

Oracle® Cloud

Using the Shopify Adapter with Oracle Integration



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Preface

This guide describes how to configure the Shopify 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 Shopify 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

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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.
<i>italic</i>	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 Shopify Adapter

Review the following conceptual topics to learn about the Shopify Adapter and how to use it as a connection within an integration in Oracle Integration. A typical workflow of adapter and integration tasks is also provided.

Topics:

- [Shopify Adapter Capabilities](#)
- [Shopify Adapter Restrictions](#)
- [What Application Version Is Supported?](#)
- [Workflow to Create and Add a Shopify Adapter Connection to an Integration](#)

Shopify Adapter Capabilities

Shopify is a cloud-based, e-commerce platform that enables sellers to start, grow, and manage a business. The Shopify Adapter enables you to design, set up, and manage stores across multiple sales channels including mobile, social media, web, online marketplaces, and so on. The Shopify Adapter enables you to create an integration with a Shopify application. You can configure the Shopify Adapter as a trigger and an invoke connection in an integration in Oracle Integration.

The Shopify Adapter provides the following benefits:

- Provides invoke (target) connection support for performing various types of operations against objects from the following modules:
 - Customers
 - Discounts
 - Inventory
 - Metafields
 - Orders
 - Plus
 - Products
 - Sales Channel
 - Shipping and Fulfillment
 - Shopify Payments
 - Store Properties
- Provides invoke (target) connection support for performing the following types of actions against the selected object and operation:
 - Create Information (create records in Shopify)
 - Query Information (get records from Shopify)

- Update Information (update records in Shopify)
- Delete Information (delete records from Shopify)
- Provides trigger (source) connection support for performing various types of actions against events from the following modules:
 - Customers
 - DeliveryProfiles
 - FulfillmentEvents
 - Fulfillments
 - Inventory
 - Orders
 - Products
- Supports fetching the presentment prices for the product variants and current exchange adjustment data for the order transactions. The Shopify Adapter exposes the required custom HTTP headers for the above use cases.
- Supports exposing the store name for all the business events received. This enables the integration developer to identify the event source.
- Supports Shopify APIs protected using Basic Authentication and the Shopify Security Policy.

The Shopify Adapter is one of many predefined adapters included with Oracle Integration. You can configure the Shopify Adapter as a trigger and an invoke connection in an integration in Oracle Integration.

Shopify Adapter Restrictions

Note the following Shopify Adapter restriction.

All Shopify APIs are rate-limited. These types of limits help Shopify to ensure platform stability for all. The request-based limits method is used by Shopify's REST Admin API for rate-limiting. The standard limit for Shopify's REST Admin API is 2 requests/second (that is, only two requests per second are allowed).



Note:

There are overall service limits with Oracle Integration. A service limit is the quota or allowance set on a resource. See [Service Limits](#).

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](#).

Workflow to Create and Add a Shopify 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 the adapter tasks and the overall integration tasks, and provides links to instructions for each step.

Step	Description	More Information
1	Access Oracle Integration.	Go to <code>https://instance_name/ic/home</code>
2	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 Shopify Adapter Connection
3	Create the integration. When you do this, you add trigger (source) and invoke (target) connections to the integration.	Create Integrations in <i>Using Integrations in Oracle Integration</i> and Add the Shopify Adapter Connection to an Integration
4	Map data between the trigger connection data structure and the invoke connection data structure.	Map Data in <i>Using Integrations in Oracle Integration</i>
5	(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 in <i>Using Integrations in Oracle Integration</i>
6	Activate the integration.	Activate Integrations in <i>Using Integrations in Oracle Integration</i>
7	Monitor the integration on the dashboard.	Monitor Integrations in <i>Using Integrations in Oracle Integration</i>
8	Track payload fields in messages during runtime.	Assign Business Identifiers for Tracking Fields in Messages and Manage Business Identifiers for Tracking Fields in Messages in <i>Using Integrations in Oracle Integration</i>
9	Manage errors at the integration level, connection level, or specific integration instance level.	Manage Errors in <i>Using Integrations in Oracle Integration</i>

2

Create a Shopify 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](#)

Prerequisites for Creating a Connection

Before you can create a connection with the Shopify Adapter, you must satisfy the following prerequisites:

- Create a private application on the Shopify platform.
- Obtain the Shopify API credentials (API key and password) and shared secret.

Create a Private Application

To create a private application in Shopify, you use the Shopify administration console. When you save your private application, Shopify automatically generates API credentials. You'll use these credentials when you configure security for your Shopify Adapter connection.

