Informatica

Informatica® Cloud Data Integration

Salesforce Marketing Cloud Connector

Informatica Cloud Data Integration Salesforce Marketing Cloud Connector
April 2023

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Preface

Use *Salesforce Marketing Cloud Connector* to learn how to read from or write to Salesforce Marketing Cloud by using Cloud Data Integration. Learn to create a Salesforce Marketing Cloud connection and run synchronization tasks in Cloud Data Integration.

Informatica Resources

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Informatica Documentation

Use the Informatica Documentation Portal to explore an extensive library of documentation for current and recent product releases. To explore the Documentation Portal, visit https://docs.informatica.com.

If you have questions, comments, or ideas about the product documentation, contact the Informatica Documentation team at infa_documentation@informatica.com.

Informatica Intelligent Cloud Services web site

You can access the Informatica Intelligent Cloud Services web site at http://www.informatica.com/cloud. This site contains information about Informatica Cloud integration services.

Informatica Intelligent Cloud Services Communities

Use the Informatica Intelligent Cloud Services Community to discuss and resolve technical issues. You can also find technical tips, documentation updates, and answers to frequently asked questions.

Access the Informatica Intelligent Cloud Services Community at:

https://network.informatica.com/community/informatica-network/products/cloud-integration

Developers can learn more and share tips at the Cloud Developer community:

https://network.informatica.com/community/informatica-network/products/cloud-integration/cloud-developers

Informatica Intelligent Cloud Services Marketplace

Visit the Informatica Marketplace to try and buy Data Integration Connectors, templates, and mapplets:

https://marketplace.informatica.com/

Data Integration connector documentation

You can access documentation for Data Integration Connectors at the Documentation Portal. To explore the Documentation Portal, visit https://docs.informatica.com.

Informatica Knowledge Base

Use the Informatica Knowledge Base to find product resources such as how-to articles, best practices, video tutorials, and answers to frequently asked questions.

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You can access the trust center at https://www.informatica.com/trust-center.html.

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You can contact a Global Support Center through the Informatica Network or by telephone.

To find online support resources on the Informatica Network, click **Contact Support** in the Informatica Intelligent Cloud Services Help menu to go to the **Cloud Support** page. The **Cloud Support** page includes system status information and community discussions. Log in to Informatica Network and click **Need Help** to find additional resources and to contact Informatica Global Customer Support through email.

The telephone numbers for Informatica Global Customer Support are available from the Informatica web site at https://www.informatica.com/services-and-training/support-services/contact-us.html.

CHAPTER 1

Introduction to Salesforce Marketing Cloud Connector

You can use Salesforce Marketing Cloud Connector to read contact data from and write contact to Salesforce Marketing Cloud. When you read data from or write data to Salesforce Marketing Cloud, you can specify the Hosted Agent or the Secure Agent.

The Contact Builder app in the Salesforce Marketing Cloud manages contact data from other Salesforce Marketing Cloud apps and other sources. You can use the Salesforce Marketing Connector to capture the changed data details in the Salesforce Marketing Cloud. When you use Salesforce Marketing Cloud Connector, you can create a synchronization task to read data from or write data to Salesforce Marketing Cloud.

Note: You cannot use Salesforce Marketing Cloud Connector to connect to Salesforce Marketing sandbox instances.

Introduction to Salesforce Marketing Cloud

Salesforce Marketing Cloud is a Salesforce platform that you can use to manage marketing. Salesforce Marketing Cloud uses the email, mobile, and social media channels to manage marketing. You can use the Contact Builder application in Salesforce Marketing Cloud to access and manage contact data of customers. The Contact Builder application provides you with a single point view of how customer data is organized and the relationships between data. Related data are grouped as attribute groups.

The following are the categories of the attribute groups:

- System-defined attribute groups
- User-defined attribute groups

System-Defined Attribute Groups

You can change the system-defined attribute groups.

The following attributes groups are examples of system-defined attribute groups:

System Data

Contains contact ID, contact key, and email details.

MobileConnect

Contains mobile demographic details, includes first name, last name, and subscription information.

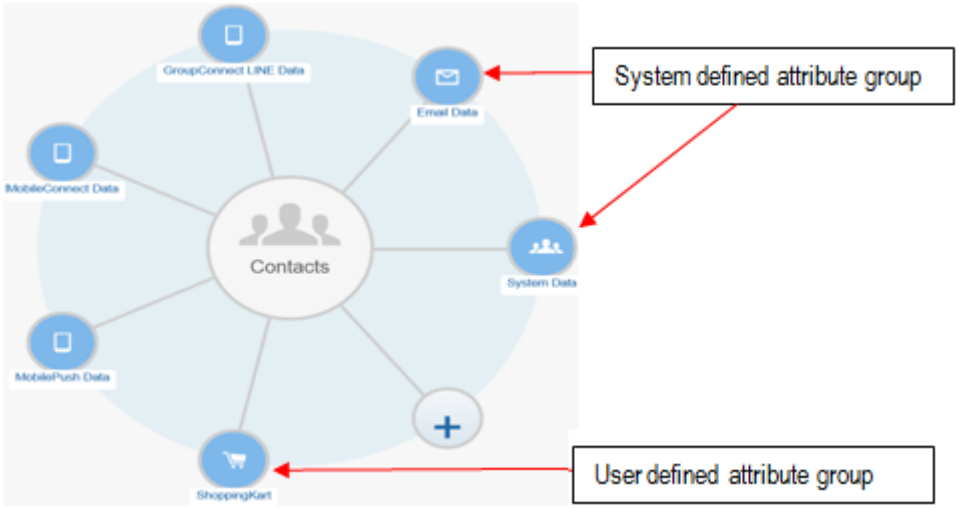
Mobile Push

Contains customer mobile device details to which you need to send the data.

For more information about Contact Builder application, see Salesforce Marketing Cloud documentation at the following website: https://help.exacttarget.com/en/documentation/contact_builder/

User-Defined Attribute Groups

You can use Salesforce Marketing Cloud to create user-defined attribute groups. You can create customized data extensions by using user-defined attribute groups. A data extension is a data structure in Salesforce Marketing Cloud, which is similar to a relational database. You can use data extensions to store customer contact data that system-defined attribute groups do not represent.



