

<int_shipperhq_sfra>

Version <20.1.0>



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Summary

ShipperHQ offers a variety of functionality that is critical to help retailers ensure they are charging accurate rates for shipping in all cases and offering shipping options that are relevant to their customers. The shipping options offered to customers at checkout have a direct impact on merchant conversion rates and it's critical that they are accurate and relevant to both the products being purchased and the customer.

The cartridge provides an integration with the ShipperHQ shipping rate management platform in order to support retailers in providing real-time calculated shipping rates at checkout. Included in this functionality is the addition of several product attributes in support of advanced shipping capabilities such as product dimensions, ship-from location, and shipping group.

This document describes the implementation of the ShipperHQ cartridge into a Salesforce Commerce Cloud site. Integration encompasses deployment of ShipperHQ cartridge; import of Metadata, Jobs, and Services; and configuration of Custom Site Preferences.

Use of the cartridge requires an account at ShipperHQ.com and a subscription to ShipperHQ's services. No other costs are associated with the installation or use of the cartridge. Use of the cartridge is covered by ShipperHQ's existing user contracts but agreement to those contracts is required and obtained when an account is created with ShipperHQ.

A ShipperHQ account can be created at ShipperHQ.com or by speaking with ShipperHQ by contacting sales@shipperhq.com or (512) 215-4900.

1. Component Overview

Functional Overview

Within the ShipperHQ dashboard at ShipperHQ.com merchants are able to:

- Connect to their carrier accounts with 50+ carriers worldwide to retrieve real-time shipping rates
- Configure custom rates that can be as simple or as complex as required including support for importing carrier rate tariffs for carriers who do not have available API's
- Set up and manage multiple ship-from locations
- Set up packing rules and packages for real-time package calculation
- Configure promotional business rules to offer certain options and rates in certain scenarios
- Ensure product restrictions around shipping services or destinations are enforced for regulated products such as alcohol, health products, guns and ammo, etc.
- Present highly accurate delivery dates to customers based on both the merchant's fulfillment operations as well as real-world carrier operations

When a customer reaches checkout and proceeds to the shipping step, the ShipperHQ cartridge for Commerce Cloud makes an API call to ShipperHQ's web services to retrieve the results based on the merchant's configuration. The chosen shipping service and rate are then saved by the cartridge against the order when the customer completes their transaction.

Use Cases

Connects to ShipperHQ's web services to allow merchants to fully control the rates and options displayed to their customers in any given scenario.

Specific use cases include:

1. Live rates from 50+ carriers including domestic parcel carriers in North America, Europe, and Australia, international parcel carriers, and LTL freight carriers
2. Customer-facing delivery date estimates calculated off real-world merchant and carrier operations to ensure accuracy
3. Intelligent packing algorithm allowing packages to be determined in real-time for scenarios where packages used impact shipping options or rates which should be offered to customers
4. Accurate shipping rating for multi-origin fulfillment scenarios including multi-shipment orders
5. Shipping business rules which can apply globally or to any given scenario including order value, weight, quantity, product, product type, ship-from location, ship-to location, etc. supporting adjustments to rates and control of which shipping services should be offered
6. Promotional shipping rules such as free or discounted shipping applying globally, at certain price points, including or excluding specific products, etc.
7. Offering customers alternate fulfillment options such as click & collect, same-day delivery, pickup point/locker, etc.

Supported Locales

The ShipperHQ cartridge can support any locale. However, metadata and other merchant-facing language is provided out of the box in US English only.

Limitations, Constraints

An account with ShipperHQ is required to use the ShipperHQ cartridge. An account may be created at ShipperHQ.com.

The cartridge supports all of ShipperHQ's core functionality but does not support certain advanced capabilities including:

- Delivery date picker calendar
- In-Store Pickup/Click & Collect location map
- LTL Freight accessorial interactive UX elements

For customers who are not logged into an account, shipping estimates are not available in the cart.

Compatibility & Testing Version

Available since Commerce Cloud 19.10 which is also used for storefront reference application and screenshots. This version of the ShipperHQ cartridge has been tested against SFRA version 4.4.1.

Privacy, Payment

Customer shipping address is the only customer information accessed and processed by the cartridge. Use of ShipperHQ requires agreement to our User Agreement and Privacy Policy both of which can be found at ShipperHQ.com. Payment may be made from within the ShipperHQ dashboard at ShipperHQ.com or by other methods arranged in advance by contacting us.

