Oracle® Cloud

Using the DocuSign Adapter with Oracle Integration
Preface

This guide describes how to configure the DocuSign 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 DocuSign 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:

<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><code>monospace</code></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 DocuSign Adapter

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

DocuSign Adapter Capabilities

To integrate your applications with DocuSign, add the DocuSign Adapter as an integration in Oracle Integration.

You can replace your paper and ink signature processes with fully automated electronic signature workflows. Use a browser or mobile device to send, sign, track, and manage the review and signature process. Key features of DocuSign Adapter include:
- Specified signer routing order for multiple signers
- Delegation of signing responsibility to others

The DocuSign Adapter is one of many predefined adapters included with Oracle Integration. You can configure the DocuSign Adapter as a target 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 Matric at the top of the page:

Oracle Integration Adapters Certification Matrix

About DocuSign Adapter Use Cases

The DocuSign Adapter can be used in scenarios such as the following.
- Select the **Send an envelope or create a draft** in one integration to create an envelope and send it to recipients or save it as a draft. Select and configure the REST Adapter as the source. Appropriate data mapping between the REST Adapter and DocuSign Adapter is performed in the mapper. Invoke the integration endpoint with a REST client to send a POST request to the REST Adapter. The
DocuSign Adapter sends the data as a payload while invoking the configured operation in DocuSign.

- Select the **Get envelope status changes** operation in one integration to return envelope status changes for all envelopes. Appropriate data mapping between the REST Adapter and DocuSign Adapter is performed in the mapper. The REST Adapter sends a GET request to the DocuSign Adapter, which returns status change information for all envelopes.

## Workflow to Create and Add a DocuSign 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.

This table lists the workflow steps for both adapter tasks and overall integration tasks, and provides links to instructions for each step.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</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 DocuSign Adapter Connection</td>
</tr>
<tr>
<td>2</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 DocuSign Adapter Connection to an Integration</td>
</tr>
<tr>
<td>3</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>4</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>5</td>
<td>Activate the integration.</td>
<td>Manage Integrations of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>6</td>
<td>Monitor the integration on the dashboard.</td>
<td>Monitor Integrations of Using Integrations in Oracle Integration</td>
</tr>
<tr>
<td>7</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>8</td>
<td>Manage errors at the integration level, connection level, or specific integration instance level.</td>
<td>Manage Errors of Using Integrations in Oracle Integration</td>
</tr>
</tbody>
</table>
Create a DocuSign 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

A DocuSign user name, password, and integrator key are required to create a DocuSign Adapter connection. A DocuSign integrator key is a unique identifier for each DocuSign integration and it is used to authenticate your API calls with DocuSign. To move your integration to DocuSign production, you must be certified and get your integrator key authorized by DocuSign.

Note:
To create a connection, a trusted public certificate is required. Typically, the certificate is included with Oracle Integration. If you cannot locate the public certificate, contact your administrator. If you download a public certificate, rename the file extension to .crt. To upload the certificate, see Upload an SSL Certificate.

1. Log on to your DocuSign developer account. If you do not have an account, create one here: https://www.docusign.com/developer-center#form-devaccount.
2. Click the profile icon in the upper right corner and select Go to Admin.
3. Click API and Keys in the left menu.
4. Click Add Integrator Key.
5. Enter a description for the integrator key.
6. Click Add URI in the Redirect URIs field and enter https://{ICS_HOST}:{ICS_SSL_PORT}/icsapis/agent/oauth/callback.
   Replace ICS_HOST and ICS_SSL_PORT with values specific to your environment.
7. Click Add.
8. Copy or record the integrator key. The key is required to create the connection in Oracle Integration.
9. Create the connection.
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**.

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**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.)

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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**

Use this procedure to define the security settings for your DocuSign Adapter connection.

1. Click **Configure Credentials**.

   **DocuSign OAuth Authorization Code Credentials** displays in the **Security Policy** field by default. This value cannot be changed. This policy supports the OAuth 2.0 resource owner password credentials grant.