Data Extensions

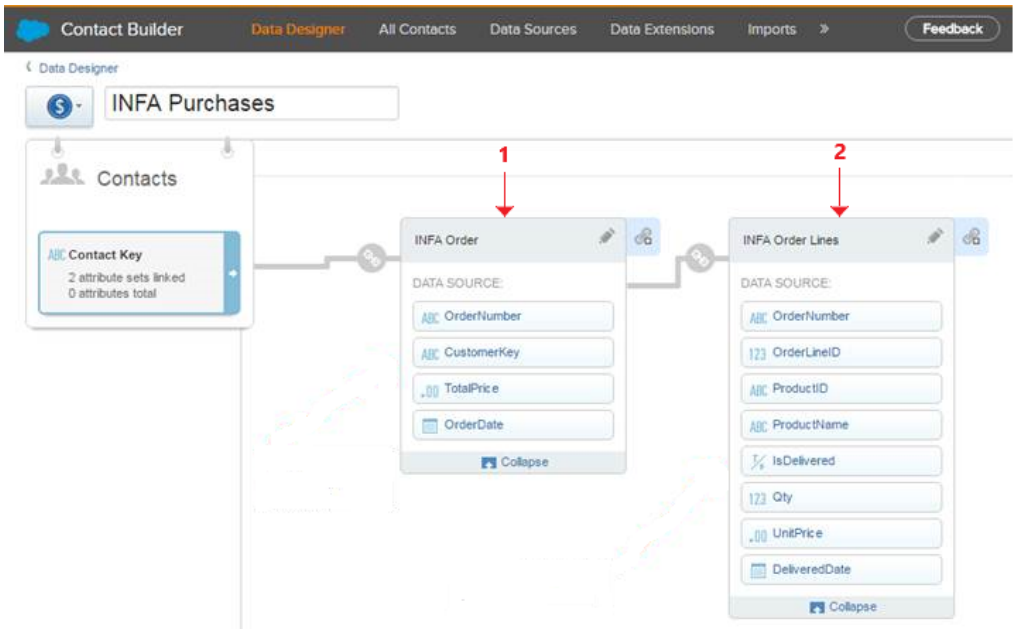
Salesforce Marketing Cloud Connector supports the following types of data extensions:

- System Contact Linked Data Extension: The data extension is directly or indirectly linked to the System.Contacts data extensions.
  - Child System Contact Linked Data Extension: The data extension is directly linked to the System.Contacts data extension.
  - Grandchild System Contact Linked Data Extension: The data extension is indirectly linked to the System.Contacts data extension.

The following image shows the **MobileConnect Demographics** and **MobileConnect Subscriptions** page:



- Custom Contact Linked Data Extension: The data extension is directly or indirectly linked to the System.Contacts data extensions.
  - Child Custom Contact Linked Data Extension: The data extension is directly linked to the System.Contacts data extension.
  - Grandchild Custom Contact Linked Data Extension: The data extension is indirectly linked to the System.Contacts data extension.
    The following image shows the **INFA Order** and **INFA Order Lines** page:



- Non-Contact Linked Data Extension: The data extension is not linked to the System.Contacts data extensions.

Salesforce Marketing Cloud Objects

Salesforce Marketing Cloud Connector supports all user-defined data extensions in user-defined attribute groups.

Salesforce Marketing Cloud Connector supports the following data extensions and operation tasks:

Objects	Read	Insert	Update	Upsert	Delete
System Data Extension	Yes	Yes	Yes	Yes	NA
System Contact Linked Data Extension - Child and Grandchild	Yes	Yes	Yes	Yes	NA
Custom Contact Linked Data Extension - Child and Grandchild	Yes	Yes	Yes	Yes	Yes
Non-Contact Linked Data Extension	Yes	Yes	Yes	Yes	Yes

When you perform an operation on System Data Extension, it is mandatory to configure the **Contact.Contact Key** field.

Note: Salesforce Marketing Cloud Connector does not support the update, upsert, and delete operations for data extensions without the primary key field.

Administration of Salesforce Marketing Cloud Connector

As a user, you can use Salesforce Marketing Cloud Connector after the organization administrator performs the following tasks:

- When you upload the connector, specify the name of the connector as Salesforce Marketing Cloud.
- Ensure that you have a valid Salesforce Marketing Cloud account and credentials to connect to Salesforce Marketing Cloud.
- Get the client ID and the client secret from Salesforce Marketing Cloud. For more information, see "Retrieving the Client ID and Client Secret" on page 11.
- Enable read and write scopes for the installed packages which is the minimum permission required to access the installed packages.
- Create an API user and assign Administrator role to the user which is the minimum permission required to access the APIs. For more information, see "Assigning Administrator Role to Users" on page 11.
- Disable the Salesforce Marketing Cloud account password expiry date. For more information, see "Disabling the Salesforce Marketing Cloud Account Password Expiry Date " on page 12.

For more information about the Salesforce Marketing Cloud APIs, see the Salesforce Marketing Cloud documentation at the following website:
https://developer.salesforce.com/docs/atlas.en-us.mc-apis.meta/mc-apis/index-api.htm.

Retrieving the Client ID and Client Secret

Perform the following steps to retrieve the Client ID and Client Secret for a new package:

1. Log in to Salesforce Marketing Cloud.
2. Go to **Setup** > **Apps** > **Installed Packages**.
3. Click **New** to create a new package.
4. In the **New Package Details** window, enter the name and description for the package.

   To use OAuth 2.0, select **Create with enhanced functionality (recommended)**.
5. Click **Add Component**.
6. Select **API Integration** as the component type.
7. Click **Next**.
8. Select **Server-to-Server** as the integration type.
9. Click **Next**.
10. Select the following permissions for the Server-to-Server properties:
    - List and Subscribers - Read, Write
    - Marketing Cloud Connect - Read, Write
    - Data Extensions - Read, Write

    These are the minimum permissions required to use Salesforce Marketing Cloud Connector.
11. Click **Save**.

    The Components section displays the Client ID and Client Secret for the package.

Perform the following steps to retrieve the Client ID and Client Secret for an existing package:

1. Go to **Setup** > **Apps** > **Installed Packages**.
   The **Installed Packages** page lists all the packages installed in the Salesforce Marketing Cloud account.
2. Select a package and go to the **Components** section.
   - To add a new component, click **Add Component**.
   - To edit existing component, click **Edit**.

   The Components section displays the Client ID and Client Secret for the package.
3. Click **Save**.

Note: Informatica recommends that you upgrade to OAuth 2.0. If an existing package uses OAuth 1.0, you cannot edit the package to use OAuth 2.0. You must create a new package to use OAuth 2.0.

