

Oracle® Cloud

Using the Coupa Sourcing Adapter with Oracle Integration 3



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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 <https://www.oracle.com/corporate/accessibility/>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <https://support.oracle.com/portal/> or visit [Oracle Accessibility Learning and Support](#) if you are hearing impaired.

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 at <http://cloud.oracle.com>
- *Using Integrations in Oracle Integration 3*
- *Using the Oracle Mapper with Oracle Integration 3*
- Oracle Integration documentation on the Oracle Help Center.

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 Coupa Sourcing Adapter

Review the following topics to learn about the Coupa Sourcing 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:

- [Coupa Sourcing Adapter Capabilities](#)
- [What Application Version Is Supported?](#)
- [Workflow to Create and Add a Coupa Sourcing Adapter Connection to an Integration](#)

Coupa Sourcing Adapter Capabilities

The Coupa Sourcing Adapter enables you to create an integration between Coupa and Oracle Integration. You can configure the Coupa Sourcing Adapter as an invoke connection in an integration in Oracle Integration.

The Coupa Sourcing Adapter provides the following capabilities:

- Supports the following modules:
 - Attachments
 - Coupa Pay
 - Expense Reports
 - Invoices
 - Legal Entity
 - Payables / Payable
 - Suppliers
 - Users
- Supports Create, Update, Delete, and Get actions. For example, you can create a user, expense reports, supplier, travel expense, invoice, and legal entity in Coupa.
- Enables you to integrate the near real-time data between Coupa and other external systems.
- Supports REST web services.
- Supports custom fields.
- Supports attachment downloads of up to 250 MB.
- Supports pagination.
- Supports query and filter parameters.
- Supports OAuth Client Credentials and OAuth Authorization Code Credentials authentication.

The Coupa Sourcing Adapter is one of many predefined adapters included with Oracle Integration. See the Adapters page in the Oracle Help Center.

Query Parameters Support

Query parameters are used to fetch a specific set of records based on certain conditions. These are applicable for all GET operations in Coupa.

Types of Query Parameters

- **Offset:** Skips the record as per the order by passing an integer. For example, if the user sets the offset to 3, the first three records are skipped, and the results start from the fourth record.
- **Limit:** Restricts the number of records fetched in a single API call. By default, Coupa fetches 50 records per call, but the limit can be set to fetch a specific number of records as required.
- **Filter:** Filters are used to fetch records that meet specific criteria. This parameter restricts the number of fields fetched in a single API call. The filter name is passed as a parameter, and only records that match the filter condition are fetched.
- **Order By:** Returns the response as per the order of fields passed in the query parameter (it can be in terms of alphabetical/numeric order).
- **Direction:** Used in conjunction with **Order By** to specify the direction of sorting, either ascending or descending.
- **Return Object:** This parameter has three values: **shallow**, **limited**, and **none**. It specifies the level of detail included in the returned records. See [API Return Formats](#).

Pagination Support

Pagination is used to retrieve a subset of data from a larger data set to display in pages, typically in response to user requests that exceed the default limit of 50 records per API call.

Functionality

- **Iteration:** Pagination works by iterating through the records in batches (usually 50 records per batch) until all records are fetched. Each iteration fetches the next set of records.
- **APIs Supporting Pagination:** Not all Coupa APIs support pagination. Generally, APIs that fetch a large number of records (more than 50) support pagination. For example, users, suppliers, and invoices modules support pagination.
- **Implementation:** Pagination involves setting up a loop that fetches records in batches. The process continues until all records are retrieved. If the body of the response is empty, the pagination stops.

What Application Version Is Supported?

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

Workflow to Create and Add a Coupa Sourcing 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.

This table lists the workflow steps for both adapter tasks and overall integration tasks, and provides links to instructions for each step.

Step	Description	More Information
1	Access Oracle Integration.	Go to https://instance_URL/ic/home
2	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 a Coupa Sourcing Adapter Connection
3	Create the integration. When you do this, you add trigger (source) and invoke (target) connections to the integration.	Understand Integration Creation and Best Practices in <i>Using Integrations in Oracle Integration 3</i> and Add the Coupa Sourcing Adapter Connection to an Integration
4	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data in <i>Using Integrations in Oracle Integration 3</i>
5	(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 3</i>
6	Activate the integration.	Activate an Integration in <i>Using Integrations in Oracle Integration 3</i>
7	Monitor the integration on the dashboard.	Monitor Integrations During Runtime in <i>Using Integrations in Oracle Integration 3</i>
8	Track payload fields in messages during runtime.	Assign Business Identifiers for Tracking Fields in Messages and Track Integration Instances in <i>Using Integrations in Oracle Integration 3</i>
9	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors in <i>Using Integrations in Oracle Integration 3</i>

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Create a Coupa Sourcing 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](#)

Prerequisites for Creating a Connection

You must satisfy the following prerequisites to create a connection with the Coupa Sourcing Adapter.

Set Up OAuth 2.0 (Client and Code Credentials) in a Coupa Sandbox

1. Log in to your Coupa admin account and click **Setup**.
2. Search for `OAuth2` in the search bar.
3. Under **Integrations**, click **OAuth2/OpenID Connect Clients**.
4. Click **Create**.
5. Select the grant type and provide the required information:
 - **Client Credentials**
 - a. Select **Client Credentials** as the grant type.
 - b. Enter the required information to create an OAuth client.
 - **Authorization Code**
 - a. Select **Authorization Code** as the grant type.
 - b. Provide a valid name for the client.
 - c. Provide the redirect URL of the server on which to create the integration.
6. Under **Scopes**, select the required scopes.
7. Click **Save**.
The system generates the client ID (identifier) and client secret.
8. Copy the values for the client ID (identifier), client secret, and scopes (if applicable). You'll need to enter those values on the Connections page when you configure security for your Coupa Procurement Adapter connection in Oracle Integration. See [Create a Connection](#).

