Informatica® Cloud (Version Spring 2017)

Google API Connector Guide

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Preface

The Google API Connector Guide contains information about how to set up and use Google API Connector. The guide explains how organization administrators and business users can use Google API Connector to read data from Google Analytics and Google AdSense.

Informatica Resources

Informatica Documentation

To get the latest documentation for your product, browse the Informatica Knowledge Base at https://kb.informatica.com/_layouts/ProductDocumentation/Page/ProductDocumentSearch.aspx.

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Informatica Cloud Web Site

You can access the Informatica Cloud web site at http://www.informatica.com/cloud. This site contains information about Informatica Cloud editions and applications.

Informatica Cloud Communities

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

Access the Informatica Cloud Community at:


To find resources on using Cloud Application Integration (the Informatica Cloud Real Time service), access the community at:

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

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

Informatica Cloud Marketplace

Visit the Informatica Marketplace to try and buy Informatica Cloud Connectors, Informatica Cloud integration templates, and Data Quality mapplets:


Informatica Cloud Connector Documentation

You can access documentation for Informatica Cloud Connectors at the Informatica Cloud Community:

https://network.informatica.com/cloud/index.htm

You can also download individual connector guides: https://network.informatica.com/docs/DOC-15333.

Informatica Knowledge Base

Use the Informatica Knowledge Base to search Informatica Network for product resources such as documentation, how-to articles, best practices, and PAMs.

To access the Knowledge Base, visit https://kb.informatica.com. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team at KB_Feedback@informatica.com.

Informatica Cloud Trust Site

You can access the Informatica Cloud trust site at http://trust.informaticacloud.com. This site provides real time information about Informatica Cloud system availability, current and historical data about system performance, and details about Informatica Cloud security policies.

Informatica Global Customer Support

You can contact a Customer Support Center by telephone or online.

For online support, click Submit Support Request in the Informatica Cloud application. You can also use Online Support to log a case. Online Support requires a login. You can request a login at https://network.informatica.com/welcome.

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 Google API Connector

This chapter includes the following topics:

- Google API Connector Overview, 7
- Administration of Google API Connector, 8
- Google API Supported Task Types and Object Types, 9

Google API Connector Overview

Use Google API Connector to integrate various Google APIs to the applications that are either internal to the organisation or external applications to Informatica Cloud.

You can use Google API Connector to read data from Google Analytics and Google AdSense.

The Google API Connector supports the following APIs:

- Google Analytics
  The following image shows the Google Analytics APIs supported by Google API Connector:

```
---Lists_all_columns_for_a_report_type
---Lists_advanced_segments_to_which_the_user_has_access
---Lists_all_accounts_to_which_the_user_has_access
---Lists_webProperty-user_links_for_a_given_web_property
---Lists_web_properties_to_which_the_user_has_access
---Lists_web_property_to_which_the_user_has_access
---Lists_views_profiles_to_which_the_user_has_access
---Lists_profiles_web_property_to_which_the_user_has_access
---Lists_profile-user_links_for_a_given_view_profile
---Lists_goals_to_which_the_user_has_access
---Gets_a_goal_to_which_the_user_has_access
---Lists_experiments_to_which_the_user_has_access
---Returns_an_experiment_to_which_the_user_has_access
---List_daily_uploads_to_which_the_user_has_access
---List_custom_data_sources_to_which_the_user_has_access
---Lists_account-user_links_for_a_given_account
---Returns_real_time_data_for_a_view_profile
---Returns_Analytics_Multi-Channel_Funnels_data_for_a_view_profile
---Returns_Analytics_data_for_a_view_profile
```
• Google AdSense
The following image shows the Google AdSense APIs supported by Google API Connector:

