



# Vertex® Tax Integration with SAP S/4HANA Cloud Public Edition

## Configuration Guide

July 2026

This guide describes the configuration steps required to manually install and set up the Vertex® Tax Integration with SAP S/4HANA Cloud for USA (for SAP S/4HANA Cloud Public Edition) with your Vertex tax solution. It also covers how to configure logging and view log files.

This guide is a supplement to the *External Sales and Use Tax Calculation (SAP\_COM\_0177) Configuration Guide*, which covers the steps needed to configure your SAP S/4HANA Cloud Public Edition system to call the Vertex tax integration flows. All relevant documentation for the integration is available at this URL:

<https://api.sap.com/package/VertexTaxIntegrationFlows/documents>

## Overview

Vertex integration flows are designed to integrate SAP S/4HANA Cloud Public Edition with Vertex solutions for tax calculation, posting, and jurisdiction determination.

This package runs in the SAP Integration Suite.

Transactions flow from SAP S/4HANA Cloud Public Edition through the Vertex integration flows to the Vertex tax solutions using the SOAP protocol as shown here:



## Prerequisites

Before configuring the Vertex Tax Links integration flow, ensure that the following prerequisites are met:

- You received the SAP Integration Suite and can access it.  
SAP Integration Suite links:
  - <https://www.sap.com/products/technology-platform/integration-suite.html>
  - <https://www.sap.com/products/technology-platform.html>
- You acquired a Vertex tax solution.
  - Vertex® O Series - <https://www.vertexinc.com/solutions/products/vertex-indirect-tax-o-series>
- You have the following Vertex tax solution account information, which is provided by Vertex:
  - Login username and password, or a Trusted ID
  - Endpoints for tax calculation and address verification
  - Company name that you registered with Vertex
  - *(Optional)* Vertex Address Cleansing

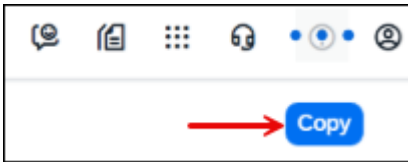
This licensed service from Vertex enables you to receive address verification functionality, which provides suggested addresses in the United States for customers when they add new addresses or update current addresses in the store.

## Installing the Vertex connector

Complete the following steps to copy the Vertex Integration package to your SAP Integration Suite tenant and install the Vertex connector:

1. Log in to your SAP Integration Suite and select **Discover > Integrations**.
2. Search for **Vertex**.
3. Select **Tax Integration with SAP S/4HANA Cloud for USA**.

- Click the **Copy** button to copy this package to your tenant.



## Configuring the Vertex connector

Configuring the Vertex connector is a three-part process:

- Configure the content packages (see page 3).
- Add your Vertex web service credentials (see page 9).
- Specify integration endpoints (see page 11).

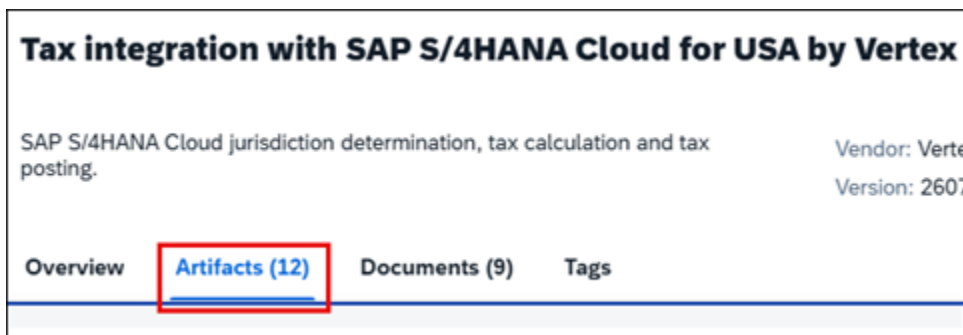
### Configure the content packages

- Access the Vertex integration in your SAP Integration Suite:
  - Select **Design > Integrations and APIs** on the main menu.
  - Search for Vertex.
- Select the Vertex package:



Tax integration with SAP S/4 HANA Cloud for USA by Vertex

- Click **Artifacts**.



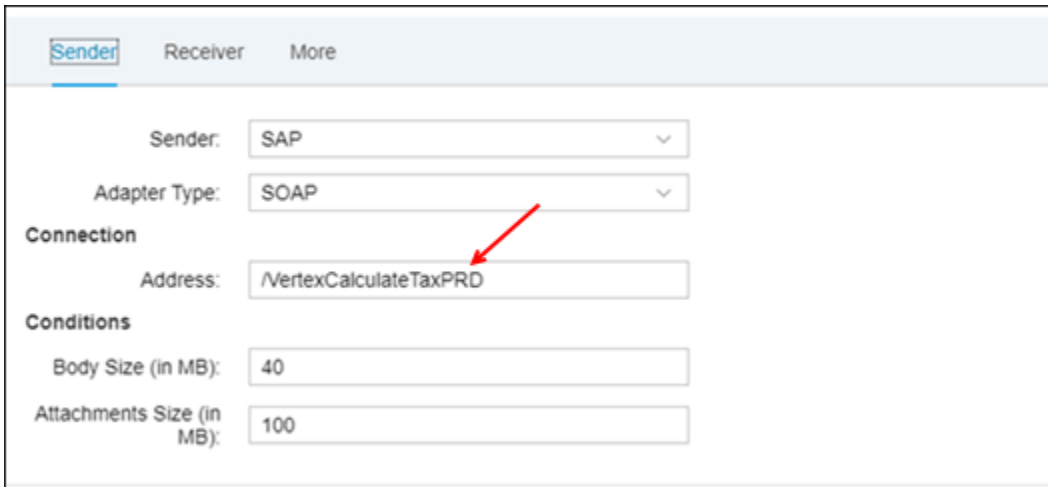
- Starting with the \_qa endpoints, click the Actions ellipses (...) for an integration flow and select **Configure**.



The Configure page for the selected integration flow displays with three tabs (**Sender**, **Receiver**, and **More**).

- On the **Sender** tab, verify that the specified address ends with either **QA** (testing) or **PRD** (production), depending on the type of integration flow.

