Oracle® Cloud
Using the Salesforce Marketing Cloud Adapter with Oracle Integration 3

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Contents

Preface

1   Understand the Salesforce Marketing Cloud Adapter

2   Create a Salesforce Marketing Cloud Adapter Connection

3   Add the Salesforce Marketing Cloud Adapter Connection to an Integration

4   Implement Common Patterns Using the Salesforce Marketing Cloud Adapter

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.
italic	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 Salesforce Marketing Cloud Adapter

Review the following topics to learn about the Salesforce Marketing 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:

- Salesforce Marketing Cloud Adapter Capabilities
- What Application Version Is Supported?
- Workflow to Create and Add a Salesforce Marketing Cloud Adapter Connection to an Integration

Salesforce Marketing Cloud Adapter Capabilities

The Salesforce Marketing Cloud Adapter enables you to create an integration in Oracle Integration that connects to the Salesforce Marketing Cloud platform. The Salesforce Marketing Cloud Adapter is one of many predefined adapters included with Oracle Integration. You can configure the Salesforce Marketing Cloud Adapter as a trigger or invoke connection in an integration in Oracle Integration.

The Salesforce Marketing Cloud Adapter provides the following capabilities for trigger endpoints:

- Supports processing email event notifications.
- Supports receiving automation events for the activities performed on the Salesforce Marketing Cloud application.
- Supports OAuth 2.0 Client Credentials, referred to as the SFMC Composite Security Policy.

The Salesforce Marketing Cloud Adapter provides the following capabilities for invoke endpoints:

- Supports performing operations such as `Create`, `Update`, `Delete` and `Retrieve` on the following business objects:
  - Assets
  - Campaigns
  - Categories
  - Contacts
  - Data Extensions
  - Event Definitions
  - Journeys
- Supports the following security policies:

- OAuth 2.0 client credentials, referred as the Server-to-Server Integrations Security Policy.

- OAuth 2.0 authorization code credentials authentication, referred to as the Web App Integrations Security Policy.

Supported Asset Types

The Salesforce Marketing Cloud Adapter supports the following asset types:

Asset Type	Asset ID
htmlemail	208
htmlblock	197

In addition to the above asset types, the Salesforce Marketing Cloud Adapter also supports image asset types. The following table lists the supported image asset types and their respective image asset IDs.

Image Asset Type	Image Asset ID
ai	16
psd	17
pdd	18
eps	19
gif	20
jpe	21
jpeg	22
jpg	23
jp2	24
jpx	25
pict	26
pct	27
png	28
tif	29
tiff	30
tga	31
bmp	32
wmf	33
vsd	34
pnm	35
pgm	36
pbm	37
ppm	38
svg	39

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 Salesforce Marketing 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.

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 Salesforce Marketing Cloud 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 *Using Integrations in Oracle Integration 3* and Add the Salesforce Marketing Cloud Adapter Connection to an Integration
4	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data in *Using Integrations in Oracle Integration 3*
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 *Using Integrations in Oracle Integration 3*
6	Activate the integration.	Activate an Integration in *Using Integrations in Oracle Integration 3*
7	Monitor the integration on the dashboard.	Monitor Integrations During Runtime in *Using Integrations in Oracle Integration 3*
8	Track payload fields in messages during runtime.	Assign Business Identifiers for Tracking Fields in Messages and Track Integration Instances in *Using Integrations in Oracle Integration 3*
9	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors in *Using Integrations in Oracle Integration 3*

2
Create a Salesforce Marketing 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

Prerequisites for Creating a Connection

You must satisfy the following prerequisites to create a connection with the Salesforce Marketing Cloud Adapter:

Create a New Package

Create a new package in your Salesforce Marketing Cloud account and obtain the client ID and client secret. See Create and Install Packages.

- During the registration process, if you select the **Web App** integration type, enter the redirect URI under **Redirect URI** in the following format:

  ```
  https://OIC_instance_URL/icsapis/agent/oauth/callback
  ```

- During the registration process, make sure you provide the required permission to the component.

- Copy the client ID and client secret. You'll need to enter those values on the Connections page when you configure security for your Salesforce Marketing Cloud Adapter connection in Oracle Integration. See Configure Connection Security.

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	**Note**: This field only appears if you are creating a connection in a project.
	Select to make this connection publicly available in other projects. Connection sharing eliminates the need to create and maintain separate connections in different projects.
	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.
	See Add and Share a Connection Across a Project.

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 **Subdomain** field, enter your subdomain. See Your Subdomain and Your Tenant's Endpoints.

Configure Connection Security

Configure security for your Salesforce Marketing Cloud Adapter connection.

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

2. Configure security for invoke connections:

   a. Select one of the following policies from the security policy list:

      • **Server-to-Server Integrations Security Policy** (OAuth 2.0 Client Credentials): Supported for trigger and invoke connections.

