Shipping Method for nopCommerce

Plugin Documentation

Incorporating

Canada Post API (Canada) – Refer to Separate Appendix for more information
Aramex API (Australia) – Refer to Separate Appendix for more information
Sendcloud API (Europe) – Refer to Separate Appendix for more information

Shipping Manager Shipping Plugin

Plugin Documentation v4 Series

Contents

nopCommerce Shipping Manager Plugin 6
Shipping Manager – Main Functions 6
Advanced Configuration 6
Desktop Administration 7
Plugin Menu Options 7
Plugin Access Control 8
Available Access Control Options for Roles 8
Admin area. Shipping Operator 8
Admin area. Shipping Manager 8
Admin area. Shipping Supervisor 8
nopCommerce Standard Access Control 8
Admin area. Manage Shipping Settings 8
Admin area. Manage Plugins 8
Order Processing 9
Sales Processing 9
Shipment Add 9
Warehouse Shipment 9
Enter a tracking number 10
Admin Comment 10
Order Report 10
Orders Export 10
Set all Selected Orders as Paid (Is test function at this stage) 10
Set all Selected Orders as Approved (Is test function at this stage) 10
Shipment Processing 11
Search by Various Options 11
Packing Reports 11
Packing Report 11
Packing List 12
Set as Shipped 12
Set as Delivered 12
Create Shipment 12
Editing a Shipment 12
1. Edit Shipment Details 12

Tracking number 13
Shipment Id 13
Print Label (Only currently available for Canda Post) 13
Shipping Method 14
Admin Comment 14
Packaging Option 14
Refund Request or Cancel Parcel 14
2. Edit Shipment Details – Line Items 14
Shipment Method 14
Admin Comment 14
Tracking number 14
Shipment Sent 14
Shipment Delivered 15
Editing a Shipment shipped 15
Unship and Item 15
Change Quantity Shipped 15
Create Shipment Errors 17
Checking the System error Log 17
Installing the Plugin 17
Configure Settings 18
Multistore Configuration 18
Enable Plugin 18
Processing Mode (Only used by Shopping Manager Computation 18
International Operations Enabled 19
Use Packaging system 19
Packaging Options 19
Ordered by Date 19
Available API Services 19
Delete Tables on Uninstall 19
Delete Configuration on Uninstall 19
Test Mode 19
Purchased Licence Keys 19
Public Key 20
Private Key 20
Inbuild API Settings 20
System Configuration 20
Measures Configuration 20
States and Provinces 21

Default Shipping Address 22
Shipping Settings 23
Product Configuration 24
Free Shipping 24
Ship Separately 24
Weight 24
Length, Width and Height 24
nopCommerce Shipping Settings 24
ShipSeparatelyOneItemEach 24
ConsiderAssociatedProductsDimensions 24
UseCubeRootMethod 24
ReturnValidOptionsIfThereAreAny 24
EstimateShippingEnabled 24
Packaging Options 25
Test Mode – System Log 25
Entity Configuration 26
Shipping Methods 26
Friendly Name 26
Vendors 27
Carriers 27
Carriers are defined by Name 27
Editing a Carrier 27
Linking a Carrier to an API 27
Warehouses 28
Allocating Warehouses to Products 28
Dates and Ranges 29
Delivery Days and Product Availability Ranges 29
Cut Off Time 29
Managing Shipping Rates 30
Manual Shipping Rate Configuration and Calculation 30
Search by the various options 31
Manage the Shipping Methods (Setup in the Plugin Configuration) 31
Edit a Rate 31
Adding a new Rate 31
Store (only displayed when multiple stores are configured) 32
Vendor (only displayed when multiple vendors are configured) 32
Carrier 33
Shipping Method 33

Friendly name 33
Warehouse 33
Cut Of Time 33
Country 33
State / province 33
Postcode 33
Edit Rate Configuration 33
Export 35
Import 35
Select the file to Import 35
Processing Mode 36
Pickup Points 36
Appendix A - Shipping Manager - Shipping Rate Computation Management 37
Operation Overview 37
Enable the Plugin for Shipping Rate Computation Management 37
External Shipping Plugins 39
Shipping Rate Computation Management 39
Option 1 39
Option 2 39

nopCommerce Shipping Manager Plugin

The shipping manager plugin is used to manage orders for the shipment and delivery of products purchased in the nopCommerce system.

Shipping Manager – Main Functions

1. Shipping management Functions

    Provides a set of new views and controls to manage shipping operations

2. Shipping Rate Computation Management

    Manages all installed Shipping Rate Computation Methods Plugins

Each function can be used independently or both can be used together.

The plugin also has a number of inbuilt API's enabling the plugin to connect to third party shipping provider systems to automatically create shipments and print labels produced by these providers

Currently this includes:

Canada Post	https://www.canadapost-postescanada.ca/
Aramex	https://www.aramex.com.au/
Sendcloud	https://www.sendcloud.com/

Advanced Configuration

Using the advanced configuration function the plugin can be used to manage and override all other Shipping Provider Plugins that are installed. This will mean that when you configure the plugin correctly you will not see the individual shipping rate options displayed from any other Shipping Provider Plugins plugin concurrently installed in the system.

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/shipping-providers/index.html

This enables all Shipping Provider Plugins and the associated rates that are calculated and/or displayed to be configured and selected by the system entities: Store, Vendor, Warehouse and Shipping Method. In addition, shipping rates can be defined by Country, State and Postcode, Order Subtotal, Product Weight and Dimensions.

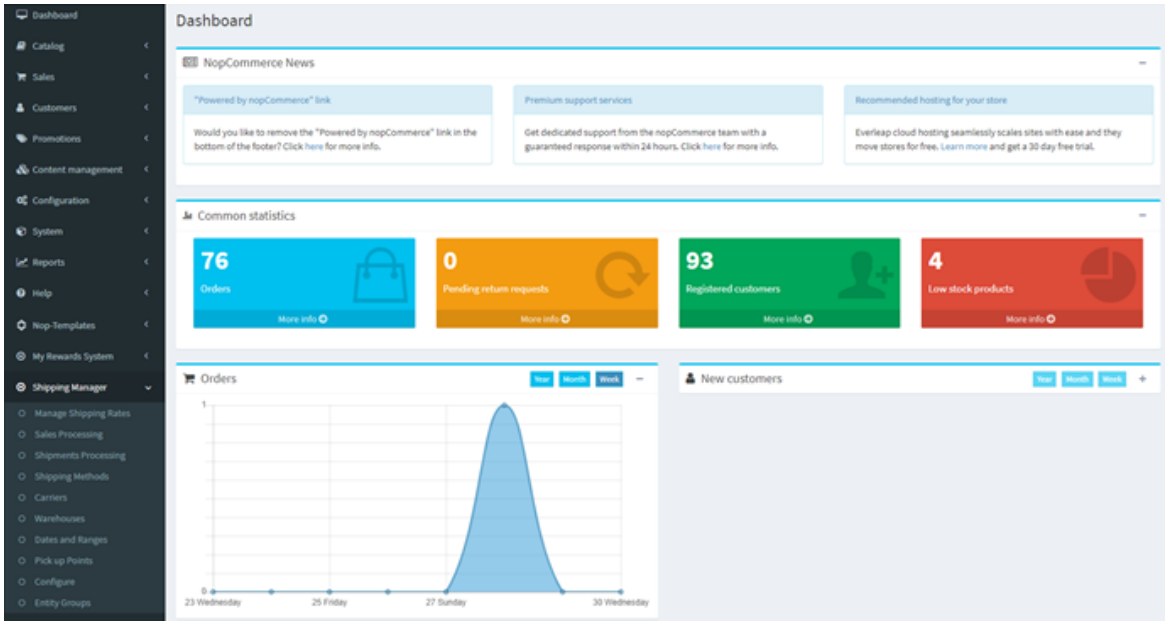
This advanced mode of operation of the plugin provides an extension of the standard nopCommerce Manual rate by Weight and Total plugin where rates are manually entered and selected.

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/shipping-providers/manual.html

This manual provides a summary and details of each of the specific functions. Also refer to the nopCommerce documentation for more information regards configuring nopCommerce Shipping.

See https://docs.nopcommerce.com/en/getting-started/configure-shipping/index.html

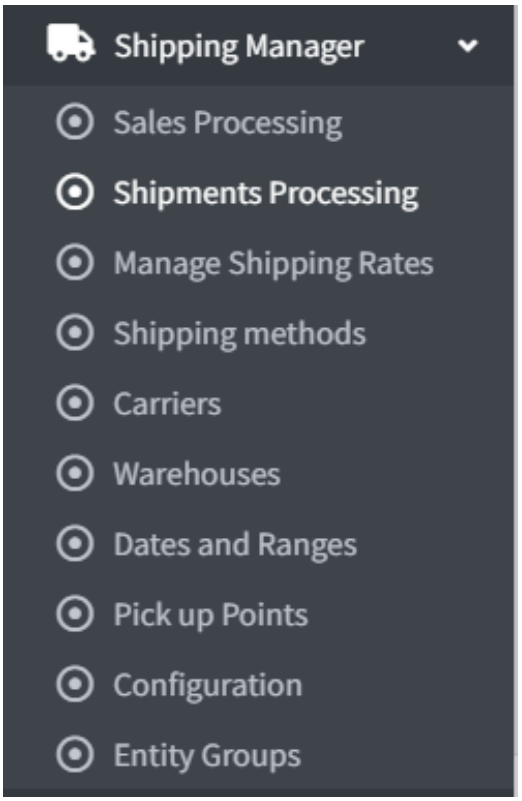
Desktop Administration



Before continuing on in this manual refer to Installing the Plugin section below

Plugin Menu Options

The plugin has a number of menu options which will be discussed in detail in this manual.



Shipping Manager

Sales Processing
Process orders and create shipments for orders not shipped

Shipments Processing
Edit and Process shipments for orders without shipments

Manage Shipping Rates
Create and edit shipping rates which can be searched and applied by Store, Vendor, Warehouse, Method, Country, State and Postcode

Shipping Methods
Setup, create, edit and delete shipping methods used when defining shipping rates

Carriers
Setup, create, edit and delete carriers and their associated shipping rate calculation plugins used when defining shipping rates

Manage Warehouses
Setup, create, edit and delete warehouses which are used in the setup of products and shipping rates

Dates and Ranges
Setup, create, edit and delete Product dates and ranges which are used in the setup of products

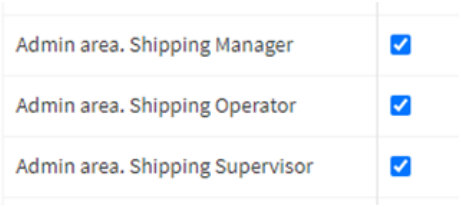
Pick-up Points
Setup, create, edit and delete Pickup Points

Configure
Setup, create, edit and delete Plugin configuration

Entity Groups
Used by Superuser to setup, create, edit and delete Entity Groupings used in the configuration

Plugin Access Control

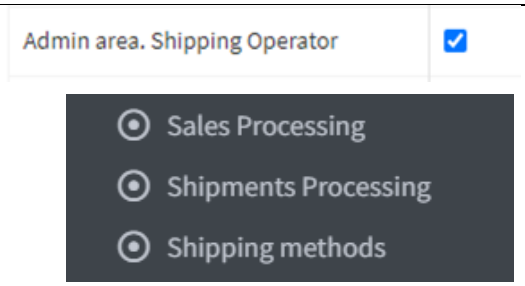
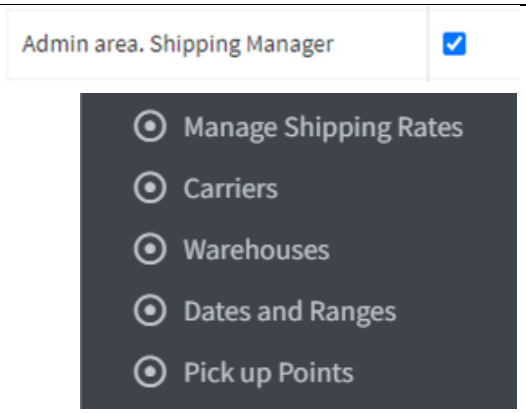
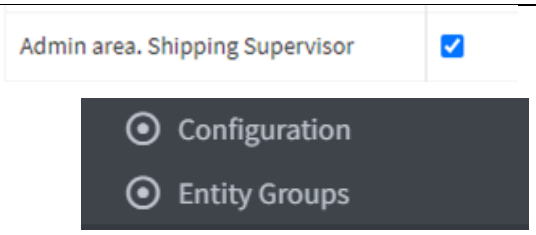
There are a number of levels of access control which can be defined by Customer Role



Refer to Admin > Configuration > Access Control List

See https://docs.nopcommerce.com/en/running-your-store/customer-management/access-control-list.html

Available Access Control Options for Roles

	*Admin area. Shipping Operator* User can Operate the system, Manage order shipments using the Sales Processing and Shipments Processing Views, Manage Shipping Methods
	*Admin area. Shipping Manager* User can Manage Shipping Rates and Create / Configure Carriers, Warehouses and Dates and Ranges
	*Admin area. Shipping Supervisor* The system allows the grouping of vendors – See Vendor Grouping below. This access is used in association with Operate and Manager to provide supervisor access for managing groups of vendors and other supervisor functions

nopCommerce Standard Access Control

In addition, the standard nopCommerce ACL access can be used

Admin area. Manage Shipping Settings
Can manage shipping settings for all users

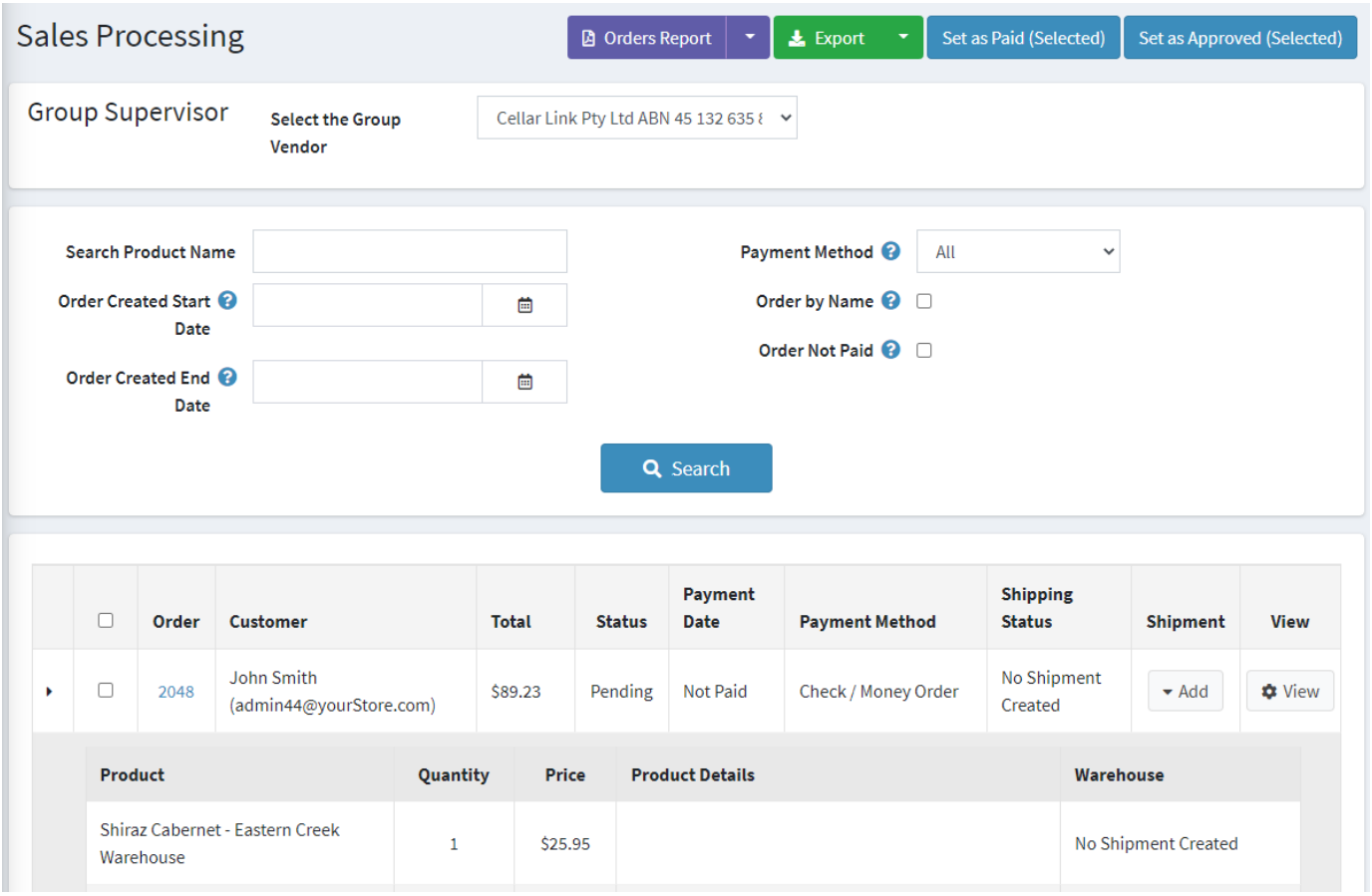
Admin area. Manage Plugins
can configure Plugins i.e. Shipping Manager Plugin

