on an adapter. A connection includes the additional information required by the adapter to communicate with a specific instance of an application (this can be referred to as metadata or as connection details). For example, to create a connection to a specific RightNow Cloud application instance, you must select the Oracle RightNow adapter and then specify the WSDL URL, security policy, and security credentials to connect to it.

Video

About Oracle Integration Cloud Service Integrations

Integrations are the main ingredient of Oracle Integration Cloud Service. An integration includes at least a trigger (source) connection (for requests sent to Oracle Integration Cloud Service) and invoke (target) connection (for requests sent from Oracle Integration Cloud Service to the target) and the field mapping between those two connections.

When you create your integrations, you build on the connections you already created by defining how to process the data for the trigger (source) and invoke (target) connections. This can include defining the type of operations to perform on the data, the business objects and fields against which to perform those operations, required schemas, and so on. To make this easier, the most complex configuration tasks are handled by Oracle Integration Cloud Service. Once your trigger (source) and invoke (target) connections are configured, the mappers between the two are enabled so you can define how the information is transferred between the trigger (source) and invoke (target) data structures for both the request and response messages.
Typical Workflow for Creating and Including an Adapter Connection in 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 Cloud Service.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<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>Creating a SuccessFactors 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>Creating an Integration and Adding the SuccessFactors 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>Mapping Integration Cloud Service Data of Using Oracle Integration Cloud Service</td>
</tr>
<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>Creating Lookups of Using Oracle Integration Cloud Service</td>
</tr>
<tr>
<td>5</td>
<td>Activate the integration.</td>
<td>Managing Integrations of Using Oracle Integration Cloud Service</td>
</tr>
<tr>
<td>6</td>
<td>Monitor the integration on the dashboard.</td>
<td>Monitoring Integration Cloud Services of Using Oracle Integration Cloud Service</td>
</tr>
<tr>
<td>7</td>
<td>Track payload fields in messages during runtime.</td>
<td>Assigning Business Identifiers for Tracking Fields in Messages and Managing Business Identifiers for Tracking Fields in Messages of Using Oracle Integration Cloud Service</td>
</tr>
<tr>
<td>8</td>
<td>Manage errors at the integration level, connection level, or specific integration instance level.</td>
<td>Managing Errors of Using Oracle Integration Cloud Service</td>
</tr>
</tbody>
</table>
Creating a SuccessFactors Adapter Connection

A connection is based on an adapter. You define connections to the specific cloud applications that you want to integrate. The following topics describe how to define connections:

Topics

• Prerequisites for Creating a Connection
• Uploading an SSL Certificate
• Creating a Connection
• Adding a Contact Email
• Configuring Connection Properties
• Configuring Connection Security
• Testing the Connection
• Editing a Connection
• Cloning a Connection
• Deleting a Connection

Prerequisites for Creating a Connection

You must satisfy the following prerequisites to create a connection with the SuccessFactors Adapter:

• Purchase a subscription to SuccessFactors. When you subscribe, you receive a company ID, username, and password. The information required for creating a SuccessFactors Adapter connection on the Connections page includes an SFAPI WSDL location (WSDL URL). This WSDL location represents your API endpoint, which depends on where your SuccessFactors instance is located. It can be in one of several data centers. Contact your SuccessFactors representative if you are unsure of which data center to use.

For more information, see Configuring Connection Properties and Configuring Connection Security.

Uploading 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 Cloud
Service, an exception is thrown. In that case, you must upload the appropriate certificate. A certificate enables Oracle Integration Cloud Service to connect with external services. If the external endpoint requires a specific certificate, request the certificate and then upload it into Oracle Integration Cloud Service.

To upload a certificate:

1. From the Oracle Integration Cloud Service home page, click the Administration tab in the upper right corner.

All certificates currently uploaded to the trust store are displayed in the Certificates dialog. A navigation panel on the left side of the dialog displays the following details:

- **All**: Displays all certificates in Oracle Integration Cloud Service.
- **System**: Displays the certificates automatically included in Oracle Integration Cloud Service. These certificates cannot be deleted.
- **Uploaded**: Displays the certificates uploaded by individual users. These certificates can be deleted and updated.

2. Click **Upload Certificate** at the top of the page.

3. In the Upload Certificate dialog box, enter a unique identifier for the certificate.

   This is a name you can use to identify the certificate.

4. Click **Browse** to locate the certificate file (.cer).

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.

**Creating 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 Integration Cloud Service toolbar, click **Designer**.

2. On the Designer Portal, click **Connections**.
3. Click **Create New Connection**.

   The Create Connection — Select Adapter dialog is displayed.

