Oracle® Public Cloud Machine

Using the Google Task Adapter

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Preface

Using the Google Task Adapter describes how to configure the Google Task Adapter as a connection in an integration in Oracle Integration Cloud Service.

Topics:

- Audience
- Related Resources
- Conventions

Audience

Using the Google Task Adapter is intended for developers who want to use the Google Task Adapter in integrations in Oracle Integration Cloud Service.

Related Resources

For more information, see these Oracle resources:

- *Using Oracle Integration Cloud Service*
- *Using the Oracle Mapper*
- Oracle Public Cloud Machine documentation in the Oracle Help Center:

  http://docs.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.
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

Getting Started with the Google Task Adapter

Review the following conceptual topics to learn about the Google Task Adapter and how to use it as a connection in integrations in Integration Cloud Service. A typical workflow of adapter and integration tasks is also provided.

Topics

- About the Google Task Adapter
- What Application Version Does the Google Task Adapter Support?
- About Oracle Integration Cloud Service
- About Oracle Integration Cloud Service Connections
- About Oracle Integration Cloud Service Integrations
- Typical Workflow for Creating and Including an Adapter Connection in an Integration

About the Google Task Adapter

The Google Task Adapter enables you to modify Google Task data as part of an integration in Oracle Integration Cloud Service.

The Google Task Adapter provides the following benefits:

- You can filter operations and select one operation for your integration.

  Examples of operations are List All Tasks and Update Task List.

- You can filter and select query parameters for the selected operation.

  Examples of parameters are showCompleted and maxResults.

The Google Task Adapter is one of many predefined adapters included with Oracle Integration Cloud Service. You can configure the Google Task Adapter as a connection in an integration in Oracle Integration Cloud Service. For information about Oracle Integration Cloud Service, connections, and integrations, see the following sections:

- About Oracle Integration Cloud Service
- About Oracle Integration Cloud Service Connections
- About Oracle Integration Cloud Service Integrations

What Application Version Does the Google Task Adapter Support?

The Google Task Adapter is compatible with version 1 of the Google Tasks API.

About Oracle Integration Cloud Service

Oracle Integration Cloud Service is a complete, secure, but lightweight integration solution that enables you to connect your applications in the cloud. It simplifies connectivity between your applications, and can connect both your applications that live in the cloud and your applications that still live on premises. Oracle Integration Cloud Service provides secure, enterprise-grade connectivity regardless of the applications you are connecting or where they reside.

Oracle Integration Cloud Service provides native connectivity to Oracle Software as a Service (SaaS) applications, such as Oracle Sales Cloud, Oracle RightNow Cloud, and so on. Oracle Integration Cloud Service *adapters* simplify connectivity by handling the underlying complexities of connecting to applications using industry-wide best practices. You only need to create a *connection* that provides minimal connectivity information for each system. Oracle Integration Cloud Service *lookups* map the different codes or terms used by the applications you are integrating to describe similar items (such as country or gender codes). Finally, the visual data mapper enables you to quickly create direct mappings between the trigger and invoke data structures. From the mapper, you can also access lookup tables and use standard XPath functions to map data between your applications.

Once you integrate your applications and activate the integrations to the runtime environment, the dashboard displays information about the running integrations so you can monitor the status and processing statistics for each integration. The dashboard measures and tracks the performance of your transactions by capturing and reporting key information, such as throughput, the number of messages processed successfully, and the number of messages that failed processing. You can also manage business identifiers that track fields in messages and manage errors by integrations, connections, or specific integration instances.

About Oracle Integration Cloud Service Connections

Connections define information about the instances of each predefined configuration you are integrating. Oracle Integration Cloud Service includes a set of predefined *adapters*, which are the types of applications on which you can base your connections, such as Oracle Sales Cloud, Oracle Eloqua Cloud, Oracle RightNow Cloud, and others. A connection is based on an adapter. A connection includes the additional information required by the adapter to communicate with a specific instance of an application (this can be referred to as metadata or as connection details). For example, to create a connection to a specific RightNow Cloud application instance, you must select the Oracle RightNow adapter and then specify the WSDL URL, security policy, and security credentials to connect to it.