Order Processing

Sales Processing

Sales processing shows all orders that:

1. Do not have a shipment created
2. Have a shipment created but the shipment has not yet been shipped



Once an order has been shipped then it will drop of this processing list

Shipment Add

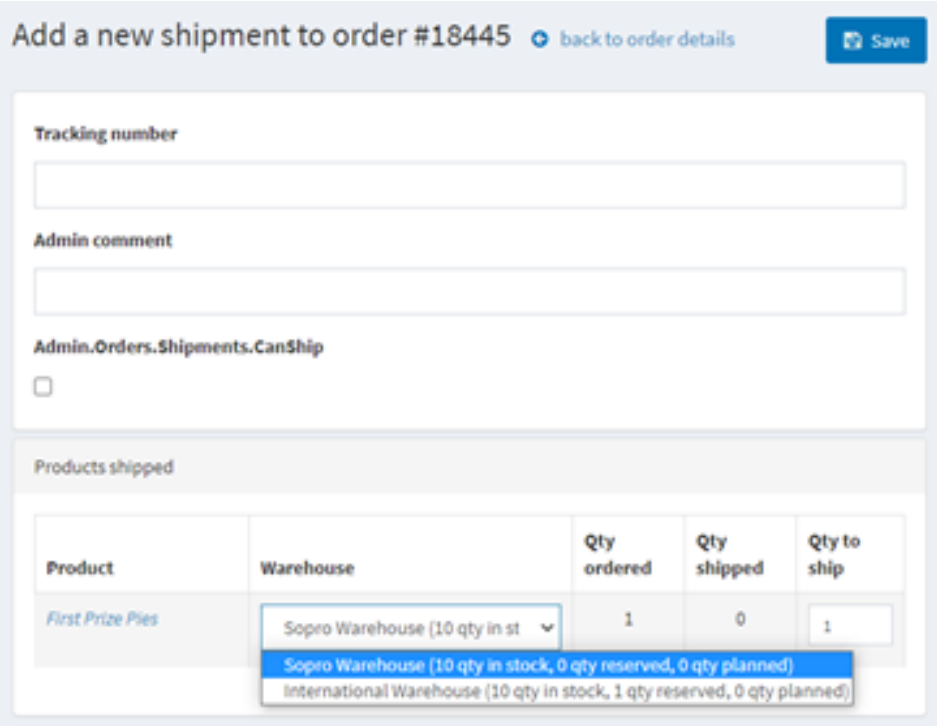
When an order is created the system does not automatically create a shipment. This function allows an operator to create a shipment for an order. To create a shipment, click the Add button.

An order needs to be marked as paid to create a Shipment

When warehouses are not used then the warehouse will be automatically created.

Warehouse Shipment

Used to allocate a warehouse add a shipment. In the case where there is there is only one warehouse option this process is automatic. In the case where there are two or more warehouse options then select a warehouse to ship from must be selected



Enter a tracking number

In the case where a carrier is defined and linked to a Shipping provider API then in most cases the tracking number will be automatically entered when a shipping package is created. Refer to Shipment Processing below.

Admin Comment

Enter an admin comment if required

Order Report

You can create an Order Report for the orders displayed

Orders Report **Category** **Date: 7/2/2021 6:48:39 PM**

Customer	Order Details	Payment	Paid Date	Method
JohnSmith	Nike Shoes - No Vendor	Pending	Not Paid	Check / Money Order

Orders Export

You can export all orders displayed

	A	B	C	D	E	F	G	H	I
1	Name	Customer Email	OrderId	Payment Status	Payment Date	Price	Quantity	Total Price	Payment Method
2	Nike Shoes - No Vendor	admin42@yourStore.com	4055	Pending		30	1	30	Check / Money Order

Set all Selected Orders as Paid (Is test function at this stage)

Note: Only displayed if test mode is selected

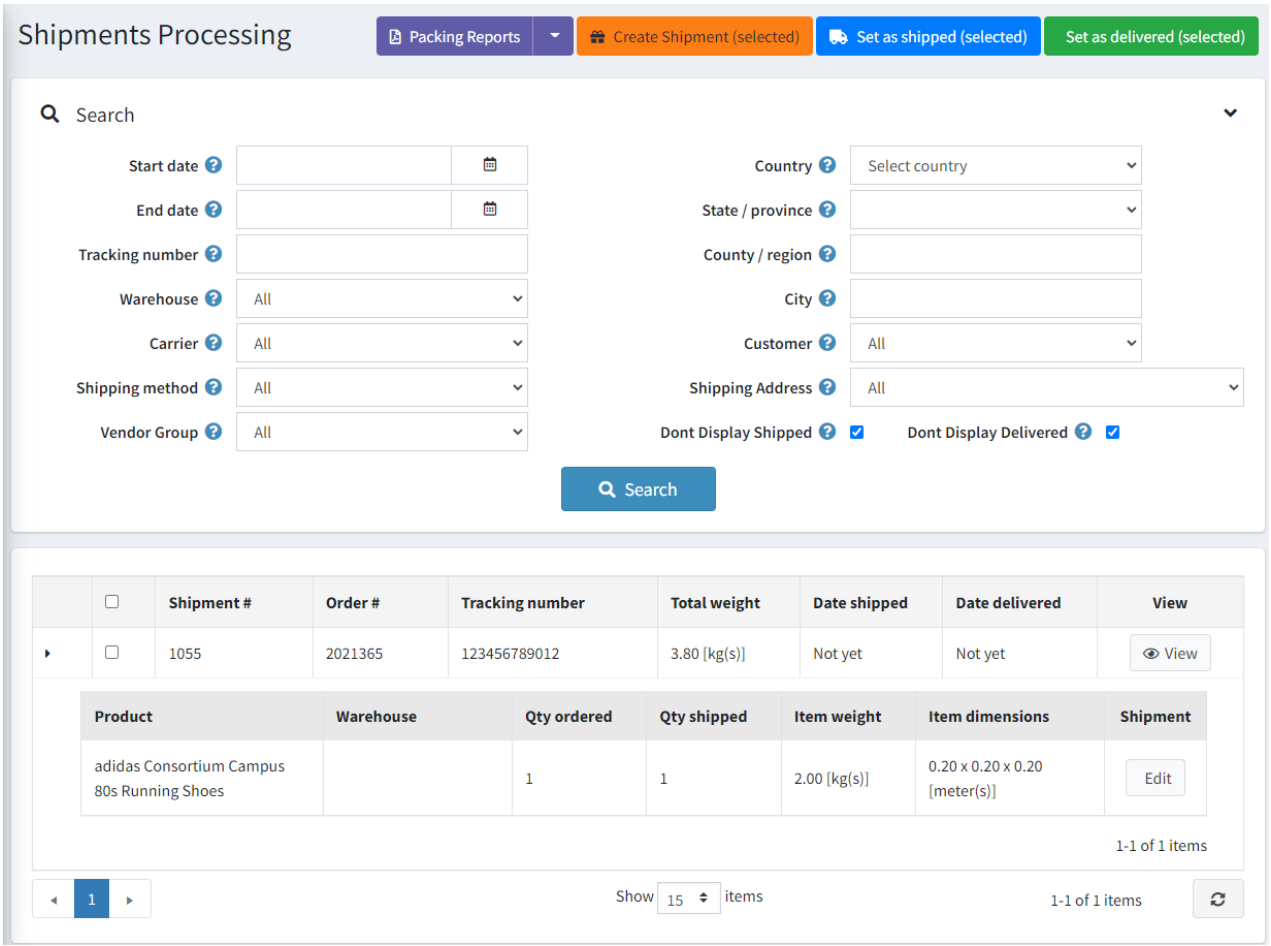
Set all Selected Orders as Approved (Is test function at this stage)

Note: Only displayed if test mode is selected

Shipment Processing

Shipment processing shows all orders that:

1. Have a shipment created but the shipment has not yet been shipped and delivered



Once an order has been Shipped and Delivered then it will automatically not display on this processing list

To redisplay these orders you can search using the search options

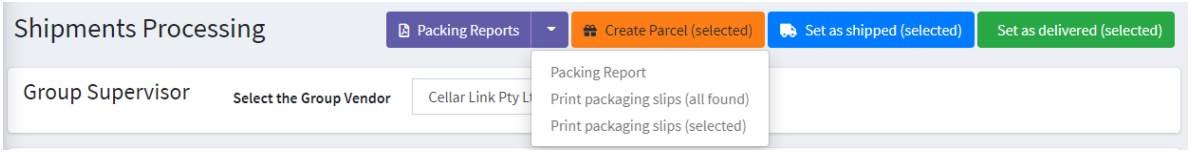
- Dont Display Shipped
- Dont Display Delivered

Uncheck either option to display orders that have been either Shipped or Delivered or both

Search by Various Options

You can use the various search parameters to find a particular order

Packing Reports



There are a number of reports which can be printed

Packing Report

The packing report is a manifest of all shipments by the selections show. It can be used to list all shipments done on a particular day

Store: Your store name
https://localtest44.selectsystems.com.au
Date: Monday, 30 August 2021

Shipment #1015 : Order 2049 : Shipment Cost $4.95
Name: John Smith 02 99999999 Zuidzijde Haven 39a Bergen op Zoom (NL), Zuid-Holland 4611 HC Netherlands
Shipping method: DPD

Product Name	SKU	Quantity
Nike - Sopro	NK_FRC_RS-V1-NS-copy	1

Shipment #1014 : Order 2047 : Shipment Cost $26.85
Company: Select Systems International
Name: John Smith 02 99999999 84 Boundary Road Pennant Hills, New South Wales 2120 Australia
Shipping method: Australia Post - Express Post Parcel

Product Name	SKU	Quantity
Nike - Vendor 1 *Size: 8* *Color: White/Blue* *Print: Natural*	NK_FRC_RS-V1-NS	11

Packing List

The packing list is a list of shipments to be packed. Either the full list or a selected number of shipments

Shipment #1109
Order #4055
Name: John Smith
Phone: 02 9999 9999
Address: 1 Test Address
Test, Antwerpen 9999
Belgium

Shipping method: DHLForYou Drop Off

Product Name	SKU	Quantity
Nike Shoes - No Vendor	NK_ZSJ_MM-Test	1

Set as Shipped

Click to set the selected orders as Shipped

Set as Delivered

Click to set the selected orders as Delivered

Create Shipment

Use this function to create a Shipment in the external Shipping provider System. For example, Canada Post or Sendcloud.

Note: This function has not yet being completely implemented for Aramex

After a shipment has been create the **Tracking number** and **Shipment Id** will be updated

Editing a Shipment

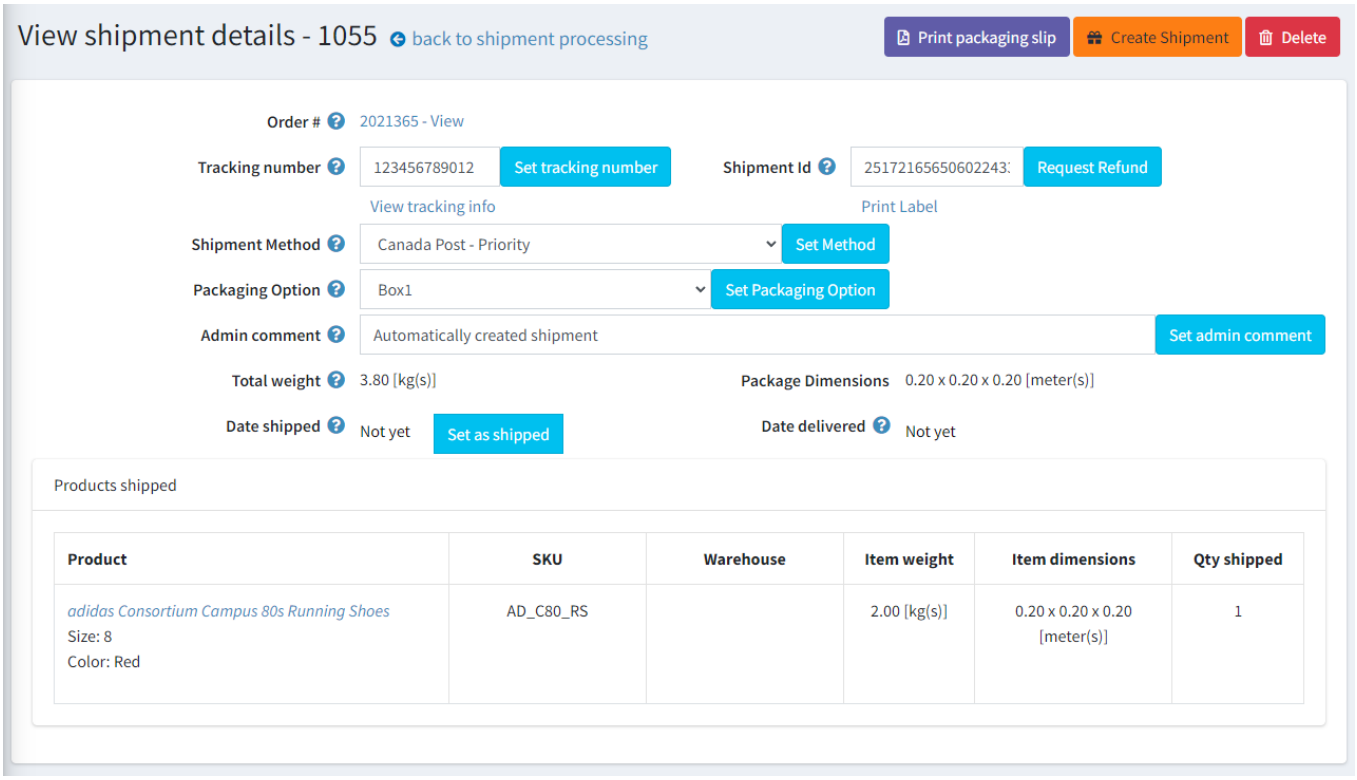
There are two ways to edit a shipment

1. Edit Shipment Details

Click the View Button on the Shipment to edit the shipment details

		Shipment #	Order #	Tracking number	Total weight	Date shipped	Date delivered	View
▾	☐	1110	4056	SCCWF28CKFW7	10.00 [kg(s)]	Not yet	Not yet	View

Shipment view details will be displayed



From this view you can edit the tracking shipment details

Tracking number

This is the tracking number assigned by the create shipment function. To manually adjust the tracking number enter the new number and click **Set Tracking number**

Note: a default tracking number is entered when the shipment is first created

Shipment Id

This the Shipment Identified allocated when a shipment has been created. If there is an error with the shipment and you need to request a refund click the **Request Refund** button. Refer the Shipping Carrier regards their specific refund policy or associated costs.