To create a private application in Shopify:

1. Sign in to the Shopify administration console using the following URL:

```
https://hostname.domain_name.com/admin
```

2. In the navigation pane, click **Apps**.
3. Click the **Manage private apps** link.
4. In the **App details** section, enter a name for your private application and a valid email address.
5. In the **Admin API** section, click **Review disabled Admin API permissions** and then select the **Read and write** permission from the dropdown for the data this application can access. See the following table for the required permissions.

Data	Permission
Customer details and customer groups	Read and write
Orders, transactions and fulfillments	Read and write
Products, variants and collections	Read and write
Product information	Read and write

Data	Permission
Order editing	Read and write
Locations	Read and write
Inventory	Read and write
Draft orders	Read and write
Fulfillment services	Read and write
Assigned fulfillment orders	Read and write
Merchant managed fulfillment orders	Read and write
Third party fulfillment orders	Read and write
Shipping rates, countries, and provinces	Read and write
Discounts - PriceRule REST and GraphQL AP	Read and write
Resource feedback	Read and write

6. Click **Save**, and then click **I understand, create the app**.

Obtain the Shopify API Credentials and Shared Secret

When you save your private application, Shopify automatically generates an API key, a password, and a shared secret.

To get the values for your API credentials and shared secret:

1. Open the private application that you created and saved.
2. Scroll to the **Admin API** section.
3. Copy the values for your API key, password, and shared secret.

You'll need to enter those values in the Credentials dialog when you configure security for your Shopify Adapter connection in Oracle Integration. See [Configure Connection Security](#).

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.)

- 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.

- In the Create Connection dialog, enter the information that describes this connection.

What is it called?

The Name can be changed later. The Identifier can be set only now and it must be unique.

* Name

* Identifier

Keywords

Select what role this connection will play in integrations.

* Role

Description

1024 characters left

- 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).
 - Enter optional keywords (tags). You can search on the connection keywords on the Connections page.
 - 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.
 - Enter an optional description of the connection.
- 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 Properties

Enter connection information so your application can process requests.

- Go to the **Connection Properties** section.

2. Enter your login credentials:
 - a. In the **Hostname** field, enter the Shopify host name. The Shopify host name appears in the Shopify home URL. For example, `https://hostname.myshopify.com`.
 - b. In the **Shopify REST API Version** field, enter the REST API version.

Configure Connection Security

Configure security for your Shopify Adapter connection.

1. Go to the **Security** section.
2. From the **Security Policy** list, select the security policy.
 - **Basic Authentication**
 - **Shopify Security Policy**
3. If you select **Basic Authentication**:
 - a. In the **Username** field, enter the API key that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - b. In the **Password** field, enter the password that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - c. In the **Confirm Password** field, re-enter the password a second time for confirmation.

 **Note:**

The **Basic Authentication** security policy can only be used for invoke connections.

4. If you select **Shopify Security Policy**:
 - a. In the **Username** field, enter the API key that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - b. In the **Password** field, enter the password that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - c. In the **Confirm Password** field, re-enter the password a second time for confirmation.
 - d. In the **Shared secret** field, enter the shared secret that you obtained after performing the prerequisite steps. See [Prerequisites for Creating a Connection](#).
 - e. In the **Confirm Shared secret** field, re-enter the shared secret a second time for confirmation.

 **Note:**

- The **Shopify Security Policy** can be used for invoke and trigger connections.
- The **Shared secret** and **Confirm Shared secret** fields are not marked with an asterisk (*). This incorrectly implies that these fields are not mandatory. When you configure this security policy for a trigger connection, these fields are mandatory.

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	<p>A dialog prompts you to select the type of connection testing to perform:</p> <ul style="list-style-type: none"> • 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



3

Add the Shopify Adapter Connection to an Integration

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

The following topics describe the wizard pages that guide you through configuration of the Shopify Adapter as a trigger and an invoke in an integration.

Topics:

- [Basic Info Page](#)
- [Trigger Events Page](#)
- [Invoke Actions 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.

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 hyphens in the name. You can't include the following characters: <ul style="list-style-type: none">• No blank spaces (for example, My Inbound Connection)• No special characters (for example, #;83& or righ(t)now4) except underscores and hyphens• No 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.

Trigger Events Page

On the Trigger Events page in the Adapter Endpoint Configuration Wizard, select the modules and associated events for which to receive notifications.

Element	Description
Select Module	Select the module: <ul style="list-style-type: none"> • Customers: Configures customers and customer-related business events such as Customer creation/update/enable/disable/delete. • DeliveryProfiles: Configures delivery profiles and delivery profile-related business events such as DeliveryProfile create/delete/update. • FulfillmentEvents: Configures fulfillment events and fulfillment event-related business events such as FulfillmentEvents create/update. • Fulfillments: Configures fulfillments and fulfillment-related business events such as Fulfillment create/update. • Inventory: Configures inventory and inventory-related business events such as Inventory Level update. • Orders: Configures orders and order-related business events such as Order creation/edit/update/deletion/cancellation, Order payment, Order fulfillment/partial fulfillment, Transactions create, and Refund create. • Products: Configures products and product-related business events such as Product creation/update/deletion.
Select Event	Select an event name, such as Customer creation. The events available for selection are based on the module selected.
Filter by Module Name	Type the initial letters of the module name to filter the display of names in the list.
Filter by Event Name	Type the initial letters of the event name to filter the display of names in the list.