This helps quickly identify which integration endpoint you are pointed to when inside the SAP Communication Arrangements.



The screenshot shows the 'Sender' tab configuration page. It has three tabs: 'Sender', 'Receiver', and 'More'. The 'Sender' tab is active. The configuration fields are as follows:

- Sender:** SAP (dropdown)
- Adapter Type:** SOAP (dropdown)
- Connection:**
  - Address:** /VertexCalculateTaxPRD (text field, with a red arrow pointing to the end of the text)
- Conditions:**
  - Body Size (in MB):** 40 (text field)
  - Attachments Size (in MB):** 100 (text field)

- On the **Receiver** tab, the address you enter depends on the receiver specified. Verify that the address (URL) is one of the following:
  - For Vertex - Calculate Taxes, Vertex - Post SAP Calculated Taxes, and Vertex - Post Vertex Calculated taxes, use the following address:

<https://s4hanaconnect.vertexsmb.com/vertex-ws/services/CalculateTax70>

| Sender                                                                                                                                       | Receiver | More |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------|------|
| <div>Receiver: <input type="text" value="Vertex"/></div> <div>Adapter Type: <input type="text" value="SOAP"/></div>                          |          |      |
| <div>Connection</div> <div>Address: <input type="text" value="https://s4hanaconnect.vertexsmb.com/vertex-ws/services/CalculateTax70"/></div> |          |      |

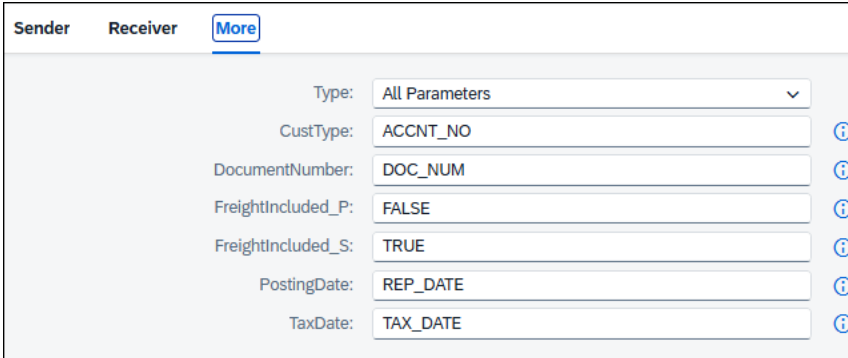
- For Vertex - Determine Jurisdiction Code, Vertex - Find Changed Tax Jurisdiction Codes, and Vertex - Lookup Changed Tax Jurisdiction Codes, use one of the following addresses:
  - <https://s4hanaconnect.vertexsmb.com/vertex-ws/services/LookupTaxAreas70> - This URL returns 1 jurisdiction code.
  - <https://calconnect.vertexsmb.com/vertex-ws/services/LookupTaxAreas70> - This URL returns 5 jurisdiction codes.

As a best practice, set lookup endpoints to the `s4hanaconnect` URL, and only change Vertex - Determine Jurisdiction Code when more than 1 result is required.

| Configure "Vertex - Determine Jurisdiction Code_qa"                                                                                                                                                           |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Sender                                                                                                                                                                                                        | Receiver |
| <div>Receiver: <input type="text" value="Vertex"/></div> <div>Adapter Type: <input type="text" value="SOAP"/></div>                                                                                           |          |
| <div>Connection</div> <div>Address: <input type="text" value="https://s4hanaconnect.vertexsmb.com/vertex-ws/services/LookupTaxAreas70"/></div> <div>Timeout (in ms): <input type="text" value="60000"/></div> |          |

- On the **More** tab, enter values for **CustType**, **DocumentNumber**, **FreightIncluded\_P**, **FreightIncluded\_S**, **PostingDate**, and **TaxDate**.

The substeps that follow describe the possible values for these fields.



The screenshot shows a configuration window with three tabs: 'Sender', 'Receiver', and 'More'. The 'More' tab is active. It contains several input fields with labels and values, and each field has an information icon (i) to its right.

| Field Label        | Value          |
|--------------------|----------------|
| Type:              | All Parameters |
| CustType:          | ACCNT_NO       |
| DocumentNumber:    | DOC_NUM        |
| FreightIncluded_P: | FALSE          |
| FreightIncluded_S: | TRUE           |
| PostingDate:       | REP_DATE       |
| TaxDate:           | TAX_DATE       |

- CustType** determines the source for the customer. You can avoid using custom code in the Cloud BAdI based on the value in this field.

The options are case sensitive. The text must exactly match one of the predefined valid values. If there is no exact match, the default value of `ACCNT_NO` is used.

The following table lists possible values for **CustType**:

| Value     | Description                                                                                                                                                                                                                                                                                                                                                    |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACCNT_NO  | ACCNT_NO is the default option. It is used if the <b>CustType</b> parameter is blank or contains an invalid value.<br><br>The integration flows get the value for customer from the <b>ACCNT_NO</b> field, which is populated from the Cloud BAdI.                                                                                                             |
| ACCNT_CLS | The integration flows get the value for the customer class from the ACCNT_CLS field, which is populated from the Cloud BAdI. The customer code field is not populated if this option is used.                                                                                                                                                                  |
| SHIP_TO   | Starting with version 1905, SAP completes a field in the request that contains the ship-to customer number. You can source the ship-to customer from this field by setting <b>CustType</b> to SHIP_TO.<br><br><i><b>Note:</b> If you are an existing customer and you implement this option, remove any custom Cloud BAdI code to source customer numbers.</i> |
| BILL_TO   | SAP completes a field in the request that contains the bill-to customer number. You can source the bill-to customer from this field by setting <b>CustType</b> to BILL_TO.<br><br><i><b>Note:</b> If you are an existing customer and you implement this option, remove any custom Cloud BAdI code to source customer numbers.</i>                             |
| SOLD_TO   | Starting with version 1905, SAP completes a field in the request that contains the sold-to customer number. You can source the sold-to customer from this field by setting <b>CustType</b> to SOLD_TO.<br><br><i><b>Note:</b> If you are an existing customer and you implement this option, remove any custom Cloud BAdI code to source customer numbers.</i> |