For information about configuring installed packages and API integration, see the Salesforce documentation.

Assigning Administrator Role to Users

Perform the following steps to assign Administrator role to users in the Salesforce Marketing Cloud account:

1. Log in to Salesforce Marketing Cloud.
2. Go to **Setup** > **Users** > **Users**

   The **Users** page lists all the users available in the Salesforce Marketing Cloud account.
3. Select the user to whom you want to assign Administrator role.
4. Click **Manage Roles** tab.
5. Click on **Edit Roles**.

6. Select **Marketing Cloud Administrator** and **Grant the user access to the web services** to assign Administrator role to the user that you selected.

Disabling the Salesforce Marketing Cloud Account Password Expiry Date

Perform the following steps to disable the Salesforce Marketing Cloud account password expiry date permanently.

1. Log in to Salesforce Marketing Cloud.
2. Go to **Setup** > **Users** > **Users**.

   The **Users** page lists all the users available in the Salesforce Marketing Cloud account.
3. Select the user for whom you want to disable password expiry date.
4. Click **Edit**.
5. Specify **Yes** in the **API User** property.
6. Click **Save**.

Configure proxy settings

If your organization uses an outgoing proxy server to connect to the Internet, you can use the serverless runtime environment to connect to Informatica Intelligent Cloud Services through the proxy server.

You can use the unauthenticated or authenticated proxy server.

To configure the proxy settings for the serverless runtime environment, see *Runtime Environments* in the Administrator help.

CHAPTER 2

Salesforce Marketing Cloud Connections

Create a Salesforce Marketing Cloud connection to connect to Salesforce Marketing Cloud. Use the connection to read data from and write data to Salesforce Marketing Cloud. Use Salesforce Marketing Cloud connection as a source connection object when you read records from Salesforce Marketing Cloud. Use Salesforce Marketing Cloud connection as a target connection when you write or update data to Salesforce Marketing Cloud.

You create a Salesforce Marketing Cloud connection on the **Connections** page. You can then use the connection in the Synchronization Task wizard when you create a task.

Salesforce Marketing Cloud connection properties

When you set up a Salesforce Marketing Cloud connection, configure the connection properties.

The following table describes the Salesforce Marketing Cloud connection properties:

Property	Description
Connection Name	Name of the connection. Each connection name must be unique within the organization. Connection names can contain alphanumeric characters, spaces, and the following special characters: _ . + -, Maximum length is 255 characters.
Description	Description of the connection. Maximum length is 4000 characters.
Type	The Salesforce Marketing Cloud connection type.
Runtime Environment	The name of the runtime environment where you want to run the tasks. Select a Secure Agent, Hosted Agent, or serverless runtime environment.

Property	Description

Salesforce Marketing Cloud Url	The URL that the agent uses to connect to the Salesforce Marketing Cloud WSDL.
	The following URL is an example for OAuth 1.0 URL:
	`https://webservice.s7.exacttarget.com/etframework.wsdl`
	The following URL is an example for OAuth 2.0 URL:
	`https://<SUBDOMAIN>.soap.marketingcloudapis.com/etframework.wsdl`
	Important: Salesforce is going to deprecate the OAuth 1.0 APIs by September 30 th , 2022. Informatica recommends that you upgrade to OAuth 2.0 for new and existing packages.

Username	Applies to basic authentication. The user name of the Salesforce Marketing Cloud account.
Password	Applies to basic authentication. The password for the Salesforce Marketing Cloud account.
Client ID	The client ID of Salesforce Marketing Cloud required to generate a valid access token.
Client Secret	The client secret of Salesforce Marketing Cloud required to generate a valid access token.
Use Proxy Server	Connects to Salesforce Marketing Cloud though proxy. **Note:** When you use a serverless runtime environment, you cannot use a proxy server to connect to Informatica Intelligent Cloud Services.
Enable Logging	Enables logging for the task. When you enable logging, you can view the session log for the log details.
UTC offset	Uses the UTC offset connection property to read data from and write data to Salesforce Marketing Cloud in the UTC offset time zone.
Batch Size	Number of rows that the agent writes in a batch to the target. When you insert or update data and specify the contact key, the data associated with the specified contact ID is inserted or updated in a batch to Salesforce Marketing Cloud. When you upsert data to Salesforce Marketing Cloud, do not specify the contact key.
Enable Multiple BU	Uses the Salesforce Marketing Cloud connection to access data across all business units. Select this option if there are multiple business units in your Salesforce Marketing Cloud account.

CHAPTER 3

Synchronization Tasks with Salesforce Marketing Cloud Connector

Use the Synchronization task to synchronize data between a source and target.

You can configure a synchronization task using the Synchronization Task wizard.

When you create a task, you can associate it with a schedule to run it at specified times or on regular intervals. Or, you can run it manually. You can monitor tasks that are currently running in the activity monitor and view logs about completed tasks in the activity log.

Salesforce Marketing Cloud Source Synchronization Example

Configure Salesforce Marketing Cloud source properties on the **Source** page of the Synchronization Task wizard.

Use the synchronization task to perform the following:

- Read records from system-defined and user-defined data extensions.
- Read records from a single data extension or multiple data extensions. Common attributes connect the multiple data extensions.
- Use conditional operations, such as =, !=, <, and >.
- Read a child object group. The retrieved data is in de-normalized form.
- Apply filters on a single or multiple column to filter data.

The system-defined and user-defined data extensions are prefixed with their respective attribute group name. For example, in the System Data.Contact data extension, System Data refers to the system-defined attribute group and Contact refers to the system defined data extension. Similarly, user-defined data extensions are prefixed with their attribute group name.

