

# Oracle® Cloud

## Using the Google Calendar Adapter with Oracle Integration



E85501-05  
January 2019

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

ORACLE®

Oracle Cloud Using the Google Calendar Adapter with Oracle Integration,

E85501-05

Copyright © 2017, 2019, Oracle and/or its affiliates. All rights reserved.

Primary Author: Oracle Corporation

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

# Contents

	<b>Preface</b>	
	Audience	iv
	Documentation Accessibility	iv
	Related Resources	iv
	Conventions	v
<b>1</b>	<b>Understand the Google Calendar Adapter</b>	
	Google Calendar Adapter Capabilities	1-1
	What Application Version Is Supported?	1-1
	Workflow to Create and Add a Google Calendar Adapter Connection to an Integration	1-1
<b>2</b>	<b>Create a Google Calendar Adapter Connection</b>	
	Prerequisites for Creating a Connection	2-1
	Upload the GeoTrust Global CA Certificate	2-2
	Create a Connection	2-2
	Add a Contact Email	2-4
	Configure Connection Security	2-4
	Test the Connection	2-4
<b>3</b>	<b>Add the Google Calendar Adapter Connection to an Integration</b>	
	Basic Info Page	3-1
	Operation Page	3-1
	Request Parameter Page	3-2
	Summary Page	3-3
<b>4</b>	<b>Troubleshoot the Google Calendar Adapter</b>	
	Specify the Port Number with the Authorized Redirect URL	4-1

# Preface

This guide describes how to configure the Google Calendar Adapter as a connection in an integration in Oracle Integration.

**Note:**

The information in this guide applies to all of your Oracle Integration instances. It doesn't matter which edition you're using, what features you have, or who manages your cloud environment. You'll find what you need here, including notes about any differences between the various flavors of Oracle Integration when necessary.

**Topics**

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

## Audience

This guide is intended for developers who want to use the Google Calendar 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>.

**Access to Oracle Support**

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## Related Resources

See these Oracle resources:

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

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	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](#)

## 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 Oracle Integration Adapters Certification Matrix under section **Oracle Integration Adapters Certification** at the top of the page:

[Oracle Integration Adapters 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.	<a href="#">Create a Google Calendar Adapter Connection</a>
2	Create the integration. When you do this, you add trigger and invoke connections to the integration.	Create Integrations and <a href="#">Add the Google Calendar Adapter Connection to an Integration</a>
3	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data of <i>Using Integrations in Oracle Integration</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 of <i>Using Integrations in Oracle Integration</i>
5	Activate the integration.	Manage Integrations of <i>Using Integrations in Oracle Integration</i>
6	Monitor the integration on the dashboard.	Monitor Integrations of <i>Using Integrations in Oracle Integration</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 of <i>Using Integrations in Oracle Integration</i>
8	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors of <i>Using Integrations in Oracle Integration</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](https://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 navigation pane, click **Integrations**, then click the < arrow next to **DESIGNER**.
4. Click **Settings > Certificates**.
5. Click **Upload Certificate**.
6. Click **Browse**, locate the `GeoTrustGlobalCA.crt` file, and click **Open**.
7. Enter a **Certificate Alias Name** and click **Upload**.

## Create 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 navigation pane, click **Integrations**, then click **Connections**.
2. Click **Create**.

 **Note:**

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

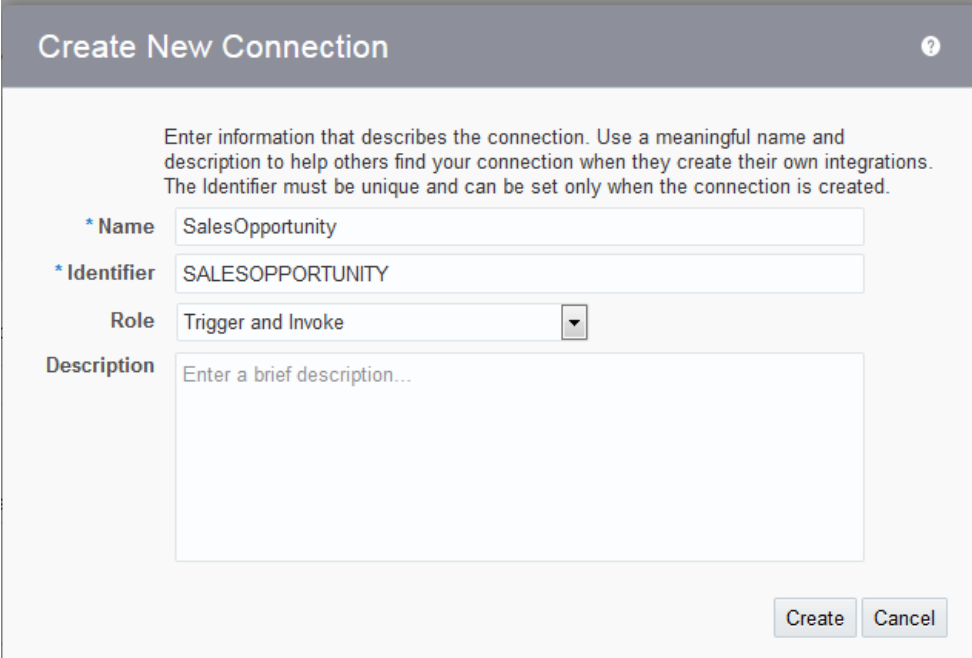
- An orchestrated integration (See Define Inbound Triggers and Outbound Invokes.)
- A basic routing integration (See Add a Trigger (Source) Connection.)