Print Label (Only currently available for Canda Post)

The print label function will call the respective API to product a label. For example the Canada Post label produced is as follows

Shipping Method

This is the shipment method selected by the customer during the checkout. To change the shipping method select the new option and click **Set Method**

Admin Comment

You can add an admin comment then click Add Comment button

Packaging Option

In this view you can also change and select the required Packaging Option. The packing options are setup in configuration. Refer to the **Packaging Option** Section below for more information.

Refund Request or Cancel Parcel

The function of this button will depend on the shipping method selected.

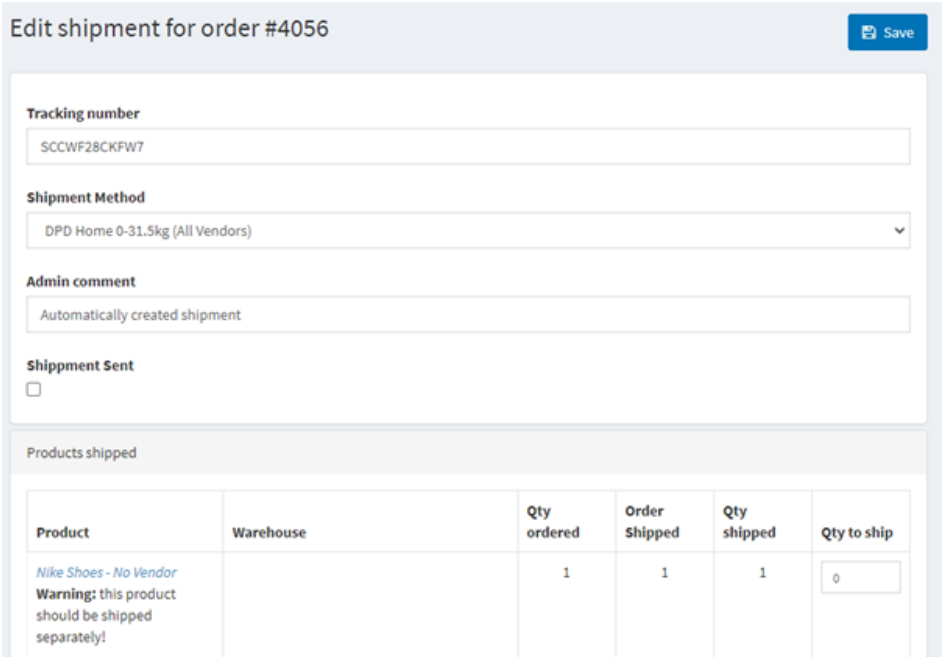
For Canada Post Where a shipment or error has been created in error and the costs have been added to your account or credit card then you can use the Request Refund option.

- Ensure the label has been created
- Print the Label
- Click the Refund Request button
- If approved the refund may take a number of days to process

For Send cloud it will cancel the parcel if this is still an option

2. Edit Shipment Details – Line Items

The second option for editing the shipment is by click the Edit button on the shipping line



Shipment Method

If required you can change the Shipment Method

Admin Comment

You can add an admin comment then click Add Comment button

Tracking number

To manually adjust the tracking number enter the new number and click **Set Tracking number**

Shipment Sent

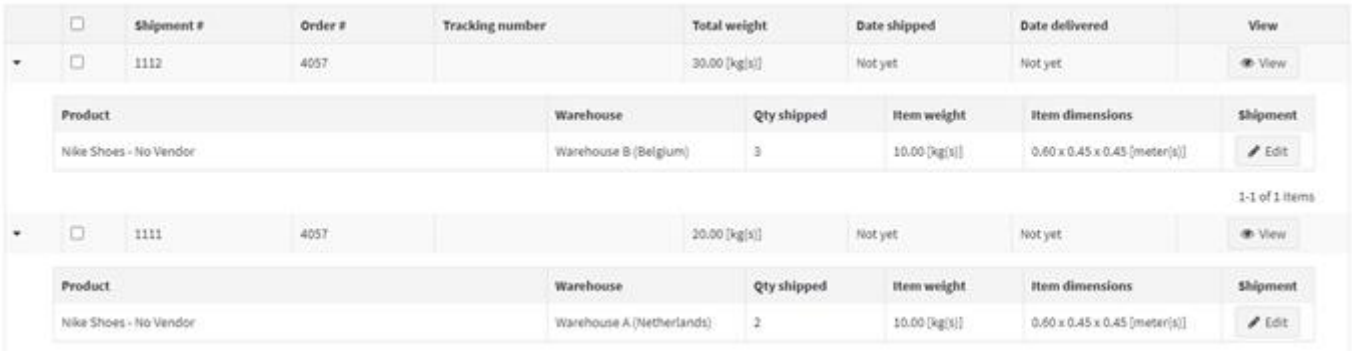
Click to set the status of the shipment to **Shipped**

Shipment Delivered

Click to set the status of the shipment to **Delivered**

Editing a Shipment shipped

Two shipments have been created



	Shipment #	Order #	Tracking number	Total weight	Date shipped	Date delivered	View
▾	1112	4057		30.00 [kg(s)]	Not yet	Not yet	View

Product	Warehouse	Qty shipped	Item weight	Item dimensions	Shipment
Nike Shoes - No Vendor	Warehouse B (Belgium)	3	10.00 [kg(s)]	0.60 x 0.45 x 0.45 [meter(s)]	Edit

1-1 of 1 items

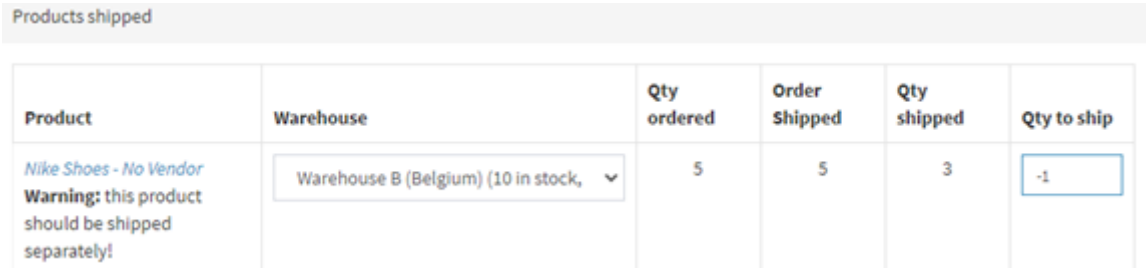
▾	1111	4057		20.00 [kg(s)]	Not yet	Not yet	View

Product	Warehouse	Qty shipped	Item weight	Item dimensions	Shipment
Nike Shoes - No Vendor	Warehouse A (Netherlands)	2	10.00 [kg(s)]	0.60 x 0.45 x 0.45 [meter(s)]	Edit

If the parcels have not yet been shipped then can change the number of items Shipped from any warehouse by editing the quantity value.

Unship and Item

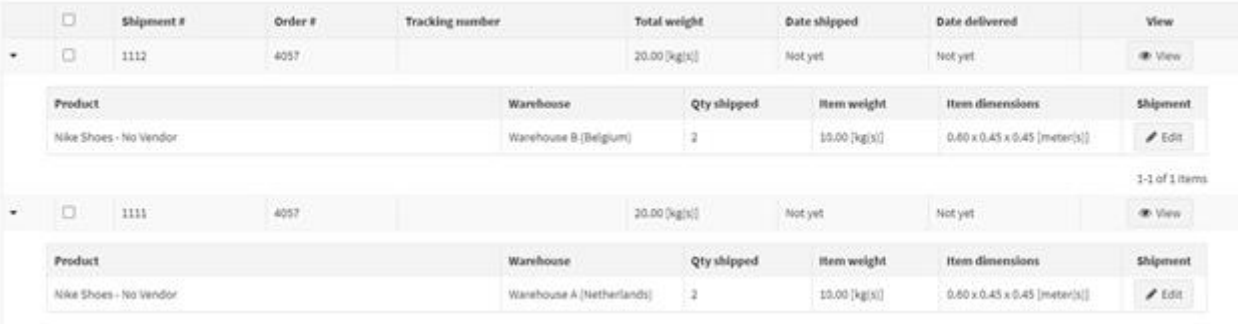
To unship an item enter a negative value



Products shipped

Product	Warehouse	Qty ordered	Order Shipped	Qty shipped	Qty to ship
Nike Shoes - No Vendor **Warning:** this product should be shipped separately!	Warehouse B (Belgium) (10 in stock,	5	5	3	-1

The quantity values have been updated



	Shipment #	Order #	Tracking number	Total weight	Date shipped	Date delivered	View
▾	1112	4057		20.00 [kg(s)]	Not yet	Not yet	View

Product	Warehouse	Qty shipped	Item weight	Item dimensions	Shipment
Nike Shoes - No Vendor	Warehouse B (Belgium)	2	10.00 [kg(s)]	0.60 x 0.45 x 0.45 [meter(s)]	Edit

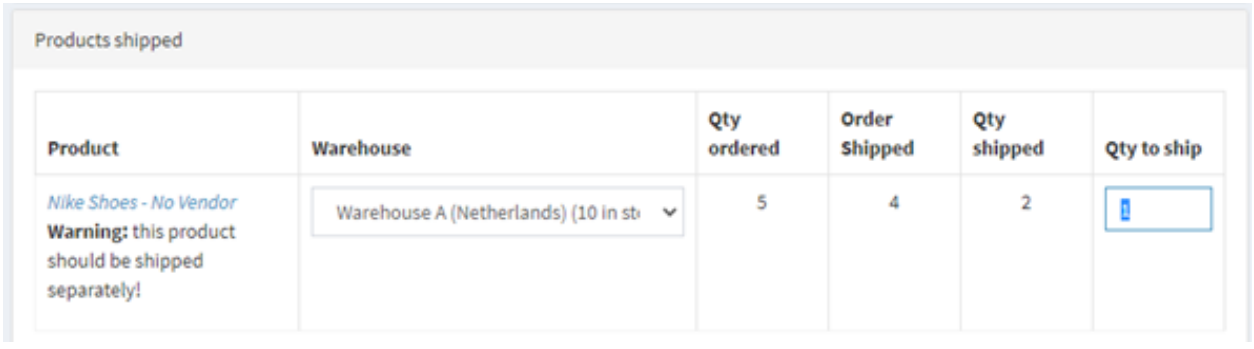
1-1 of 1 items

▾	1111	4057		20.00 [kg(s)]	Not yet	Not yet	View

Product	Warehouse	Qty shipped	Item weight	Item dimensions	Shipment
Nike Shoes - No Vendor	Warehouse A (Netherlands)	2	10.00 [kg(s)]	0.60 x 0.45 x 0.45 [meter(s)]	Edit

Change Quantity Shipped

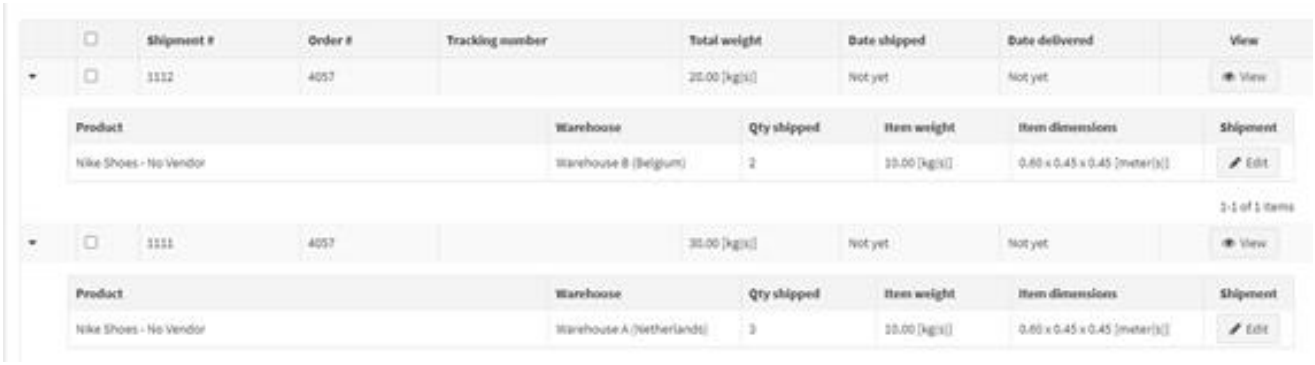
We can then edit the second shipment to increase the quantity to be shipped



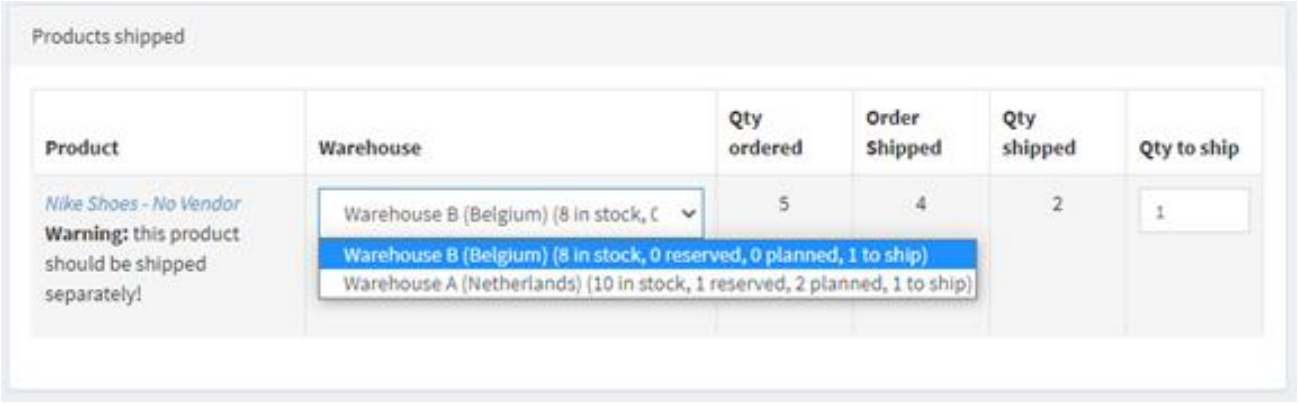
Products shipped

Product	Warehouse	Qty ordered	Order Shipped	Qty shipped	Qty to ship
Nike Shoes - No Vendor **Warning:** this product should be shipped separately!	Warehouse A (Netherlands) (10 in st	5	4	2	1