      • **Web App Integrations Security Policy** (OAuth 2.0 Authorization Code Credentials): Supported only for invoke connections.

   b. If you select the **Server-to-Server Integrations Security Policy**:

      i. In the **Client Id** field, enter the client ID that you obtained after performing the prerequisite steps. See Prerequisites for Creating a Connection.

      ii. In the **Client Secret** field, enter the client secret that you obtained after performing the prerequisite steps. See Prerequisites for Creating a Connection.

   c. If you select the **Web App Integrations Security Policy**:

      i. In the **Client Id** field, enter the client ID that you obtained after performing the prerequisite steps. See Prerequisites for Creating a Connection.

ii. In the **Client Secret** field, enter the client secret that you obtained after performing the prerequisite steps. See Prerequisites for Creating a Connection.

iii. Click **Provide Consent** to verify the connection properties.

The Salesforce Marketing Cloud login page is displayed.

iv. Enter your Salesforce Marketing Cloud login credentials.

v. Once you see an `Authenticated!!` message, you can test your connection.

3. Configure security for trigger connections:

The adapter supports the OAuth 2.0 Client Credentials security policy, which is referred as the SFMC Composite Security Policy.

a. In the **Client Id** field, enter the client ID 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 **Client Identifier** field, enter the identifier that you received from Oracle for your current instance.

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: • **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**.

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3

Add the Salesforce Marketing Cloud Adapter Connection to an Integration

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

The following sections describe the wizard pages that guide you through configuration of the Salesforce Marketing Cloud Adapter as a trigger or an invoke in an integration.

Topics:

- Trigger Basic Info Page
- Invoke Basic Info Page
- Summary Page

Trigger Basic Info Page

Specify a name, description, business object, and trigger event type on the Basic Info page of each trigger connection in your integration.

Element	Description
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 hyphens in the name. You can't include the following characters: • 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?	Enter an optional description of the connection's responsibilities.
Select Business Object	Select a business object: • **Automation Events** • **Engagement Events**
Trigger	Select an event from the list: • **Automation Events** • **Engagement Emails Event**

Invoke Basic Info Page

Specify a name, description, business object, and action type 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 responsibilities of this connection. You can include English alphabetic characters, numbers, underscores, and hyphens in the name. You can't include the following characters: • 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?	Enter an optional description of the connection's responsibilities.
Select Business Object	Select a business object. The supported business objects are: • Assets • Campaigns • Categories • Contacts • Data Extensions • Event Definitions • Journeys
Action	Select an operation to perform for the selected business object, such as Create Asset-Image, Create Contact, Get Campaign, Update Category by ID, Delete Journey, and so on. The actions/operations available for selection are based on the business object selected.

Summary Page

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

Element	Description
Summary	Displays a summary of the 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 **Go back**. To cancel your configuration details, click **Cancel**.

4

Implement Common Patterns Using the Salesforce Marketing Cloud Adapter

You can use the Salesforce Marketing Cloud Adapter to implement the following common patterns.

Topics:

- Export Bulk Campaign Data from Snowflake to Salesforce Marketing Cloud Through GCP Storage

> **✎ Note:**
>
> Oracle Integration offers a number of prebuilt integrations, known as *recipes*, that provide you with a head start in building your integrations. You can start with a recipe, and then customize it to fit your needs and requirements. Depending upon the solution provided, a variety of adapters are configured in the prebuilt integrations.
> See the Recipes and Accelerators page on the Oracle Help Center.

Export Bulk Campaign Data from Snowflake to Salesforce Marketing Cloud Through GCP Storage

You can export bulk campaign data from Snowflake to Salesforce Marketing Cloud using Google Cloud Platform (GCP) storage.

The integration process begins with the Snowflake Adapter extracting files from the Snowflake database and placing the bulk data into a designated storage bucket within the Google Cloud Platform. Subsequently, the GCP Storage Adapter retrieves these files from the Google Cloud Platform storage. Finally, the Salesforce Marketing Cloud Adapter operates on the extracted file content from stage, reads, and processes the messages before transmitting them to the Salesforce Marketing Cloud.

To perform these operations, you must create the Snowflake Adapter, GCP Storage Adapter, and Salesforce Marketing Cloud Adapter connections in Oracle Integration. This implementation pattern provides an overview of the steps.

1. Create a scheduled integration.

2. Drag a Snowflake Adapter into the integration canvas.

3. Configure the Snowflake Adapter as follows:

    a. On the Basic Info page, provide a name.

    b. On the Action page, select the **Perform Bulk Export** action.

   c. On the Operations page, select the stage type, stage name, target Snowflake database table name, and file format.

   d. On the Summary Page, review your selections.

4. Assign the following two variables and values to the integration.

- `flag = 'false'`

- `filename= ''`

5. Click **Validate**, and then click **Close**.

6. Drag a while action below the assign action. Provide a unique name for this action, and click **Create**. Set the condition for the specified variables to `flag = 'false'`.

7. **Click Validate**, and then click **Close**.