- b. **DocumentNumber** determines the source for the document number. The following table lists the possible values:

| Value   | Description                                                                                                                                                                                                                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DOC_NUM | Sources the document number from DOC_NUMBER in the request header. This is the default value. It is used if the <b>DocumentNumber</b> parameter is blank or contains an invalid value.<br>DOC_NUM is located in: <ul style="list-style-type: none"> <li>• UPDATE_HEADER in the Post Vertex call</li> <li>• FORCE_HEADER in the Post SAP call</li> </ul> |
| OTHER   | Sources the document number from SALES_DOC. <ul style="list-style-type: none"> <li>• For Post SAP, SALES_DOC is in:<br/>FORCE_ITEM/POPUP_FIELDS/TAX_POPUP_FIELDS_S/SALES_DOC</li> <li>• For Post Vertex, SALES_DOC is in:<br/>UPDATE_ITEM/POPUP_FIELDS/TAX_POPUP_FIELDS_S/SALES_DOC</li> </ul>                                                          |

- c. If the freight amount is included in the tax base amount from SAP, the values in **FreightIncluded\_P** (purchases) and **FreightIncluded\_S** (sales) specify whether these values are subtracted from the Product Line amount (TRUE) or not subtracted (FALSE).
- d. **PostingDate** determines the source for postingDate in the Vertex request for posting calls (billing documents, manual invoices, vendor invoices, and so forth).

The following table lists valid values for the **PostingDate** configuration parameter:

| Value                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REP_DATE                                             | REP_DATE is the default value for postingDate.<br>If the <b>PostingDate</b> parameter is blank or contains an invalid value, REP_DATE is used.                                                                                                                                                                                                                                                                                                                                                                                                             |
| TAX_DATE                                             | Sources postingDate from the tax date in the request header.<br>The tax date is in the following field in the request:<br>TAX_DATE                                                                                                                                                                                                                                                                                                                                                                                                                         |
| DOC_DATE                                             | Sources postingDate from the document date in the request header.<br>This option depends on the following field being populated in the request:<br>TAX_POPUP_FIELDS_S/DOC_DATE                                                                                                                                                                                                                                                                                                                                                                             |
| POS_DATE                                             | Sources postingDate from the posting date in the request header.<br>This option depends on the following field being populated in the request:<br>TAX_POPUP_FIELDS_S/POS_DATE                                                                                                                                                                                                                                                                                                                                                                              |
| SERV_DATE                                            | Sources postingDate from the service-rendered date in the request header.<br>This option depends on the following field being populated in the request:<br>TAX_POPUP_FIELDS_S/SERV_DATE                                                                                                                                                                                                                                                                                                                                                                    |
| FLEX_DATE2<br>FLEX_DATE3<br>FLEX_DATE4<br>FLEX_DATE5 | These options are available starting with the 2607 release.<br>To use one of these options, first populate one of these fields using the Cloud BAdI, and then specify the option in the <b>PostingDate</b> configuration parameter.<br>For one of these options to work, the corresponding field must be populated in the request:<br>FLEX_DATE2 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD037<br>FLEX_DATE3 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD038<br>FLEX_DATE4 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD039<br>FLEX_DATE5 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD040 |

- e. **TaxDate** determines the source for taxDate and documentDate in the Vertex request for calculation and posting calls. (The value for taxDate is always used for documentDate, too.)

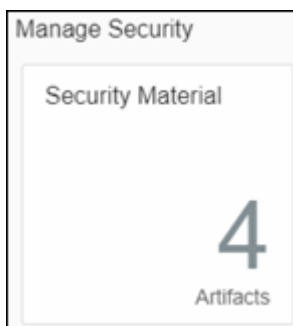
The following table lists valid values for the **TaxDate** configuration parameter:

| Value                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TAX_DATE                                             | TAX_DATE is the default value for taxDate and documentDate.<br>TAX_DATE is from the item's TAX_DATE field.<br>If the <b>TaxDate</b> parameter is blank or contains an invalid value, TAX_DATE is used.                                                                                                                                                                                                                                                                                                                                                 |
| DOC_DATE                                             | Sources taxDate and documentDate from the document date in the request.<br>The document date is in the following field in the request:<br>TAX_POPUP_FIELDS_S/DOC_DATE                                                                                                                                                                                                                                                                                                                                                                                  |
| POS_DATE                                             | Sources taxDate and documentDate from the posting date in the request.<br>The posting date is in the following field in the request:<br>TAX_POPUP_FIELDS_S/POS_DATE                                                                                                                                                                                                                                                                                                                                                                                    |
| SERV_DATE                                            | Sources taxDate and documentDate from the service-rendered date in the request.<br>The service-rendered date is in the following field in the request:<br>TAX_POPUP_FIELDS_S/SERV_DATE                                                                                                                                                                                                                                                                                                                                                                 |
| FLEX_DATE2<br>FLEX_DATE3<br>FLEX_DATE4<br>FLEX_DATE5 | These options are available starting with the 2607 release.<br>To use one of these options, first populate one of these fields using the Cloud BAdI, and then specify the option in the <b>TaxDate</b> configuration parameter.<br>For one of these options to work, the corresponding field must be populated in the request:<br>FLEX_DATE2 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD037<br>FLEX_DATE3 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD038<br>FLEX_DATE4 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD039<br>FLEX_DATE5 = TAX_POPUP_FIELDS_C/EXTENSION_FIELD040 |

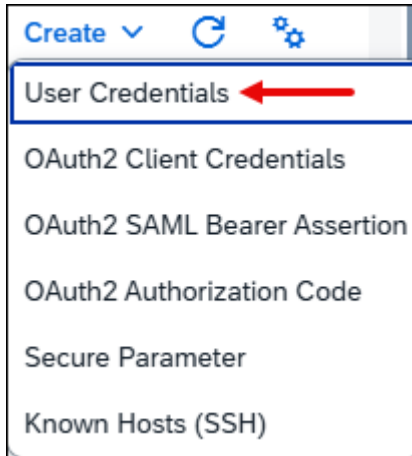
## 8. Click **Deploy**.

## Add your Vertex web service credentials

- From the main menu of your SAP Integration Suite, select **Monitor > Integrations and APIs**.
- Select the **Security Material** tile in the Manage Security section.

