

Oracle® Cloud

Using the Google Calendar Adapter with Oracle Integration Generation 2



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The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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Preface

This guide describes how to configure this adapter as a connection in an integration in Oracle Integration.

**Note:**

The use of this adapter may differ depending on the features you have, or whether your instance was provisioned using Standard or Enterprise edition. These differences are noted throughout this guide.

Topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Diversity and Inclusion](#)
- [Related Resources](#)
- [Conventions](#)

Audience

This guide is intended for developers who want to use this adapter in integrations in Oracle Integration.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our

initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Resources

See these Oracle resources:

- Oracle Cloud
<http://cloud.oracle.com>
- *Using Integrations in Oracle Integration Generation 2*
- *Using the Oracle Mapper with Oracle Integration Generation 2*

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.
<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.

1

Understand the Google Calendar Adapter

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

Topics:

- [Google Calendar Adapter Capabilities](#)
- [What Application Version Is Supported?](#)
- [Workflow to Create and Add a Google Calendar Adapter Connection to an Integration](#)



Note:

There are overall service limits for Oracle Integration. A service limit is the quota or allowance set on a resource. See [Service Limits](#).

Google Calendar Adapter Capabilities

The Google Calendar Adapter enables you modify Google Calendar data as part of an integration in Oracle Integration.

The Google Calendar Adapter provides the following benefits:

- You can filter operations and select one operation for your integration.
Examples of operations are List Events and Update Event.
- You can filter and select query parameters for the selected operation.
Examples of parameters are orderBy and showHiddenInvitations.

The Google Calendar Adapter is one of many predefined adapters included with Oracle Integration. You can configure the Google Calendar Adapter as a connection in an integration in Oracle Integration.

What Application Version Is Supported?

For information about which application version is supported by this adapter, see the [Connectivity Certification Matrix](#).

See [Connectivity Certification Matrix](#).

Workflow to Create and Add a Google Calendar Adapter Connection to an Integration

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

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.	Create a Google Calendar Adapter Connection
2	Create the integration. When you do this, you add trigger and invoke connections to the integration.	Create Integrations and Add the Google Calendar Adapter Connection to an Integration
3	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data in <i>Using Integrations in Oracle Integration Generation 2</i>
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).	Manage Lookups in <i>Using Integrations in Oracle Integration Generation 2</i>
5	Activate the integration.	Manage Integrations in <i>Using Integrations in Oracle Integration Generation 2</i>
6	Monitor the integration on the dashboard.	Monitor Integrations in <i>Using Integrations in Oracle Integration Generation 2</i>
7	Track payload fields in messages during runtime.	Assign Business Identifiers for Tracking Fields in Messages and Manage Business Identifiers for Tracking Fields in Messages in <i>Using Integrations in Oracle Integration Generation 2</i>
8	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors in <i>Using Integrations in Oracle Integration Generation 2</i>

2

Create a Google Calendar Adapter Connection

A connection is based on an adapter. You define connections to the specific cloud applications that you want to integrate.

Topics:

- [Prerequisites for Creating a Connection](#)
- [Upload the GeoTrust Global CA Certificate](#)
- [Create a Connection](#)

Prerequisites for Creating a Connection

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

1. Go to console.developers.google.com.
2. If this is your first visit, create an account.
3. Click the **My project** dropdown list in the upper left corner.
4. Click the + sign to create a new project.
5. Complete the steps to create a project.
6. In the **Library** tab, type `calendar` in the search field.
7. Select **Calendar API**.
8. Click **Enable**.
9. Click either **Credentials** or **Go to Credentials**.
10. Click **Create Credentials** and select **OAuth 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 [Configure 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 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 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 Calendar application.
- Next, see [Upload the GeoTrust Global CA Certificate](#).

Upload 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. In the left navigation pane, click **Home > Settings > Certificates**.
4. Click **Upload**.
5. Click **Browse**, locate the `GeoTrustGlobalCA.crt` file, and click **Open**.
6. Enter a **Certificate Alias Name** and click **Upload**.

Create a Connection

Before you can build an integration, you have to create the connections to the applications with which you want to share data.

To create a connection in Oracle Integration:

1. In the left navigation pane, click **Home > Integrations > Connections**.
2. Click **Create**.

 **Note:**

You can also create a connection in the integration canvas of:

- An orchestrated integration (See Define Inbound Triggers and Outbound Invokes.)
- A basic routing integration (See Add a Trigger (Source) Connection.)

3. In the Create Connection — Select Adapter dialog, select the adapter to use for this connection. To find the adapter, scroll through the list, or enter a partial or full name in the **Search** field and click

**Search.**

4. In the Create Connection dialog, enter the information that describes this connection.
 - a. Enter a meaningful name to help others find your connection when they begin to create their own integrations. The name you enter is automatically added in capital letters to the **Identifier** field. If you modify the identifier name, don't include blank spaces (for example, SALES OPPORTUNITY).
 - b. Enter optional keywords (tags). You can search on the connection keywords on the Connections page.
 - c. Select the role (direction) in which to use this connection (trigger, invoke, or both). Only the roles supported by the adapter are displayed for selection. When you select a role, only the connection properties and security policies appropriate to that role are displayed on the Connections page. If you select an adapter that supports both invoke and trigger, but select only one of those roles, you'll get an error when you try to drag the adapter into the section you didn't select. For example, let's say you configure a connection for the Oracle Service Cloud (RightNow) Adapter as only an **invoke**. Dragging the adapter to a **trigger** section in the integration produces an error.
 - d. Enter an optional description of the connection.
5. Click **Create**.