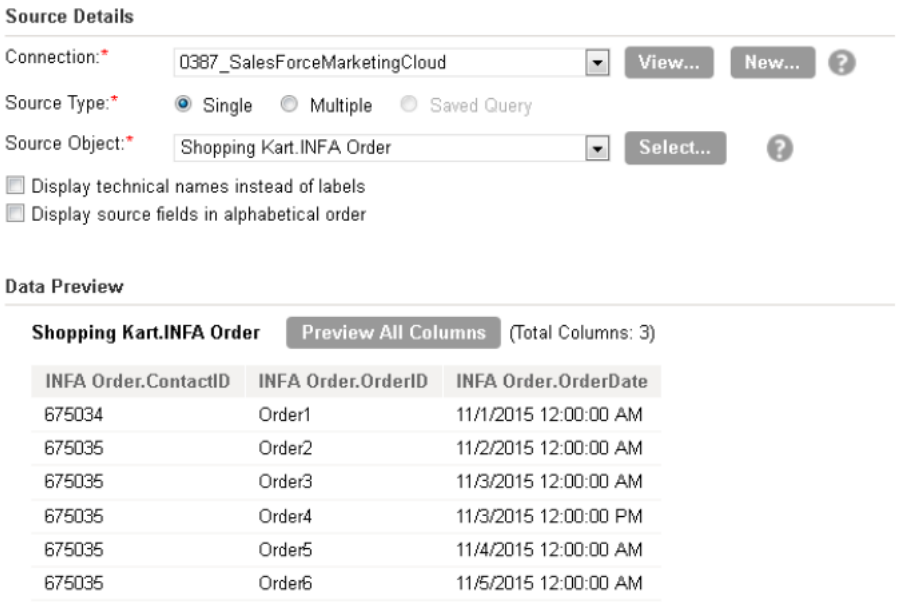
Read Records by Using Single Data Extension as a Source

Perform the following steps to read records by using a single data extension as a source:

1. On the **Source** tab, select the Salesforce Marketing Cloud connection for the **Connection** attribute and Infa Order for the **Source Object** attribute.

   The following image shows the source object configuration for the synchronization task:

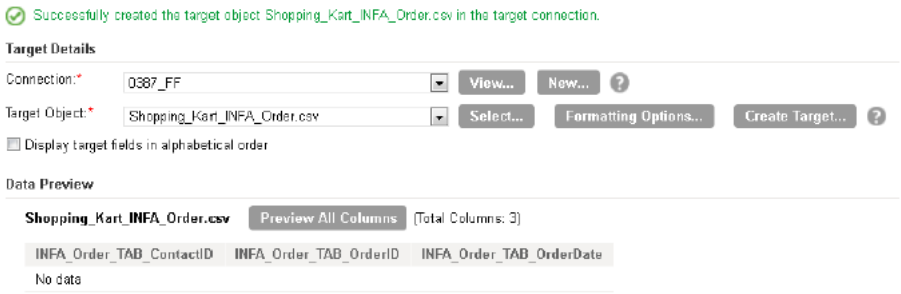
   Note: INFA Order is a user-defined data extension.



2. On the **Target** tab, select a `.csv` file as the target object and select a Flat File connection for the **Connection** attribute.

   Note: The **.csv** file consists of the contact ID and contact Key fields.

   The following image shows the target object configuration for the synchronization task:



3. On the **Data Filter** tab, configure single or multiple data filters to reduce the number of rows to be read. You can also filter records by applying filter conditions.

   Note: To read data that has changed since the last synchronization, configure a simple data filter that uses the `$LastRunTime` or `$LastRunDate` filter field. You cannot use advanced data filters when you read data from Salesforce Marketting Cloud.

4. On the **Field Mapping** tab, map the primary fields of the INFA Order source object to the flat file target object.

The following image shows the mapping of the INFA Order source with the flat file target:



5. Under the **Schedule** tab, you can set the following advanced source properties:

Property	Describtion
Batch Size	Number of rows that the Secure Agent writes in a batch to the target. When you insert or update data and specify the contact key, the data associated with the specified contact ID is inserted or updated in a batch to Salesforce Marketing Cloud. When you upsert data to Saleforce Marketing Cloud, do not specify the contact key. If you enter a batch size value greater than or equal to 0, the Secure Agent uses this value. If you enter a batch size value less than 0, the Secure Agent uses the batch size value that you entered in the **Connection** property. Default is 1.

6. Click **Save** > **Finish**.
7. Select the synchronization task from the **Explore** page and click **Actions** > **Run**.

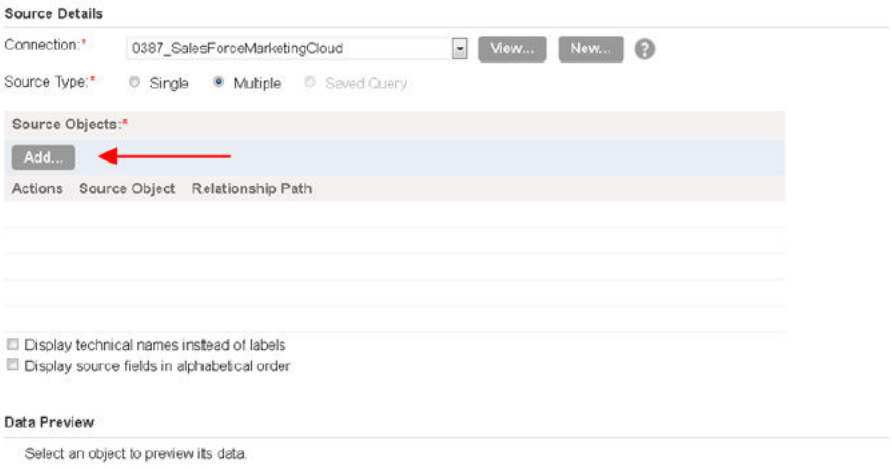
   In **Monitor**, you can monitor the status of the logs after you run the task.

Read Records by Using Multiple Sources

Perform the following steps to read records by using multiple sources:

1. On the **Source** tab, select the Salesforce Marketing Cloud connection for the **Connection** attribute, **Source type** as **Multiple** and click the **Add** button to add the source objects.

   The following image shows the source object configuration for the synchronization task:



   The **Add Primary Object** page appears.
2. Enter the name of the source object and select the source object.