2. Implementation Guide

Prerequisites

Before performing the steps below, you will need to ensure you have:

1. Created a ShipperHQ account at ShipperHQ.com
2. Within the ShipperHQ dashboard under Websites created a new website and obtained an API Key and Authentication Code. Note the Scope under which your website is configured (noted in the top right corner of the dashboard). These credentials will be used to connect to ShipperHQ from the cartridge.
3. Download the ShipperHQ cartridge ZIP file from the Salesforce Commerce Cloud Marketplace. Within this ZIP you'll find the int_shipperhq_sfra directory containing the cartridge

Import Cartridge

1. Update your site's package.json to include the cartridge by adding "&& sgmf-scripts --uploadCartridge int_shipperhq_sfra" to "uploadCartridge"
2. In Business Manager > Administration > Sites > Manage Sites > Business Manager Site. Select the Settings tab and prepend "int_shipperhq_sfra:" to the beginning of the "Cartridges" path.
3. In Business Manager > Administration > Sites > Manage Sites > {Select Site Name} . Select the Settings tab and prepend "int_shipperhq_sfra:" to the beginning of the "Cartridges" path.

Import Meta Data, Jobs, & Services

The ShipperHQ cartridge employs product meta data as well as a synchronization job to support the cartridge functionality. These need to be imported as follows.

1. Find the metadata directory under the ShipperHQ cartridge folder
2. In the "jobs.xml" file, update the "site-id" attribute of the <context> tags as well of the values in the WorkingFolder and ArchiveFolder parameters to match your Site ID
3. Compress the metadata directory under the ShipperHQ cartridge folder into a Zip file called metadata.zip
4. In Business Manager > Administration > Site Development > Import & Export click the "Upload" button under "Import & Export Files" and select the Zip file from step three and click "Upload"
5. Click the "Import" button and once the import shows as complete you can continue to the next step

[Administration](#) > [Site Development](#) > Site Import & Export

Site Import & Export

This page allows you to export the current configuration of your organization including all of its sites. To download an archive, just click its file name.

Import

Upload Archive:

☒ Local ☐ Remote

Choose File metadata.zip

Select	Name	Location	File Size	Last Modified
<input type="radio"/>	metadata.zip	local	3.64 KB	5/19/20 5:29:35 pm
<input type="radio"/>	SiteGenesis Demo Site			
<input type="radio"/>	Storefront Reference Architecture Demo Sites			

Connect to ShipperHQ

The connection to ShipperHQ's API is made using credentials and preferences set in the Site Preferences as follows.

1. In Business Manager > Merchant Tools > Site Preferences > Custom Preferences select the "ShipperHQ" group
2. Set "Enable" to "Yes," set "Scope" to match the scope of your website in the ShipperHQ dashboard (see Prerequisites above)
3. Enter the API Key retrieved from ShipperHQ in the "API Key" field and the Authentication Code retrieved from ShipperHQ in the "Password" field
4. Save these settings

The screenshot shows the Salesforce interface for configuring ShipperHQ. The top navigation bar includes 'Merchant Tools', 'Administration', 'Storefront', and 'Toolkit'. The 'Merchant Tools' dropdown is open, showing 'Sandbox - shipperhq' and 'RefArch'. The 'Administration' dropdown is also open, showing 'Merchant Tools', 'Administration', 'Storefront', and 'Toolkit'. The 'Storefront' dropdown is open, showing 'Storefront' and 'Toolkit'. The 'Toolkit' dropdown is open, showing 'Toolkit' and 'Partners ShipperHQ'. The 'Partners ShipperHQ' dropdown is open, showing 'Partners ShipperHQ' and 'Partners ShipperHQ'.

The main content area is titled 'ShipperHQ' and contains a table of configuration settings. The table has three columns: 'Name', 'Value', and 'Default Value'. The settings are as follows:

Name	Value	Default Value
Enable	Yes	Yes
Scope	Live (LIVE)	Live
API Key	8cb83c857364ad5d6d48ee9c5197006d	
Password	

Each row has an 'Edit Across Sites' link. The 'Enable' row also has a description: 'Activates ShipperHQ integration, overriding native shipping ...'. The 'Password' row has a question mark icon next to the field.

