Shipping

This page gives an overview of the **Shipping** microservice, including core features

Overview

The **Shipping** microservice ("Shipping") plays an important role in the entire journey of an online consum returns the possible shipping methods and its rates based on the shipping address. Every online store ha the shipment destination, have multiple methods per zone, and add rules under the methods based on pr Shipping Method, and Shipping Zone.

- **Shipping Class** – identifies the class of the item and is usually derived from the Catalog service throu else, the `DEFAULT` shipping class would be considered for the calculation of shipping charges. For ex
- **Shipping Method** – helps to define the different methods of shipping supported by the store. Each m Shipping, Express Shipping.
- **Shipping Zone** – helps to configure the various shipping zones based on country and zip code. Every specific regions within a country can also be restricted using the zip codes in the shipping address.

See the Shipping glossary [https://developer.skava.com/microservices/shipping/shipping-glossary/] for

Core Features

- Shipping facilitates through three entities: Class, Method, Zone
- Options to set flat rate for all products or specific products
- Ability to define specific rates for specific products.
- SKUs with special shipping
- Manage multiple shipping options such as vendors and set rules to minimize shipping expense
- Flat shipping, discounted shipping, and free shipping can be easily calculated or overridden on a per-S
- Ability to provide various options of shipping based on customer location (Ex: Overnight, Standard, 2-

Shipping Zones

- A geographical area to which you ship items. The shipping cost is calculated based on the user's ship zone. Any number of shipping zones can be created in a shipping collection, however, a customer ma no matching zone or method for an item in the cart, then that item cannot be shipped to the user's de
- The shipping zones and methods under it are matched for a given item in the cart only if the following *AND Currency*

Country

- A country or multiple countries configured in the shipping zone is matched with the shipping address

Zip Code (Optional)

- Added with the region. Only those configured zip codes are considered as eligible for shipping under as eligible. The zip code in the shipping address of the user is matched with the zip code configured i

Shipping Class

- The shipping class is configured as a product attribute which categorizes the product under a class. attribute for each item.
- By default, Skava Commerce includes Nil and Any.
  - **Nil** – refers to NO shipping class attribute
  - **Any** – refers to any value in the shipping class attribute. (i.e., it can be LARGE or MEDIUM or M
- A large product which is not allowed to ship in a flight is categorized under Shipping Class = "LARGE"
- Meltable products which is not allowed to ship for certain hot areas are categorized under shipping c

Currency

- Configured in the shipping zone; matched with the locale parameter configured in the store that calls

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For example: two (2) zones with different shipping methods in its classes.


     **Shipping Configurations:**
      **Zone US:** (All US zip codes except Hawaii)
     **Shipping Methods:**
                  Standard , Cost = $10 , Product class = Large, Medium
                  Overnight, Cost= $20,    Product class= Small, Medium


     **Zone US:** (ship only to Hawaii)
     **Shipping Methods:**
                  Standard, Cost = $ 10, Product class = Large, Medium, Small


   ** Use Cases:**
    **User 1,** whose zip code = 10005 (New York, falls under zone 1), buys a wardrobe (Clas
    **Shipping Method** for wardrobe = "Standard Shipping".
    **Shipping Cost** = $10.


    **User 2, **whose zip code = 10005 (New York, falls under zone 1), buys a shoe (Class=sma
    **Shipping Method** for Shoe, user 2 is eligible for two (2) shipping methods.
```

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       **Standard Shipping Cost** = $10.

       **Overnight Shipping Cost** = $20.


       **Shipping Method** for Wardrobe, user 2 is eligible only for one (1) shipping method

       **Standard Shipping Cost** = $10


    **User 3,** whose zip code = 96701 (Hawaii, falls under zone 2), item buys a wardrobe (Cl

       **Standard Shipping Cost** = $10.
```

Shipping Methods

- Shipping methods are where the shipping rates are configured and calculated based on the business
  rule engine is used to calculate rates and to select the respective shipping method. For example: Star

- Following are the fields that are to be configured for a shipping method:
  1) **Name** – name for the shipping method e.g. Standard Shipping, Overnight Shipping
  2) **Description** – description for the shipping method.
  3) **Taxable** – yes or no (Yes – tax is calculated for the shipping cost / No – tax is not calculated for th
  4) **Base fee** (Optional) – included in the shipping cost, in addition to the calculated shipping cost
  5) **Handling fee** (Optional) – included in the shipping cost, in addition to the calculated shipping cost
  6) **Expected Delivery** – represents the number of days to deliver the product (e.g. "Usually within 3 bu
  7) **Expected Delivery days** – number used to calculate the delivery date (e.g. Order submitted date + 3
  on "01/04/2019")
  8) **Shipping Rates** – shipping rates are calculated based on the shipping class and the calculation typ

Shipping Rate Calculations

- **Per Order** – calculates shipping for the entire cart

  - If there are three (3) items in the cart and the shipping charge = 10, then the calculation is "10
    in the cart, if ALL the items have a Per Order calculation type.

  - If any one (1) of the items has a different calculation type, then that item will receive the shippi
    with a Per Line calculation type="Per Line", then the two (2) items with a Per Order calculation
    receive a separate charge.

- **Per Quantity** – calculates the cost per each quantity of an item in the cart

  - If there is one (1) item with a quantity of two (2) and the shipping charge = 10; the calculation i

- **Per Line** – calculates the cost for each item in the cart

  - If there are three (3) items with any number of quantities each and the shipping charge = 5, the

NUMBER OF ITEMS	ITEM	SHIPPING CLASS
2	Black Shoe	small
1	White Shoe	small
1	Table	medium
COST FOR SHIPPING CLASS	COST	
medium	$10	**Note**: Medium is configured first.
small	$5	

PER ORDER	PER QUANTITY	PER LINE
10	Black Shoe - 10 White Shoe - 5 Table - 10	Black Shoe - 5 White Shoe - 5 Table - 10

Revision History
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