The following image shows the primary object that you can select for the source:

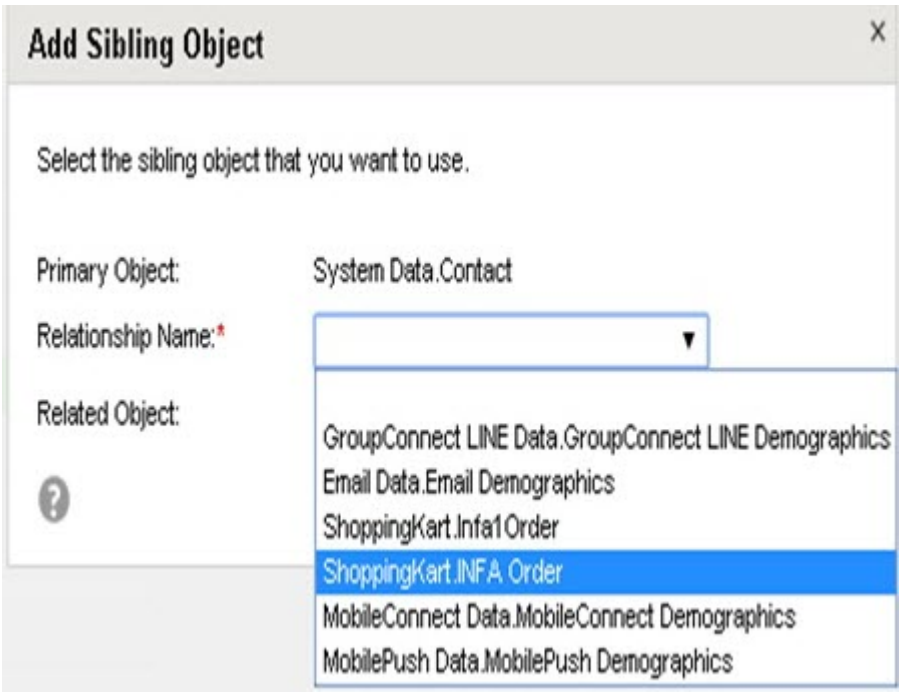


3. After you add the primary source object, add the child object. Click the **Add** button to add the child object.

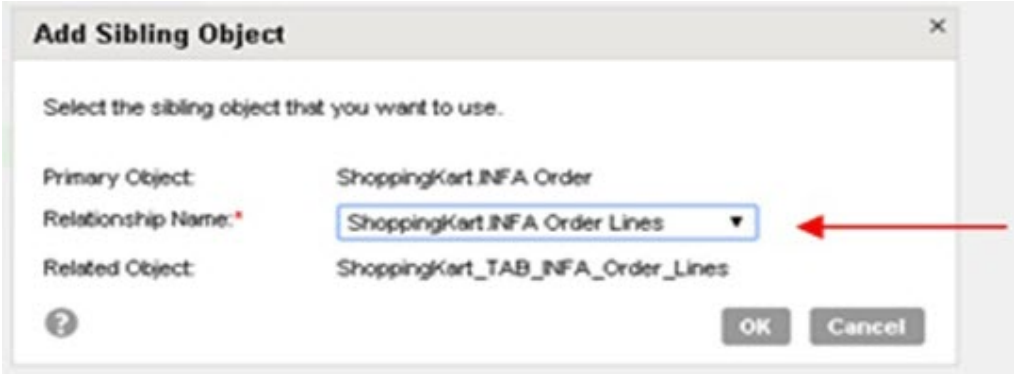
   The **Add Sibling Object** page appears.

4. Select INFA Order as the sibling object.

   The following image shows the Add Sibling Object page:



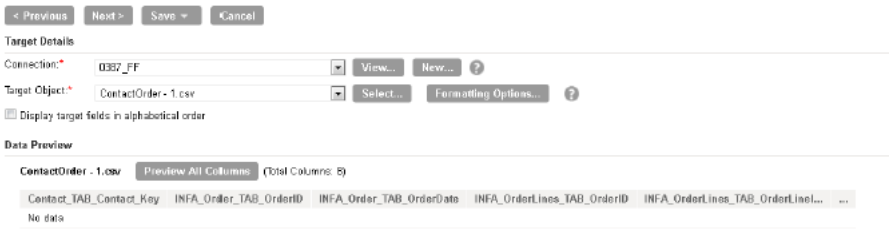
5. Click **OK**
6. Similarly, add the **ShoppingKart.INFA OrderLines** object as a child object.



7. On the **Target** tab, select a `.csv` file as the target object and select a Flat File connection for the **Connection** attribute.

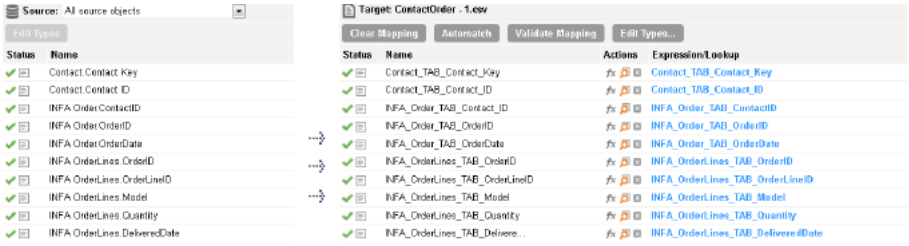
   Note: The **.csv** file consists of the contact ID and contact Key fields.

   The following image shows the target object configuration for the synchronization task:



8. On the **Field Mapping** tab, map the primary fields of the INFA Order source object to the flat file target object.

   The following image shows the mapping of the INFA Order source with the flat file target:

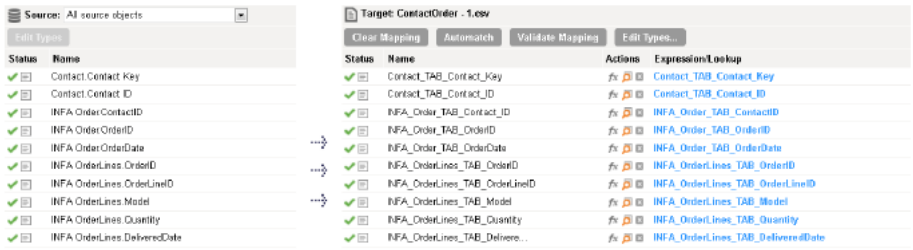


9. Under the **Schedule** tab, you can set the following advanced source properties:

Property	Describtion
Batch Size	Number of rows that the Secure Agent writes in a batch to the target. When you insert or update data and specify the contact key, the data associated with the specified contact ID is inserted or updated in a batch to Salesforce Marketing Cloud. When you upsert data to Saleforce Marketing Cloud, do not specify the contact key. If you enter a batch size value greater than or equal to 0, the Secure Agent uses this value. If you enter a batch size value less than 0, the Secure Agent uses the batch size value that you entered in the **Connection** property. Default is 1.

10. Click **Save** > **Finish**.

The following image shows the data that the Secure Agent reads from Salesforce Marketing Cloud and writes to the flat file based on the fields you mapped in the synchronization task:



11. Select the synchronization task from the **Explore** page and click **Actions** > **Run**.

    In **Monitor**, you can monitor the status of the logs after you run the task.