Synchronize Shipping Methods

Since the purpose of ShipperHQ is to provide shipping rates and options in real-time to a merchant's clients' shipping methods that will be made available from ShipperHQ must be pre-populated. This can be done automatically using the ShipperHQ Job as described below.

1. Under Business Manager > Administration > Operations > Jobs select "ShipperHQ"
2. Click "Run Now" to run the synchronization Job
3. This Job will import shipping methods configured in ShipperHQ into Commerce Cloud
4. Once the Job has completed, confirm shipping methods have been imported successfully under Business Manager > Merchant Tools > Ordering > Shipping Methods
5. Shipping Methods can be reordered and their order will be respected with future runs of the synchronization Job
6. This Job will need to be rerun whenever new methods are enabled in your ShipperHQ dashboard

Merchant Tools > Ordering > Shipping Methods

Shipping Methods

The list shows all shipping methods currently available for this site.

Click **New** to create a new shipping method. Use the checkboxes and then click **Delete** to delete shipping methods or click **Copy** to copy them.

There can be only one default shipping method per site/per currency.

Currency: All

Select All	ID	Name	Description	Based On	Status	Currency	Sorting
<input type="checkbox"/>	shqcustom2_New_Method	New Method		-	Active	USD	
<input type="checkbox"/>	shqcustom2_New_Method_2	New Method 2		-	Active	USD	
<input type="checkbox"/>	shqcustom2_Test	Test		-	Active	USD	
<input type="checkbox"/>	EUR001	Ground	Order received within 7-10 business days	-	Active, Default	EUR	
<input type="checkbox"/>	shqcustom2_Ground	Ground		-	Active	USD	
<input type="checkbox"/>	shqcustom2_Next_Day	Next Day		-	Active	USD	
<input type="checkbox"/>	shqflat_fixed	fixed		-	Active, Default	USD	
<input type="checkbox"/>	shqfree4_free	Free		-	Active	USD	
							<div>NewCopyDelete</div>

Showing 1 - 8 of 8 items

Configure Product Attributes

Some of ShipperHQ’s functionality requires additional product attributes to be set on products. At a minimum, weight must be set (especially if you are using live rate carriers) but additionally attributes like length, width, height, ship-from origin, shipping group, etc. may be set. Most of these attributes accept plain numeric values (e.g. length, width, height, weight) but others must match values set in ShipperHQ in order to be recognized by ShipperHQ. Therefore, certain attributes as described below are of type Enum of Strings and must be set up prior to using them. We recommend setting these up as 1 word and if the name is more than 1 word use underscores to join, for example shipping_group, origin_1, dim_rule_1.

1.

Go to Business Manager > Administration > Site Development > System Object Types > Product > Attribute Definitions
2.

Find “shipperHQDimGroups,” “shipperHQShippingGroups,” or “shipperHQWarehouses”
3.

For each one ensure that you have entered the corresponding values from your ShipperHQ account. For example, if you have the following Shipping Groups configured in ShipperHQ: “Large,” “Medium,” and “Small” you would need to edit the “shipperHQShippingGroups” attribute and add additional values with those strings as the Value. The Display Value does not impact processing but it is recommended to keep this the same as the Value.

a.

“shipperHQDimGroups” corresponds to Dimensional Packing Rule Groups in ShipperHQ

b.

“shipperHQShippingGroups” corresponds to “Shipping Groups” in ShipperHQ

c.

“shipperHQWarehouses” corresponds to “Origins” in ShipperHQ
4.

Apply the attribute changes and move on to the next attribute. Repeat for all three of these attributes.

Object Type 'Product' - Attribute Value Range Definition

This section lists the attribute value definitions of the attribute. Create a new attribute value definition by providing the “Value” and “Display Value” in the “New Value” section below. Click **Apply** to update the attribute value definitions. Click **Reset** to revert your changes. Click **Delete** to delete selected attribute value definitions.

