Oracle® Cloud
Using the Trello Adapter with Oracle Integration
## Contents

### Preface

<table>
<thead>
<tr>
<th>Audience</th>
<th>iv</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation Accessibility</td>
<td>iv</td>
</tr>
<tr>
<td>Related Resources</td>
<td>iv</td>
</tr>
<tr>
<td>Conventions</td>
<td>v</td>
</tr>
</tbody>
</table>

### 1 Understand the Trello Adapter

<table>
<thead>
<tr>
<th>Trello Adapter Capabilities</th>
<th>1-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>What Application Version Is Supported?</td>
<td>1-1</td>
</tr>
<tr>
<td>About Trello Adapter Use Cases</td>
<td>1-1</td>
</tr>
<tr>
<td>Workflow to Create and Add a Trello Adapter Connection to an Integration</td>
<td>1-2</td>
</tr>
</tbody>
</table>

### 2 Create a Trello Adapter Connection

<table>
<thead>
<tr>
<th>Prerequisites for Creating a Connection</th>
<th>2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a Connection</td>
<td>2-2</td>
</tr>
<tr>
<td>Add a Contact Email</td>
<td>2-3</td>
</tr>
<tr>
<td>Configure Connection Security</td>
<td>2-3</td>
</tr>
<tr>
<td>Test the Connection</td>
<td>2-4</td>
</tr>
<tr>
<td>Upload an SSL Certificate</td>
<td>2-4</td>
</tr>
</tbody>
</table>

### 3 Add the Trello Adapter Connection to an Integration

<table>
<thead>
<tr>
<th>Basic Info Page</th>
<th>3-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoke Operations Page</td>
<td>3-1</td>
</tr>
<tr>
<td>Summary Page</td>
<td>3-2</td>
</tr>
</tbody>
</table>
Preface

This guide describes how to configure the Trello 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 Trello 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:
• 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:

<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>monospace</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 Trello Adapter

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

Trello Adapter Capabilities

Use the Trello Adapter to create an integration with Trello. Trello provides boards, lists, and cards to organize and prioritize projects. Projects are represented by boards that contain lists (associated with lists of tasks). Lists contain cards (associated with tasks). Cards can move from one list to the next list (for example, the life cycle flow of a product from initial design to completion). You can assign users to cards and can group users and boards into organizations. Use the Trello Adapter to select and perform specific card, board, and list API operations in Trello.

The Trello Adapter is one of many predefined adapters included with Oracle Integration. You can configure the Trello 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

About Trello Adapter Use Cases

The Trello Adapter can be used in scenarios such as the following.

• Create an integration with the REST Adapter as the trigger connection and the Trello Adapter as the invoke connection. Configure the Trello Adapter with the Create a board operation to create a board in Trello. Select and configure the REST Adapter to send a POST request to the Trello Adapter. Perform appropriate data mapping between the REST Adapter and Trello Adapter in the mapper. The Trello Adapter sends the Create a board operation as a payload while invoking the operation in Trello.
Create an integration with the REST Adapter as the trigger connection and the Trello Adapter as the invoke connection. Configure the Trello Adapter with the **Delete a member from a card** operation in the Trello Adapter to delete a specific member from a card in Trello. Select and configure the REST Adapter to send a **DELETE** request to the Trello Adapter. Perform appropriate data mapping between the REST Adapter and the Trello Adapter in the mapper. The REST Adapter sends a **DELETE** request to the Trello Adapter, which sends the **Delete a member from a card** operation as a payload while invoking the operation in Trello.

**Workflow to Create and Add a Trello Adapter Connection to an Integration**

Follow a 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>Create a Trello user account and obtain an API key (client ID) and secret key (client secret).</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 Trello Adapter Connection</td>
</tr>
<tr>
<td>3</td>
<td>Create the integration. When you do this, you add source and target connections to the integration.</td>
<td>Create Integrations and Add the Trello Adapter Connection to an Integration</td>
</tr>
<tr>
<td>4</td>
<td>Map data between the source connection data structure and the target 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</td>
<td>Manage Errors of <em>Using Integrations in Oracle Integration</em></td>
</tr>
<tr>
<td></td>
<td>specific integration instance level.</td>
<td></td>
</tr>
</tbody>
</table>
Create a Trello 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 connection with the Trello Adapter.

Obtaining the Client ID and Client Secret

Before you can use the Trello Adapter, you must obtain the API key (client ID) and secret key (client secret).

1. If you do not have an account, perform the following steps:
   a. Go to https://trello.com/.
   b. Create an account.
2. Log in to the Trello Developers Console.
3. In the navigation bar, click Sandbox.
4. If you do not have any API keys, click grab your API key here.
   This action generates your API key and client secret key under the Developer API Keys and OAuth headers, respectively.
5. Write down the API key and client secret key values. You need these values when creating a connection with the Trello Adapter on the Connections page.

Obtaining the Certificate

Before creating a Trello Adapter connection, you must upload the Trello public trust certificate to Oracle Integration.

1. Download the Trello certificate from https://www.trello.com/.
2. Upload the certificate into Oracle Integration as a trust certificate. See Upload an SSL Certificate.
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

Select the security policy and specify the API key and client secret ID for the connection.

1. Click Configure Security.

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

2. In the Client Id field, enter the API key you obtained in Prerequisites for Creating a Connection. This value is used to identify the client making the request.
3. In the Client Secret field, enter the client secret key ID you obtained in Prerequisites for Creating a Connection. This value is used to identify the client application making the request.
4. In the **Scope** field, enter the permissions the application is requesting on behalf of the user (either **read**, **write**, or **account**). To delete and add members to a board or card, you need the account scope.

5. Click **Provide Consent**.
   The consent dialog is displayed. If the dialog is not displayed, ensure that your browser pop-up blocker is turned off.

6. Read the instructions and provide your consent.

7. Click **OK**.

8. Test connection connectivity. 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**.

**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 Trello Adapter Connection to an Integration

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

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

Select the Trello Adapter invoke operation.
You can select the Trello API operation to perform on the invoke Trello Adapter Operations page.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Operation</td>
<td>Select the Trello API operation to perform:</td>
</tr>
<tr>
<td></td>
<td>• Get user details: Get information about a specific user such as the user ID, user name, and member type.</td>
</tr>
<tr>
<td></td>
<td>• Create a board: Create a new board.</td>
</tr>
<tr>
<td></td>
<td>• Create a list: Create a new list.</td>
</tr>
<tr>
<td></td>
<td>• Create a card: Create a new card.</td>
</tr>
<tr>
<td></td>
<td>• Add a member to a card: Add a member to a card.</td>
</tr>
<tr>
<td></td>
<td>• Add a label to a card: Add a label to a card.</td>
</tr>
<tr>
<td></td>
<td>• Add/update due date of a card: Add or update the due date of a card.</td>
</tr>
<tr>
<td></td>
<td>• Add a member to a board: Add a member to a board.</td>
</tr>
<tr>
<td></td>
<td>• Move a card to a different list: Move a card from one list to another list.</td>
</tr>
<tr>
<td></td>
<td>• Move a card to a different board: Move a card from one board to another board.</td>
</tr>
<tr>
<td></td>
<td>• Delete a member from a board: Delete a member from a board.</td>
</tr>
<tr>
<td></td>
<td>• Delete a member from a card: Delete a member from a card.</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. 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. 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>