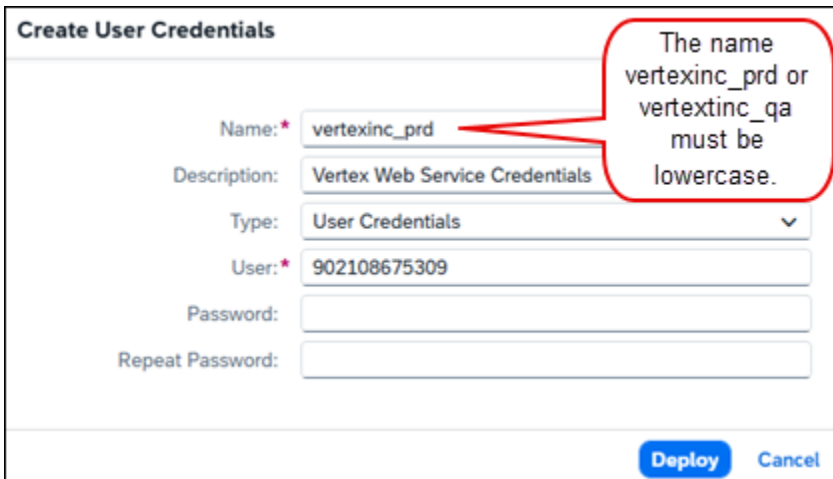


- On the Manage Security Material page, click **Create** to create a new Security Material entry, and select **User Credentials**.



The Create User Credentials dialog box displays.

- Fill in the user credentials.



The screenshot shows the 'Create User Credentials' dialog box. The fields are filled as follows:

- Name: vertexinc\_prd
- Description: Vertex Web Service Credentials
- Type: User Credentials
- User: 902108675309
- Password: (empty)
- Repeat Password: (empty)

A red callout box points to the 'Name' field with the text: "The name vertexinc\_prd or vertexinc\_qa must be lowercase."

- Refer to the following table to complete the fields in the Create User Credentials dialog box:

| Field name      | Instructions for field entry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name            | Enter <code>vertexinc_qa</code> or <code>vertexinc_prd</code> , depending on whether this user is being created for the testing environment or the production environment. Use lowercase.                                                                                                                                                                                                                                                                                                                                |
| Description     | Enter <code>Vertex Web Service Credentials</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Type            | Select <b>User Credentials</b> from the dropdown list.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| User            | Do one of the following, depending on your Vertex Tax Calculation Engine: <ul style="list-style-type: none"> <li>Vertex O Series Cloud or Vertex Cloud: Enter your Vertex Trusted ID, provided by Vertex.</li> <li>Vertex O Series Cloud hosted on Microsoft Azure: Enter TRUSTEDID. (This environment does not support using the actual trusted ID in the <b>User</b> field.)</li> <li>Vertex O Series On-Demand or Vertex O Series On-Premise: Enter the O Series username with the API user role assigned.</li> </ul> |
| Password        | Do one of the following, depending on your Vertex Tax Calculation Engine: <ul style="list-style-type: none"> <li>Vertex O Series Cloud or Vertex Cloud: Leave this field blank.</li> <li>Vertex O Series Cloud hosted on Azure: Enter your Vertex Trusted ID, provided by Vertex.</li> <li>Vertex O Series On-Demand or Vertex O Series On-Premise: Enter the O Series password for the O Series username specified in User.</li> </ul>                                                                                  |
| Repeat Password | Use the same entry as in the Password field.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

6. Click **Deploy**.

## Specify integration endpoints in SAP

During installation, 12 Vertex integration flows are supplied: six for QA (testing) and six for PRD (production). During the SAP S/4HANA Cloud configuration, you must enter this information for the communication arrangement outlined in SAP Note 2498888.

### How to find endpoint URLs

To find the endpoint URL for a deployed Vertex integration:

1. In SAP Integration Suite, select **Monitor > Integrations and APIs** on the main menu.
2. Go to **All** under **Manage Integration Content**.
3. Search for Vertex.
4. Click an integration.

The endpoint URL is in the Endpoints section of the window.

## Example

The following example shows some integration endpoints.

- The endpoints shown are for the QA system. Production systems have `PRD` at the end of each path.
- The Path for each endpoint is in the following format:  
`/cxf/ConnectionAddress`, where *ConnectionAddress* is the value entered in the Connection Address field of the sender when the integration was configured.
- The Service URL matches the endpoint of each integration if configured correctly.

| Outbound Services                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <div> <div>External Tax - Determine Tax Jurisdiction Codes</div> <div> <div>Service Status: <input checked="" type="checkbox"/> Active</div> <div>Application Protocol: SOAP</div> <div>Port: 443</div> </div> <div> <div>Path: /cxfl/VertexDetermineJurisdictionQA</div> <div>Service URL: https://[redacted]us1.hana.ondemand.com:443/c...</div> <div>Use WSRM: <input type="checkbox"/></div> </div> </div> | <a href="#">Download WSDL/Service Metadata</a> <a href="#">Check Connection</a> |
| <div> <div>External Tax - Calculate Taxes</div> <div> <div>Service Status: <input checked="" type="checkbox"/> Active</div> <div>Application Protocol: SOAP</div> <div>Port: 443</div> </div> <div> <div>Path: /cxfl/VertexCalculateTaxQA</div> <div>Service URL: https://[redacted]us1.hana.ondemand.com:443/c...</div> <div>Use WSRM: <input type="checkbox"/></div> </div> </div>                           | <a href="#">Download WSDL/Service Metadata</a>                                  |
| <div> <div>External Tax - Update Tax Documents</div> <div> <div>Service Status: <input checked="" type="checkbox"/> Active</div> <div>Application Protocol: SOAP</div> <div>Port: 443</div> </div> <div> <div>Path: /cxfl/VertexUpdateTaxQA</div> <div>Service URL: https://[redacted]us1.hana.ondemand.com:443/c...</div> <div>Use WSRM: <input type="checkbox"/></div> </div> </div>                         | <a href="#">Download WSDL/Service Metadata</a>                                  |
| <div> <div>External Tax - Force Update Tax Documents</div> <div> <div>Service Status: <input checked="" type="checkbox"/> Active</div> <div>Application Protocol: SOAP</div> <div>Port: 443</div> </div> <div> <div>Path: /cxfl/VertexForceTaxQA</div> <div>Service URL: https://[redacted]us1.hana.ondemand.com:443/c...</div> <div>Use WSRM: <input type="checkbox"/></div> </div> </div>                    | <a href="#">Download WSDL/Service Metadata</a>                                  |
| <div> <div>External Tax - Get Changed Jurisdiction Code List</div> <div> <div>Service Status: <input checked="" type="checkbox"/> Active</div> <div>Application Protocol: SOAP</div> <div>Port: 443</div> </div> <div> <div>Path: /cxfl/VertexFindChangedTXJCDQA</div> <div>Service URL: https://[redacted]us1.hana.ondemand.com:443/c...</div> <div>Use WSRM: <input type="checkbox"/></div> </div> </div>    | <a href="#">Download WSDL/Service Metadata</a>                                  |
| <div> <div>External Tax - Mass Redefine Tax Jurisdiction Code</div> <div> <div>Service Status: <input checked="" type="checkbox"/> Active</div> <div>Application Protocol: SOAP</div> <div>Port: 443</div> </div> <div> <div>Path: /cxfl/VertexMassTXJCDLookupQA</div> <div>Service URL: https://[redacted]us1.hana.ondemand.com:443/c...</div> <div>Use WSRM: <input type="checkbox"/></div> </div> </div>    | <a href="#">Download WSDL/Service Metadata</a>                                  |