8. Drag a Snowflake Adapter inside the while action.

9. Configure the Snowflake Adapter as follows:

   a. On the Basic Info page, provide a name.

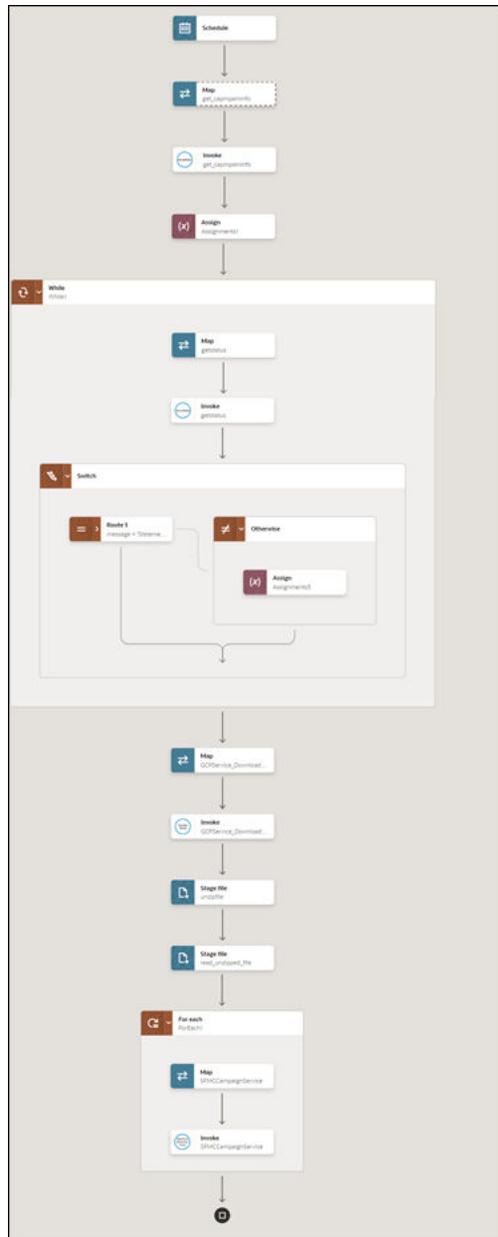   b. On the Action page, select the **Check/Cancel Statement Execution** action.

   c. On the Operations page, select the stage type, stage name, target Snowflake database table name, and file format.

   d. On the Summary Page, review your selections.

10. In the mapper, perform the required mapping.

11. Drag a switch action inside the while action and specify the condition as follows:

```
Statement executed successfully
```

12. Drag an assign action into the **Otherwise** section of the switch action to update the specified variables as follows:

```
flag = 'false'
```

13. Drag the GCP Storage Adapter into the integration canvas.

14. Configure the GCP Storage Adapter as follows:

   a. On the Basic Info page, provide an endpoint name.

   b. Select **Objects** as a resource and **Download Object** as an action.

   c. On the Summary page, review your selections.

15. Perform the required mapping to download the files.

16. Drag a stage file action into the integration canvas after the GCP Storage Adapter and configure it to unzip the file.

   a. On the Basic Info page, provide a name.

   b. On the Configure Operation page, select **Unzip File** from the **Choose Stage File Operation** field.

   c. Specify the XPath expression for the file reference in the **Specify the File Reference** field.

   d. Specify the directory name in the **Specify the Directory to Unzip** field.

  e. Review your selections on the Summary page.

17. Drag a second stage file action into the integration canvas and configure it to read an unzipped file.

  a. On the Basic Info page, provide a name.

  b. On the Configure Operation page, select **Read Entire File** from the **Choose Stage File Operation** field.

  c. Specify the XPath expression for the file reference in the **Specify the File Reference** field.

  d. On the Scheme Options page, select **Yes** in the **Do you want to specify the structure for the contents of the file** field.

  e. Select **Sample delimited document (e.g. CSV)** in the **Which one of the following choices would be used to describe the structure of the file contents** field.

  f. On the Format Definition page, click **Choose File** and upload the sample CSV file in the **Select a New Delimited Data File** field.

  g. Review your selections on the Summary page.

18. Drag a for-each action. The for-each action enables you to loop over individual files within the ZIP file and stage each file in Oracle Integration for transformation.

19. Specify **Record** as a repeating element (for this example, **Campaign_Record**).

20. Drag the Salesforce Marketing Cloud Adapter inside the for-each action.

21. Configure the Salesforce Marketing Cloud Adapter as follows:

  a. On the Basic Info Page, provide a name.

  b. Select **Campaign** as a business object and **Create Campaign** as an action to extract the entire file content from the stage to the Campaign table.

  c. On the Summary Page, review your selections.

22. Perform the required mapping.

23. Click **Validate**.

The complete integration looks as follows.

24. When complete, save and activate the integration. As a result, the Salesforce Marketing Cloud Adapter imports bulk data from the Snowflake application into Salesforce Marketing Cloud.