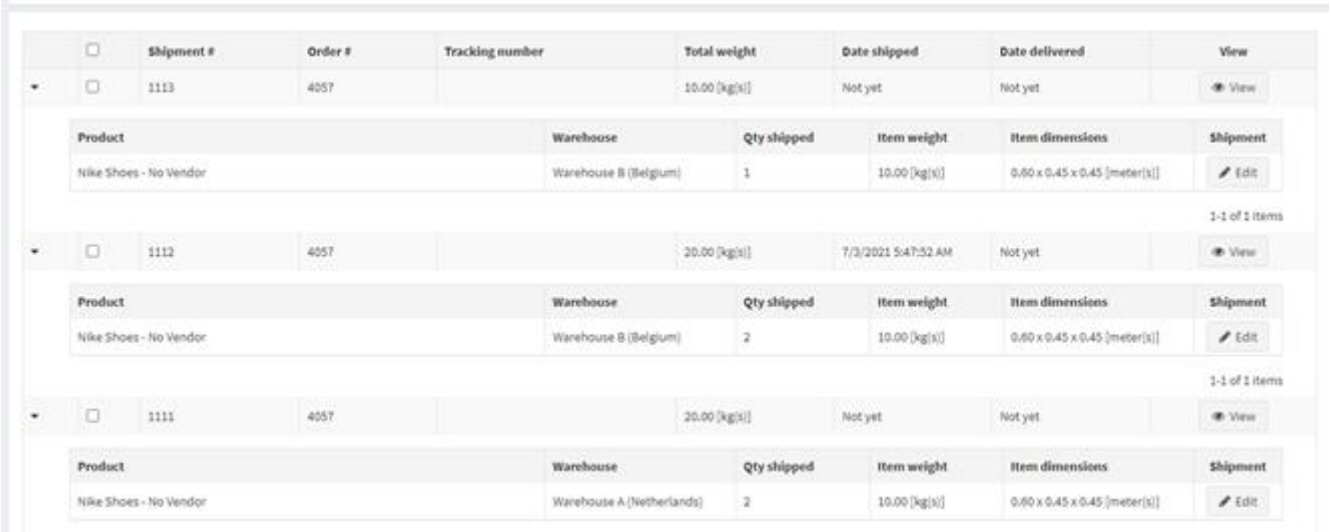
The quantity values have been updated



When an item shipment has already been created you can reassign the items to be shipped to another warehouse



In this case an additional shipment will be created give the first shipment had already been sent from the first warehouse selected

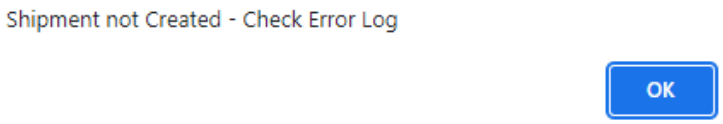


Note: the values cannot be edited after a shipment is marked as shipped

After making any changes click the **Save** button

Create Shipment Errors

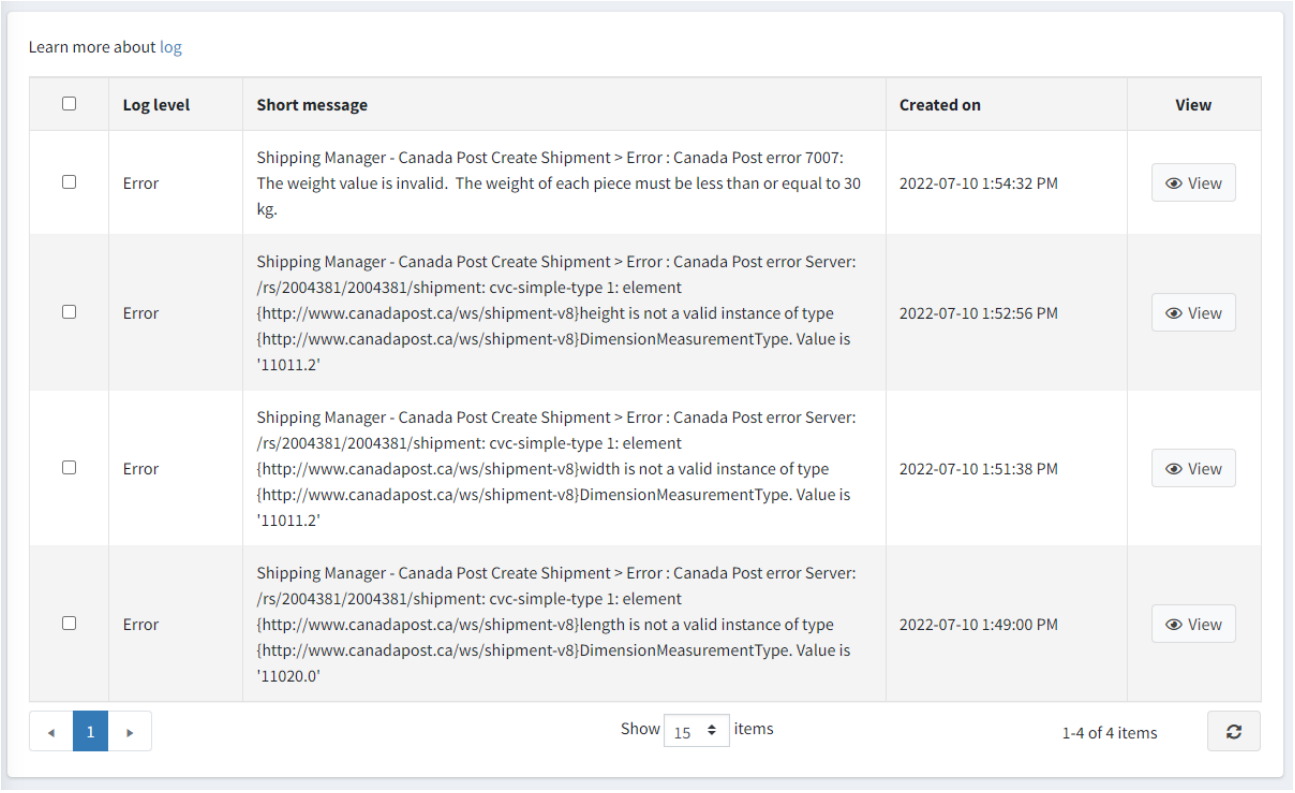
If any error is created as a result of configuration or system errors then the following message will be displayed



In this case check the System Log to determine the error.

Checking the System error Log

For example Canada Post Errors:



Learn more about log

	Log level	Short message	Created on	View
☐	Error	Shipping Manager - Canada Post Create Shipment > Error : Canada Post error 7007: The weight value is invalid. The weight of each piece must be less than or equal to 30 kg.	2022-07-10 1:54:32 PM	View
☐	Error	Shipping Manager - Canada Post Create Shipment > Error : Canada Post error Server: /rs/2004381/2004381/shipment: cvc-simple-type 1: element {http://www.canadapost.ca/ws/shipment-v8}height is not a valid instance of type {http://www.canadapost.ca/ws/shipment-v8}DimensionMeasurementType. Value is '11011.2'	2022-07-10 1:52:56 PM	View
☐	Error	Shipping Manager - Canada Post Create Shipment > Error : Canada Post error Server: /rs/2004381/2004381/shipment: cvc-simple-type 1: element {http://www.canadapost.ca/ws/shipment-v8}width is not a valid instance of type {http://www.canadapost.ca/ws/shipment-v8}DimensionMeasurementType. Value is '11011.2'	2022-07-10 1:51:38 PM	View
☐	Error	Shipping Manager - Canada Post Create Shipment > Error : Canada Post error Server: /rs/2004381/2004381/shipment: cvc-simple-type 1: element {http://www.canadapost.ca/ws/shipment-v8}length is not a valid instance of type {http://www.canadapost.ca/ws/shipment-v8}DimensionMeasurementType. Value is '11020.0'	2022-07-10 1:49:00 PM	View

1 Show 15 items 1-4 of 4 items

All of these errors relate to weights and measures that are invalid.

Check the packaging options selection and setup also check the product setup.

For example

The weight is greater than 30kg maximum limit

For example

The dimensions are greater than maximum limit

Installing the Plugin

The zip package supplied can be uploaded and installed using the “Upload plugin or theme” button on the Configuration > plugins page.

Refer to Then the installation of the plugin follows the standard nopCommerce procedure.
See https://docs.nopcommerce.com/user-guide/configuring/system/plugins.html

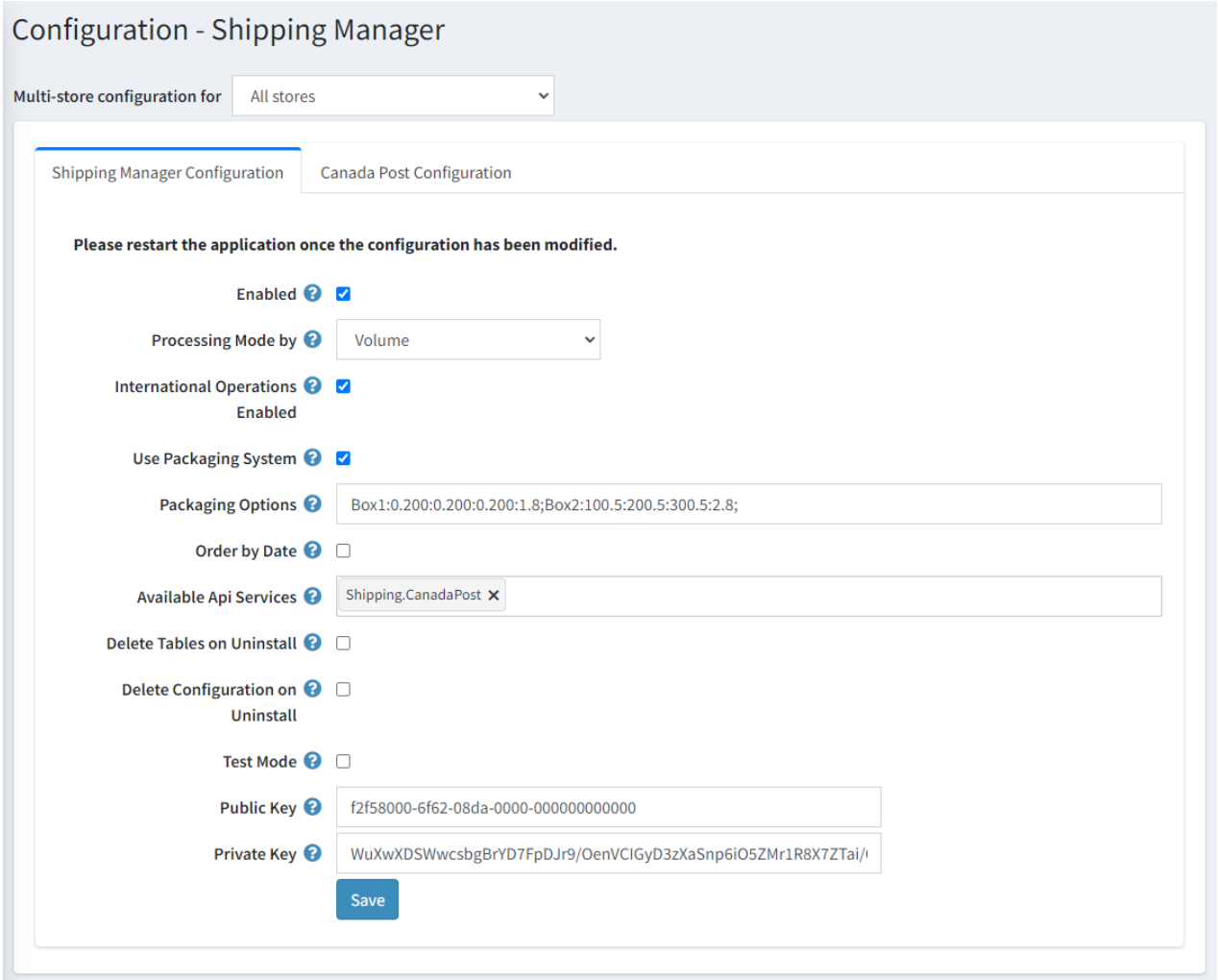
Alternatively, you can manually install the plugin:

1. Copy the Plugin to the correct directory
2. Restart the Application – Click the Icon in the top

Once installed the you can configure the plugin.

Configure Settings

The settings for the plugin can be set using the configure page. To setup the plugin or define the options open the config page in the Menu then click the required function checkbox. After entering the settings click **Save.**



Multistore Configuration

The plugin supports multistore configurations. Select All Stores to setup the settings for All Stores or alternatively select the store and customise the settings for the particular store.

Enable Plugin

To Enable the Plugin click Enable

Processing Mode (Only used by Shopping Manager Computation

There are a number of modes of operation that can be used depending on the most common configuration of the system product base.

Processing by Item: All items in the shopping cart are organised by product as individual packages which then sent to gain a price for shipping calculation.

Processing by Volume: All items in the shopping cart are organised by warehouse as packages which then sent to gain a price for shipping calculation.

For more information see the Processing Mode section.

International Operations Enabled

To enable the selection of Country for the configuration of Shipping Rates click International Operations Enabled

Use Packaging system

Select this option if you ship multiple items together in the one package

Packaging Options

Enter the available Packaging options – See Packaging Options below

Ordered by Date

When selected Orders and Shipments are sorted by date decreasing when displayed on the Order process and Shipment processing views.

Available API Services

Select which API Services you wish to make Available in the plugin:

Select **Shipping.CanadaPost** to enable the use of the Canada Post shipping systems

Also refer to the **External Plugins Section** below

In the above configuration Canada Post external or separate plugin has been added as an option which can then be selected when configuring Carriers.

Note:

Shipping.Sendcloud is for European Markets

Shipping.AustraliaPost and Shipping.Aramex are for Australian Markets

Delete Tables on Uninstall

This setting is used if the plugin needs to be uninstalled. To delete the tables and the configuration click the Checkbox

Delete Configuration on Uninstall

This setting is used if the plugin needs to be uninstalled and you will not be reinstalling and want to delete the system configuration

Test Mode

When test mode is enabled, the plugin will store Information messages in the system log to enable fault finding and debugging of any issues.

Purchased Licence Keys

When you first install the plugin Demonstration keys will be automatically generated. The plugin can be operated in demo mode for 14 days. The purchase licence keys will be provided via email normally within 1 day after purchase. The purchase licence keys can then be entered as follows:

Public Key

This is the plugin licence public key provided. When you first install the plugin a Demonstration key will be saved. Change this value to the Public key suppled in the email when received.

Private Key

This is the plugin licence public key provided. When you first install the plugin a Demonstration key will be saved. Change this value to the Private key suppled in the email when received.

Inbuild API Settings

System Configuration

The plugin utilises elements of the nopCommerce system shipping configuration and then must be configured before the plugin is used to estimate and display shipping rates

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/shipping-settings.html

Measures Configuration

System measures must be configured correctly including the units of weights and dimensions that relate to the country of Shipping Origin.