Video

About Oracle Integration Cloud Service Integrations

Integrations are the main ingredient of Oracle Integration Cloud Service. An integration includes at the least a trigger (source) connection (for requests sent to Oracle Integration Cloud Service) and invoke (target) connection (for requests sent from Oracle Integration Cloud Service to the target) and the field mapping between those two connections.

When you create your integrations, you build on the connections you already created by defining how to process the data for the trigger (source) and invoke (target) connections. This can include defining the type of operations to perform on the data, the business objects and fields against which to perform those operations, required

schemas, and so on. To make this easier, the most complex configuration tasks are handled by Oracle Integration Cloud Service. Once your trigger (source) and invoke (target) connections are configured, the mappers between the two are enabled so you can define how the information is transferred between the trigger (source) and invoke (target) data structures for both the request and response messages.

Video

Typical Workflow for Creating and Including an Adapter Connection in an Integration

You follow a very simple workflow to create a connection with an adapter and include the connection in an integration in Integration Cloud Service.

Step	Description	More Information
1	Create the adapter connections for the applications you want to integrate. The connections can be reused in multiple integrations and are typically created by the administrator.	Creating a Google Task Adapter Connection
2	Create the integration. When you do this, you add trigger and invoke connections to the integration.	Creating an Integration and Adding the Google Task Adapter Connection to an Integration
3	Map data between the trigger connection data structure and the invoke connection data structure.	Mapping Integration Cloud Service Data of *Using the Oracle Mapper*
4	(Optional) Create lookups that map the different values used by those applications to identify the same type of object (such as gender codes or country codes).	Creating Lookups of *Using Oracle Integration Cloud Service*
5	Activate the integration.	Managing Integrations of *Using Oracle Integration Cloud Service*
6	Monitor the integration on the dashboard.	Monitoring Integration Cloud Services of *Using Oracle Integration Cloud Service*
7	Track payload fields in messages during runtime.	Assigning Business Identifiers for Tracking Fields in Messages and Managing Business Identifiers for Tracking Fields in Messages of *Using Oracle Integration Cloud Service*
8	Manage errors at the integration level, connection level, or specific integration instance level.	Managing Errors of *Using Oracle Integration Cloud Service*

2

Creating a Google Task Adapter Connection

A connection is based on an adapter. You define connections to the specific cloud applications that you want to integrate. The following topics describe how to define connections:

Topics

- Creating the Google Task Project
- Uploading the GeoTrust Global CA Certificate
- Creating a Connection
- Editing a Connection
- Cloning a Connection
- Deleting a Connection

Creating the Google Task Project

You must create a Google Task project following specific steps before creating a connection with the Google Task Adapter.

1. Go to console.developers.google.com.
2. Select **Create a new project**.
3. Enter a project name and click **Create**.
4. Click the **Products & services** icon in the upper left corner.
5. Select **API Manager**.
6. Type `task` in the search field.
7. Select **Tasks API**.
8. Click **Enable API**.
9. Click either **Credentials** or **Go to Credentials**.
10. Click **Add Credentials** and select **OAuth 2.0 client ID**.
11. Click **Configure consent screen**.
12. Enter a **Product name shown to users** and click **Save**.

13. Select **Web application** for the application type, enter a web client **Name**, and click **Create**.

    The client ID and secret are displayed.

14. Copy the client ID and secret so you can use them in Configuring Connection Security.

15. Click the name of the web client you created.

16. In the **Authorized redirect URIs** field, enter the SSL URL for OAuth callback for your Oracle Integration Cloud Service instance.

    The format is as follows:

    `https://ICS_HOST:ICS_SSL_PORT/icsapis/agent/oauth/callback`

    For example, suppose this is the URL you use to access your Oracle Integration Cloud Service instance:

    `http://example.com:7001/ics/faces/global`

    This is what the SSL URL for OAuth callback is likely to be:

    `https://example.com:7002/icsapis/agent/oauth/callback`

17. Click **Save**.

18. Code your Google Task application.

Next, see Uploading the GeoTrust Global CA Certificate.

