

Oracle® Cloud

Using the Oracle Eloqua Cloud Adapter with Oracle Integration Generation 2



E85425-11
December 2022

The Oracle logo, consisting of the word "ORACLE" in white, uppercase, sans-serif font, positioned on a solid red rectangular background.

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E85425-11

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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>.

Access to Oracle Support

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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 Oracle Eloqua Cloud Adapter

Review the following conceptual topics to learn about the Oracle Eloqua Cloud 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 Eloqua Cloud Adapter Capabilities](#)
- [What Application Version Is Supported?](#)
- [About Oracle Eloqua Cloud Adapter Use Cases](#)
- [Workflow to Create and Add an Oracle Eloqua Cloud 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 Eloqua Cloud Adapter Capabilities

The Oracle Eloqua Cloud Adapter enables you to create an integration with an Oracle Eloqua Cloud application. You configure the Oracle Eloqua Cloud Adapter as a trigger (inbound) connection (Oracle Eloqua Cloud to Oracle Integration) or as an invoke (outbound) connection (Oracle Integration to Oracle Eloqua Cloud).

Oracle Eloqua Cloud provides cloud-based marketing software that delivers marketing automation for industries such as finance, health, media, real estate, sports, entertainment, and so on. Oracle Eloqua Cloud simplifies marketing procedures by delivering leads targeted to new customers. Oracle Eloqua Cloud helps manage and organize marketing segmentation and marketing workflow.

The Oracle Eloqua Cloud Adapter accelerates integrations between Oracle Integration and Oracle Eloqua Cloud systems. The Oracle Eloqua Cloud Adapter synchronizes accounts, contacts, and custom objects from Oracle Integration to Oracle Eloqua Cloud systems. Accounts can only be synchronized from Oracle Integration to Oracle Eloqua Cloud systems, and not in the other direction.

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](#).

About Oracle Eloqua Cloud Adapter Use Cases

The Oracle Eloqua Cloud Adapter can be used in scenarios such as the following.

- General use cases such as integrating with other applications through Oracle Integration where you build your own integrations.
- Out-of-the-box integrations for bidirectional flows between Oracle Eloqua Cloud and Oracle Service Cloud (RightNow) Adapter, including contact to contact (bidirectional) and organization to account (unidirectional Oracle Service Cloud (RightNow) Adapter to Oracle Eloqua Cloud only).
- Other flows that you build such as incident import to an Oracle Eloqua Cloud custom object so that a marketer can segment Oracle Service Cloud (RightNow) Adapter data.

Workflow to Create and Add an Oracle Eloqua Cloud 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 Eloqua Cloud Adapter Connection
2	Create the integration. When you do this, you add an invoke connection to the integration. During connection configuration, you add an Eloqua business object and fields.	Understand Integration Creation and Best Practices and Add the Oracle Eloqua Cloud 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.	Activate an Integration 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>

Step	Description	More Information
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 Eloqua Cloud 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 prerequisite to create a connection with the Oracle Eloqua Cloud Adapter:

- Work with your sales representative to become a customer of Oracle Eloqua Cloud. This action enables you to create an Oracle Eloqua Cloud user account with the correct privileges. You specify this user account when creating an Oracle Eloqua Cloud Adapter connection on the Connections page. See [Oracle Marketing Cloud](#).
- Follow the instructions in [Integration Cloud Service for Eloqua app](#) to install and configure the Integration Cloud Service for Eloqua app to work in integrations with Oracle Integration. The Integration Cloud Service for Eloqua app must be installed and configured prior to testing an Eloqua connection in Oracle Integration. This guide is located on the [Integration Cloud Service for Eloqua](#) web site.

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 Security

Configure security for your Oracle Eloqua Cloud Adapter connection.

1. Go to the **Security** section.

The Connection Security dialog is displayed.
2. Select the security policy. Note that **Eloqua HTTP Basic Authentication** is displayed by default and cannot be deselected.
3. Specify the company name.
4. Specify the username and password.

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	<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.

- 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.
- 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:

- 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			
<div> <div> <div>Q</div> <div>6 Certificates</div> </div> <div> <div>Installed By: User</div> <div>X</div> </div> </div>			
Name	Type	Category	Status
mykey2 EXPIRES IN 1 MONTHS	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 Eloqua Cloud Adapter Connection to an Integration

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

These topics describe the wizard pages that guide you through configuration of the Oracle Eloqua Cloud Adapter as a trigger or invoke in an integration.