## Log Levels for Vertex integration flows

You can set the Log Level for Vertex integration flows depending on the level of detail you want to include in the log:

- **None** provides no logging.
- **Info** provides minimal detail but provides relatively faster performance compared to more detailed logging options. This is the default setting.
- **Debug** provides processing steps, error locations, and other details. It does not include the payload.
- **Trace** provides every detail about a transaction including the payload (XML, RFC, headers, and so forth) throughout the call.

Vertex recommends setting Log Level to Trace when troubleshooting requests that failed or have errors, and for providing Vertex Support with details if you request assistance.

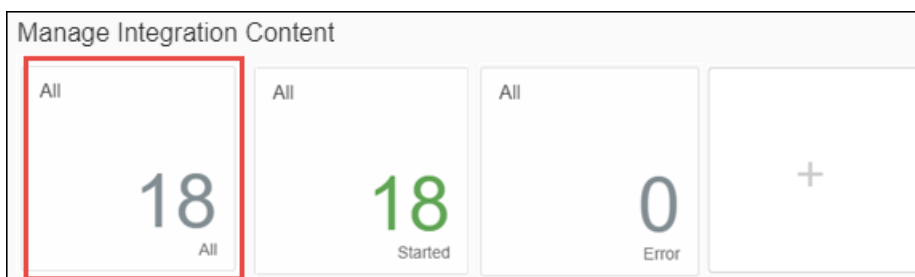
## Changing Log Level to Trace for more details

If the information contained in debug logs is not enough, you can increase the logged details by using Trace Log Level. This level logs every detail about a transaction including the payload (XML, RFC, headers, and so forth) throughout the call.

**Caution:** *Trace is enabled for 10 minutes only and should not be set in a production system unless absolutely required. Processing times and tenant log storage are affected by this log level.*

Complete the following steps to change the Log Level for Vertex integration flows to Trace:

1. Access your SAP Integration Suite.
2. From the main menu, select **Monitor > Integrations and APIs**.
3. Scroll down until you see **Manage Integration Content** and select the first **All** tile.

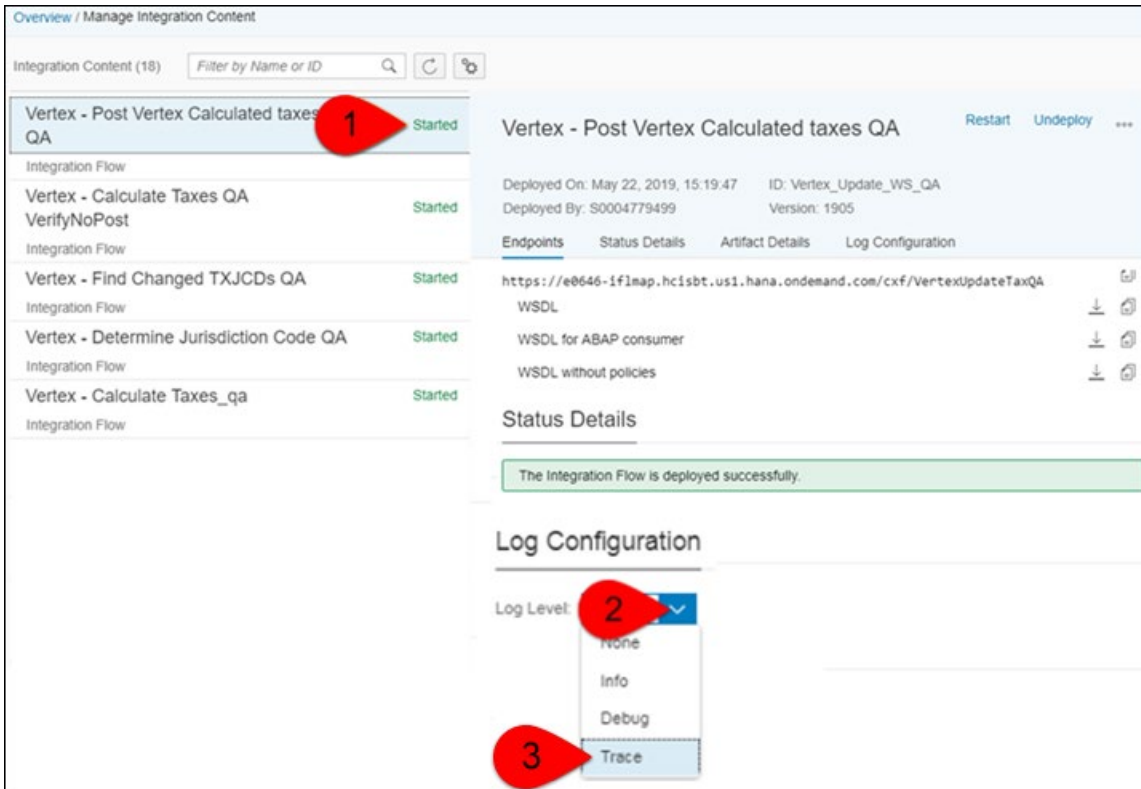


4. Select the integration for which you require the Trace log level.

You can search for the Vertex integrations using the search bar at the top.