---List_all_accounts_available_to_this_AdSense_account
---List_all_ad_clients_in_this_AdSense_account
---List_the_aerts_for_this_AdSense_account
---List_dimensions_available_to_this_AdSense_account
---List_metrics_available_to_this_AdSense_account
---List_the_payments_for_this_AdSense_account
---List_all_saved_reports_in_this_AdSense_account
---List_all_saved_ad_styles_in_the_user's_account
---List_all_ad_clients_in_the_specified_account
---Get_the_ad_unit_for_the_specified_ad_client_account
---Get_ad_code_for_the_specified_ad_unit
---List_all_ad_units_for_the_specified_ad_client_account
---List_the_aerts_for_the_specified_AdSense_account
---Get_custom_channel_for_the_specified_ad_client_account
---Get_information_about_the_selected_AdSense_account
---List_custom_channels_for_the_specified_ad_client_account
---List_the_payments_for_the_specified_AdSense_account
---Generate_an_AdSense_report_based_on_the_report
---List_a_specific_saved_ad_style_for_the_specified_account
---List_all_saved_ad_styles_in_the_specified_account
---Get_the_specified_ad_unit_in_the_specified_ad_client
---List_all_ad_units_this_AdSense_client_account
---List_all_custom_channels_which_the_specified_ad_unit
---Get_the_specified_custom_channel_from_the_ad_client
---List_all_custom_channels_for_this_ad_client_account
---List_all_ad_units_in_the_specified_custom_channel
---Generate_an_AdSense_report_based_on_the_report2
---Generate_an_AdSense_report_based_on_the_saved_report_ID
---Get_a_specific_saved_ad_style_from_the_user_account
---List_all_URL_channels_for_this_AdSense_ad_client_account

Administration of Google API Connector

Before you use Google API Connector, you must complete the following tasks:

1. Create a Google account or use an existing Google account to access the Google APIs.
2. Go to Credentials > Client ID for web application.
3. Click **Download JSON** to download the JSON file that contains the Client ID and Client secret details. You need to enter the Client ID and Client secret details when you create a Google API connection in Informatica Cloud.

### Google API Supported Task Types and Object Types

The following table shows the objects and task operations that Google API supports:

<table>
<thead>
<tr>
<th>Object</th>
<th>Read</th>
<th>Insert</th>
<th>Update</th>
<th>Upset</th>
<th>Delete</th>
<th>Data Preview</th>
<th>Lookup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google API</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Yes</td>
<td>NA</td>
</tr>
</tbody>
</table>
Google API Connections

This chapter includes the following topics:

- Google API Connections Overview, 10
- Configuring Google API Connection for Windows, 10
- Configuring Google API Connection for LINUX, 11
- Google API Connection Properties, 12

Google API Connections Overview

Create a Google API connection to read data from Google Analytics and Google AdSense sources. You can use Google API connections in Data Synchronization tasks.

Configuring Google API Connection for Windows

To use Google API connector in Data Synchronization task, you must create a connection in Informatica Cloud.

Perform the following steps to create a Google API connection in Informatica Cloud:

1. Log in to Informatica Cloud.
3. Click New to create a connection.
4. Specify the connection details.
   For details, see “Google API Connection Properties” on page 12.
5. Click Test to check the connection.
6. If connection test is successful, select NO in Create the config csv file and Authentication Required fields.
7. Click OK to save the connection.
Configuring Google API Connection for LINUX

You must manually authorize the Google APIs, when you create a connection in Linux environment.

Perform the following steps to manually authorize the Google APIs:

1. Create Google_Analytics_API.bat batch file with the following code:
   ```
   ```

2. Create Google_Analytics_API.bat batch file with the following code:
   ```
   adsense.readonly&approval_prompt=force&access_type=offline
   ```

3. You can select the Google_Analytics_API.bat or Google_Analytics_API.bat batch file. The Project Default Service Account browser window appears.

4. Click Accept to allow access to Google API.

Project Default Service Account browser redirects you to the following the URL: localhost:4000/?code

5. Obtain and save the authorization code in the URL.

The following image shows the authorization code in the URL:

![Authorization Code](image)

6. Navigate to Authorization Code and enter the authorization code in Google API Connection Properties when you create a connection.
The following image shows the Google API connection properties:

<table>
<thead>
<tr>
<th>Connection Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection Name:*</td>
</tr>
<tr>
<td>Description:</td>
</tr>
<tr>
<td>Type:*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GoogleAPI Connection Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure Agent:*</td>
</tr>
<tr>
<td>Google API:*</td>
</tr>
<tr>
<td>Is Google API Dynamic:</td>
</tr>
<tr>
<td>URI Request Parameters:</td>
</tr>
<tr>
<td>Request Type:*</td>
</tr>
<tr>
<td>Client ID:</td>
</tr>
<tr>
<td>Client Secret Key:</td>
</tr>
<tr>
<td>Authorization Code:</td>
</tr>
<tr>
<td>Response Folder path:</td>
</tr>
<tr>
<td>URI Parameters File Name:</td>
</tr>
<tr>
<td>Secure Credentials File Name:*</td>
</tr>
<tr>
<td>Create the config csv file:*</td>
</tr>
<tr>
<td>Authentication Required:*</td>
</tr>
</tbody>
</table>