Uploading the GeoTrust Global CA Certificate

Upload the GeoTrust Global CA certificate so your adapter can connect securely.

1. Export the GeoTrust Global CA certificate from your browser.

   The details for how to do this are different for each browser and each browser version. Typically you select Options or Preferences from the menu and then select Security or Advanced options.

2. Select a directory to which to download the `GeoTrustGlobalCA.crt` certificate file and click **Save**.

3. Log in to your Oracle Integration Cloud Service instance.

4. On the Integration Cloud Service home page, click the **Administration** tab in the upper right corner.

5. Click **Upload Certificate**.

6. Click **Browse**, locate the `GeoTrustGlobalCA.crt` file, and click **Open**.

7. Enter a **Certificate Alias Name** and click **Upload**.

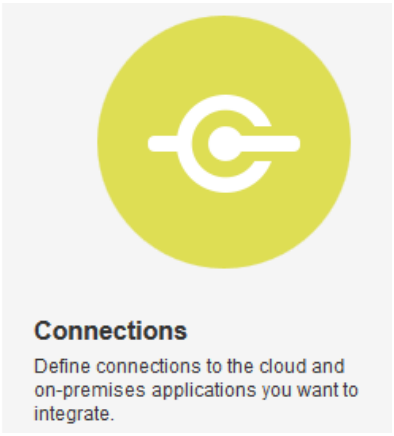
Next, see Creating a Connection.

Creating a Connection

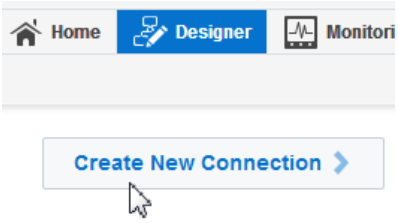
The first step in creating an integration is to create the connections to the applications with which you want to share data.

1. In the Integration Cloud Service toolbar, click **Designer**.

2. On the Designer Portal, click **Connections**.



3. Click **Create New Connection**.

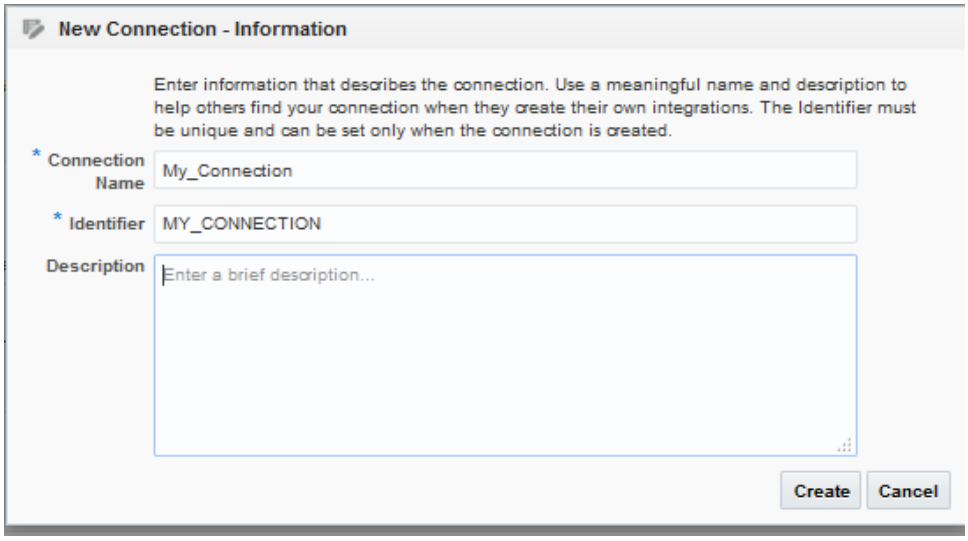


   The Create Connection — Select Adapter dialog is displayed.

4. Select an adapter from the dialog. You can also search for the type of adapter to use by entering a partial or full name in the Search field, and clicking **Search**.

   The New Connection — Information dialog is displayed.

5. Enter the information to describe the connection. Use a meaningful name to help others find your connection when they begin to create their own integrations.