5. Select **Trace** from the **Log Configuration** dropdown list.

The numbered callouts in the following figure illustrate the process for changing the value in the Log Level field for one integration.



## Viewing the message processing logs

Vertex integration flows include standard and enhanced logging.

- Standard logging includes information about the transaction as it flows through the Vertex integration flow process. Standard logging information displays in a text view that you can download.

You can view standard logging information regardless of whether Log Level is set to Info, Debug, or Trace.

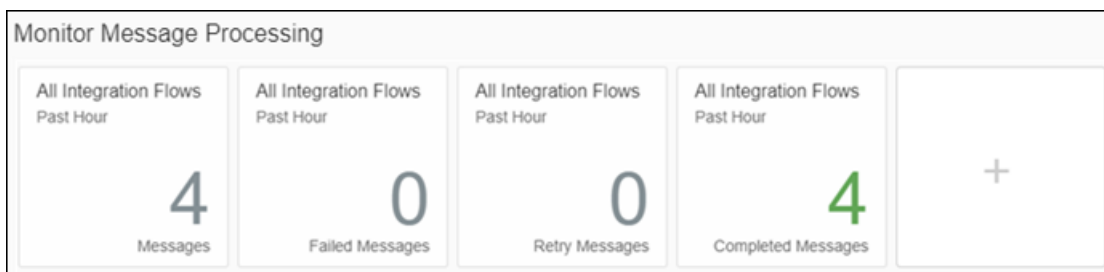
- Enhanced logging information displays in an interactive view.

You can view enhanced logging information when Log Level is set to Debug or Trace.

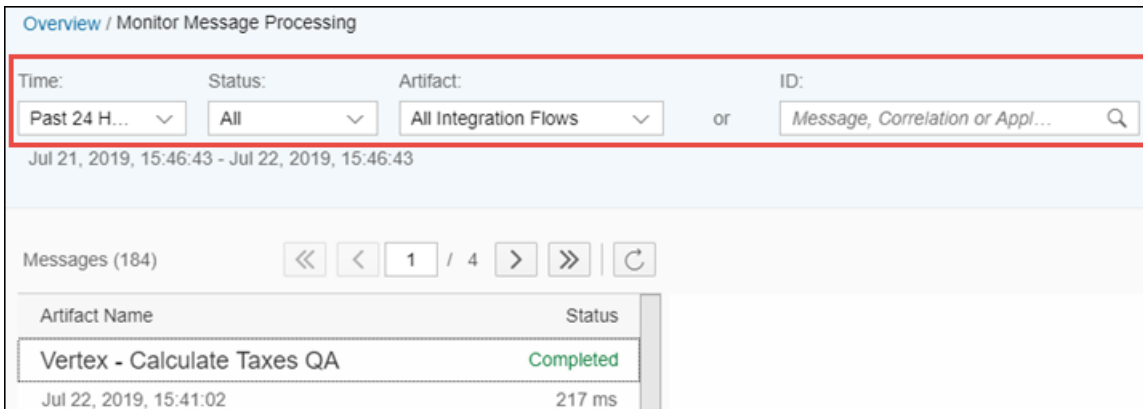
For information about the levels of logging available, refer to Log Levels for Vertex integration flows (see page 14).

To view the log:

1. Access your SAP Integration Suite.
2. From the main menu, select **Monitor > Integrations and APIs**.
3. Scroll down until you see **Monitor Message Processing** and select one of the tiles:
  - To view all messages, select the **Messages** tile.
  - To view failed, retry, or completed messages, select the relevant tile.



4. Use the filters to determine which transactions to display.



Overview / Monitor Message Processing

Time: Past 24 H... Status: All Artifact: All Integration Flows or ID: Message, Correlation or Appl...

Jul 21, 2019, 15:46:43 - Jul 22, 2019, 15:46:43

Messages (184) << < 1 / 4 > >>

| Artifact Name               | Status    |
|-----------------------------|-----------|
| Vertex - Calculate Taxes QA | Completed |