Invoke Actions Page

On the Actions page in the Adapter Endpoint Configuration Wizard, select the action to perform.

Element	Description
Select Action	<ul style="list-style-type: none"> • Query: Retrieves information from the Shopify application corresponding to the selected object and operation. • Create: Creates records such as Product, Order, and so on in the Shopify application. • Update: Updates the existing records in the Shopify application. • Delete: Deletes the records in the Shopify application.

Invoke Operations Page

On the Invoke Operations page in the Adapter Endpoint Configuration Wizard, select the module and the operation you want to perform in the Shopify application.

Element	Description
Select Module	<ul style="list-style-type: none">• Customers: Configures customers and customer-related business objects/operations such as Customer Address and Customer Saved Search.• Discounts: Configures discounts and discount-related business objects/operations such as Discount Code and Price Rule.• Inventory: Configures inventory and inventory-related business objects/operations such as Inventory Level, Location, and Inventory Item.• Metafields: Configures metafields and metafield-related business objects/operations such as the Metafield.• Orders: Configures orders and order-related business objects/operations such as Draft Order, Refund, Transaction, Order Risk, and Abandoned checkouts.• Plus: Configures plus and plus-related business objects/operations such as Gift Cards.• Products: Configures products and product-related business objects/operations such as Product Image, Custom Collection, Product Variant, Product, Collect, and Smart Collection.• Sales Channel: Configures sales channel and sales channel-related business objects/operations such as Collection Listing, Resource Feedback, and Product Listing.• Shipping and Fulfillment: Configures shipping and fulfillment, and associated business objects/operations such as Carrier Service, Fulfillment, Assigned Fulfillment Order, Fulfillment Order/Service/Event, and Locations For Move.• Shopify Payments: Configures Shopify payments and Shopify payment-related business objects/operations such as Payouts.• Store Properties: Configures store properties and associated business objects/operations such as Countries and Shop.
Select Object	Use the scrolling list to select an object within the selected action.
Filter by Object Name	Type the initial letters of the object name to filter the display of names in the list.
Select Operation	Select an operation name, such as Retrieve a single customer .
Filter by Operation Name	Type the initial letters of the operation name to filter the display of names in the list.

Summary Page

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

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

4

Implement Common Patterns Using the Shopify Adapter

You can use the Shopify Adapter to implement the following common patterns.

Topic:

- [Use Pagination in an Integration](#)

Use Pagination in an Integration

When you must fetch a large number of results in Shopify, you can use the Shopify Adapter's pagination feature. Pagination helps you segregate the total number of results. You can specify the number of results per page according to your requirement while triggering an integration and receive sorted results.

This use case describes how to use pagination to sort results while fetching product results. Similarly, you can use pagination for the Customers, Inventory, and Orders modules. To perform this operation, you create an integration for the Shopify Adapter in Oracle Integration using pagination with the orchestrator.

1. Create an app-driven orchestrated integration.
2. Drag a SOAP Adapter into the integration as a trigger connection.
3. Drag an assign action to the workspace next to the SOAP Adapter. Provide a unique name for this action, and click **Create**.
4. Assign the following two variables to your integration. Specify the values to variables as follows.

```
Link = ""  
Check = "false"
```

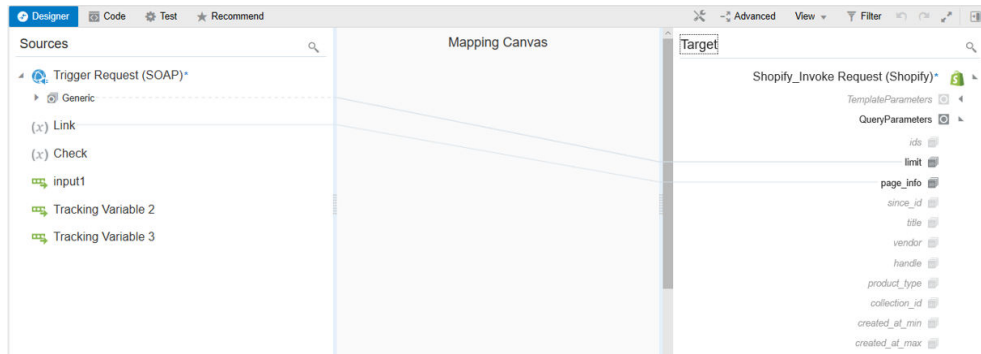
5. Click **Validate**, and then click **Close**.
6. Drag a while action below the assign action.
7. Provide a unique name for this action, and click **Create**.
8. Set the condition for the specified variables as follows.

```
Check! = "true"
```