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/advanced-configuration/measures.html

A typical configuration for metric countries is:

Measures

Dimensions

Name	System keyword	Ratio to primary dimension	Display order	Is primary dimension	Mark as primary dimension	Edit	Delete
inch(es)	inches	1	1	✗	Mark as primary dimension	Edit	Delete
feet	feet	0.08333333	2	✗	Mark as primary dimension	Edit	Delete
meter(s)	meters	1	3	✓	Mark as primary dimension	Edit	Delete
millimetre(s)	millimetres	1000	4	✗	Mark as primary dimension	Edit	Delete

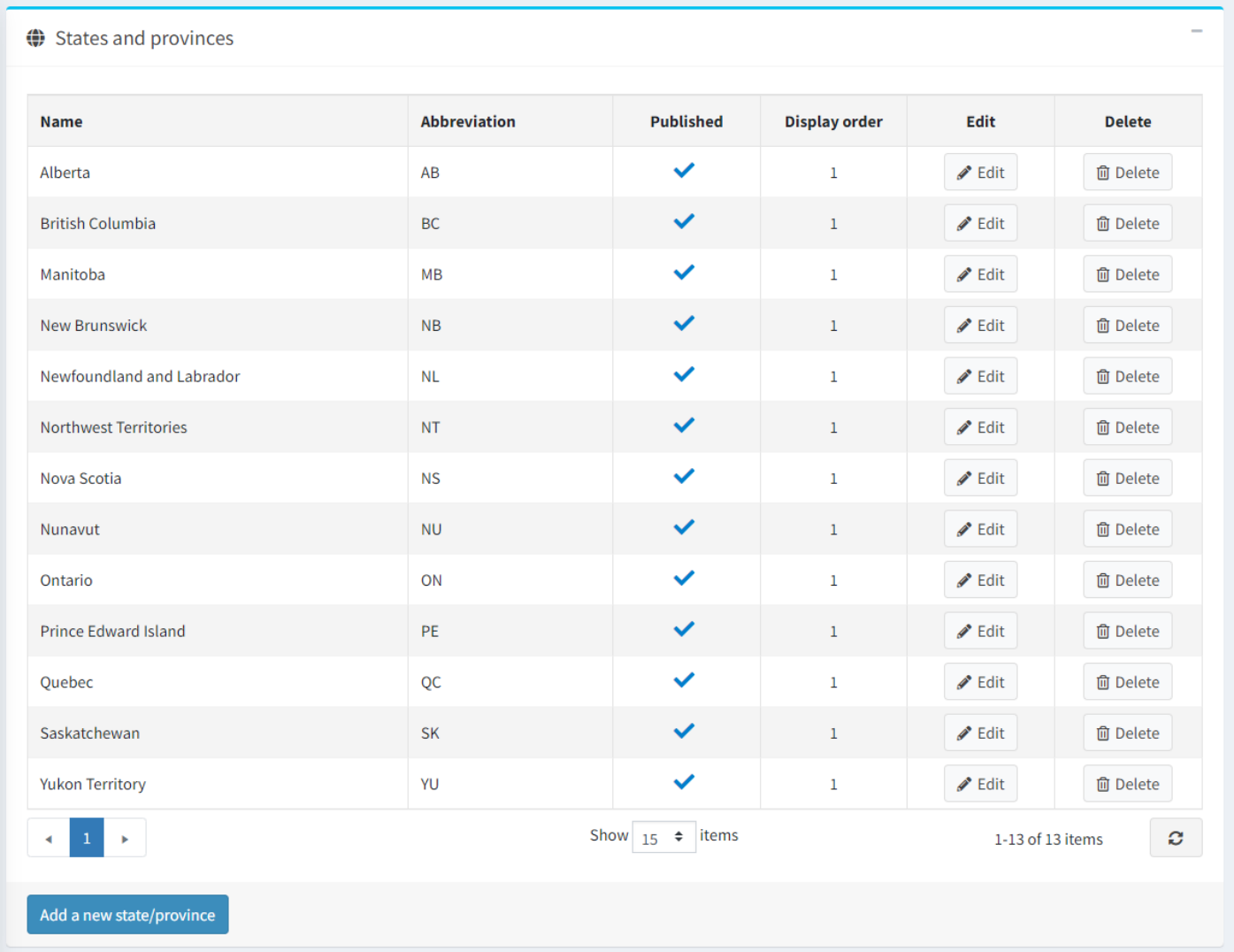
Weights

Name	System keyword	Ratio to primary weight	Display order	Is primary weight	Mark as primary weight	Edit	Delete
ounce(s)	ounce	16	1	✗	Mark as primary weight	Edit	Delete
lb(s)	lb	1	2	✗	Mark as primary weight	Edit	Delete
kg(s)	kg	1	3	✓	Mark as primary weight	Edit	Delete
gram(s)	grams	1000	4	✗	Mark as primary weight	Edit	Delete

States and Provinces

Ensure the states have been correctly configured for the required Countries.

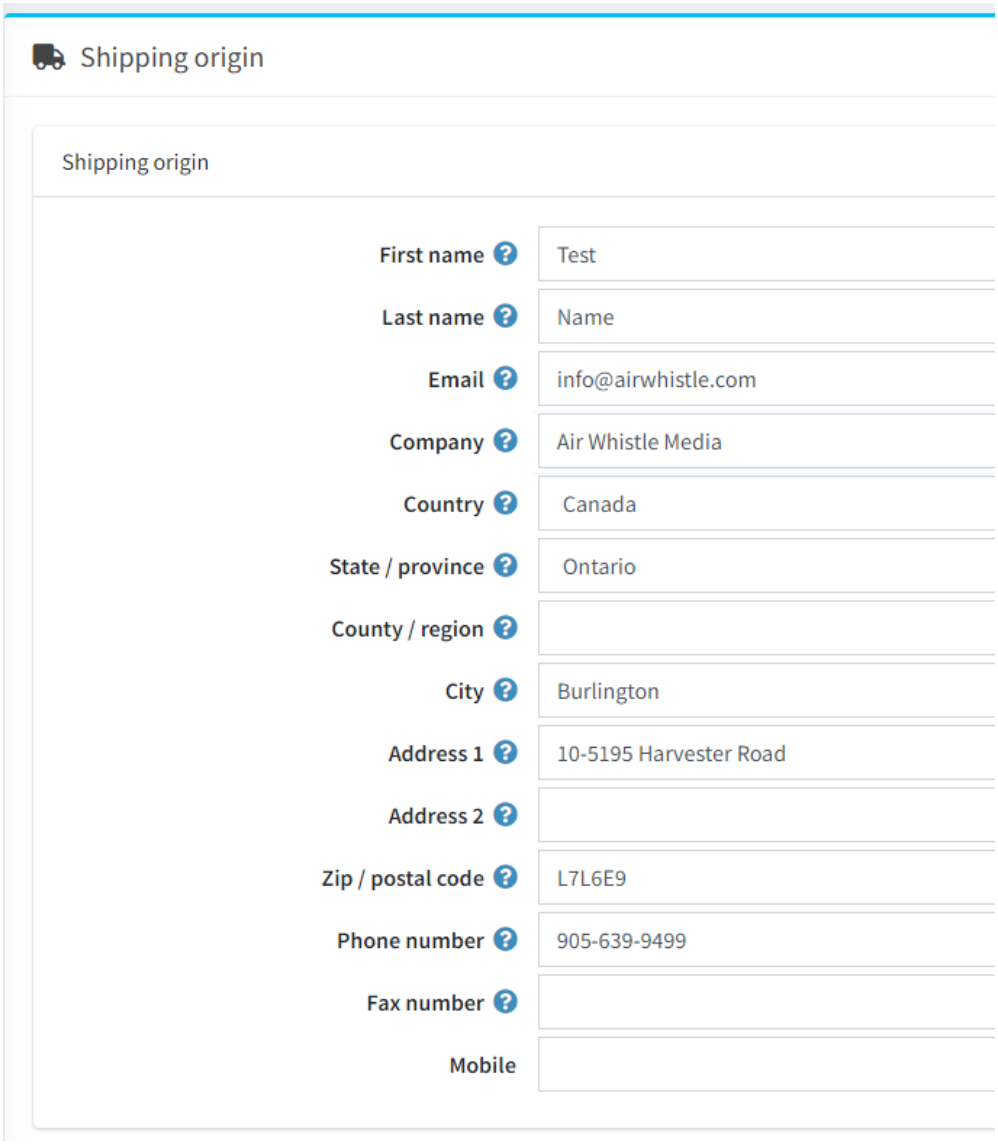
For example, the Abbreviations for States of Canada are shown below



Default Shipping Address

Some shipping methods require a default address and specifically a state which is not available in the nopCommerce Shipping Estimate function, in this case the first address found in the customer's account is used. For example, Aramex requires a **City** to find the address for the shipping destination to calculate an estimate.

Ensure the address is valid for the shipping method used.



Note: If you have been using the standard Canada Post shipping method then this should already be configured

Shipping Settings

Shipping Manager uses the system settings to configure the operation of the plugin:

Setting name	Value
shippingsettings.activepickuppointprovidersystemnames	Pickup.PickupInStore
shippingsettings.activeshippingratecomputationmethodsystemnames	Shipping.CanadaPost,Shipping.FixedByWeightByTotal,Shipping.Manager
shippingsettings.allowpickupinstore	True
shippingsettings.bypassshippingmethodselectionifonlyone	False
shippingsettings.considerassociatedproductsdimensions	True
shippingsettings.displaypickuppointsonmap	False
shippingsettings.displayshipmenteventstocustomers	True
shippingsettings.displayshipmenteventstostoreowner	True
shippingsettings.estimateshippingcartpageenabled	True
shippingsettings.estimateshippingcitynameenabled	False
shippingsettings.estimateshippingproductpageenabled	True
shippingsettings.freeshippingoverxenabled	False
shippingsettings.freeshippingoverxincludingtax	False
shippingsettings.freeshippingoverxvalue	0
shippingsettings.googlemapsapikey	
shippingsettings.hideshippingtotal	False
shippingsettings.ignoreadditionalshippingchargeforpickupinstore	True
shippingsettings.notifycustomeraboutshippingfrommultiplelocations	True
shippingsettings.requestdelay	300
shippingsettings.returnvalidoptionsifthereareany	True
shippingsettings.shippingoriginaddressid	2020
shippingsettings.shipseparatelyoneitemeach	True
shippingsettings.shiptosameaddress	True
shippingsettings.usecuberootmethod	True
shippingsettings.usewarehouselocation	True

Product Configuration

Refer to nopCommerce documentation

See https://docs.nopcommerce.com/en/running-your-store/catalog/products/add-products.html

Free Shipping

Where used the cost of shipping will be free but the weight is still considered when determining the available of the service

Ship Separately

A product should use this option where the weight of the product cannot be broken down into small packages for shipping calculation. i.e. A carton of wine is sold as a carton. A TV in a box cannot be divided into two cartons.

Weight

The maximum weight of each individual product item

Length, Width and Height

The maximum dimensions of the product or shippable product package.

nopCommerce Shipping Settings

Refer to nopCommerce documentation

See https://docs.nopcommerce.com/en/getting-started/configure-shipping/shipping-settings.html

and https://docs.nopcommerce.com/en/getting-started/advanced-configuration/all-settings.html

There are a number of nopCommerce Shipping Settings that should be considered and set based on the standard operations for shipping

ShipSeparatelyOneItemEach

This setting is used when creating the shipment package. If it is true then when products are shipped separately each product item is also shipped separately

ConsiderAssociatedProductsDimensions

This setting is used when creating the shipment package. If it is true then when products associated then the dimensions of the associated product are added the selected product

UseCubeRootMethod

This setting is used when multiple products are added to the shipping cart and the product is not set to ship separately rather than multiplying the dimensions by the quantity the system uses the cube root method to estimate the dimensions.

ReturnValidOptionsIfThereAreAny

When set any valid shipping options are returned otherwise if there is an error then no shipping options are returned

EstimateShippingEnabled

When true the shipping estimate view is shown.
Note: some shipping methods require the city to be entered which is not currently available in the parameters passed for the shipping estimate. In this case a customer's default shipping address is used to calculate the estimate

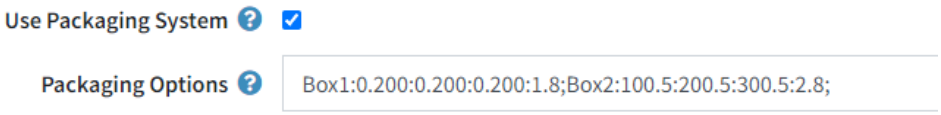
Packaging Options

When a shipment is created from an order, by default the dimensions and weight which are setup in the product are used to create the shipment.

A problem can then arise when multiple products are purchased in the same order and are to be shipped together because then the size of the package which is to be prepared for shipping no longer directly relates to the dimensions and weight of the single product.

As such the system allows you to create default packaging options in the configuration which can then be later used when creating a shipment.

Refer to Plugin configuration above



When entering the Packaging options available use the same units as measurement as defined for products.

Refer to Measures Configuration above

When entering the Packaging options available use the following format:

PackagingOptionName1: Length**:**Width**:**Height:Weight;**PackagingOptionName2**:Length:Width:Height:Weight;

Where:

PackagingOptionName is the name of the packaging option

Length is the length of the packaging

Width is the length of the packaging

Height is the length of the packaging

Weight is the weight of empty packaging

Any number of packaging options can be entered – ensure you use the format separators **:** and **;** correctly

In the example shown here the values are entered in metres and kgs

Note: when the shipment is automatically created then the first Packaging Option in the list will be used as the default Packaging Option

If required the Packaging Option can be changed when editing a shipment.