Your connection is created. You're now ready to configure the connection details, such as connection properties, security policies, connection login credentials, and (for certain connections) agent group.

Configure Connection Security

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

1. Go to the **Security** section.
2. Enter the login credentials that you generated in [Prerequisites for Creating a Connection](#).
 - 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 Calendar is either `https://www.googleapis.com/auth/calendar` or `https://www.googleapis.com/auth/calendar.readonly`.
3. Click **Provide Consent**.
A page opens in another browser tab or window with this heading:
Product Name would like to: Manage your calendars.
4. Click **Allow**.
5. Go back to the Connections page in Oracle Integration.

Test the Connection

Test your connection to ensure that it's configured successfully.

1. In the page title bar, click **Test**. What happens next depends on whether your adapter connection uses a Web Services Description Language (WSDL) file. Only some adapter connections use WSDLs.

If Your Connection...	Then...
Doesn't use a WSDL	The test starts automatically and validates the inputs you provided for the connection.
Uses a WSDL	A dialog prompts you to select the type of connection testing to perform: <ul style="list-style-type: none"> • Validate and Test: Performs a full validation of the WSDL, including processing of the imported schemas and WSDLs. Complete validation can take several minutes depending on the number of imported schemas and WSDLs. No requests are sent to the operations exposed in the WSDL. • Test: Connects to the WSDL URL and performs a syntax check on the WSDL. No requests are sent to the operations exposed in the WSDL.

2. Wait for a message about the results of the connection test.
 - If the test was successful, then the connection is configured properly.
 - If the test failed, then edit the configuration details you entered. Check for typos, verify URLs and credentials, and download the diagnostic logs for additional details. Continue to test until the connection is successful.
3. When complete, click **Save**.

3

Add the Google Calendar Adapter Connection to an Integration

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

These topics describe the wizard pages that guide you through configuration of the Google Calendar Adapter as an invoke in an integration. The Google Calendar Adapter cannot be used as a trigger in an integration.

Topics:

- [Basic Info Page](#)
- [Operation Page](#)
- [Request Parameter Page](#)
- [Summary Page](#)

Basic Info Page

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

Element	Description
What do you want to call your endpoint?	<p>Provide a meaningful name so that others can understand the responsibilities of this connection. You can include English alphabetic characters, numbers, underscores, and hyphens in the name. You can't include the following characters:</p> <ul style="list-style-type: none">• No blank spaces (for example, My Inbound Connection)• No special characters (for example, #;83& or righ(t)now4) except underscores and hyphens• No multibyte characters
What does this endpoint do?	<p>Enter an optional description of the connection's responsibilities. For example:</p> <pre>This connection receives an inbound request to synchronize account information with the cloud application.</pre>

Operation Page

Select the Google Calendar Adapter operation for your integration.

The following table describes the key information on the Operation 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 <code>Get</code> to display only operations with names that begin with <code>Get</code> .
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. <ul style="list-style-type: none"> • Query Free-Busy • Delete Calendar Entry • Get Calendar Entry • Create Calendar Entry • List Calendar Entries • Update Calendar Entry • Delete Event • Get Event • Import Event • Insert Event • Get Event Instances • List Events • Update Event • Delete Access Control Rule • Get Access Control Rule • Create Access Control Rule • List Access Control Rules • Update Access Control Rule • Clear Calendar • Delete Calendar • Get Calendar • Create Calendar • Update Calendar

Request Parameter Page

Select the Google Calendar Adapter request parameters for your operation.

For operations that do not have request parameters, this page is skipped when you click **Next** on the Operation 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 <code>max</code> to display only parameters with names that begin with <code>max</code> .

Element	Description
Available Query Parameters	<p>To select a parameter, click its name in this list and click the > button.</p> <p>To select all displayed parameters, click the >> button.</p> <p>Selected parameters move to the Selected Query Parameters list.</p> <p>You can mouse over a parameter to see details about it.</p>
Selected Query Parameters	<p>To deselect a parameter, click its name in this list and click the < button.</p> <p>To deselect all previously selected parameters, click the << button.</p> <p>Deselected parameters move to the Available Query Parameters list.</p>

Summary Page

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

Element	Description
Summary	<p>Displays a summary of the configuration values you defined on previous pages of the wizard.</p> <p>The information that is displayed can vary by adapter. For some adapters, the selected business objects and operation name are displayed. For adapters for which a generated XSD file is provided, click the XSD link to view a read-only version of the file.</p> <p>To return to a previous page to update any values, click the appropriate tab in the left panel or click Back.</p> <p>To cancel your configuration details, click Cancel.</p>

4

Troubleshoot the Google Calendar Adapter

Review the following topics to learn about troubleshooting issues with the Google Calendar Adapter.

Topics:

- [Specify the Port Number with the Authorized Redirect URL](#)

Additional integration troubleshooting information is provided. See Troubleshoot Oracle Integration in *Using Integrations in Oracle Integration Generation 2* and the [Oracle Integration Troubleshooting page](#) in the Oracle Help Center.

Specify the Port Number with the Authorized Redirect URL

When configuring the authorized redirect URL, ensure that you specify the port number. For example:

```
https://host:443/icsapis/agent/oauth/callback
```

Not specifying the port number in the URL results in an error saying the application wasn't authorized for the redirect URL.