The Create Connection — Select Adapter dialog is displayed.

3. 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 Create New Connection dialog is displayed.

4. Enter the information to describe the connection.
  - 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, do not include a blank space (for example, Sales Opportunity).
  - Select the role (direction) in which to use this connection (trigger, invoke, or both). Only the roles supported by this 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, then try to drag the adapter into the section you did not select, you receive an error (for example, configure an Oracle Service Cloud (RightNow) Adapter as only an invoke, but drag the adapter to the trigger section).
  - Enter an optional description of the connection.



**Create New Connection** ?

Enter information that describes the connection. Use a meaningful name and description to help others find your connection when they create their own integrations. The Identifier must be unique and can be set only when the connection is created.

\* Name

\* Identifier

Role

Description

5. Click **Create**.

Your connection is created and you are now ready to configure connection details, such as email contact, connection properties, security policies, connection login credentials, and (for certain connections) agent group.

## Add 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**.

## Configure Connection Security

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

1. Click **Configure Credentials**.
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 connection page in Oracle Integration.

Next, see [Test the Connection](#).

## Test the Connection

Test your connection to ensure that it is successfully configured.

1. In the upper right corner of the page, click **Test**.
2. If your adapter connection uses a WSDL, you are prompted to select the type of connection testing to perform:
  - **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.

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

Connection **connection\_name** was tested successfully.

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

# 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
<b>What do you want to call your endpoint?</b>	Provide a meaningful name so that others can understand the responsibilities of this connection. You can include English alphabetic characters, numbers, underscores, and dashes in the name. You cannot include the following: <ul style="list-style-type: none"><li>• Blank spaces (for example, My Inbound Connection)</li><li>• Special characters (for example, #;83&amp; or righ(t)now4)</li><li>• Multibyte characters</li></ul>
<b>What does this endpoint do?</b>	Enter an optional description of the connection's responsibilities. For example: This connection receives an inbound request to synchronize account information with the cloud application.

## Operation Page

Select the Google Calendar Adapter operation for your integration.

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

Element	Description
<b>Select Operation Filter</b>	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> .
<b>Select Operation List</b>	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"> <li>• Query Free-Busy</li> <li>• Delete Calendar Entry</li> <li>• Get Calendar Entry</li> <li>• Create Calendar Entry</li> <li>• List Calendar Entries</li> <li>• Update Calendar Entry</li> <li>• Delete Event</li> <li>• Get Event</li> <li>• Import Event</li> <li>• Insert Event</li> <li>• Get Event Instances</li> <li>• List Events</li> <li>• Update Event</li> <li>• Delete Access Control Rule</li> <li>• Get Access Control Rule</li> <li>• Create Access Control Rule</li> <li>• List Access Control Rules</li> <li>• Update Access Control Rule</li> <li>• Clear Calendar</li> <li>• Delete Calendar</li> <li>• Get Calendar</li> <li>• Create Calendar</li> <li>• Update Calendar</li> </ul>

## 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
<b>Query Parameters</b>	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
<b>Available Query Parameters</b>	<p>To select a parameter, click its name in this list and click the &gt; button.</p> <p>To select all displayed parameters, click the &gt;&gt; button. Selected parameters move to the Selected Query Parameters list.</p> <p>You can mouse over a parameter to see details about it.</p>
<b>Selected Query Parameters</b>	<p>To deselect a parameter, click its name in this list and click the &lt; button.</p> <p>To deselect all previously selected parameters, click the &lt;&lt; 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
<b>Summary</b>	<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 <b>Back</b>. Click <b>Cancel</b> to cancel your configuration details.</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*.

### 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 when configuring the adapter on the Connections page:

```
"Authorization Failed: String index out of range: -12"
```