Test Mode – System Log

Using the plugin requires the configuration is setup correctly you can check the error log for debug, information and error messages to help find issues or problems with your configuration

Turn on Test Mode in Config

Each Api in use also has a separate test mode

Check the Error log – Search for Information Messages

Entity Configuration

Shipping Methods

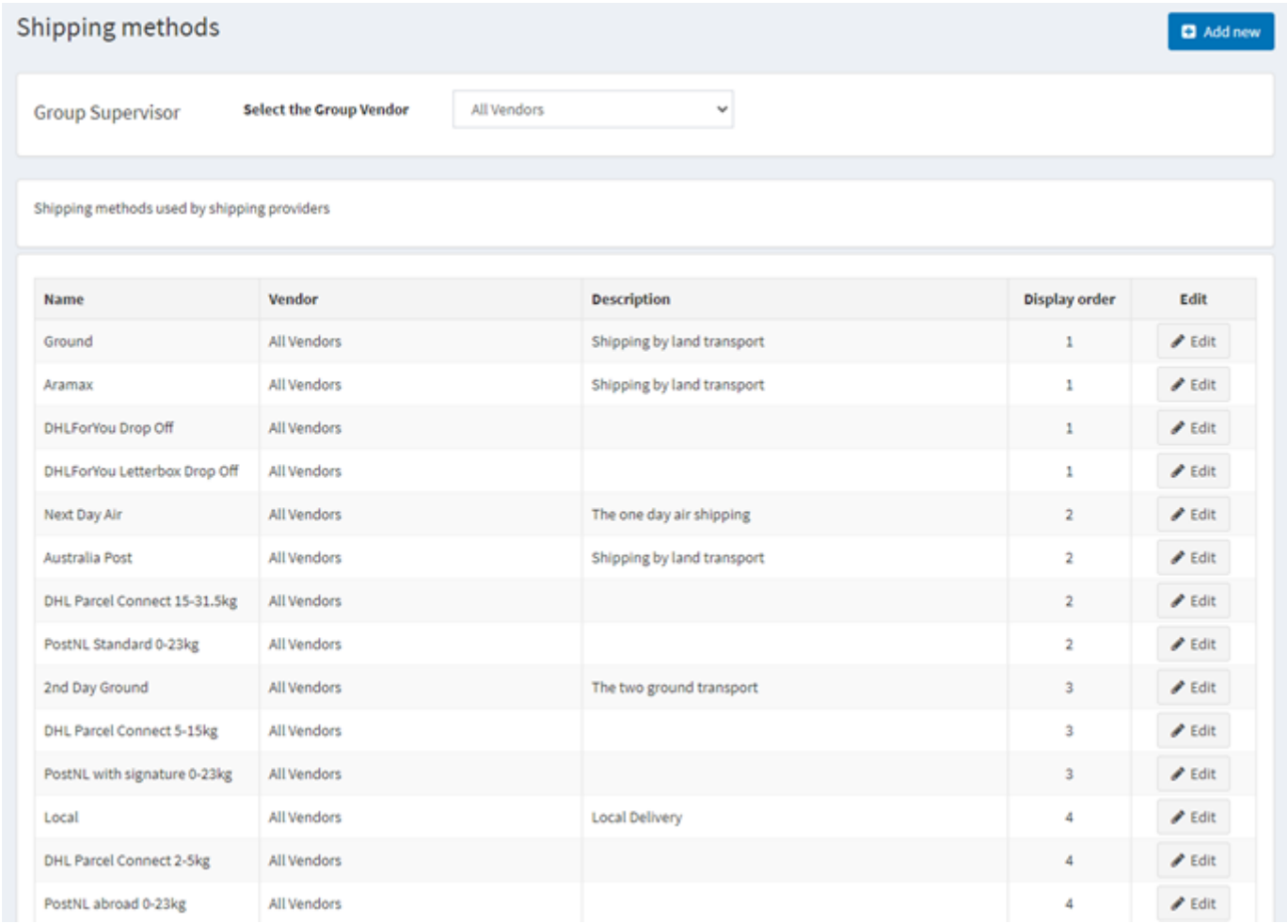
Shipping Methods are required to be setup before a Shipping Rate can be configured. Shipping Methods can also be defined by Vendor in a multivendor system.

When an Admin Operator is logged in as an Administrator, they can see all Shipping Methods. Where multiple vendors are configured only the Shipping Rates defined for the Current Vendor are displayed.

Shipping Methods are defined by Name.

When an order is created in nopCommerce as part of the shopping cart checkout the selected Shipping Method and associated Shipping Provider Plugin name is stored in the order and displayed to the customer.

This means that when you define shipping methods then the names need to be unique so that later the name can be searched and found via the information that is stored in the order.



Friendly Name

It is also possible to define a friendly name for each shipping Method Rate.

The Friendly Name does not need to be unique but for each rate that uses the same Friendly Name it must link to the same Shipping Method

In the case where no Friendly Name is entered then the Shipping Method name will be displayed

Vendors

nopCommerce allows products to be defined as being provided by a vendor. Vendors are setup in the system and then linked to Customers which are then configured as “vendor customers”. Once a vendor is setup this then allows products to be created for a particular vendor or owner by the vendor, these products then become “vendor products”

See https://docs.nopcommerce.com/en/running-your-store/vendor-management.html

Normally the system entities: Warehouses, Shipping Rates, Dates and Ranges, Orders and Shipments cannot be segregated or defined by vendor. Rather they are defined or created for use in system as a whole.

By using the Shipping Manager plugin, the standard nopCommerce configuration can be modified and enhanced to allow these system entities to be defined, configured and accessed by a particular vendor and each vendor is able to define or create “their own” system entities.

These system entities can then be later utilised based on the particular product or “vendor product” which is selected and added to the shopping cart.

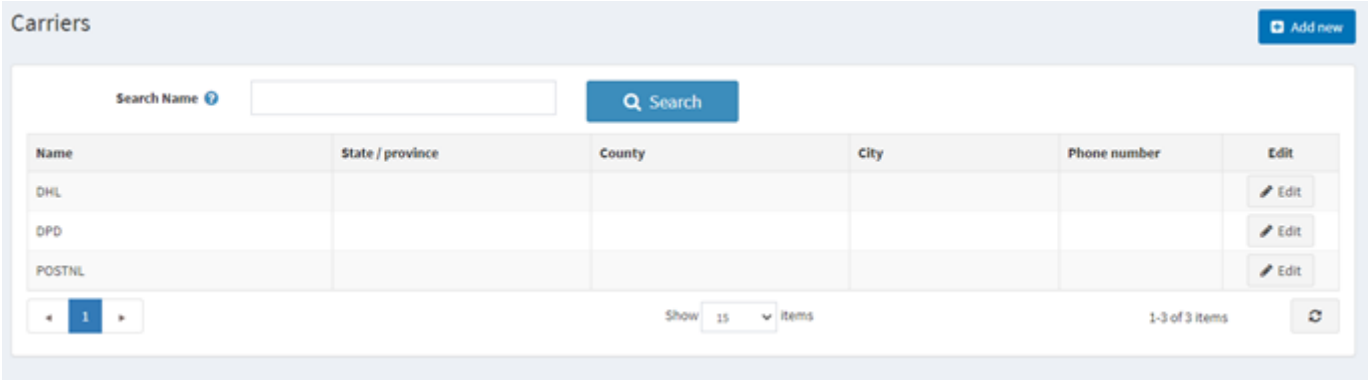
This allows each vendor to separately define their own rates for shipping, allow or disallow the use of certain shipping methods for different warehouses and or dispatch locations and add their own additional shipping fees and changes based on system parameters and the selected product.

Note: not all options will be shown depending on the Access Control Configuration

Carriers

Carriers are required to be setup before a Shipping Rate can be configured. Carriers can also be defined by Vendor in a multivendor system.

When an Admin Operator is logged in as an Administrator, they can see all Carriers. Where multiple vendors are configured only the Carriers defined for the Current Vendor are displayed.



Carriers are defined by Name

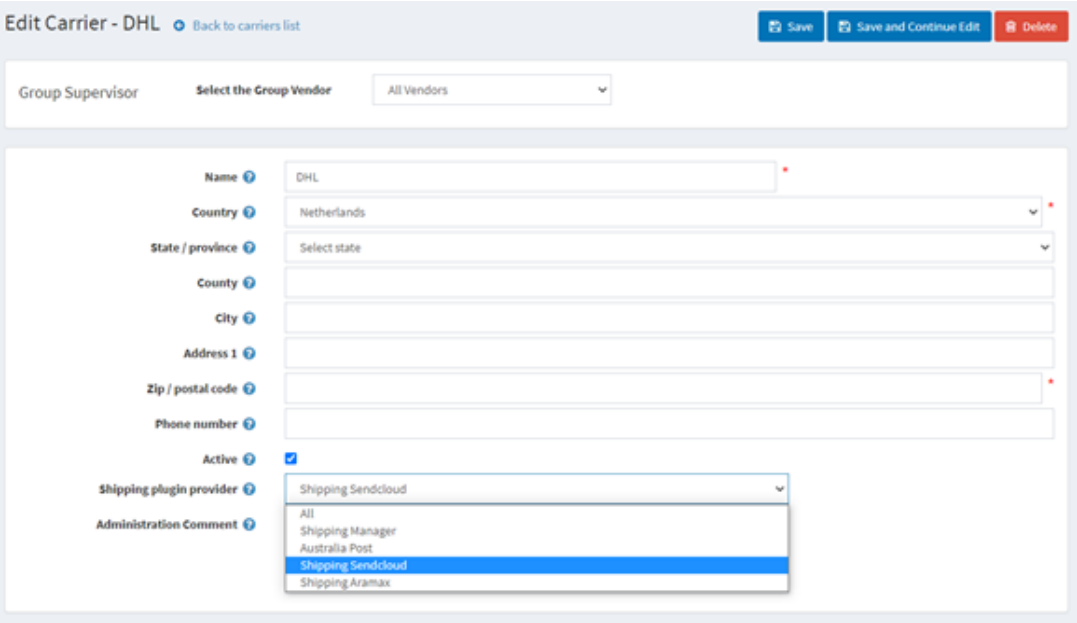
When the shipping cost is being calculated the **Shipping Rate** options are searched by the carrier defined in the shipping rates.

Editing a Carrier

You can edit a carrier and make it active or in-active meaning it will not be used when searching and determining which rates will be shows to the customer. At this stage the address is only used to display information to the store owner and is not used for any other purpose.

Linking a Carrier to an API

When you edit a Carrier, it is possible to link a particular carrier to a Shipping Plugin. This means that when the rates are searched and a rate is found that matches the search criteria e.g. County and State.



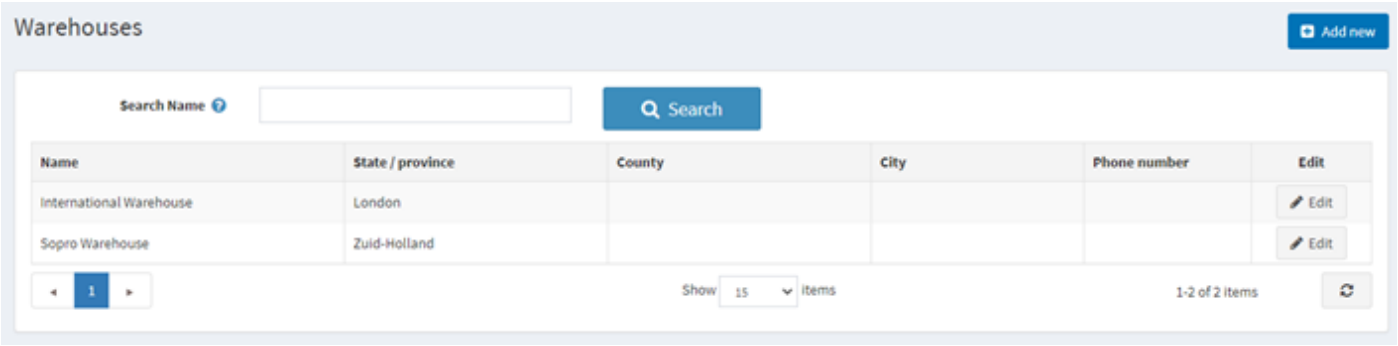
When linked to a provider then then the Shipping Rate options and the base shipping rate will be obtained from the provider API. The above formula values will then

Warehouses

Defining Warehouses are optional when setting a Shipping Rate. Warehouses can also be defined by Vendor in a multivendor system.

When an Admin Operator is logged in as an Administrator, they can see all Warehouses. Where multiple vendors are configured only the Warehouses defined for the Current Vendor are displayed.

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/advanced-configuration/warehouses.html

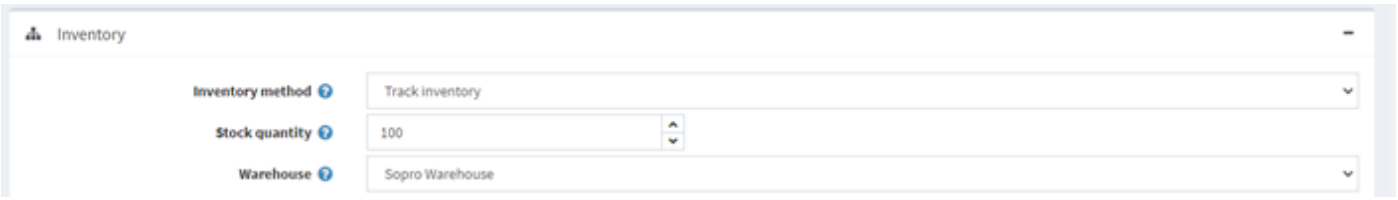


Warehouses are defined by Name

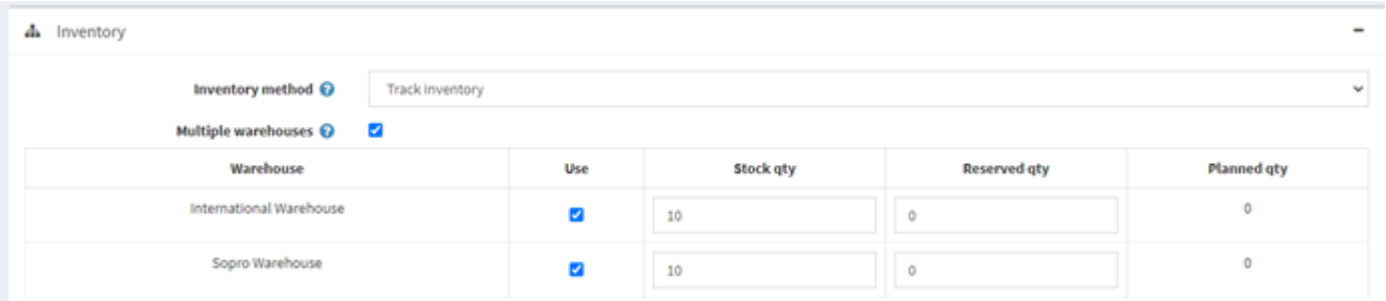
When the shipping cost is being calculated the **Shipping Rate** options are searched by the warehouse defined in nopCommerce

Allocating Warehouses to Products

Products can be allocated to a Single Warehouses



Products can be allocated to Multiple Warehouses



Dates and Ranges

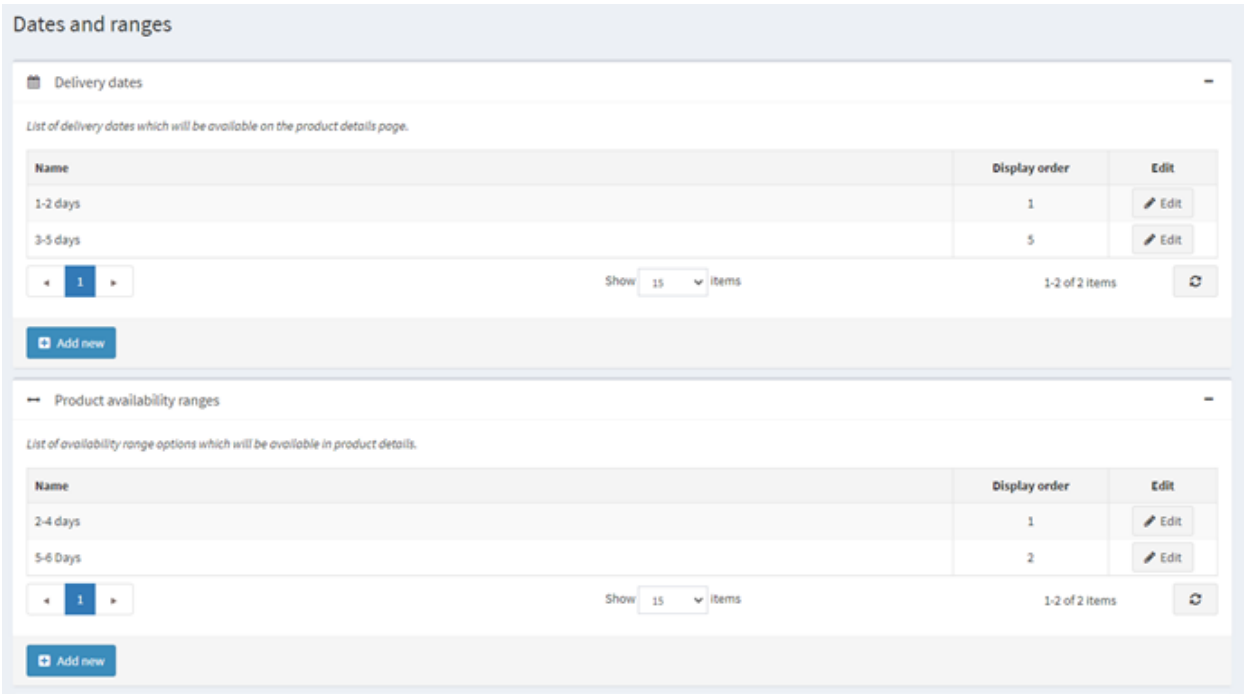
Defining Dates and Ranges are used when setting up a product ready for purchase. Dates and Ranges can also be defined by Vendor in a multivendor system.