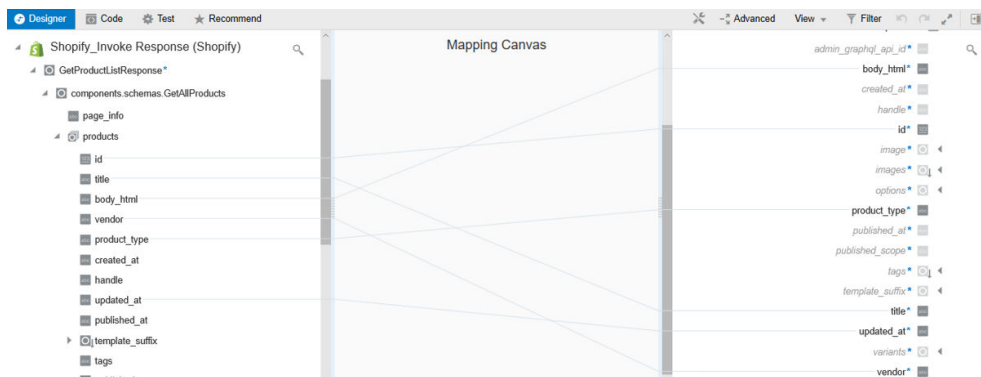
9. Click **Validate**, then click **Close**.
10. In the mapper, map **Link** to **page_info** in the Shopify request mapper and **SOAP** to **limit**.

 **Note:**

The **page_info** element is a unique ID required to search and access the next page in the results and **limit** is the maximum number of results to show per page.



11. Drag a Shopify Adapter inside a while action.
12. Specify the following details in the Adapter Endpoint Configuration Wizard.
 - On the Basic Info page, provide a name.
 - On the Actions page, select the **Query** action.
 - On the Operations page, select the **Products** module, the **Product** object, and the **Retrieve list of all Products** operation.
 - Review your selections on the Summary page.
13. Drag an FTP Adapter and configure it with the .CSV data file.
14. Perform the required mapping.



15. Drag a switch action and specify the following IF condition:

```
count( components.schemas.GetAllProducts) != 0.0 & string-length( page_info) != 0.0
```

16. Drag an assign action to update the specified variables as follows:

```
Link = Page_info  
Check = "false"
```

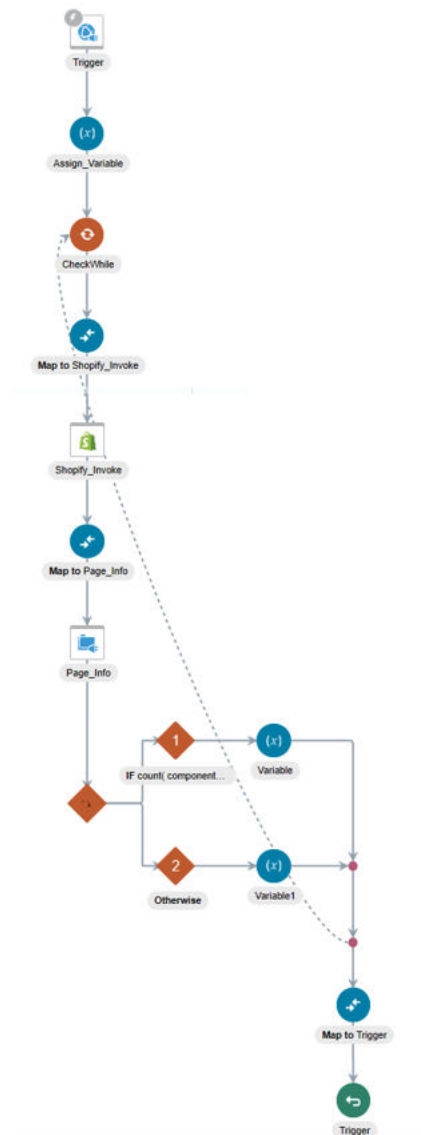
The while loop runs up to **page_info** in Shopify. Each page gets triggered and fetches the required data.

17. Drag an assign action into the **Otherwise** branch of the switch action to update the specified variables as follows:

```
Check = "true"
```

18. When complete, save and activate the integration.

The completed integration looks as follows.



19. After successful activation, you can submit the integration and monitor the runtime in Oracle Integration. The integration keeps running until it completes all cycles of fetching product results, respectively, to each page in the FTP location.