

Oracle® Cloud

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



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Preface

This document describes how to install, configure, and run this recipe in Oracle Integration 3.

Topics:

- [Documentation Accessibility](#)
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- [Conventions](#)

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Related Resources

For more information, see these Oracle resources:

- Oracle Integration documentation on the Oracle Help Center.
- Oracle Cloud at <http://cloud.oracle.com>.

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.

Convention	Meaning
<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.

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About This Recipe

Use this recipe to export campaign data in bulk from Snowflake to Salesforce Marketing Cloud (SFMC) using Google Cloud Platform (GCP) Storage.

Note:

This recipe is available as **Snowflake — Salesforce Marketing Cloud | Export Campaign Data** in Oracle Integration. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe exports campaign data in bulk from Snowflake to Salesforce Marketing Cloud using an external stage (GCP Storage).

To use the recipe, you must install the recipe and configure the connections and other resources within it. You can activate and run the integration flow of the recipe manually or specify an execution schedule for it. When triggered, the integration flow fetches the campaign data from Snowflake and exports it to a GCP Storage bucket in comma separated value (CSV) format. Subsequently, it downloads the CSV file from the GCP Storage bucket and creates campaign objects in Salesforce Marketing Cloud. Basic data such as Name, Description, CampaignCode, Favorite, Color and so on are synchronized between Snowflake and Salesforce Marketing Cloud.

System and Access Requirements

- Oracle Integration, Version 24.04 or higher
- Snowflake
- An account on Snowflake with the System Administrator role
- GCP bucket that is configured with a storage integration in the Snowflake account as an external stage.
- Salesforce Marketing Cloud
- An account on Salesforce Marketing Cloud with the Administrator role
- GCP Storage
- An account on GCP Storage with the System Administrator role
- Ensure your Snowflake storage integration has access to the GCP bucket by granting permission in the GCP bucket (by adding Principals and assigning the Storage Object Admin role)

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Before You Install the Recipe

You must perform the following configuration tasks on your Snowflake, GCP Storage and Salesforce Marketing Cloud instances to successfully connect to these external systems using Oracle Integration and import campaign data.

Configure Snowflake

Complete the following tasks in your Snowflake instance to successfully connect to it from Oracle Integration and export campaigns.

- For general configuration steps, see [Prerequisites for Creating a Connection](#).
- Ensure the table with column definitions such as Name, Description, CampaignCode, Favorite, and Color is created in Snowflake.
- Ensure that a Cloud Storage Integration is created in Snowflake and grant the Service Account the necessary permissions to access objects within the Cloud Storage bucket. See [Create a Cloud Storage Integration in Snowflake](#).

Configure GCP Storage

To configure GCP Storage, see [Prerequisites for Creating a Connection](#).

Configure Salesforce Marketing Cloud

To access Salesforce Marketing Cloud from Oracle Integration and import campaign data, you must perform certain configurations on your Salesforce Marketing Cloud instance.

- For general configuration tasks, see [Prerequisites for Creating a Connection](#).
- To obtain Client ID and Secret, see [OAuth client ID credentials](#).


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Install and Configure the Recipe

On your Oracle Integration instance, install the recipe to deploy and configure the integration and associated resources.

1. On the Oracle Integration Home page, in the **Get started** section, click **Browse store**.
2. Find the recipe you want to install, then click **Get**.

A message confirms that the recipe was successfully installed, and the recipe card shows **In use**.

3. Click **Configure**  on the recipe to configure its resources.

The project workspace opens, displaying all the resources of the recipe. Configure the following resources before you activate and run the recipe.

Configure the Oracle Snowflake Connection

1. In the Connections section, click the connection name.
2. In the Properties section, enter the following details:


Field	Information to Enter
Instance URL	URL of your Snowflake account, typically provided by Snowflake when you sign up. See Configure Snowflake .
Warehouse Name	Name of the Snowflake virtual warehouse where the data is stored and processed.
Database Name	Name of the Snowflake database where the desired tables are located.
Schema Name	Name of the schema within the specified database where the tables are located.

3. In the Security section, enter the following details:

Field	Information to Enter
Security Policy	Select Authorization Code Credentials .
Client ID	Enter the Client Id of the account created for Oracle Integration on Snowflake. See Configure Snowflake .
Client Secret	Enter the secret value of the account created for Oracle Integration on Snowflake.
Scope (Optional Security)	refresh_token

4. Click **Save**. If prompted, click **Save** again.
5. Click **Provide Consent**.
6. Once the consent is approved, click **Test** in the connection window to ensure that your connection is successfully configured, click **Test** again.


A message confirms if your test is successful.

- To return to the project workspace, click **Go back** .