4. 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 New Connection — Information dialog is displayed.

5. 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.

   - 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 RightNow Cloud Adapter as only an invoke, but drag the adapter to the trigger section).

   - Enter an optional description of the connection.

6. Click **Create**.

   Your connection is created and you are now ready to configure connection details, such as email contact, connection properties, security policies, and connection login credentials.
Adding a Contact Email

From the Connection Administrator section of the connection, you can add a contact email address for notifications.

1. In the Email Address field, enter an email address to receive email notifications when problems occur.

2. In the upper right corner, click Save.

Configuring Connection Properties

Enter connection information so your application can process requests.

1. Click Configure Connectivity.

The Connection Properties dialog is displayed.

2. In the SFAPI WSDL Location field, enter the WSDL (for example, https://host_name.successfactors.com/sfapi/v1/soap?wsdl). The WSDL endpoint depends on where your SuccessFactors instance is located. It can be in one of several data centers. Contact your SuccessFactors representative if you are unsure of which data center to use. The WSDL can be accessed by appending ?wsdl to the endpoint.

3. Click OK.

You are now ready to configure connection security.

Configuring Connection Security

Configure security for your SuccessFactors Adapter connection by selecting the security policy and security token.

1. Click Configure Credentials.

2. Enter your login credentials.

   a. Select the security policy. Only the SuccessFactors Custom Policy policy is supported. It cannot be deselected.

   b. In the Company ID field, enter the SuccessFactors client instance. You received the company ID, username, and password when you subscribed to SuccessFactors.

   c. Enter the username and password to connect to the SuccessFactors instance.

   d. Reenter the password a second time.

3. Click OK. You are now ready to test the connection.

Testing the Connection

Test your connection to ensure that it is successfully configured.

1. In the upper right corner of the page, click Test.
If successful, the following message is displayed and the progress indicator shows 100%.

The connection test was successful!

2. If your connection was unsuccessful, an error message is displayed with details. Verify that the configuration details you entered are correct.

3. When complete, click Save.

**Editing a Connection**

You can edit connection settings after creating a new connection.

1. In the Oracle Integration Cloud Service toolbar, click Designer.
2. On the Designer Portal, click Connections.
3. On the Connections page, select Edit from the connection Actions menu or click the connection name.

The Connection page is displayed.

4. To edit the notification email contact, change the email address in the Email Address field.

5. To edit the connection properties, click Configure Connectivity. Note that some connections do not include this button. If your connector does not include a Configure Connectivity button, then click the Configure Credentials button.

**Cloning a Connection**

You can clone a copy of an existing connection. It is a quick way to create a new connection.

1. In the Oracle Integration Cloud Service toolbar, click Designer.
2. On the Designer Portal, click Connections.
3. On the Connections page, select Clone from the connection Actions menu.

The Clone Connection dialog is displayed.

4. Enter the connection information.
5. Click **Clone**.

6. Click **Edit** to configure the credentials of your cloned connection. Cloning a connection does not copy the credentials.

See [Editing a Connection](#) for instructions.

### Deleting a Connection

You can delete a connection from the connection menu.

1. In the Oracle Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.
3. On the Connections page, click **Delete** from the connection **Actions** menu.

   ![Actions](image)

   The Delete Connection dialog is displayed if the connection is not used in an integration.

4. Click **Yes** to confirm deletion.
Creating an Integration

Integrations use the adapter connections you created to your applications, and define how information is shared between those applications. You can create, import, modify, or delete integrations; create integrations to publish or subscribe to messages; add and remove request and response enrichment triggers; and create routing paths for different invoke endpoints in integrations. Click the following topics for more information.

Topic

- Creating Integrations (in Using Oracle Integration Cloud Service)
Adding the SuccessFactors Adapter Connection to an Integration

When you drag the SuccessFactors Adapter into the invoke area of an integration, the Adapter Endpoint Configuration Wizard appears. This wizard guides you through configuration of SuccessFactors Adapter endpoint properties.

The following sections describe the wizard pages that guide you through configuration of the SuccessFactors Adapter as an invoke connection in an integration. The SuccessFactors Adapter cannot be used as a trigger connection in an integration.

Topics

• Configuring Basic Information Properties
• Configuring SuccessFactors Adapter Invoke Operation Properties
• Reviewing Configuration Values on the Summary Page

For more information about the SuccessFactors Adapter, see About the SuccessFactors Adapter.