Search Attribute Value Definitions

Value or Display Value:Find

Select All	Value	Display Value	Default	Sorting
<input type="checkbox"/>	Large	Large	<input type="radio"/>	
<input type="checkbox"/>	Medium	Medium	<input type="radio"/>	
<input type="checkbox"/>	Small	Small	<input type="radio"/>	
New Value:				<input type="radio"/>

ApplyResetDelete

Showing 1 - 3 of 3 items

Configure Products

1. Under Business Manager > Merchant Tools > Products and Catalogs > Products choose a product and edit
2. In the ShipperHQ section the following can be configured by product:
 - a. "Origin Warehouse(s)" for merchants fulfilling from multiple locations, supports assignment of products to one or more warehouses pre-configured in ShipperHQ
 - b. "HS Code" for merchants shipping internationally with real-time duties & tax calculations at checkout enter the 6 or 10 digit HS Code of the product
 - c. "Ship Length" is the length dimension
 - d. "Shipping Groups" for merchants using ShipperHQ's Shipping Groups within their ShipperHQ dashboard configuration products can be assigned to one or more Shipping Groups
 - e. "Ship Height" is the height dimension
 - f. "Fixed Shipping Fee" for merchants who set a fixed shipping price for certain products
 - g. "Ship Weight" is the weight of the product
 - h. "Ship Width" is the width dimension
 - i. "Dimensional Rule Group(s)" for merchants using ShipperHQ's Dimensional Rule Groups to set specific packing rules for certain groups of products
3. Only "Ship Weight" is required, all other fields are optional

The screenshot shows the ShipperHQ configuration interface for a product. At the top, there is a dropdown menu labeled "On sale" with the value "-None-". Below this, the "ShipperHQ" section contains several configuration fields:

- Origin Warehouse(s):** A dropdown menu with options: "-None-", "illinois (illinois)", and "farmingdale (farmingdale)".
- HS Code:** A text input field containing "10.3.191".
- Ship Length:** A text input field containing "5", with "(Number)" to its right.
- Shipping Groups:** A dropdown menu with options: "-None-", "Medium (Medium)", and "Large (Large)".
- Ship Height:** A text input field containing "3", with "(Number)" to its right.
- Fixed Shipping Fee:** A text input field containing "2.99", with "(Number)" to its right.
- Ship Weight:** A text input field containing "1.7", with "(Number)" to its right.
- Ship Width:** A text input field containing "4", with "(Number)" to its right.
- Dimensional Rule Group(s):** A dropdown menu with options: "-None-", "Rule1 (Rule1)", and "Rule2 (Rule2)".

At the bottom right of the form, there are four buttons: "Apply", "Reset", "Copy", and "Delete".

Custom Code

No custom code is required.

External Interfaces

Shipping rate request web service calls are made to ShipperHQ's web services at api.shipperhq.com. All traffic uses the HTTPS protocol.

Requests include:

- Ship-to address
- Shipping-related product attributes for all products in the cart

Responses include:

- Available shipping services
- Shipping rates for each service
- Optionally may include delivery date

Firewall Requirements

ShipperHQ requires outbound requests to api.shipperhq.com via HTTPS therefore port 443 access is required for outbound traffic.

3. Testing

Connect to ShipperHQ and Synchronize Shipping Methods

1. Within the ShipperHQ dashboard, under Websites edit your Website and copy the API Key shown then click the “Generate New Authentication Code” button and confirm then copy the Authentication Code shown
2. In Business Manager > Merchant Tools > Site Preferences > Custom Preferences select the “ShipperHQ” group
3. Set “Enable” to “Yes,” set “Scope” to match the scope of your website in the ShipperHQ dashboard (see Prerequisites above)
4. Enter the API Key retrieved from ShipperHQ in the “API Key” field and the Authentication Code retrieved from ShipperHQ in the “Password” field
5. Save these settings
6. Under Business Manager > Administration > Operations > Jobs select “ShipperHQ”
7. Click “Run Now” to run the synchronization Job
8. This Job will import shipping methods configured in ShipperHQ into Commerce Cloud
9. Once the Job has completed, confirm shipping methods have been imported successfully under Business Manager > Merchant Tools > Ordering > Shipping Methods
10. The methods shown should match the methods configured in your ShipperHQ dashboard

Connecting ShipperHQ to Your eCommerce Platform

[How to connect your eCommerce platform to ShipperHQ.](#) You need both an API Key and an Authentication Code.

API Key
7714ba28025f526C Copy
You cannot edit the API Key

Authentication Code
Generate New Authentication Code
Note: this will reset your current Authentication Code and will break existing connections until you update.