7. Specify the connection details.
   For details, see “Google API Connection Properties” on page 12.

8. Click Test to check the connection.

9. If connection test is successful, select NO in Create the config csv file and Authentication Required fields.

10. Click OK to save the connection.

**Google API Connection Properties**

When you create a Google API connection, you must configure the connection properties.
The following table describes the Google API connection properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection Name</td>
<td>Enter a unique name for the connection.</td>
</tr>
<tr>
<td>Description</td>
<td>Provide a relevant description for the connection.</td>
</tr>
<tr>
<td>Type</td>
<td>Select GoogleAPI (Informatica Cloud Labs) from the list.</td>
</tr>
<tr>
<td>Secure Agent</td>
<td>Select the Secure Agent from the list.</td>
</tr>
<tr>
<td>Google API</td>
<td>You can select one of the following Google APIs from the list:</td>
</tr>
<tr>
<td></td>
<td>- Lists_all_accounts_to_which_the_user_has_access</td>
</tr>
<tr>
<td></td>
<td>- Lists_web_properties_to_which_the_user_has_access</td>
</tr>
<tr>
<td></td>
<td>- Lists_views_profiles_to_which_the_user_has_access</td>
</tr>
<tr>
<td></td>
<td>- Lists_goals_to_which_the_user_has_access</td>
</tr>
<tr>
<td></td>
<td>- Lists_experiments_to_which_the_user_has_access</td>
</tr>
<tr>
<td>Is Google API Dynamic</td>
<td>Select the Is Google API Dynamic API checkbox to make the API dynamic.</td>
</tr>
<tr>
<td>URI Request Parameters</td>
<td>Enter the URL request parameters. For example, 'Max-results=10;start-index=0'. Note: You must create config.csv to provide the URL parameters.</td>
</tr>
<tr>
<td>Request Type</td>
<td>Select Post to read data from the source.</td>
</tr>
<tr>
<td>Client ID</td>
<td>Enter the Client_ID that you obtain after you configure Google account.</td>
</tr>
<tr>
<td>Client Secret Key</td>
<td>Enter the Client_Secret key that you obtain after you configure Google account.</td>
</tr>
<tr>
<td>Authorization Code</td>
<td>Secure Agent configures it automatically.</td>
</tr>
<tr>
<td>Response Folder Path</td>
<td>Specifies the location where the Secure Agent creates the file that contains summary of Data Synchronization task.</td>
</tr>
<tr>
<td>URI Parameters File Name</td>
<td>Specifies the location where the Secure Agent creates the file that contains connection and end-point reference details .</td>
</tr>
<tr>
<td>Secure Credentials File Name</td>
<td>Enter the secure credentials file folder path with the file name. Secure agent creates the file when you test the connection. For Example, ....\GoogleAPI\Secure_Credentials.cfg.</td>
</tr>
<tr>
<td>Create the config csv file</td>
<td>If you are creating the Google API connection for the first time, select YES and test the connection. If connection test is successful, select NO in Create the config csv file field. Note: You must create a different config.csv file for each Google API you select.</td>
</tr>
<tr>
<td>Authentication Required</td>
<td>If you are creating the Google API connection for the first time, select YES and test the connection. If connection test is successful, select NO in Authentication Required field. Click Accept to allow access to Google API.</td>
</tr>
</tbody>
</table>
CHAPTER 3

Data Synchronization Tasks with Google API Connector

This chapter includes the following topics:

- Understanding the config.csv File, 14
- Updating config.csv File, 14
- Data Synchronization Task Example, 15

Understanding the config.csv File

The config.csv file contains the configuration parameters of the Google API. When you read data from different Google API sources, you must obtain different IDs as a key to access other Google APIs.

When you create a connection, the Secure Agent generates a config.csv file. To run a Data Synchronization task successfully you must update IDs present in the config.csv file. You can obtain the IDs from the target.csv file.

Updating config.csv File

When you require Account ID to obtain all other IDs, you must select Lists_all_accounts_to_which_the_user_has_access in Google API when you establish a connection to a source.