Configuring Basic Information Properties

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

Topics

• What You Can Do from the Basic Info Page
• What You See on the Basic Info Page

What You Can Do from the Basic Info Page

You can specify the following values on the Basic Info page. The Basic Info page is the initial wizard page that is displayed whenever you drag an adapter to the trigger (source) or invoke (target) area supported by your adapter.

• Specify a meaningful name.
• Specify a description of the responsibilities.

What You See on the Basic Info Page

The following table describes the key information on the Basic Info page.
<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you want to call your endpoint?</td>
<td>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:</td>
</tr>
<tr>
<td></td>
<td>• Blank spaces (for example, My Inbound Connection)</td>
</tr>
<tr>
<td></td>
<td>• Special characters (for example, #;836 or righ(t)now4)</td>
</tr>
<tr>
<td></td>
<td>• Multibyte characters</td>
</tr>
<tr>
<td>What does this endpoint do?</td>
<td>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.</td>
</tr>
</tbody>
</table>
Select an Operation Type

Select the type of operation to perform on the business objects in an Oracle SuccessFactors application:

- **CRUD**: Displays the insert, upsert, update, and delete operations to perform on SuccessFactors business objects. Select the operation and the business object on which to perform the operation.
- **SFQL**: (SuccessFactors Query Language) enables you to define an SFQL-based query to send a request for querying a particular business object and retrieve the respective object’s information, which is queried from the SuccessFactors application. If you select this option, the page is refreshed to display a text box for entering a query.
  - **SFQL query statement**: Enter a valid SFQL query in the text box. The query can include custom fields and parameters. For example:

    ```sql
    SELECT guid, name FROM Goal$7 WHERE userid = 'USR-22'
    ```

    Use the Find field to search for an entry in the SFQL query and the Go to Line field to go to a specific line in the SFQL query.

    The query can include custom fields and parameters.
  - **Binding Parameters**: Displays any binding parameter, if included, in the specified query. For example, `firstname` is a parameter in the following query:

    ```sql
    SELECT firstname, lastname FROM user WHERE firstname = 'params.firstname'
    ```

    Enter a query with a parameter and press the Refresh button above Binding Parameters. A text box in which to enter a test value for the parameter is displayed.
  - **Test My Query**: Click to validate the query against the SuccessFactors application. The query response is displayed for a successful query. If the query is invalid, you receive a response for the errors in the query.

Filter by object name

Enter the initial letters of an object name to display a range of objects. You can also select a filter type:

- **All**: Displays all objects available for the selected operation.
- **Custom**: Displays objects that can be created in the SuccessFactors application for the selected operation. These business objects are identified by special icon (‘-’). For example, Goal-1, DevelopmentGoal-2002.
- **Standard**: Displays business objects delivered as part of the SuccessFactors application.
Select Business Objects (sfapiv1 API)
Select a business object from the SuccessFactors application (multiple objects are not supported). The selected operation acts on this business object. The SuccessFactors API version that is displayed is based on the SuccessFactors Cloud application version to which you are connected.

Your Selected Business Objects
Displays the selected business objects.

What is this Object
Describes the selected business object.

Reviewing Configuration Values on the Summary Page
You can review the specified adapter configuration values on the Summary page.

Topics
- What You Can Do from the Summary Page
- What You See on the Summary Page

What You Can Do from the Summary Page
You can review trigger (source) or invoke (target) configuration details from the Summary page. The Summary page is the final wizard page for each adapter after you have completed your configuration.

- View the configuration details you defined for the trigger (source) or invoke (target) adapter. For example, if you have defined an inbound trigger (source) adapter with a request business object and immediate response business object, specific details about this configuration are displayed on the Summary page.
- Click Done if you want to save your configuration details.
- Click a specific tab in the left panel or click Back to access a specific page to update your configuration definitions.
- Click Cancel to cancel your configuration details.

What You See on the Summary Page
The following table describes the key information on the Summary page.
<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Summary** | Displays a summary of the trigger (source) or invoke (target) configuration values you defined on previous pages of the wizard.  

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.  

To return to a previous page to update any values, click the appropriate tab in the left panel or click **Back**. |
Creating Mappings and Lookups in Integrations

You must map data between trigger connections and invoke connections in integrations. You can also optionally create lookups in integrations.

Topics

- Mapping Integration Cloud Service Data (in *Using Oracle Integration Cloud Service*)
- Creating Lookups (in *Using Oracle Integration Cloud Service*)
Oracle Integration Cloud Service provides you with the information and tools required to activate, monitor, and manage your integrations in the runtime environment.

**Topic**

- Administering Integration Cloud Service (in *Using Oracle Integration Cloud Service*)