

Oracle® Cloud

Using the HubSpot 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.
<code>monospace</code>	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 HubSpot Adapter

Review the following conceptual topics to learn about the HubSpot 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:

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

HubSpot Adapter Capabilities

The HubSpot Adapter enables you to create an integration with the HubSpot application. You can configure the HubSpot Adapter as an invoke connection in an integration in Oracle Integration.

The HubSpot Adapter provides the following benefits:

- Provides metadata caching support.
- Provides invoke (target) connection support for performing the following types of actions against the selected module and operation:
 - Create (create records in HubSpot)
 - Update (update records in HubSpot)
 - Query (get records from HubSpot)
 - Delete (delete records from HubSpot)
- Supports HubSpot APIs protected using OAuth 2.0 three-legged authentication (authorization code credentials).

The HubSpot Adapter is one of many predefined adapters included with 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](#).

Workflow to Create and Add a HubSpot 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 HubSpot 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 Generation 2</i> and Add the HubSpot 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 Generation 2</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 Generation 2</i>
6	Activate the integration.	Activate an Integration in <i>Using Integrations in Oracle Integration Generation 2</i>
7	Monitor the integration on the dashboard.	Monitor Integrations in <i>Using Integrations in Oracle Integration Generation 2</i>
8	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>
9	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 a HubSpot 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](#)
- [Create a Connection](#)
- [Upload an SSL Certificate](#)

Prerequisites for Creating a Connection

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

- [Create a Developer Account](#)
- [Create an Application](#)

Create a Developer Account

You must create a developer account. Go to <https://developers.hubspot.com/get-started>, enter the required details, and create a developer account.

Create an Application

To generate the client ID and client secret, you must create an application using the HubSpot Developer account.

1. Log in to your HubSpot Developer account.
2. On the home page, click **Create an app** or click the **Apps** tab and click **Create app**.
3. Enter a name for your application in the **Public app name** field.
4. Click the **Auth** tab.
5. Copy the client ID and client secret.
You'll need to enter these values on the Connections page when you configure security for your HubSpot Adapter connection in Oracle Integration. See [Configure Connection Security](#).
6. Under the **Redirect URL** section, enter the redirect URL or URLs in the following format:

```
https://{OIC_Host}:{OIC_SSL_PORT}/icsapis/agent/oauth/callback
```

7. Under the **Scopes** section, select scopes (permissions) for your application. For example, contact, tickets, e-commerce, and more. See the scopes documentation at [Initiate an integration with OAuth 2.0](#).

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 letters to the **Identifier** field. If you modify the identifier name, don't include blank spaces (for example, SALES OPPORTUNITY).
 - b. Enter optional keywords (tags). You can search on the connection keywords on the Connections page.
 - c. 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, let's say 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.
 - d. Enter an optional description of the connection.
5. Click **Create**.

Your connection is created. You're now ready to configure the connection details, such as connection properties, security policies, connection login credentials, and (for certain connections) agent group.

Configure Connection Properties

Enter connection information so your application can process requests.

1. Go to the **Connection Properties** section.
2. In the **Site URL** field, enter the base URL:

```
https://api.hubapi.com
```

3. In the **REST Version** field, enter the supported HubSpot REST version using the following format. For example, for version 3:

```
v3
```

Configure Connection Security

Configure security for your HubSpot Adapter connection by specifying the following information.

1. Go to the **Security** section.
2. In the **Client Id** field, enter the client ID that you obtained after performing the steps in the prerequisites section. See [Create an Application](#).
3. In the **Client Secret** field, enter the client secret that you obtained after performing the steps in the prerequisites section. See [Create an Application](#).
4. In the **Scope** field, enter a scope corresponding to the object you need to select. A space or comma must be entered between scopes if you need to provide more than one scope. See the scopes documentation at [Initiate an integration with OAuth 2.0](#).

 **Note:**

The **Scope** field is not marked with an asterisk (*). This incorrectly implies that this field is not mandatory. This field is mandatory.

5. Click **Provide Consent** to verify the connection properties and get an access token. The HubSpot application login page is displayed.
6. Enter your HubSpot login credentials.
7. Once you see an access allowed 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	<p>A dialog prompts you to select the type of connection testing to perform:</p> <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.

Name	Type	Category	Status
mykey3 <small>EXPIRES IN 1 MONTH</small>	X.509	Identity	Configured
mykey2 <small>EXPIRED</small>	X.509	Identity	Configured
recert1586867745048 <small>EXPIRES IN 4 YEARS</small>	X.509	Trust	Configured
recert1586863610817 <small>EXPIRES IN 4 YEARS</small>	X.509	Trust	Configured
recert1586857607511 <small>EXPIRES IN 4 YEARS</small>	X.509	Trust	Configured
recert1586857416600 <small>EXPIRES IN 4 YEARS</small>	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 HubSpot Adapter Connection to an Integration

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

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

Topics:

- [Basic Info Page](#)
- [Invoke Action Page](#)
- [Invoke Operation 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>

Invoke Action Page

Select the type of action to perform.

Element	Description
What would you like to do in HubSpot?	<ul style="list-style-type: none"> • Create, update, and delete: Creates a new record, updates an existing record, or deletes a record in/from the HubSpot application (for example, Create companies, Create products, Update deals, Delete tickets, and so on). • Query information: Retrieves information from the HubSpot application corresponding to the selected object and operation.

Invoke Operation Page

Select the object and operation to perform in the HubSpot application. The fields that appear are based on the selection you made on the Action page.

Create, Update, and Delete

Element	Description
Select Operation	Displays the following options: Create , Update , and Delete .
Operation Description	Displays a description of the selected operation.
Filter object by name	Type the initial letters to filter the display of business objects. You can also select a filter type: <ul style="list-style-type: none"> • All: Displays all objects. • Standard: Displays business objects delivered as part of the HubSpot application. • Custom: Displays objects you created.
Select Object	Select an object, such as companies , products , line_items , tickets , and so on.

Query Information

Element	Description
Filter object by name	Type the initial letters to filter the display of business objects. You can also select a filter type: <ul style="list-style-type: none"> • All: Displays all objects. • Standard: Displays business objects delivered as part of the HubSpot application. • Custom: Displays objects you created.
Select Object	Select an object, such as companies , products , line_items , tickets , and so on.

Element	Description
Filter operation by name	Type a keyword or the initial letters of the operation name to filter the display of names in the list.
Select Operation	Select an operation name, such as Retrieve record by Id.

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>
