Oracle® Cloud

Using the Twilio Adapter with Oracle Integration
## Contents

### Preface
- Audience iv
- Documentation Accessibility iv
- Related Resources iv
- Conventions v

### 1 Understand the Twilio Adapter
- Twilio Adapter Capabilities 1-1
- What Application Version Is Supported? 1-1
- Twilio Adapter Use Cases 1-1
- Workflow to Create and Add a Twilio Adapter Connection to an Integration 1-2

### 2 Create a Twilio Adapter Connection
- Prerequisites for Creating a Connection 2-1
  - Create a Twilio User Account 2-1
- Create a Connection 2-2
  - Add a Contact Email 2-3
  - Configure Connection Security 2-3
  - Test the Connection 2-4
- Upload an SSL Certificate 2-4

### 3 Add the Twilio Adapter Connection to an Integration
- Basic Info Page 3-1
- Invoke Operations Page 3-1
- Summary Page 3-2
Preface

This guide describes how to configure the Twilio 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 Twilio Adapter in integrations in Oracle Integration.

Documentation Accessibility


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](http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info) or visit [http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs](http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs) if you are hearing impaired.

Related Resources

See these Oracle resources:
Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
Understand the Twilio Adapter

Review the following conceptual topics to learn about the Twilio 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:
• Twilio Adapter Capabilities
• What Application Version Is Supported?
• Twilio Adapter Use Cases
• Workflow to Create and Add a Twilio Adapter Connection to an Integration

Twilio Adapter Capabilities

Use the Twilio Adapter to create a Twilio integration. The Twilio Adapter provides the following benefits:

• Allows developers to embed voice, messaging and video directly into software applications.
• Brings voice, video, SMS, MMS, and real-time IP communications together into a single platform, available from one, common API.
• Removes the requirement for separate equipment, protocols, and software and allows developers to focus on building the right solution for the task.
• Provides a range of developer tools, helper libraries, documentation, and support services to help resolve issues quickly.

The Twilio Adapter is one of many predefined adapters included with Oracle Integration. You can configure Twilio Adapter as an invoke 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

Twilio Adapter Use Cases

This use case describes how the Twilio Adapter is used to allow customers to contact a vendor without exposing their permanent phone number.

• The customer makes an online service request for a home repair.
• The Twilio adapter sends the service request to the service provider.
• The service provider searches its vendor database to locate the best qualified vendor for the customer service request.
• The service provider communicates with the vendor using a Twilio-powered SMS solution and confirms the appointment, credit card payment, and insurance.
• The service provider uses the Twilio adapter to inform the customer that a vendor has been selected and provides the appointment information.
• The customer and vendor contact each other to exchange addresses and particulars about the job without exposing their permanent phone number or other sensitive data.

Workflow to Create and Add a Twilio 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.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complete the prerequisite tasks.</td>
<td>Prerequisites for Creating a Connection</td>
</tr>
<tr>
<td>2</td>
<td>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.</td>
<td>Create a Twilio Adapter Connection</td>
</tr>
<tr>
<td>3</td>
<td>Create the integration. When you do this, you add trigger and invoke connections to the integration.</td>
<td>Create Integrations and Add the Twilio Adapter Connection to an Integration</td>
</tr>
<tr>
<td>4</td>
<td>Map data between the trigger connection data structure and the invoke connection data structure.</td>
<td>Map Data of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>5</td>
<td>(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).</td>
<td>Manage Lookups of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>6</td>
<td>Activate the integration.</td>
<td>Manage Integrations of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>7</td>
<td>Monitor the integration on the dashboard.</td>
<td>Monitor Integrations of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>8</td>
<td>Track payload fields in messages during runtime.</td>
<td>Assign Business Identifiers for Tracking Fields in Messages and Manage Business Identifiers for Tracking Fields in Messages of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>Step</td>
<td>Description</td>
<td>More Information</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>------------------</td>
</tr>
<tr>
<td>9</td>
<td>Manage errors at the integration level, connection level, or specific integration instance level.</td>
<td>Manage Errors of <em>Using Integrations in Oracle Integration</em></td>
</tr>
</tbody>
</table>
Create a Twilio 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
- Create a Connection
- Upload an SSL Certificate

Prerequisites for Creating a Connection

These are the prerequisites for creating a Twilio Adapter connection:
- A Twilio security identifier (SID) and authorization token. These are provided when you create your Twilio user account. See Create a Twilio User Account.
- A trusted Twilio public certificate. Typically, the certificate is included with Oracle Integration. If you cannot locate the Twilio public certificate, download it from https://api.twilio.com/2010-04-01/Accounts. See Upload an SSL Certificate.

Create a Twilio User Account

A Twilio user account is required to create a Twilio Adapter connection.