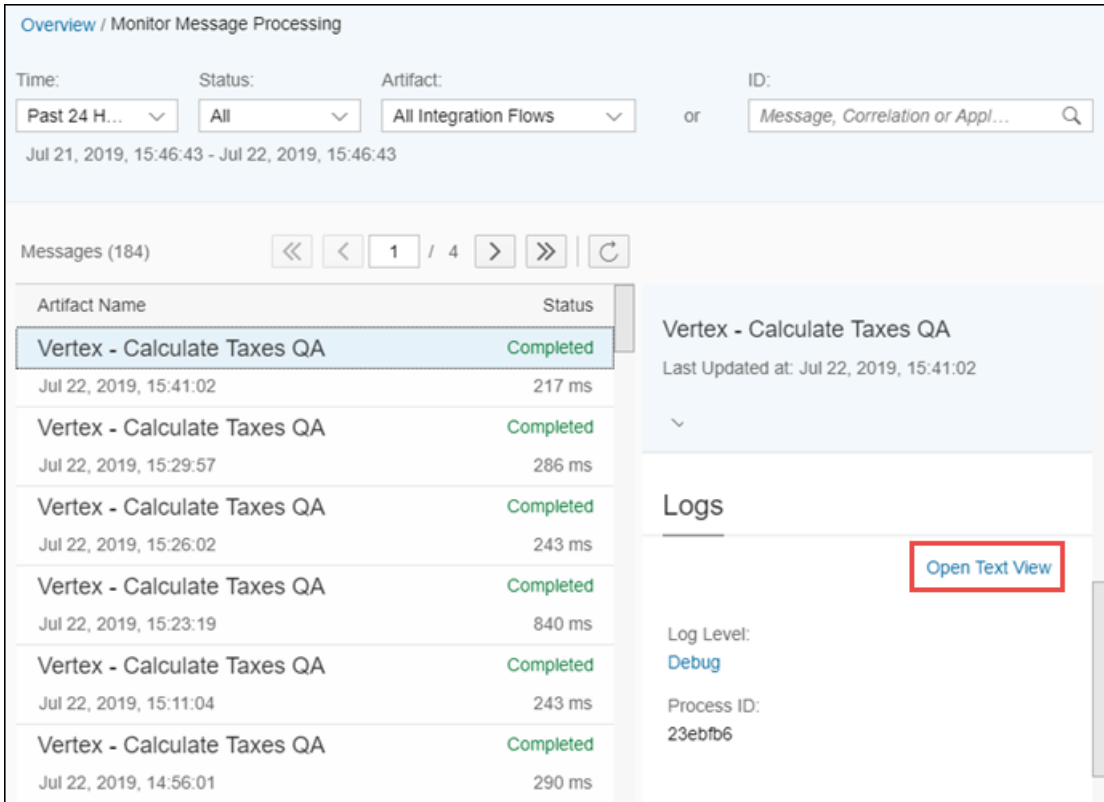
Jul 22, 2019, 15:41:02 217 ms

5. Do one of the following:
  - To view the log in a text file, continue to Option 1: Viewing standard logging information in a text view (see page 17).
  - To view details about specific steps during processing, including the SAP request and response as well as the O Series XML request and response, continue to Option 2: Displaying enhanced logging information in an interactive view (see page 18).

## Option 1: Viewing standard logging information in a text view

Continuing from the procedure in Viewing the message processing logs (see page 15):

1. Select one of the transactions from the **Messages** list and scroll down to the **Logs** section.



The screenshot shows the 'Overview / Monitor Message Processing' interface. At the top, there are filters for Time (Past 24 H...), Status (All), Artifact (All Integration Flows), and ID (Message, Correlation or Appl...). Below these filters, a date range is shown: Jul 21, 2019, 15:46:43 - Jul 22, 2019, 15:46:43.

The main section displays a list of messages. The first message is selected, showing details for 'Vertex - Calculate Taxes QA' with a status of 'Completed' and a duration of 217 ms. The log level is set to 'Debug' and the process ID is '23ebfb6'.

| Artifact Name               | Status    |
|-----------------------------|-----------|
| Vertex - Calculate Taxes QA | Completed |
| Vertex - Calculate Taxes QA | Completed |
| Vertex - Calculate Taxes QA | Completed |
| Vertex - Calculate Taxes QA | Completed |
| Vertex - Calculate Taxes QA | Completed |
| Vertex - Calculate Taxes QA | Completed |
| Vertex - Calculate Taxes QA | Completed |

The 'Logs' section on the right shows the log level 'Debug' and the process ID '23ebfb6'. A red box highlights the 'Open Text View' button.

2. Click **Open Text View** to view the log.

- If you need support, download the log file. To download the log file, click **Download** on the Log page.

Overview / Monitor Message Processing / Message Processing Log Attachments

Artifact Name: Vertex - Calculate Taxes QA      Status: Completed      Processing Time: 217 ms  
Last Updated at: Jul 22, 2019, 15:41:02      Log Level: Debug

[Log](#)

[Download](#)

Message Processing Log:

```

StartTime      = Mon Jul 22 19:41:02.476 UTC 2019
StopTime       = Mon Jul 22 19:41:02.693 UTC 2019
OverallStatus  = COMPLETED
    
```

## Option 2: Displaying enhanced logging information in an interactive view

Continuing with the procedure in Viewing the message processing logs (see page 15):

- Select one of the transactions that failed in the **Messages** list and click the **Logs** tab to get to the Logs section.

Overview / Monitor Message Processing

Time:  Status:  Artifact:  or

Jul 30, 2019, 09:12:55 - Jul 30, 2019, 10:12:55

Messages (14)    / 1

| Artifact Name                           | Status    | Processing Time |
|-----------------------------------------|-----------|-----------------|
| Vertex - Calculate Taxes QA             | Completed | 236 ms          |
| Vertex - Calculate Taxes QA             | Completed | 63 ms           |
| Vertex - Calculate Taxes QA             | Completed | 70 ms           |
| Vertex - Calculate Taxes QA             | Completed | 220 ms          |
| Vertex - Determine Jurisdiction Code QA | Failed    | 1 sec 494 ms    |
| Vertex - Determine Jurisdiction Code QA | Completed |                 |

**Vertex - Determine Jurisdiction Code QA**  
Last Updated at: Jul 30, 2019, 09:50:38

Status Properties **Logs**

[Open Text View](#)

Trace data is removed after the configured retention time, typically 1 hour.

Log Level: [Trace](#)