Topics:

- [Basic Info Page](#)
- [Trigger Operations Page](#)
- [Trigger Fields Page](#)
- [Trigger Response Page](#)
- [Invoke Operations Page](#)
- [Summary Page](#)
- [Perform Oracle Eloqua Cloud Adapter Postconfiguration Tasks](#)

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> <p>This connection receives an inbound request to synchronize account information with the cloud application.</p>

Trigger Operations Page

Configure and view the Oracle Eloqua Cloud Adapter trigger operations values for your integration.

Element	Description
Cloud Operation	View the operation to perform. Only the execute operation is supported and it cannot be deselected.
Select a Business Object	Select the standard or custom business object on which to perform the operation. You can filter the display of business objects by typing their initial letters.

Trigger Fields Page

Enter and view the Oracle Eloqua Cloud Adapter trigger field values for your integration.

Element	Description
Cloud Operation	View the selected operation to perform.
Select a Business Object	View the selected business object on which to perform the operation.
Available Fields	Select the fields that you want to send from the Oracle Eloqua Cloud application to Oracle Integration. Because an Oracle Eloqua Cloud application business object can have many fields (hundreds), select only fields required for the integration.
Selected Fields	Displays the selected fields.
Field Mapping	Displays a summary of the selected fields. The field is only available when the selected business object is a custom object. This field represents a unique identifier field used to identify the object in Oracle Eloqua Cloud.

Trigger Response Page

Enter and view the Oracle Eloqua Cloud Adapter trigger response values for your integration.

Element	Description
Cloud Operation	View the selected business operation to perform.
Select a Business Object	View the selected business object on which to perform the operation.

Element	Description
Available Response Fields	Select the fields that you want to send from the target endpoint back to the Oracle Eloqua Cloud application. Because an Oracle Eloqua Cloud application business object can have many fields (hundreds), select only fields required for the integration.
Selected Response Fields	Displays the selected response fields.

Invoke Operations Page

Enter the Oracle Eloqua Cloud Adapter invoke operation values for your integration.

Element	Description
Cloud Operation	Displays the operation to perform. The currently supported operation is import . This means that the Oracle Eloqua Cloud invoke imports data into the connected Oracle Eloqua Cloud application.
Select the Business Object	Select the business object for the Oracle Eloqua Cloud invoke to import into the Oracle Eloqua Cloud application. This enables you to synchronize the business object data from a source system (such as Oracle Service Cloud (RightNow) Adapter or Oracle Sales Cloud) to the targeted Oracle Eloqua Cloud application. <ul style="list-style-type: none">• Accounts• Contacts• Other custom objects associated with the configured Oracle Eloqua Cloud connection
Filter by Field Name	Type the initial letters of the field to filter the display of field names.
Select the Fields	Select the fields of the business object that you want to send to the Oracle Eloqua Cloud application as part of the import operation.
Your Selected Fields	Displays the selected fields.
Uniquely Match on Field	Select the field that the Oracle Eloqua Cloud application uses to match your data to the existing data in the Oracle Eloqua Cloud application. Select a field that is likely to be unique to avoid updating the wrong record. Do not use a large text field because this can potentially produce errors.
Auto-Sync Time Interval	Select the time interval between data synchronizations. The Oracle Eloqua Cloud connection uses this interval to synchronize data with the Oracle Eloqua Cloud application.

Element	Description
Link to Contacts/Accounts	<p>Select to link custom objects with contacts and accounts objects. This field is displayed if you selected a custom object.</p> <p>When importing data to a custom data object in Oracle Eloqua Cloud, the records being imported can be linked to a contact or account using a field on the custom object record and associated field on the contact or account. There can be many custom object records linked to a single contact or account. For example, a contact in Oracle Service Cloud (RightNow) Adapter may have several incidents in its history. These incidents can be imported to an Oracle Eloqua Cloud custom data object and linked to the associated contact through the email address on the incident and contact records.</p> <p>If you select this option, the three fields described below are displayed.</p>
CDO fields used for linking	Select the custom data object (CDO) field to use for linking.
Entity to map CDO records to	Select the Oracle Eloqua Cloud entity (contact/account) to link with the custom object.
Entity field used for linking	Select the Oracle Eloqua Cloud entity field to use for linking.

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>

Perform Oracle Eloqua Cloud Adapter Postconfiguration Tasks

When used as a trigger, the Oracle Integration Eloqua Application must be installed in the Oracle Eloqua Cloud instance.

See [Integration Cloud Service for Eloqua app](#).

4

Troubleshoot Oracle Eloqua Cloud Adapter

There are messages and situations that can appear in Oracle Eloqua Cloud based on data handling. Other error handling is done through Oracle Integration.

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.