2. Complete these fields:
   a. In the **Access Token URI** field, enter the URI used to retrieve the access token.

      The URI for production is https://demo.docusign.net/restapi/v2/oauth2/token. The URI for development is https://docusign.net/restapi/v2/oauth2/token.
b. In the **Integrator Key** field, enter the DocuSign integrator key. See [Prerequisites for Creating a Connection](#).
c. In the **Username** field, enter your DocuSign user name.
d. In the **Password** field, enter your DocuSign password.
e. In the **Confirm Password** field, enter your DocuSign password.

3. Click **OK**.
4. 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 DocuSign Adapter Connection to an Integration

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

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

Topics:
- Basic Info Page
- Invoke Operations Page
- Invoke Request 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 DocuSign Adapter invoke operation values for your integration.
The table provides definitions for the DocuSign Adapter API operations that can be performed on the target. These operations are listed on the DocuSign Adapter Operations page.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send an envelope or create a draft</td>
<td>Creates an envelope and sends it to recipients or saves it as a draft envelope.</td>
</tr>
<tr>
<td>Send an envelope from a template</td>
<td>Creates an envelope from an existing template and sends it or saves it as a draft envelope.</td>
</tr>
<tr>
<td>Retrieving envelope and documents</td>
<td>When the envelope status is completed, returns the signed document and associated certificate from the server.</td>
</tr>
<tr>
<td>Get envelope status changes</td>
<td>Returns envelope status changes for all envelopes.</td>
</tr>
<tr>
<td>Get individual envelope status</td>
<td>Returns the overall status for a single envelope.</td>
</tr>
<tr>
<td>Send draft envelope</td>
<td>Sends a single draft envelope.</td>
</tr>
<tr>
<td>Void envelope</td>
<td>VOID a single in-process envelope.</td>
</tr>
<tr>
<td>Modify draft envelope email subject and message for draft envelope</td>
<td>Modifies the email subject and message of draft envelopes.</td>
</tr>
<tr>
<td>Purge documents</td>
<td>Places envelope documents and metadata in a purge queue so they can be removed from DocuSign.</td>
</tr>
</tbody>
</table>

**Invoke Request Page**

Enter the DocuSign Adapter request parameters.

You can configure the request query parameters on the DocuSign Adapter Request Parameters page. This page is displayed when you select an operation that includes request parameters. The parameters that are displayed are dependent on the operation selected. For example, the parameters in the following table are available for the operation Get envelope status changes.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>transactionIds</td>
<td>Returns a comma separated list of envelope transactionIds when included in the query string. Returns a list of envelope transactionIds when included in the request_body. transactionIds are only valid in the DocuSign system for seven days.</td>
</tr>
<tr>
<td>status</td>
<td>The list of current statuses to include in the response. By default, all envelopes found are returned. If values are specified, then of the envelopes found, only those with the current status specified are returned in the results.</td>
</tr>
<tr>
<td>from_to_status</td>
<td>The status type checked for in the from_date/to_date period. If changed is specified, then envelopes that changed status during the period are returned. If created is specified, then envelopes created during the period are found. The default is changed.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>envelopeId</td>
<td>Specifies the envelope ID.</td>
</tr>
<tr>
<td>ac_status</td>
<td>Specifies the authoritative copy status for envelopes.</td>
</tr>
<tr>
<td>to_date</td>
<td>Returns items up to the specified date. If a value is not provided, the default search is to the current date.</td>
</tr>
<tr>
<td>custom_field</td>
<td>Specifies the envelope custom field name and value searched for in the envelope information.</td>
</tr>
<tr>
<td>from_date</td>
<td>Returns items on or after the specified date. If a value is not provided, the default search is the previous 30 days.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Query Parameters</strong></td>
<td>Filters the query parameters by name.</td>
</tr>
<tr>
<td><strong>Available Query Parameters</strong></td>
<td>Lists the available query parameters for the selected API operation.</td>
</tr>
<tr>
<td><strong>Selected Query Parameters</strong></td>
<td>Lists the selected query parameters for the selected API operation.</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><strong>Summary</strong></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>
Troubleshoot the DocuSign Adapter

Review the following topics to learn about troubleshooting issues with DocuSign 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"