Salesforce Marketing Cloud Target Synchronization Example

Configure Salesforce Marketing Cloud source properties on the **Target** page of the Synchronization Task wizard.

You can write to a single or multiple Salesforce Marketing Cloud objects. Data is written to the data extensions based on the following conditions:

- If the source file has non-existing contact key, a new contact is created and a new record is inserted into data extension.
- If source file has existing contact key, a new record is inserted into data extension and new contact is not created.

Prerequisites

The following are the prerequisites to perform an insert operation:

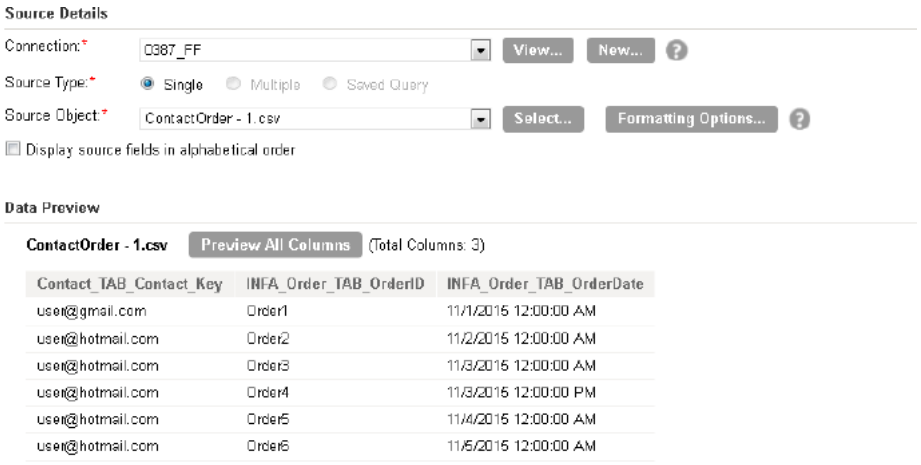
- Contact key is required in the source data to write to the Salesforce Marketing Cloud target.
- Data extension created as a child object of Contacts object should be linked to Contact ID of contacts.
- The Contact ID is an auto generated field in Salesforce Marketing Cloud. Do not map the Contact ID while mapping the fields. The flat file must contain all the mandatory columns of data extensions, such as HTML Enabled in Email Addresses.

Write Records into a Single Target

Perform the following steps to write records into a single target:

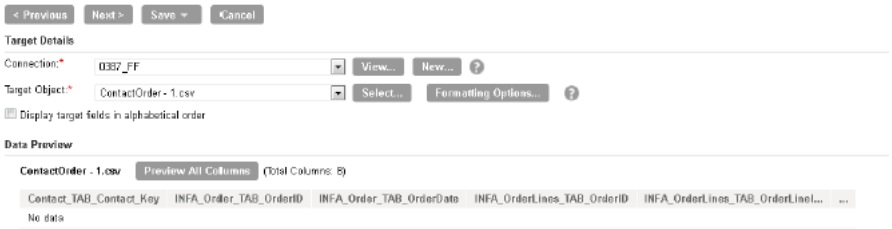
1. On the **Source** tab, select a `.csv` file as the target object, **Source type** as **Single** and select a Flat File connection for the **Connection** attribute.

   The following image shows the source object configuration for the synchronization task:



2. On the **Target** tab, select the Salesforce Marketing Cloud connection for the **Connection** attribute and Z.ContactImport for the **Source Object** attribute.

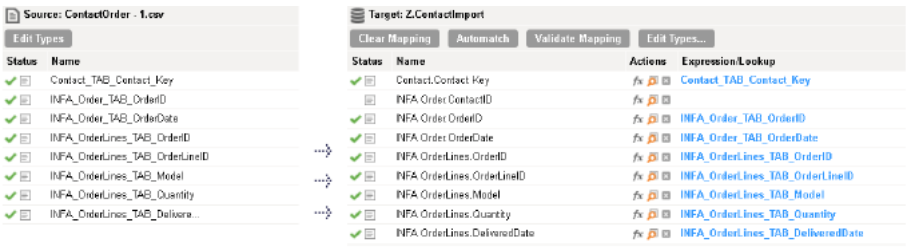
   The following image shows the target object configuration for the synchronization task:



3. On the **Field Mapping** tab, map the primary fields of the flat file source to the target object.

   Note: The Contact ID field is auto generated field and it should not be mapped.

   The following image shows the target object configuration for the synchronization task:



4. Under the **Schedule** tab, you can set the following advanced target properties:

Property	Describtion
Batch Size	Number of rows that the Secure Agent writes in a batch to the target. When you insert or update data and specify the contact key, the data associated with the specified contact ID is inserted or updated in a batch to Salesforce Marketing Cloud. When you upsert data to Saleforce Marketing Cloud, do not specify the contact key. If you enter a batch size value greater than or equal to 0, the Secure Agent uses this value. If you enter a batch size value less than 0, the Secure Agent uses the batch size value that you entered in the **Connection** property. Default is 0.
Success File Directory	Not applicable.
Error File Directory	Directory for the error rows file. Specify a directory path that is available on each Secure Agent machine in the runtime environment. By default, Data Integration writes the error rows file to the following directory: `<Secure Agent installation directory>/apps/Data_Integration_Server/data/error`

5. Click **Save** > **Finish**.
6. Select the synchronization task from the **Explore** page and click **Actions** > **Run**.

   In **Monitor**, you can monitor the status of the logs after you run the task.

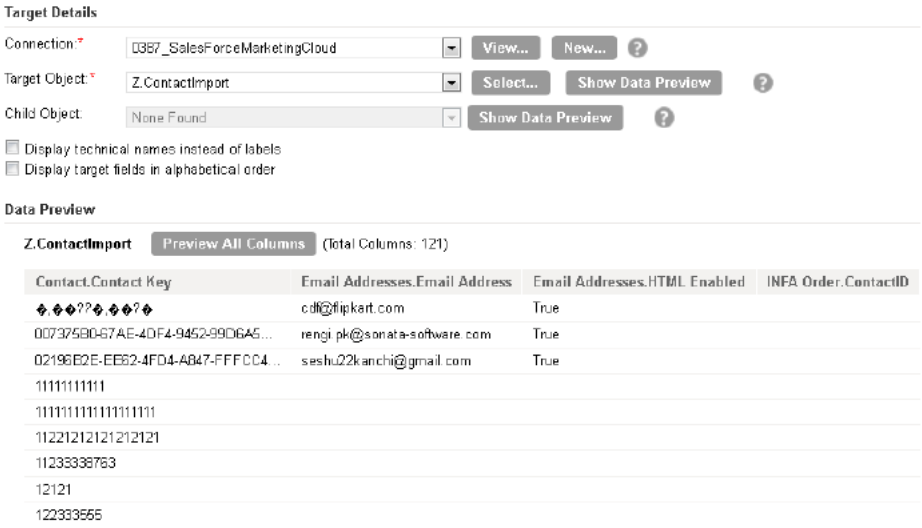
Write Records into Multiple Targets

Perform the following steps to write records into multiple targets:

1. On the **Source** tab, select a `.csv` file as the source object, **Source type** as **Multiple** and select a Flat File connection for the **Connection** attribute.