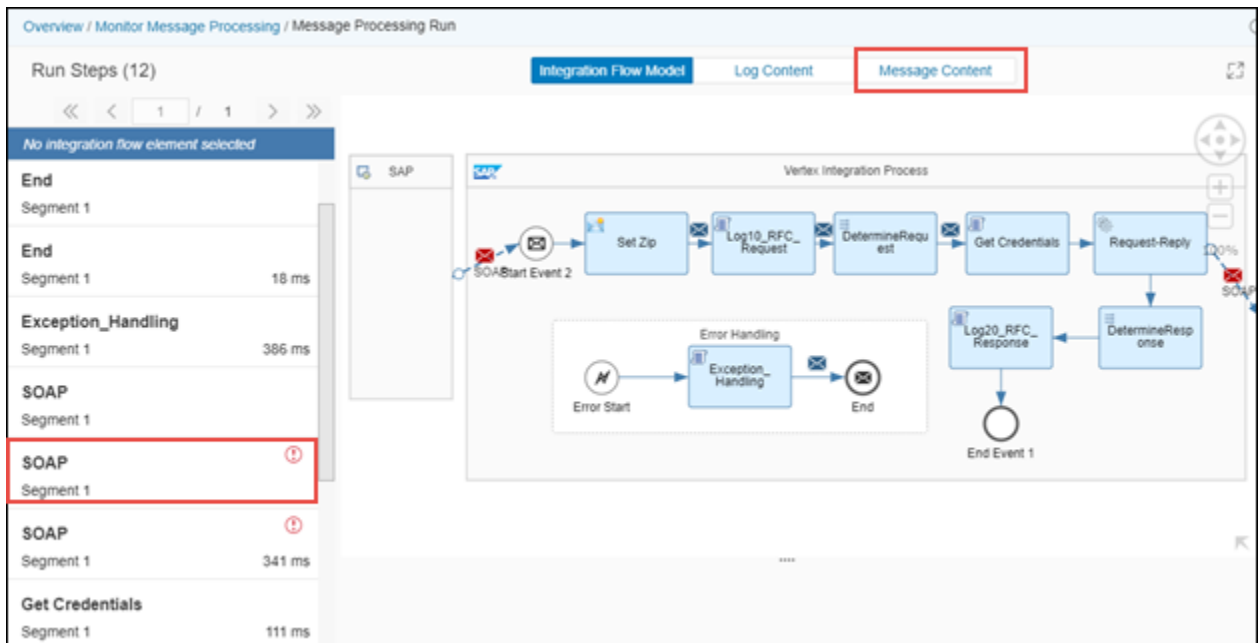
Process ID: 4ffca13

2. Click the link for the selected Log Level, either **Debug** or **Trace**. (No link is available for the Info log level.)
3. Select a step to view its logged details.

This view shows execution times and individual tasks. You can switch between the following views:

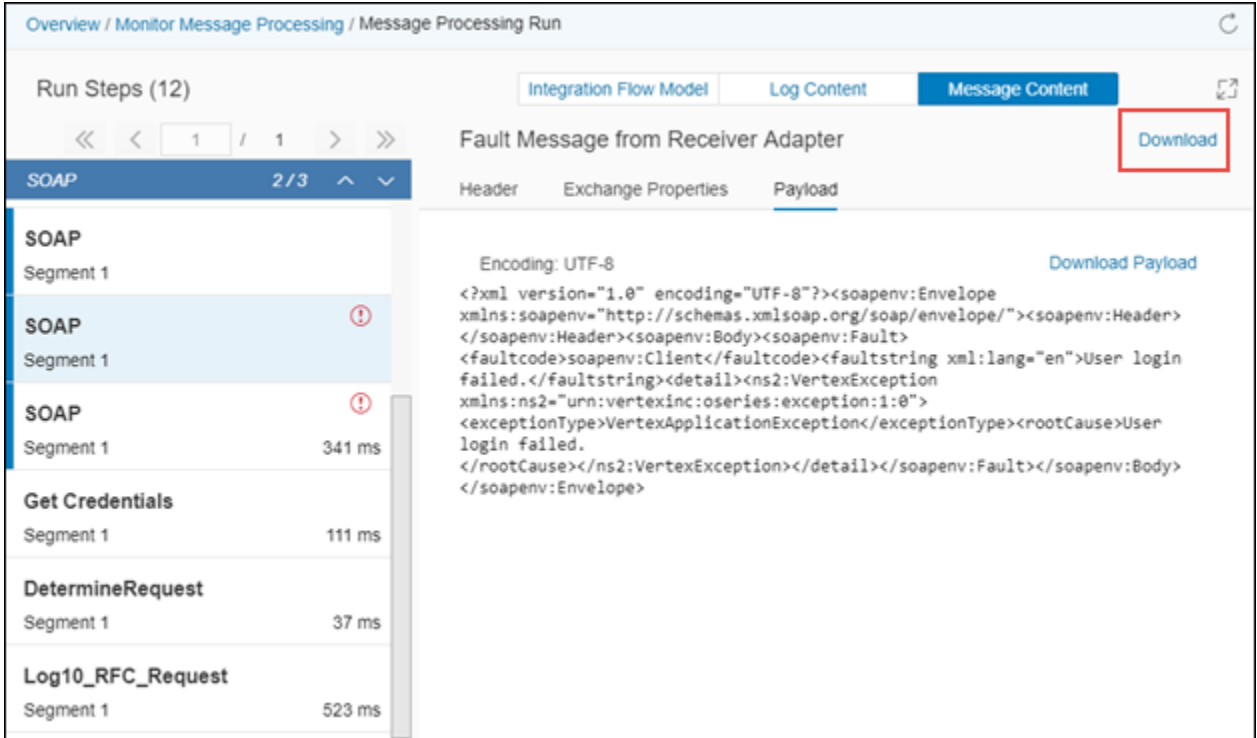
- Integration Flow Model
- Log Content
- Message Content (available only for the Trace log level; shows the header, payload, and exchange properties).

**Note:** Steps with errors show .



4. If Log Level is set to Trace, click **Message Content** to view the details of the step as follows:
  - The **Header** tab shows the headers for the step.
  - The **Exchange Properties** tab shows properties such as endpoint and credential information.
  - The **Payload** tab displays the message payload, or in the example shown, the XML error response from Vertex.

To download the information on all tabs, click **Download**. To download only the payload, click **Download Payload** on the **Payload** tab.



Overview / Monitor Message Processing / Message Processing Run

Run Steps (12)

Integration Flow Model Log Content Message Content

Fault Message from Receiver Adapter

Header Exchange Properties Payload

Encoding: UTF-8 Download Payload

```
<?xml version="1.0" encoding="UTF-8"?><soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"><soapenv:Header>
</soapenv:Header><soapenv:Body><soapenv:Fault>
<faultcode>soapenv:Client</faultcode><faultstring xml:lang="en">User login
failed.</faultstring><detail><ns2:VertexException
xmlns:ns2="urn:vertexinc:oseries:exception:1:0">
<exceptionType>VertexApplicationException</exceptionType><rootCause>User
login failed.
</rootCause></ns2:VertexException></detail></soapenv:Fault></soapenv:Body>
</soapenv:Envelope>
```

## Contacting Vertex

Contact details depend on whether you are integrating with Vertex Cloud or Vertex O Series as follows:

- If you are integrating with Vertex Cloud, contact Vertex at <https://community.vertexinc.com>.
- If you are integrating with Vertex O Series:
  - To contact Vertex about technical support, account services, or training, go to [www.vertexinc.com/contact-us](http://www.vertexinc.com/contact-us).
  - To access technical information about your Vertex tax solution, go to <https://community.vertexinc.com>.
  - To contact Vertex by phone: 1.800.281.1900.