When an Admin Operator is logged in as an Administrator, they can see all Dates and Ranges. Where multiple vendors are configured only the Warehouses defined for the Current Vendor are displayed.

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/advanced-configuration/dates-and-ranges.html

Delivery Days and Product Availability Ranges

Delivery Days and Product Availability Ranges are used when defining a product



Cut Off Time

Cut off Time is used when defining a **Shipping Rate**

There are two types of cut off times

1. The cut of time for a package to be picked up so it can be shipped and delivered by the specified Delivery Date in the product configuration
2. The cut of time use is still yet to be determined.

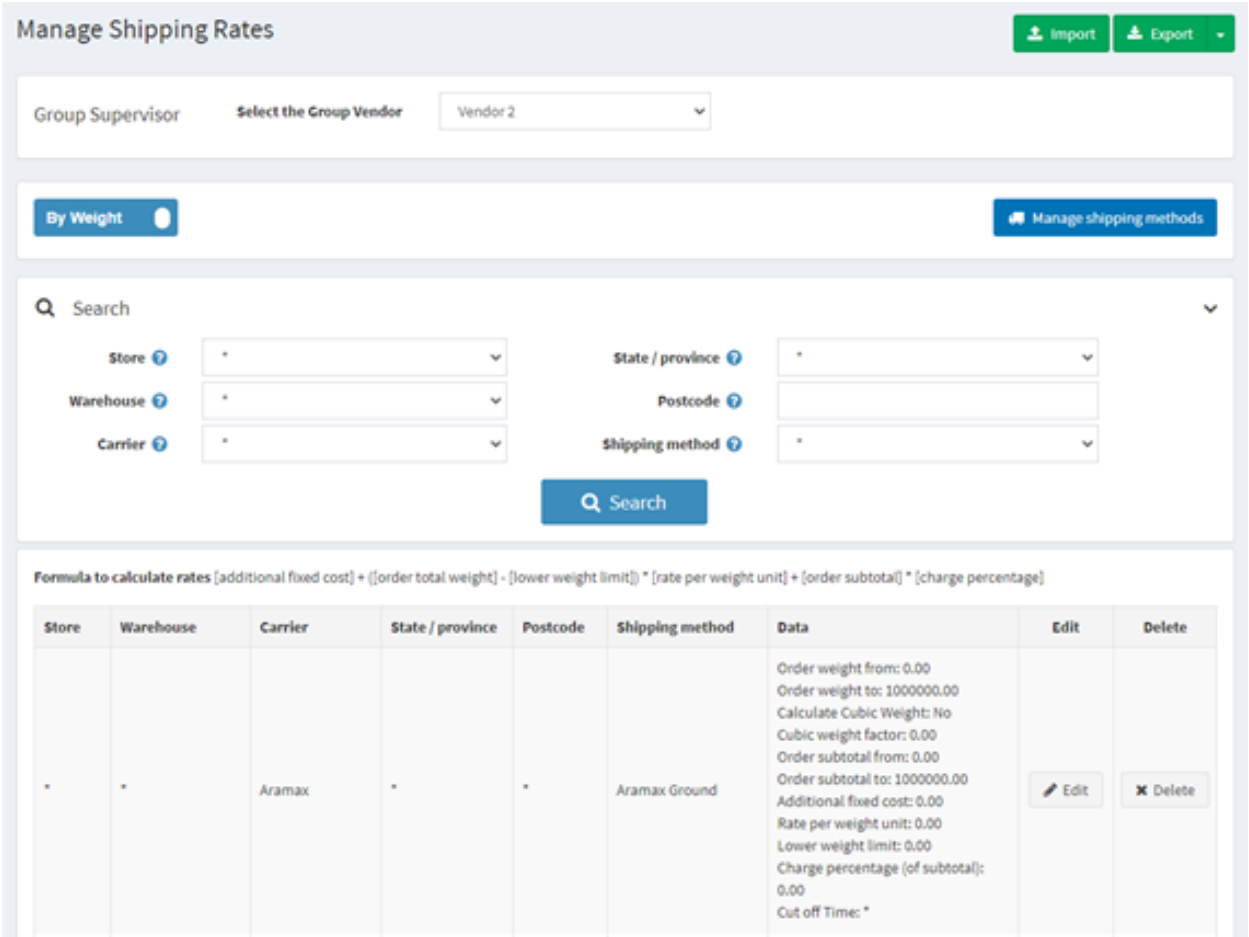
Managing Shipping Rates

Shipping Rates are required to be setup before a shipping rate selection option can be displayed to customers in the checkout. Shipping Methods can also be defined by Vendor in a multivendor system.

When an Admin Operator is logged in as an Administrator, they can see all Shipping Methods. Where multiple vendors are configured only the Shipping Rates defined for the Current Vendor are displayed.

Rates are manually entered or imported from an excel configuration file. Shipping Rates can also be automatically calculated when external API's or other Shipping Plugins are used.

The following view is displayed when this menu option is selected.



Manual Shipping Rate Configuration and Calculation

When the rates are manually configured, they can be selected and displayed in the checkout process based on the current configuration and the product package to determine the shipping options available to be displayed.

For this mode of operation, the shipping rates can be manually defined by Store, Vendor, Warehouse, Carrier, Country, State Province and Shipping Method, Weight and Subtotal

The rate configurations that are displayed are defined as manual shipping rates.

Access to the rates from both internal API's and other Shipping Plugins are also defined and controlled by adding records in the manual configuration

Refer to later sections in the document to apply these types of configurations

Note: * means not defined or limited by that parameter and matches in all searches

Search by the various options

Once a rate has been setup this function allows the operator to search for rates by Store, Warehouse, Carrier, State/province, Postcode and Shipping Method

Manage the Shipping Methods (Setup in the Plugin Configuration)

Click this option to create, edit and manage Shipping Methods which are required to be used in the configuration of shipping rates

Edit a Rate

Click the Edit button on one of the rates to edit the settings.

Adding a new Rate

To add a new rate, click on the Add button. The default values are displayed:

To define a new rate, you can select any of the options that available. When a rate is selected in the checkout it will use the parameters that are defined to select the available rates

To keep the configuration simpler, unless a parameter is specifically required to be defined for the search then you are better to leave the option as unselected

Store (only displayed when multiple stores are configured)

To setup shipping rates for different stores then select the store otherwise use the default value

Vendor (only displayed when multiple vendors are configured)

When products have a vendor defined then rates will be searched by that vendor. Therefore, you need to define a rate for any vendor define for a product.

Carrier

Select a carrier to utilise this rate

Shipping Method

Select a predefined shipping method to use this rate

Friendly name

This allows you to enter a customer friendly name for this rate. Where no Friendly name is entered the customer will see the Shipping method name.

Warehouse

To define different rates for each warehouse then select the warehouse otherwise use the default value

Cut Of Time

To define a cut off time then select the predefined cut of time otherwise use the default value

Country

To define a country for this rate then select the predefined country otherwise use the default value

State / province

To define a state /province for this rate then select the predefined state /province otherwise use the default value

Postcode

To define a postcode for this rate then enter a postcode otherwise leave the field blank

Formula to calculate rates displayed to customer

The other values which can be entered are applied in the following formula when displayed to the customer

Shipping rate = ([additional fixed cost] +
([order total weight] - [lower weight limit]) * [rate per weight unit])
* [charge percentage]

where:

additional fixed cost - is the additional cost of the shipment where the weight is under a certain level (lower weight limit).

rate per weight unit - is the cost of each weight unit above the lower weight limit.

order subtotal and charge percentage - are parameters for calculating the extra cost based on the order subtotal.

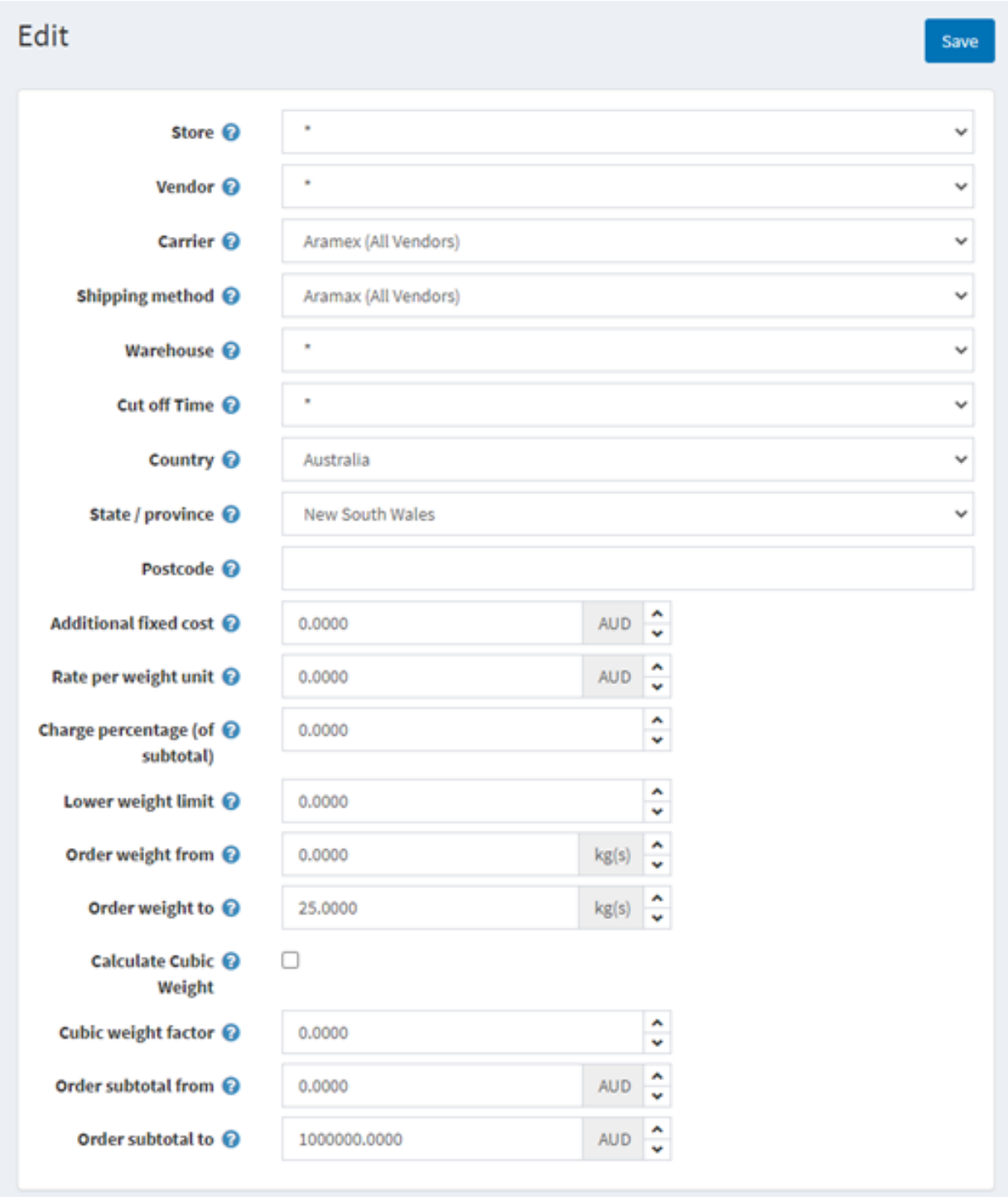
For more information and examples on defining manual rates

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/shipping-providers/manual.html

Note: Where the **Calculate cubic weight** option is selected then the package dimensions are used to calculate the cubic weight using the **Cubic weight factor.** In this case this weight is used rather than the dead weight

Edit Rate Configuration

Similarly, an existing rate can be edited



In this example displayed:

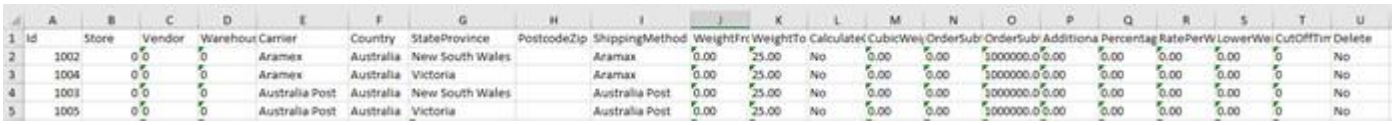
The Carrier is set as Aramex
The country the rate will apply to is Australia
The state the rate will apply to is New Source Wales
The shipping method to use is Aramex
The order weight to check this applies is from 0 to 25 kg

All other parameters use the default setting

Import and Export the Configuration

Export

Click Export to export the current configuration to an excel file



Id	Store	Vendor	Warehouse	Carrier	Country	StateProvince	PostcodeZip	ShippingMethod	WeightFr	WeightTo	Calculate	CubicWei	OrderSub	OrderSub	Additiona	Percentag	RatePerW	LowerWe	CutOffTir	Delete
1002	0	0	0	Aramex	Australia	New South Wales		Aramax	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No
1004	0	0	0	Aramex	Australia	Victoria		Aramax	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No
1003	0	0	0	Australia Post	Australia	New South Wales		Australia Post	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No
1005	0	0	0	Australia Post	Australia	Victoria		Australia Post	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No

Import

Click Import to select and import a configuration from an excel file in the correct format

To update existing records the Id is used as the key to find and update the record

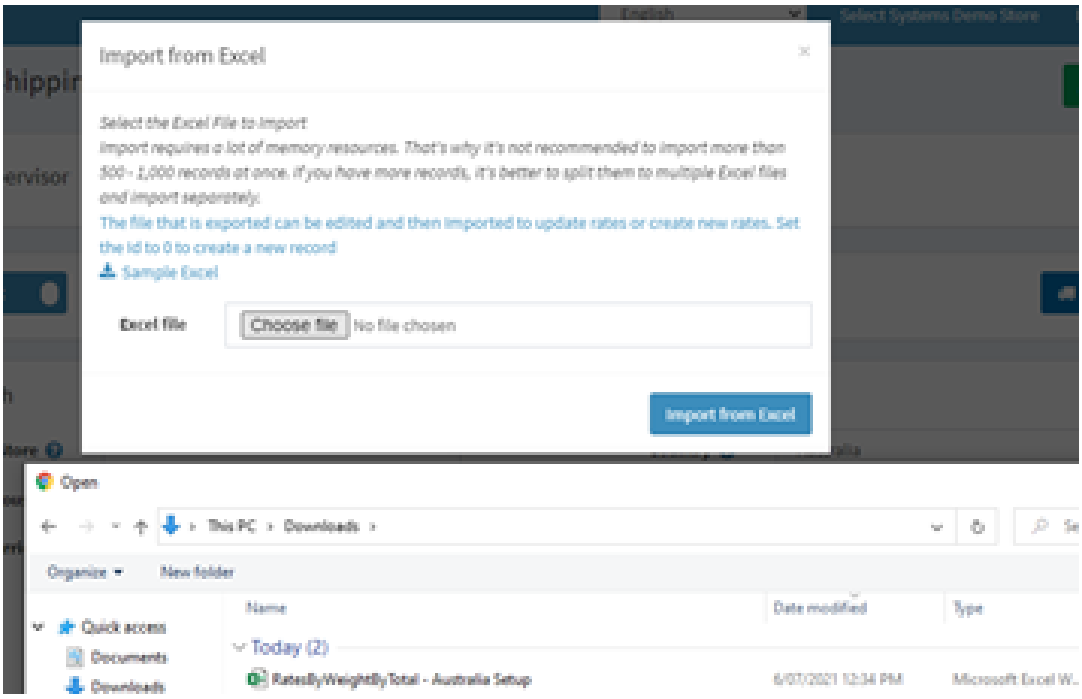
To create new records the Id should be set to 0

Id	Store	Vendor	Warehouse	Carrier	Country	StateProvince	PostcodeZip	ShippingMethod	WeightFr	WeightTo	Calculate	CubicWei	OrderSub	OrderSub	Additiona	Percentag	RatePerW	LowerWe	CutOffTir	Delete
0	0	0	0	Aramex	Australia	New South Wales		Aramax	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No
0	0	0	0	Aramex	Australia	Victoria		Aramax	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No
0	0	0	0	Australia Post	Australia	New South Wales		Australia Post	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No
0	0	0	0	Australia Post	Australia	Victoria		Australia Post	0.00	25.00	No	0.00	0.00	1000000.0	0.00	0.00	0.00	0.00	0	No

To delete existing records set the last field “Delete” to be Yes

Note: When importing the Vendors, Carriers and Shipping Methods Names, Countries and States must already be defined in the system.