Salesforce | Sandbox - shipperhq | Merchant Tools | Administration | Storefront | Toolkit | (Partners ShipperHQ)

Merchant Tools > Ordering > Shipping Methods

Shipping Methods

The list shows all shipping methods currently available for this site.
Click New to create a new shipping method. Use the checkboxes and then click Delete to delete shipping methods or click Copy to copy them.
There can be only one default shipping method per site/per currency.

Select All	ID	Name	Description	Based On	Status	Currency	Sorting
<input type="checkbox"/>	shacustom2_New_Method	New Method		-	Active	USD	
<input type="checkbox"/>	shacustom2_New_Method_2	New Method 2		-	Active	USD	
<input type="checkbox"/>	shacustom2_Test	Test		-	Active	USD	
<input type="checkbox"/>	EUR001	Ground	Order received within 7-10 business days	-	Active, Default	EUR	
<input type="checkbox"/>	shacustom2_Ground	Ground		-	Active	USD	
<input type="checkbox"/>	shacustom2_Next_Day	Next Day		-	Active	USD	
<input type="checkbox"/>	shafat_fixed	fixed		-	Active, Default	USD	
<input type="checkbox"/>	shafat_free	Free		-	Active	USD	

Showing 1 - 8 of 8 items

Set Product Attributes and Test Rating

1. Under Business Manager > Merchant Tools > Products and Catalogs > Products choose a product and edit
2. Lock the product to allow editing
3. Enter a value in the “Ship Weight” field
4. Save and unlock the product
5. On the frontend of the Commerce Cloud site, choose that product and add it to your cart
6. Continue to checkout (checkout as guest or log in)
7. Enter your Shipping Address and shipping rates will be retrieved from ShipperHQ

ShipperHQ
Origin Warehouse(s):
HS Code:
Ship Length:
Shipping Group(s):
Ship Height:
Fixed Shipping Fee:
Ship Width:
Dimensional Rule Group(s):

4. Operations, Maintenance

Data Storage

The cartridge itself does not store any data.

Availability

ShipperHQ maintains an uptime of over 99.96% annually on all web services. Though exceedingly uncommon, should any downtime or service impact be expected due to scheduled maintenance or system updates clients are notified in advance of any such event. Additionally, support is available 24/7/365 via email & phone for clients who believe they are experiencing a service outage. We also employ multiple layers of internal and external monitoring ensuring action can be taken immediately in the case of any system issues.

Failover/Recovery Process

It is recommended that merchants have basic shipping methods configured within Commerce Cloud which remain disabled at all times except during a service outage. In the event of an outage, shipping rates will not be shown to customers by the ShipperHQ cartridge and the merchant should temporarily enable these native shipping methods and notify ShipperHQ. The native shipping methods should be disabled once service is restored.

Support

ShipperHQ support team is available by email at support@shipperhq.com or during business hours by phone at +1 (512) 215-4900 and +44 (0)1722 446240. Support business hours are 3:30 AM - 6:00 PM US Central time weekdays except for holidays. Support for critical issues is provided on weekends and holidays via email or voicemail. Outside of those hours, phone voicemail messages and emails are monitored 24/7/365 for urgent issues.

5. User Guide

Roles, Responsibilities

The store admin should follow the setup instructions included in this document to add the ShipperHQ cartridge and configuration.

There are three recurring tasks which merchants may undertake as required:

1. Update product attributes such as Shipping Group, Origin, etc. as required as new products are added to the Commerce Cloud catalog.
2. If the merchant configures new shipping services in ShipperHQ, run the ShipperHQ synchronization Job to add the new services to their Commerce Cloud shipping services. The running of this Job is described in detail in the Implementation Guide above.
3. If a customer utilizes method merging they need to make sure to create the shipping method manually, as the job does not bring over method merge codes "shqmulticarrier_METHODCODE"

Business Manager

See Configuration under Section 3 above for configuration and usage as well as screenshots.

Storefront Functionality

No new storefront functionality is included with this cartridge.

6. Known Issues

If a customer proceeds to checkout and receives shipping rates then leaves checkout and makes changes to the quantity or items in their cart, the previously calculated shipping rates will still be displayed in the cart.

7. Release History

Version	Date	Changes
20.1.0	2020-03-12	Initial release