   Note: In this example, the source object for synchronization task is a flat file that has data for multiple targets. For example, INFA Order and INFA OrderLines.
2. On the **Target** tab, select the Salesforce Marketing Cloud connection for the **Connection** attribute and Z.ContactImport for the **Target Object** attribute.

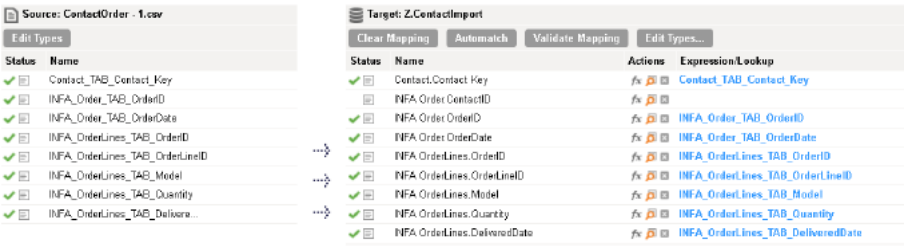
The following image shows the target object configuration for the synchronization task:



3. On the **Field Mapping** tab, map the primary fields of the flat file source to target object.

   Note: The Contact ID field is auto generated field and it should not be mapped.

   The following image shows the target object configuration for the synchronization task:



4. Under the **Schedule** tab, you can set the following advanced target properties:

Property	Describtion
Batch Size	Number of rows that the Secure Agent writes in a batch to the target. When you insert or update data and specify the contact key, the data associated with the specified contact ID is inserted or updated in a batch to Salesforce Marketing Cloud. When you upsert data to Saleforce Marketing Cloud, do not specify the contact key. If you enter a batch size value greater than or equal to 0, the Secure Agent uses this value. If you enter a batch size value less than 0, the Secure Agent uses the batch size value that you entered in the **Connection** property. Default is 0.
Success File Directory	Not applicable.
Error File Directory	Directory for the error rows file. Specify a directory path that is available on each Secure Agent machine in the runtime environment. By default, Data Integration writes the error rows file to the following directory: `<Secure Agent installation directory>/apps/Data_Integration_Server/data/error`

5. Click **Save** > **Finish**.
6. Select the synchronization task from the **Explore** page and click **Actions** > **Run**.

   In **Monitor**, you can monitor the status of the logs after you run the task.

Update Record

Data from source objects are updated in Salesforce Marketing cloud by using update operation.

Prerequisites

The following are the prerequisites to perform an update operation:

- Contact key is required in the source data to write to the Salesforce Marketing Cloud target.
- Data extension created as a child object of Contacts object should be linked to Contact ID of contacts.
- The Contact ID is an auto generated field in Salesforce Marketing Cloud. Do not map the Contact ID while mapping the fields. The flat file must contain all the required columns of data extensions, such as HTML Enabled in Email Addresses.

Changed Data Capture

You can use the Salesforce Marketing Connector to capture the changed data details in the Salesforce Marketing Cloud.

Perform the following actions to capture the changed data for data extensions:

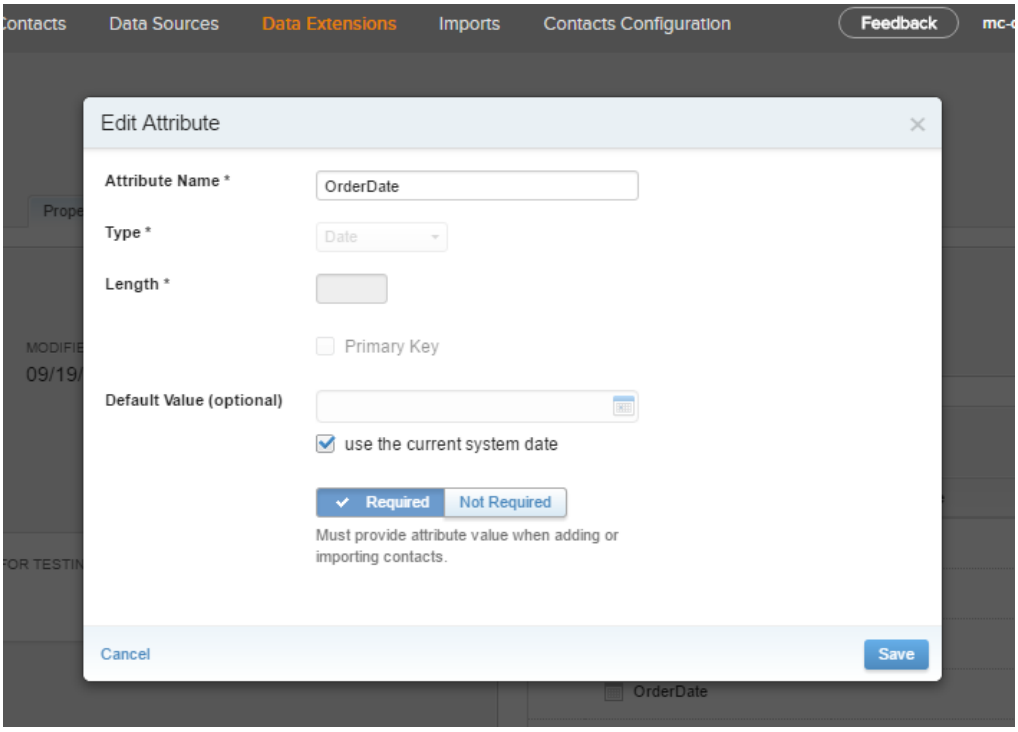
- Add a history column.
- Add a lookup condition.
- Configure data filters.