Perform the following steps to update the config.csv file:

1. Run a Data Synchronization task to obtain Account ID.
   The Account ID is present in the target.csv file.

   The following image highlights the Account ID present in the target.csv file:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>_FLT_URL_updated</td>
<td>id</td>
<td>childLink</td>
<td>childLink_name</td>
<td>selfLink</td>
<td>created</td>
<td>kind</td>
<td>XFK_json</td>
<td>XFK_Items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010-08-03</td>
<td>1778/040</td>
<td>analytics#</td>
<td><a href="https://vn/Satish's">https://vn/Satish's</a> A</td>
<td><a href="https://vn-2010-06-03analytics#">https://vn-2010-06-03analytics#</a></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Obtain the Account ID, select Lists_all_accounts_to_which_the_user_has_access in Google API when you establish a connection.
The following highlights the Account Id field present in the `config.csv` URL:

```
https://www.googleapis.com/analytics/v3/management/accounts/<Account Id>/webproperties
```

3. Update the `config.csv` file with Account ID by replacing `<Account Id>` with the Account ID you obtain.

The following image highlights the updated `config.csv` URL:

```
```

### Data Synchronization Task Example

Let us consider Insert task operation. Perform the following steps to create a Data Synchronization task:

1. Log in to Informatica Cloud.
2. Click **Task Wizards** in the Informatica Cloud home page.
3. Select **Data Synchronization** from the menu.
   
   The **Data Synchronization Tasks** tab appears.
4. Click **New** to create a Data Synchronization task.
   
   The **Definition** tab appears.
   
   The following image shows the **Definition** tab:

5. Specify the task name and provide a description.
6. Select **Insert** as the task operation.
7. Click **Next**.
   
   The **Source** tab appears.
The following image shows the **Source** page:

8. Select the source connection required for the task.
9. Select source type for the task.
10. Select the source object for the task.
11. Click **Next**.
    The **Target** tab appears.
12. Select the target connection and target object required for the task.
13. Click **Next**.
    The **Data Filters** tab appears in which by default, it process all the rows.
14. Click **New**.
    The **Data Filter** dialog box appears.
    The following image shows Data Filter tab:

15. Configure the **Data Filter** properties.
    The following table describes the data filter properties that you can configure:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Select Object for which you want to assign filter fields.</td>
</tr>
<tr>
<td>Filter By</td>
<td>Mandatory. Select _FLT_URL_Input_Parameters_Config_File_Path filter field.</td>
</tr>
<tr>
<td>Properties</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| Operator   | Select Equals operator.  
**Note**: Google API connector only supports Equal operator. |
| Filter Value | Enter the Filter value. |

Click **OK** to save the data filter configuration.

16. Click **Next**.

The **Field Mapping** tab appears where you can map source fields to target fields accordingly.

The following image shows the Field Mapping tab:

![Field Mapping](image1.png)

17. Click **Next**.

The **Schedule** tab appears where you can schedule the task for each requirement and save. If you do not want to schedule the task, click **Save and Run** the task.

The following image shows the Field Mapping page to save and run the mapping without navigating to the **Schedule** tab:

![Schedule](image2.png)

18. Click **Save and Run** the task if you do not want to schedule the task.

After you run the task, the **Monitor Log** page appears where you can monitor the status of Data Synchronization tasks.
Troubleshooting

This chapter includes the following topics:

- Increasing Secure Agent Memory, 18
- Additional Guidelines, 19

Increasing Secure Agent Memory

To increase performance and avoid runtime environment memory issues, perform the following steps:

1. Click Configure in Informatica Cloud home page.
2. Select Runtime Environments.
   The Runtime Environments page appears.
3. Select the Secure Agent for which you want to increase memory from the list of available Secure Agents.
4. Click Edit Secure Agent icon corresponding to the Secure Agent you want to edit.
   The Edit Secure Agent page appears.
5. Select the Type as DTM in the System Configuration Details section.
6. Edit JVMOption1 as -Xmx512m.

   The following image shows the Agent Details page:

7. Select the Type as TomCatJRE in the System Configuration Details section.
8. Edit INFA_memory as -Xms256m -Xmx512m.

The following image shows the Agent Details page:

Additional Guidelines

Consider the following guidelines when you configure a Google API connection:

- Before you configure Google API Connector, clear the browsing history, cookies and session information of the web browser.
- Check the Config prop file to determine whether the connection is authorized.

If required, manually authorize the connection.
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