Configure the Oracle GCP Storage Connection

- In the Connections section, click the connection name.
- In the Properties section, enter the unique identifier assigned to your GCP project in the **Project Id** field. This ID is used to authenticate requests and access resources within your project.
- In the Security section, enter the following details:

Field	Information to Enter
Security Policy	Select Authorization Code Credentials .
Google Client ID	Enter the Google Client Id of the account created for Oracle Integration on GCP Storage. See Configure GCP Storage .
Google Client Secret	Enter the secret value associated with the Client ID.
Google Authorization Scope	This refers to the specific permissions or scopes that the OAuth 2.0 credentials (Client ID and Client Secret) have been granted for accessing Google Cloud Storage (GCS). The scope determines what actions the integration can perform, such as read-only access or full access to GCS resources.

- Click **Save**. If prompted, click **Save** again.
- Click **Provide Consent**.
- Once consent is approved, click **Test** on the connection window to ensure that your connection is successfully configured. In the resulting dialog, click **Test** again.
A message confirms if your test is successful.
- To return to the project workspace, click **Go back** .


Configure the Oracle SFMC Connection

- In the Connections section, click the connection name.
- In the Properties section, enter the environment subdomain (A unique identifier) with which user needs to connect in the **Subdomain** field.
- In the Security section, enter the following details:

Field	Information to Enter
Security Policy	Select Server-to-Server Integrations Security Policy .
Client ID	Enter the client Id of the account created for Oracle Integration on SFMC. See Configure Salesforce Marketing Cloud .
Client Secret	Enter the secret value of the account created for Oracle Integration on SFMC.

- Click **Save**. If prompted, click **Save** again.
- Click **Test** to ensure that your connection is successfully configured. In the resulting dialog, click **Test** again.

A message confirms if your test is successful.


6. To return to the project workspace, click **Go back** .

Configure the Lookup Table

Edit the **SNOWFLAKE_SFMC_LOOKUP** lookup table and enter appropriate values.

1. In the Lookups section, click the lookup name.
2. In the **Property_name** column, enter the property name.
3. In the **Property_value** column, enter the values as shown in the below table to which the property names must be mapped.

Property_name	Property_value
StageName	Specify the stage name associated with the Snowflake endpoint.
SubDirectory	Specify a sub directory within the specified stage.

4. Click **Save**. If prompted, click **Save** again.
5. To return to the project workspace, click **Go back** .


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Activate and Run the Recipe


After you've configured the connections and other resources, you can activate and run the recipe.

1. In the project workspace, click **Activate**. In the Activate project panel, with the default project deployment selected, choose an appropriate tracing option, then click **Activate**.

A message confirms that the integration has been activated. Refresh the page to view the updated status of the integration.

2. Update the integration properties of the integration flow. You can update the integration properties for the integration flow only after activating the recipe.
 - a. In the Integrations section of the project workspace, click **Actions**  on the **Snowflake Salesforce Marketing Cloud Campaign Sync** integration flow, then select **Update property values**.
 - b. In the Update property values panel, update the integration properties with appropriate values.
 - i. **EmailTo**: This integration property holds the email address to which run-time exception emails are sent. Enter an email address of your choice.
 - ii. **RetryCount**: You can specify the number of retries if any invoke fails at run time. The default value is set 3.
 - iii. **WaitForCampaignCreationRetry**: This integration property controls retries and timeouts for confirming the successful creation of campaigns in Salesforce Marketing Cloud. The default value is set to 60 secs.
 - c. Click **Submit**.

A message confirms that the integration properties have been updated successfully.

3. Run the recipe.
 - a. In the Integrations section of the project workspace, click **Actions**  on the **Snowflake Salesforce Marketing Cloud Campaign Sync** integration flow, then select **Run**.
 - b. On the Configure and run page, click **Run**.

You've now successfully submitted the integration for execution.

Note:

You can also schedule this integration to run at a date, time, and frequency of your choosing. See Define the Integration Schedule.

4. Monitor the running of the integration flow in Oracle Integration.
 - a. In the project workspace, click **Observe**. You'll see the integration flow being triggered and running successfully.
 - b. To manage errors in your project, see Manage Errors in a Project.

5. In your Salesforce Marketing Cloud instance check for the campaign objects created.
 - a. Log in to Salesforce Marketing Cloud.
 - b. On the Home page, click **Campaigns**.

You can see the list of campaigns created.

Related Documentation

- *Using the Snowflake Adapter with Oracle Integration 3*
- *Using the GCP Storage Adapter with Oracle Integration 3*
- *Using the Salesforce Marketing Cloud Adapter with Oracle Integration 3*