Oracle® Cloud

Using the DocuSign Adapter with Oracle Integration

E85525-09
August 2020

Oracle Cloud Using the DocuSign Adapter with Oracle Integration,

E85525-09

Primary Author: Oracle Corporation

Contents

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

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:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	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 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

> **Note:**
>
> There are overall service limits for Oracle Integration. A service limit is the quota or allowance set on a resource. See Service Limits.

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 Connectivity Certification Matrix:

See Connectivity 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.

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 DocuSign Adapter Connection
2	Create the integration. When you do this, you add source and target connections to the integration.	Create Integrations and Add the DocuSign Adapter Connection to an Integration
3	Map data between the source connection data structure and the target connection data structure.	Map Data of *Using Integrations in Oracle Integration*
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 *Using Integrations in Oracle Integration*
5	Activate the integration.	Manage Integrations of *Using Integrations in Oracle Integration*
6	Monitor the integration on the dashboard.	Monitor Integrations of *Using Integrations in Oracle Integration*
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 *Using Integrations in Oracle Integration*

Step	Description	More Information
8	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors of *Using Integrations in Oracle Integration*

2

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 integrator key (client ID) and client secret are required to create a DocuSign Adapter connection. A DocuSign integrator key is a unique identifier for each DocuSign integration and 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 in to your DocuSign developer account at https://appdemo.docusign.com/home.
   a. If you do not have an account, create one here: https://www.docusign.com/developer-center#form-devaccount.
   b. Follow the steps to create and activate the account.
   c. Create a sandbox.
2. Click **Admin** in the upper right corner.
3. Click **API and Keys** in the left menu under **Integrations**.
4. Click **Add App / Integration Key**.
5. Enter an app name, and click **Add**.
6. Copy the integration key value (also known as the client ID). This value is required when configuring the integration key on the Connections page.

7. If you need to log into multiple accounts for a given login user, copy the API account ID. You specify this value when configuring the account ID on the Connections page.
8. Under **User Application**, select **Authorization Code Grant**.
9. Click **Add Secret Key**.
10. Copy the secret key value. This value is required when configuring the client secret on the Connections page.
11. In the **Additional Settings** section under **Redirect URIs**, click **Add URI** to enter your redirect URI:

    ```
    https://{OIC_HOST}:{OIC_SSL_PORT}/icsapis/agent/oauth/callback
    ```

    Replace `OIC_HOST` and `OIC_SSL_PORT` with values specific to your Oracle Integration environment.

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.

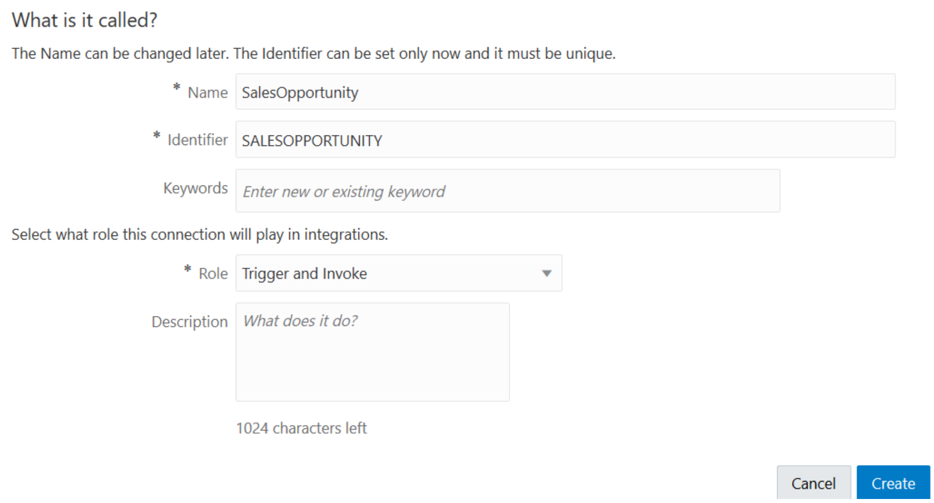
To create a connection in Oracle Integration:

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

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

1. Go to the **Security** section.

   The DocuSign Adapter supports the DocuSign OAuth Authorization Code Credentials security policy by default.

2. Enter the following details.

Element	Description
Client ID (Integrator Key)	Enter the DocuSign integrator key. The key identifies the client (the software requesting an access token) making the request. The value passed in this parameter must exactly match the value shown in the **API and Keys** section of your application in DocuSign. See Prerequisites for Creating a Connection.
Client Secret	Enter the client secret. The client secret authorizes the client (the software requesting an access token) making the request. This value must exactly match the value in the **API and Keys** section of your application in DocuSign. See Prerequisites for Creating a Connection.
Confirm Client Secret	Enter the client secret a second time.
Scope	Enter the space-delimited set of scopes to which you consented (for example, `signature extended`).
Instance Type	Select either **Production** or **Sandbox**. This is an optional field.
Account ID	Enter the account ID. This ID enables you to log into multiple accounts for a given login user. Obtain the value from the **API and Keys** section of your application in DocuSign. See Prerequisites for Creating a Connection. This is an optional field.