6. Click **Create**.

   Your connection is created and you are now ready to configure connection details, such as email contact, connection properties, security policies, and connection login credentials.

Adding a Contact Email

From the Connection Administrator section of the connection, you can add a contact email address for notifications.

1. In the **Email Address** field, enter an email address to receive email notifications when problems occur.
2. In the upper right corner, click **Save**.

Configuring Connection Security

Configure security for your Google Task connection by selecting the security policy and setting login credentials.

1. Click **Configure Credentials**.
2. Enter the login credentials that you generated in Creating the Google Task Project.
   a. Select the security policy. Only the Google OAuth Authorization Code Credentials policy is supported. It cannot be deselected.
   b. Enter the **Client ID**.
   c. Enter the **Secret**.
   d. Enter the **Scope**, which for Google Task is either `https://www.googleapis.com/auth/tasks` or `https://www.googleapis.com/auth/tasks.readonly`.
3. Click **Provide Consent**.

   A page opens in another browser tab or window with this heading:

Product Name would like to: Manage your tasks.

4. Click **Allow**.
5. Go back to the connection page in Oracle Integration Cloud Service.

Next, see Testing the Connection.

Testing the Connection

Test your connection to ensure that it is successfully configured.

1. In the upper right corner of the page, click **Test**.

   If successful, the following message is displayed and the progress indicator shows 100%.

   ```
   The connection test was successful!
   ```

2. If your connection was unsuccessful, an error message is displayed with details. Verify that the configuration details you entered are correct.
3. When complete, click **Save**.

Editing a Connection

You can edit connection settings after creating a new connection.

1. In the Oracle Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.
3. On the Connections page, select **Edit** from the connection **Actions** menu or click the connection name.

   The Connection page is displayed.

4. To edit the notification email contact, change the email address in the **Email Address** field.
5. To edit the connection properties, click **Configure Connectivity**. Note that some connections do not include this button. If your connector does not include a **Configure Connectivity** button, then click the **Configure Credentials** button.

Cloning a Connection

You can clone a copy of an existing connection. It is a quick way to create a new connection.

1. In the Oracle Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.

3. On the Connections page, select **Clone** from the connection **Actions** menu.

The Clone Connection dialog is displayed.

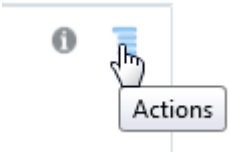
4. Enter the connection information.
5. Click **Clone**.
6. Click **Edit** to configure the credentials of your cloned connection. Cloning a connection does not copy the credentials.

See Editing a Connection for instructions.

Deleting a Connection

You can delete a connection from the connection menu.

1. In the Oracle Integration Cloud Service toolbar, click **Designer**.
2. On the Designer Portal, click **Connections**.
3. On the Connections page, click **Delete** from the connection **Actions** menu.



The Delete Connection dialog is displayed if the connection is not used in an integration.

4. Click **Yes** to confirm deletion.

3

Creating an Integration

Integrations use the adapter connections you created to your applications, and define how information is shared between those applications. You can create, import, modify, or delete integrations; create integrations to publish or subscribe to messages; add and remove request and response enrichment triggers; and create routing paths for different invoke endpoints in integrations. Click the following topics for more information.

Topic

- Creating Integrations (in *Using Oracle Integration Cloud Service*)

4

Adding the Google Task Adapter Connection to an Integration

When you drag the Google Task Adapter into the invoke area of an integration, the Adapter Endpoint Configuration Wizard is invoked. This wizard guides you through configuration of Google Task Adapter endpoint properties.

The following sections describe the wizard pages that guide you through configuration of the Google Task Adapter as an invoke in an integration. The Google Task Adapter cannot be used as an invoke in an integration.

Topics

- Configuring Basic Information Properties
- Configuring Google Task Operation Properties
- Configuring Google Task Request Parameter Properties
- Reviewing Configuration Values on the Summary Page

For general information about the Google Task Adapter, see About the Google Task Adapter.

Configuring Basic Information Properties

You can enter a name and description on the Basic Info page of each invoke adapter in your integration.