Add a History Column

Perform the following actions to add a history column:

1. Open the required Data extension where you want to perform the delta extraction.
2. In the properties tab, click **Create Date Attribute**

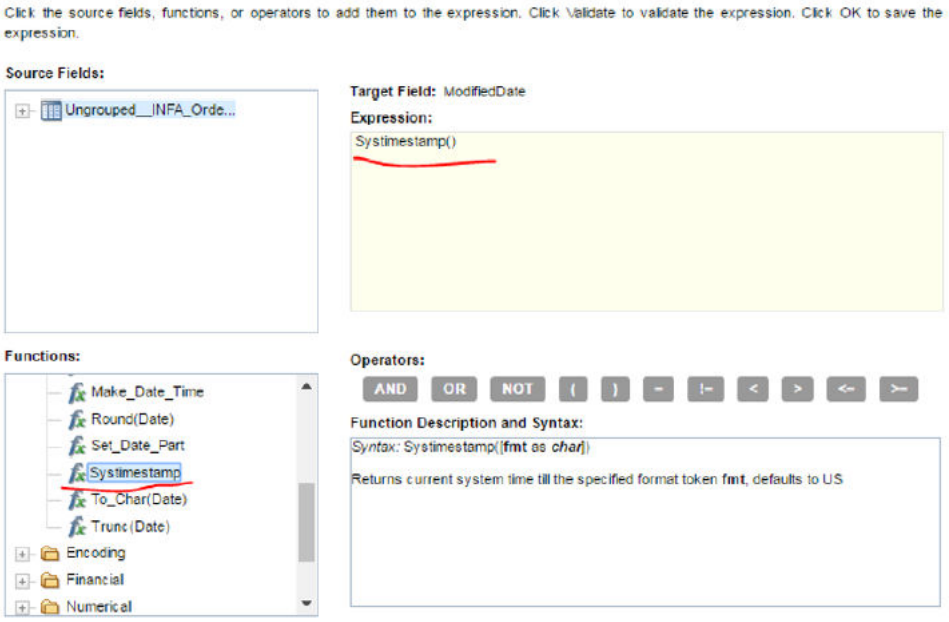
3. Select **use the current system date** field and make it a required attribute. The following image shows the details of the **Edit Attribute** page:



Add a lookup expression

For the history column that you added, add the `systemtimestamp()` lookup expression to get the current system time to write data to Salesforce Marketing Cloud.

The following image shows the details of lookup expression:



Configure Data Filters

You can create single or multiple data filters.

Use the lastruntime or lastrundate filter field to get the time when the task ran successfully.

Note: Salesforce Marketing Cloud does not support advanced data filters.

CHAPTER 4

Mappings and mapping tasks with Salesforce Marketing Cloud Connector

Use the Data Integration Mapping Designer to create a mapping. When you create a mapping, you configure a source to represent a Salesforce Marketing Cloud object.

In advanced mode, the Mapping Designer updates the mapping canvas to include transformations and functions that enable advanced functionality.

Describe the flow of data from source and target along with the required transformations before the agent writes data to the target. When you create a mapping task, select the mapping that you want to use. Use the Mapping Task wizard to create a mapping task. Validate and run the mapping to read data from sources and write to a target. The mapping task processes data based on the data flow logic you define in the mapping.

Salesforce Marketing Cloud sources in mappings

To read data from Salesforce Marketing Cloud, configure a Salesforce Marketing Cloud object as the Source transformation in a mapping.

Specify the name and description of the Salesforce Marketing Cloud source. Configure the source, query options, and advanced properties for the source object.

The following table describes the source properties that you can configure for a Salesforce Marketing Cloud source:

Property	Description
Connection	Name of the source connection. You can select an existing connection, create a new connection, or define parameter values for the source connection property. If you want to overwrite the source connection properties at runtime, select the **Allow parameter to be overridden at run time** option. Specify the parameter file directory and name in the advanced session properties.
Source Type	Type of the source object. Select one of the following source types: - Single Object - Multiple Objects - Parameter Default is **Single Object**.
Parameter	A parameter file where you define values that you want to update without having to edit the task. Select an existing parameter for the source object or click **New Parameter** to define a new parameter for the source object. The **Parameter** property appears only if you select parameter as the source type. If you want to overwrite the parameter at runtime, select the **Allow parameter to be overridden at run time** option. When the task runs, the Secure Agent uses the parameters from the file that you specify in the advanced session properties.
Object	Name of the Salesforce Marketing Cloud source object based on the source type selected. Select the source object for a single source. When you select the multiple source option, you can add multiple source objects and configure a relationship between them.

The following table describes the query options that you can configure for a Salesforce Marketing Cloud source:

Property	Description
Filter	Filter value in a read operation. Click **Configure** to add conditions to filter records and reduce the number of rows that the Secure Agent reads from the source. Specify one of the following filter conditions: - Not Parameterized. Use a basic filter to specify the object, field, operator, and value to select specific records. - Completely Parameterized. Use a parameter to represent the field mapping. - Advanced. Not applicable. Default is **Not Parameterized**.
Sort	Not applicable for Salesforce Marketing Cloud Connector.

The following table describes the advanced source properties that you can configure for a Salesforce Marketing Cloud source:

Property	Description
Batch Size	Minimum number of rows that the Secure Agent reads in a batch. Enter a number greater than 0. Default is **0**.
Read Parameter File	Not applicable.
Tracing Level	Determines the amount of detail that appears in the log file. Select one of the following options: - Terse - Normal - Verbose Initialization - Verbose Data Default is **Normal**.

CHAPTER 5

Troubleshooting

Use the following sections to troubleshoot errors in Salesforce Marketing Cloud Connector.

Troubleshooting a Synchronization Task

"ERROR java.lang.OutOfMemoryError: GC overhead limit exceeded." occurs when you run a synchronization task to read or write large number of records.

To resolve this issue, perform the following tasks to configure the **JVM** options in the Secure Agent to increase the memory for the Java heap size:

1. In Administrator, select **Runtime Environments**.
2. Select the Secure Agent for which you want to increase memory from the list of available Secure Agents.
3. In the upper-right corner, click **Edit**.
4. In the **System Configuration Details** section, select the **Type** as **DTM** for the Data Integration Service.
5. Edit the **JVMOption1** as **-Xms4056m** and **JVMOption2** as **-Xmx4056m**.
6. Restart the Secure Agent.

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