3. Click **Provide Consent**.
4. Log in as the user for the instance type that you selected in step 6.

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 connection uses a Web Services Description Language (WSDL) file.

If Your Connection...	Then...
Doesn't use a WSDL	The test starts automatically
Uses a WSDL	A dialog prompts you 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.

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.

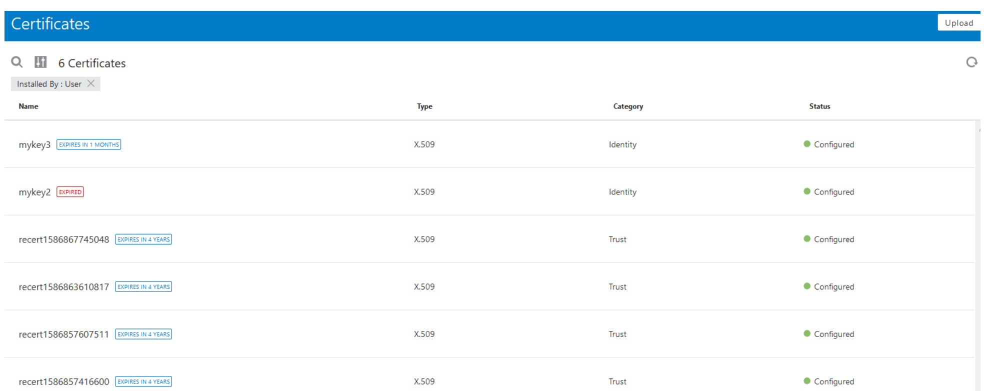
3. When complete, click **Save**, then click
.

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 left navigation pane, click **Home** > **Settings** > **Certificates**.
   All certificates currently uploaded to the trust
   store are displayed in the Certificates dialog. The
   link enables you to filter by name, certificate expiration date, status, type, category, and installation method (user-installed or system-installed). Certificates installed by the system cannot be deleted.



2. Click **Upload** at the top of the page.
   The Upload Certificate dialog box is displayed.
3. Enter an alias name and optional description.
4. In the **Type** field, select the certificate type. Each certificate type enables Oracle Integration to connect with external services.
   - **X.509 (SSL transport)**
   - **SAML (Authentication & Authorization)**
   - **PGP (Encryption & Decryption)**

X.509 (SSL transport)

1. Select a certificate category.

a. **Trust**: Use this option to upload a trust certificate.

   i. Click **Browse**, then select the trust file (for example, `.cer` or `.crt`) to upload.

b. **Identity**: Use this option to upload a certificate for two-way SSL communication.

   i. Click **Browse**, then select the keystore file (`.jks`) to upload.

   ii. Enter the comma-separated list of passwords corresponding to key aliases.

   iii. Enter the password of the keystore being imported.

c. Click **Upload**.

SAML (Authentication & Authorization)

1. Note that **Message Protection** is automatically selected as the only available certificate category and cannot be deselected. Use this option to upload a keystore certificate with SAML token support. Create, read, update, and delete (CRUD) operations are supported with this type of certificate.
2. Click **Browse**, then select the certificate file (`.cer` or `.crt`) to upload.
3. Click **Upload**.

PGP (Encryption & Decryption)

1. Select a certificate category. Pretty Good Privacy (PGP) provides cryptographic privacy and authentication for communication. PGP is used for signing, encrypting, and decrypting files. You can select the private key to use for encryption or decryption when configuring the stage file action.

   a. **Private**: Uses a private key of the target location to decrypt the file.

      i. Click **Browse**, then select the PGP file to upload.

      ii. Enter the PGP private key password.

   b. **Public**: Uses a public key of the target location to encrypt the file.

      i. Click **Browse**, then select the PGP file to upload.

      ii. In the **ASCII-Armor Encryption Format** field, select **Yes** or **No**. **Yes** shows the format of the encrypted message in ASCII armor. ASCII armor is a binary-to-textual encoding converter. ASCII armor formats encrypted messaging in ASCII. This enables messages to be sent in a standard messaging format. This selection impacts the visibility of message content. **No** causes the message to be sent in binary format.

      iii. From the **Cipher Algorithm** list, select the algorithm to use. Symmetric-key algorithms for cryptography use the same cryptographic keys for both encryption of plain text and decryption of cipher text.

   c. Click **Upload**.

3
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.

Element	Description
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.

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

Element	Description
Select Operation	Select the API operation to perform.

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`.

Parameter	Description
`transactionIds`	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.
`status`	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.
`from_to_status`	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`.
`envelopeId`	Specifies the envelope ID.

Parameter	Description
ac_status	Specifies the authoritative copy status for envelopes.
to_date	Returns items up to the specified date. If a value is not provided, the default search is to the current date.
custom_field	Specifies the envelope custom field name and value searched for in the envelope information.
from_date	Returns items on or after the specified date. If a value is not provided, the default search is the previous 30 days.

Element	Description
Query Parameters	Filters the query parameters by name.
Available Query Parameters	Lists the available query parameters for the selected API operation.
Selected Query Parameters	Lists the selected query parameters for the selected API operation.

Summary Page

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

Element	Description
Summary	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.

4 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”
```