To create the Twilio user account:
1. Open an Internet browser and browse to https://www.twilio.com/.
2. Click Sign Up.
3. Complete the First Name, Last Name, Email, Choose a password, and Password, again fields.
4. Select a product in the What is the first product you plan to use? list.
5. Selection an application type in the What are you building? list.
6. Select a language in the Choose your language list.
7. Click Get Started.
8. Complete the text or telephone verification process.
9. Click your user name in the upper corner of the screen and select Account.
10. Copy or record the values in the AccountSID and AuthToken fields. These values are required to create the connection in Oracle Integration.

Click the padlock icon to reveal the hidden AuthToken number.
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.
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 Twilio Adapter connection by selecting the security policy and security token.

1. Create a connection. See Create a Twilio Adapter Connection.
2. Click Configure Security.

The Security Policy field displays Twilio Security Policy. This value cannot be changed.

3. Complete these field using the information you recorded when completing the prerequisites. See Prerequisites for Creating a Connection:
   a. In the AccountSID field, enter the Twilio security identifier (SID).
   b. In the AuthToken field, enter the Twilio authorization token.
   c. In the Confirm AuthToken field, enter the Twilio authorization token.
4. Click **OK**.

5. Test your connection. See **Testing 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**.

### Upload an SSL Certificate

Certificates are used to validate outbound SSL connections. If you make an SSL connection in which the root certificate does not exist in Oracle Integration, an exception is thrown. In that case, you must upload the appropriate certificate. A certificate enables Oracle Integration to connect with external services. If the external endpoint requires a specific certificate, request the certificate and then upload it into Oracle Integration.

To upload an SSL certificate:

1. In the navigation pane, click **Integrations**, then click the < arrow next to **Designer**.

2. Click **Settings > Certificates**.

   All certificates currently uploaded to the trust store are displayed in the Certificates dialog. The Filter By > Type list displays the following details:
   - **Preinstalled**: Displays the certificates automatically installed in Oracle Integration. These certificates cannot be deleted.
   - **Uploaded**: Displays the certificates uploaded by individual users. These certificates can be deleted and updated.

   You can also search for certificates in the **Search** field. The search results are limited to a maximum of ten records sorted by name for performance and usability reasons. To ensure that your search results are more granular, enter as much of the certificate name as possible.

3. Click **Upload** at the top of the page.
4. In the Upload Certificate dialog box, select the certificate type. Each certificate type enables Oracle Integration to connect with external services.
   
   - **Trust Certificate**: Use this option to upload a trust certificate.
     
     a. Enter a unique alias for the certificate.
     
     b. Click **Browse**, then select the trust file (for example, .cer or .crt) to upload.

   - **Message Protection Certificate**: Use this option to upload a keystore certificate with SAML token support. Create, read, update, and delete (CRUD) operations are supported on this type of certificate.
     
     a. Enter a unique alias for the certificate.
     
     b. Click **Browse**, then select the certificate file (.cer or .crt) to upload.

   - **Identity Certificate**: Use this option to upload a certificate for two-way SSL communication.
     
     a. Click **Browse**, then select the keystore file (.jks) to upload.
     
     b. Enter the password of the keystore being imported.
     
     c. Enter the comma-separated list of aliases from the keystore being imported.
     
     d. Enter the comma-separated list of passwords corresponding to key aliases.
     
     e. If you want to display the passwords in clear text, select **Show Key Password(s)**. This enables you to ensure that you are correctly entering a list of keystore passwords.

5. Click **Upload**.

6. Click the certificate name to view details such as the subject of the certificate, the issuer of the certificate, the date the certificate was issued, and the date the certificate expires.
Add the Twilio Adapter Connection to an Integration

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

These topics describe the wizard pages that guide you through configuration of the Twilio Adapter as a trigger or invoke in an integration.

Topics:
- Basic Info Page
- Invoke Operations Page
- Summary Page

Basic Info Page

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

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| What do you want to call your endpoint?| 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:  
  - Blank spaces (for example, My Inbound Connection)  
  - Special characters (for example, #;83% or righ(t)now4)  
  - Multibyte characters                                                                 |
| What does this endpoint do?            | 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. |

Invoke Operations Page

Enter the Twilio Adapter source file read configuration values for your integration.
The table provides definitions for the Twilio Adapter API operations that can be performed on the target. These operations are listed on the Twilio Adapter Operations page.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send SMS or MMS</td>
<td>Sends an SMS or MMS message.</td>
</tr>
<tr>
<td>Get all recent SMSs</td>
<td>Returns all inbound and outbound SMS messages.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Operation</td>
<td>Selects the operation that you want Oracle Integration to invoke when running an integration that uses this endpoint.</td>
</tr>
</tbody>
</table>

Summary Page

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

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>Displays a summary of the configuration values you defined on previous pages of the wizard.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>To return to a previous page to update any values, click the appropriate tab in the left panel or click Back. Click Cancel to cancel your configuration details.</td>
</tr>
</tbody>
</table>