Select the file to Import



The best way to use the import and export function is to manual setup test records with a similar configuration to that desired.

Then export the configuration and copy the records in the exported file to ensure the correct names are imported and no errors occur.

Processing Mode

When a request is made by nopCommerce to get the available options all the items in the cart are packed up into requests. How the requests are configured will be dependent on the current shipping settings and the product settings.

In the case no options are available then a message will be displayed to the customer “No shipping options available” and then customer cannot place an order. This is obviously a situation to avoid and so it is important that the settings and configuration match the product types and normal shipping options that would be used to ship specific types of products.

So once the package request list has been prepared by nopCommerce normally it is set to the list of available shipping plugins which will then determine and possible shipping options and estimate the shipping cost and return the options.

This is where is where the Shipping Manager intervenes in the normal workflow. Shipping manager will take the request list from nopCommerce and then pre-process the list and organise it into one of two modes of processing.

It will then process this new request list and request shipping rates from each of the Shipping Plugins installed in the system to provide responses.

Currently there is two modes of operation for determining the shipping method and the total price for shipping the cart of item using Shipping Manager:

- Processing by Item which is organised by product
- Processing by Volume which is organised by warehouse

When processing by item all items in the shopping cart are organised as list of requests grouped by product. When using processing by volume all items in the shopping cart are organised as a list of requests grouped by warehouse.

Once the individual lists are organised in a new set of package arrangements each of the requests is then sent to each of shipping calculation method which then return a list of shipping options.

Shipping manager then combines and organises this list and resents it to nopCommerce to list for the customer to select the desired price and option.

The main difference in the two modes of operation and which method is best will depend on the main type of product configuration. Where the majority of the items are sold in separate quantities and shipped separately then you can use processing by item. When the majority of the product configuration is sold as a group of separate items packaged together then you can use processing by volume.

Pickup Points

The operator can use Pickup points to define locations where items can be picked up rather than delivered.

Refer to https://docs.nopcommerce.com/en/getting-started/configure-shipping/advanced-configuration/pickup-points.html

Note: Currently the plugin does not modify any of the standard functionality associated with Pickup points.

The function is included here so access to the functionality can be managed by the plugin Access Control List.

Appendix A - Shipping Manager - Shipping Rate Computation Management

Operation Overview

When a product has been selected and add to the shopping cart then before a customer can purchase the item then next step is to calculate the cost to ship the product package.

Normally this is calculated as the cost to ship the product from a dispatch location address to a destination or shipping address. The dispatch location could you're your address in the case of a small business or it could be from any number of warehouses that also have a dispatch location and address.

This basic shipping cost could be calculated in a number of ways:

1. Based on the dead weight of the product package - the cost increasing as the weigh increases
2. Based on the product dimensions - the cost increasing as the dimensions increase
3. Based on a cubic weight (calculated from the volume of the package) and a weight factor - the cost increasing as the package volume increases
4. Based on distance between the dispatch location and the shipping address

In addition, other fees or surcharges maybe be calculated and added to the base cost depending on the subtotal order price (price before shipping is added) or other rules and factors. These addition costs are then added to the base cost.

Some product packages may have some free component meaning the cost is either totally free or only calculated on the partial weight over a certain limit. A product package may also have free shopping over a set subtotal price.

The total shipping cost will be based on any one or a number of these factors depending the on the way a particular shipping provider operates and also depending on the way the store owner wishes to configure the plugin.

The Shipping Manger plugin allows the configuration to be setup to obtain rates either:

1. By manually shipping rate configuration and calculation
    a. Used for Sendcloud
2. Automatic rate calculation based on requests to in-built Shipping Provider API's
    a. Aramex
    b. Canada Post
3. Automatic rate calculation based on requests to other Shipping Provider Plugins that are installed in the nopCommerce system for e.g. Australia Post or UPS

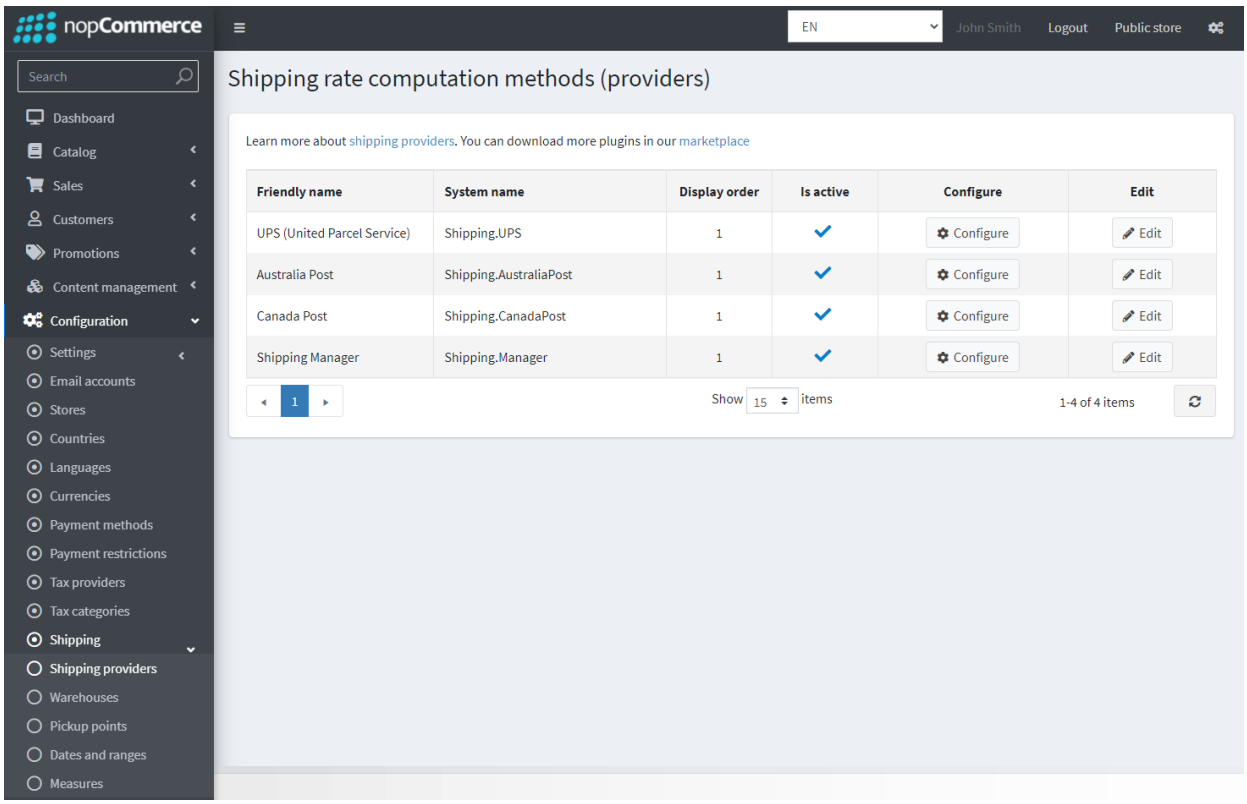
By using any one of a combination of these methods and based on the dispatch location, shipping location, package weight and dimensions and other definable parameters and settings the total cost to ship a particular package will be calculated as an estimate or as a final cost which can then added to the order subtotal.

The various "shipping options" that become available as a result of the above are then displayed the customer who can then make a selection of which method to used based on their availability to use a particular service, their preferred method of delivery, the total shipping cost or some determining factor.

Enable the Plugin for Shipping Rate Computation Management

Once the plugin has been installed then to use the Shipping.Manager as a Shipping Rate Computation Method set it to Enabled as follows.

Note: This not used for basic shipping management Refer to the previous section on Shipping Rate Compu8tation Method.



Also Enable of Disable any other plugins that you wish to be Active and to be controlled by the Shipping Manager system. Refer to the External Shipping Plugins section below

Also note if you have access to the Shipping Settings then the following Menu Options are over written by the Shipping Manager system. The functions that are over written by the plugin are:

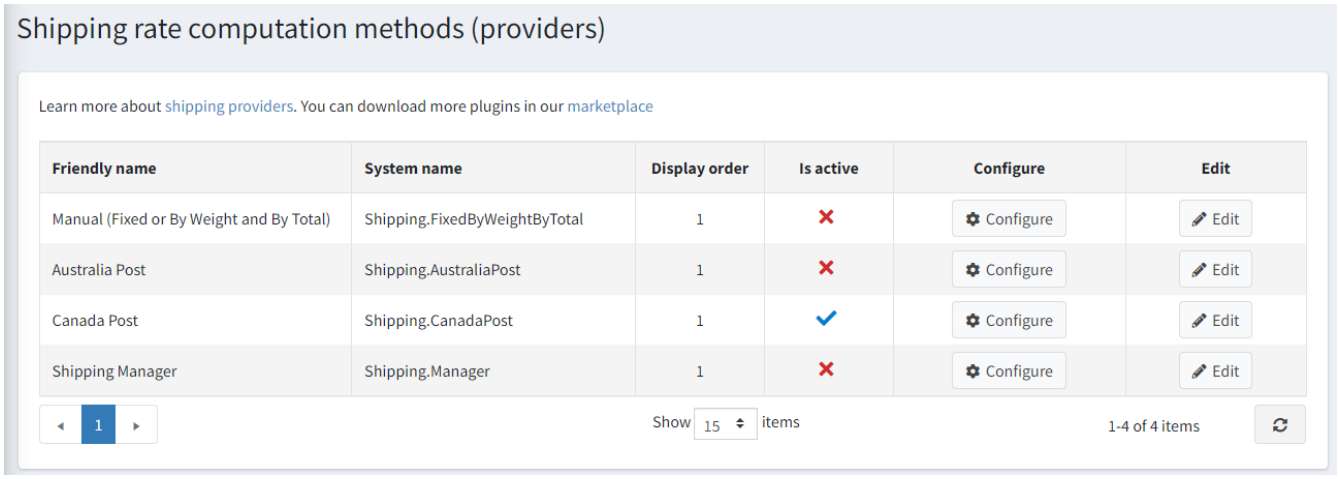
Shipping Methods, Warehouses, Dates and Ranges. These functions will be operable from the menu but the new functions provided by the system have additional functionality required by the system

External Shipping Plugins

Shipping Rate Computation Management

Option 1

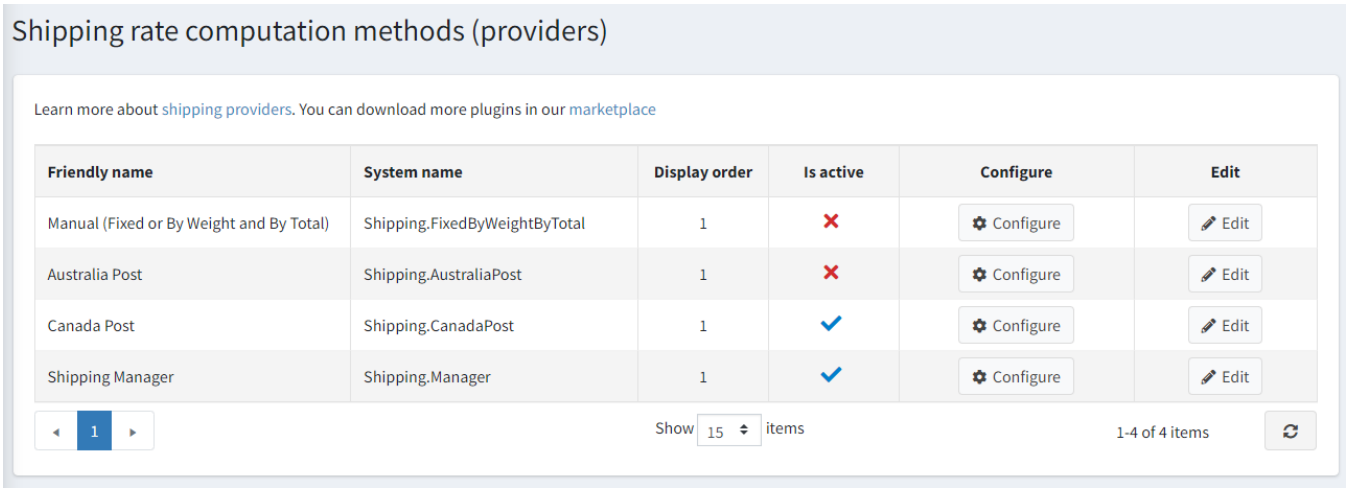
To use the Shipping Plugin without utilising the advanced **Shipping Rate Computation Management** configure the Shipping Rate Computation Methods as follows:



For example: In this mode of operation the standard Canada Post Shipping Plugin is used to manage the delivery of rates in the checkout process.

Option 2

To use the Shipping Plugin in conjunction with **Shipping Rate Computation Management** configure the Shipping Rate Computation Methods as follows:



For Example: In this advanced mode of operation the Shipping manager Plugin is used to manage the delivery of rates in the checkout process.

Note: to use this mode of operation additional configuration is required as detailed int the follow sections below.

This section only applied where you have elected to use Shipping Manager to control the Canada Post Shipping Computation Method.

Shipping Manager will connect with and manage all other Shipping Computation Method (Separate) Plugins that are installed. e.g. Australia Post, Canada Post, UPS, etc

Refer to the Other Manuals for specific information using Shipping API's.