Create a Connection

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

To create a connection in Oracle Integration:

1. In the navigation pane, click **Design**, then **Connections**.
2. Click **Create**.

 **Note:**

You can also create a connection in the integration canvas. See Define Inbound Triggers and Outbound Invokes.

3. In the Create connection panel, 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.
4. Enter the information that describes this connection.

Element	Description
Name	Enter a meaningful name to help others find your connection when they begin to create their own integrations.
Identifier	Automatically displays the name in capital letters that you entered in the Name field. If you modify the identifier name, don't include blank spaces (for example, SALES OPPORTUNITY).
Role	Select the role (direction) in which to use this connection (trigger, invoke, or both). Only the roles supported by the 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, you'll get an error when you try to drag the adapter into the section you didn't select. For example, assume you configure a connection for the Oracle Service Cloud (RightNow) Adapter as only an invoke . Dragging the adapter to a trigger section in the integration produces an error.
Keywords	Enter optional keywords (tags). You can search on the connection keywords on the Connections page.
Description	Enter an optional description of the connection.

Element	Description
Share with other projects	<p>Note: This field only appears if you are creating a connection in a project.</p> <p>Select to make this connection publicly available in other projects. Connection sharing eliminates the need to create and maintain separate connections in different projects.</p> <p>When you configure an adapter connection in a different project, the Use a shared connection field is displayed at the top of the Connections page. If the connection you are configuring matches the same type and role as the publicly available connection, you can select that connection to reference (inherit) its resources.</p> <p>See Add and Share a Connection Across a Project.</p>

5. Click **Create**.

Your connection is created. You're now ready to configure the connection properties, security policies, and (for some connections) access type.

Configure Connection Properties

Enter connection information so your application can process requests.

1. Go to the **Properties** section.
2. In the **HostUrl** field, enter the host URL in the following format:

```
https://my_instance.coupacloud.com
```

Configure Connection Security

Configure security for your Coupa Sourcing Adapter connection.

1. Go to the **Security** section.
2. From the **Security Policy** list, select the security policy:
 - **OAuth Client Credentials**
 - **OAuth Authorization Code Credentials**
3. If you select the **OAuth Client Credentials** security policy:
 - a. In the **Client Id** field, enter the client ID (identifier) that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - b. In the **Client Secret** field, enter the client secret that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - c. In the **Scope** field, enter the required scopes. For example, `core.accounting.read`, `core.accounting.write`, and so on.

For multiple modules, you must ensure that space-separated scopes are provided in this field. For example, enter:

```
core.accounting.read core.accounting.write
```

4. If you select the **OAuth Authorization Code Credentials** security policy:
 - a. In the **Client Id** field, enter the client ID (identifier) that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - b. In the **Client Secret** field, enter the client secret that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - c. In the **Scope** field, enter the required scopes. For example, `core.accounting.read`, `core.accounting.write`, and so on.

For multiple modules, you must ensure that space-separated scopes are provided in this field. For example, enter:


```
core.accounting.read core.accounting.write
```
 - d. Click **Provide Consent** to verify the connection properties. The Coupa application login page is displayed.
 - e. Enter your Coupa login credentials.
 - f. Once you see an `Authenticated` message, you can test your connection.

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 adapter connection uses a Web Services Description Language (WSDL) file. Only some adapter connections use WSDLs.

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 and verify URLs and credentials. Continue to test until the connection is successful.
3. When complete, click **Save**.

3

Add the Coupa Sourcing Adapter Connection to an Integration

When you drag the Coupa Sourcing Adapter into the invoke area of an integration, the Adapter Endpoint Configuration Wizard is invoked. This wizard guides you through configuration of the Coupa Sourcing Adapter endpoint properties.

The following sections describe the wizard pages that guide you through configuration of the Coupa Sourcing Adapter as an invoke in an integration.

Topics:

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

Invoke Basic Info Page

Specify a name, description, module name, and action on the Basic Info page of each invoke connection in your integration.

Element	Description
What do you want to call your endpoint?	Provide a meaningful name so that others can understand the connection. For example, if you are creating a database connection for adding new employee data, you may want to name it <code>CreateEmployeeInDB</code> . You can include English alphabetic characters, numbers, underscores, and dashes in the name. You cannot include the following: <ul style="list-style-type: none">• Blank spaces (for example, <code>My DB Connection</code>)• Special characters (for example, <code>#;83&</code> or <code>righ(t)now4</code>)• Multibyte characters
What does this endpoint do?	Enter an optional description of the connection's responsibilities.
Enter module name to filter	Select a module name, such as Attachments , Users , Invoices , Expense Reports , and so on.
Action	Select the type of action to perform, such as Get all Attachments for Requisition , Create A User , Update Approval Limits , Get a Pay Order , Retrieve Invoice by ID using Filter , Get CoupaPay Expense Payment by ID , Add Specific Content Group to supplier site , and so on. The actions available for selection are based on the module name selected.

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 Go back.</p> <p>To cancel your configuration details, click Cancel.</p>