Topics

- What You Can Do from the Basic Info Page
- What You See on the Basic Info Page

What You Can Do from the Basic Info Page

You can specify the following values on the invoke Basic Info page. The Basic Info page is the initial wizard page that is displayed whenever you drag an adapter to the invoke area.

- Specify a meaningful name.
- Specify a description of the responsibilities.

What You See on the Basic Info Page

The following table describes the key information on the Basic Info page.

Element	Description
What do you want to call your endpoint?	Provide a meaningful name so that others can understand the connection. For example, if you are creating an invoke Google Task Adapter connection, you may want to name it `GoogleTaskOutboundDirection`. You can include English alphabetic characters, numbers, underscores, and dashes in the name. You cannot include the following: • Blank spaces (for example, `My Task Connection`) • Special characters (for example, `#;83&` or `google(my)task`) • Multibyte characters
What does this endpoint do?	Enter an optional description of the connection's responsibilities. For example: `This connection sends an outbound request to synchronize event information with Google Tasks.`

Configuring Google Task Operation Properties

Select the Google Task operation for your integration.

Topics

- What You Can Do from the Operation Selection Page
- What You See on the Operation Selection Page

What You Can Do from the Operation Selection Page

You can specify the following values and actions on the Operation Selection page.

- Filter the list of operations.
- Select an operation.

What You See on the Operation Selection Page

The following table describes the key information on the Operation Selection page.

Element	Description
Select Operation Filter	Type the first few letters of an operation name to display only operations having names starting with those letters. For example, type `List` to display only operations with names that begin with List.

Element	Description
Select Operation List	Select one of the operations in the list. You cannot select more than one operation. You can mouse over an operation to see details about it.

Configuring Google Task Request Parameter Properties

Select the Google Task request parameters for your operation.

For operations that don't have request parameters, this page is skipped when you click **Next** on the Operation Selection page.

Topics

- What You Can Do from the Request Parameters Page
- What You See on the Request Parameters Page

What You Can Do from the Request Parameters Page

You can specify the following values and actions on the Request Parameters page.

- Filter the list of available query parameters.
- Select query parameters.

What You See on the Request Parameters Page

The following table describes the key information on the Request Parameters page.

Element	Description
Query Parameters	Type the first few letters of a parameter name to display in the Available Query Parameters list only parameters having names starting with those letters. For example, type `show` to display only parameters with names that begin with show.
Available Query Parameters	To select a parameter, click its name in this list and click the > button. To select all displayed parameters, click the >> button. Selected parameters move to the Selected Query Parameters list. You can mouse over a parameter to see details about it.

Element	Description
Selected Query Parameters	To deselect a parameter, click its name in this list and click the < button. To deselect all previously selected parameters, click the << button. Deselected parameters move to the Available Query Parameters list.

Reviewing Configuration Values on the Summary Page

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

Topics

- What You Can Do from the Summary Page
- What You See on the Summary Page

What You Can Do from the Summary Page

You can review invoke configuration details from the Summary page. The Summary page is the final wizard page for each adapter after you have completed your configuration.

- View the configuration details you defined for the invoke adapter. For example, if you have defined an outbound Google Task Adapter with an operation to list all tasks, specific details about this configuration are displayed on the Summary page.
- Click **Done** if you want to save your configuration details.
- Click a specific tab in the left panel to update your configuration definitions.

What You See on the Summary Page

The following table describes the key information on the Summary page.

Element	Description
Summary	Displays a summary of the invoke configuration values you defined on previous pages of the wizard. To return to a previous page to update any values, click the appropriate tab in the left panel.

5

Creating Mappings and Lookups in Integrations

You must map data between trigger connections and invoke connections in integrations. You can also optionally create lookups in integrations.

Topics

- Mapping Integration Cloud Service Data (in *Using Oracle Integration Cloud Service*)
- Creating Lookups (in *Using Oracle Integration Cloud Service*)

6

Administering Integrations

Integration Cloud Service provides you with the information and tools required to activate, monitor, and manage your integrations in the runtime environment.

Topic

- Administering Integration Cloud Service (in *Using Oracle Integration Cloud Service*)