



Selling on Fruugo Guide to Order API

Contents

1. Introduction	3
2. Order data feed semantics	4-10
a. Simple logic for a basic integration	4
b. Common data formats used in the API	5
c. API Methods	5
d. Download orders	5
e. Confirm order	6
f. Cancel order	7
g. Ship order	8
h. Return order	9
i. Download packing list	10
3. Order feed XML Format	11
a. Order <order>	11
b. Shipping Address <shippingAddress>	11
c. Line Item <orderLine>	12
d. Attribute <attribute>	13
e. Shipment <shipment>	13
f. ShipmentLine <shipmentLine>	13
4. An example of the XML output	14

Introduction

The Fruugo Product Order API is an interface for retailers to process Fruugo orders within their own system. The main functionalities in the API are:

- Download orders from Fruugo (HTTP/XML)
- Confirm, ship, cancel and return items (HTTP)
- Download packing slips for printing (HTTP/PDF)

The normal process flow for receiving an order and shipping is quite simple:

- 1) The retailer's system downloads order information using the API
- 2) The retailer's system calls the API to confirm the order
- 3) When the products are ready for shipping the retailer's system calls the API to change status to shipped
- 4) The retailer's system downloads packing slip using the API
- 5) The retailer prints out the packing slip and includes it to the shipment

Each section of the Order API is permitted to be used independently of all other sections. It provides the option of using the XML interface to only download orders, and then use the Fruugo Merchant Centre to carry out order status updates and the printing of packing slips.

Order Data Feed Semantics

The retailer's system sends a HTTP request to Fruugo to request order information. The request parameters specify the time of the earliest and latest orders to retrieve as well as the authentication credentials of the retailer. The response from Fruugo contains the requested orders in XML format.

The API is stateless, i.e. it doesn't track which orders the retailer system has already downloaded.

Depending on the payment method, order value and other additional factors, Fruugo checks the payment status with the payment service provider (PSP) and evaluates the fraud risk of each order. These checks are done before Fruugo releases the order to the retailer through the API (or in the Merchant Centre).

Some payment methods (PSPs) have occasional delays in their processing and that, combined with the stateless nature of the service, has an effect on how Fruugo can process and forward the orders. Therefore the start date and end date of the Order Data Feed used to select orders is based upon the time the order successfully passes the Fraud Checks, not the time that the customer places the order.

Benefits of the chosen approach are:

- The API gives only "checked and paid" complete orders. Once an order has been release no extra lines will appear in a later download.
- The API provides full view to the current order data including the status of each order and each of it's lines. For example Monday morning orders can be retrieved on Monday as well as on Thursday. The XML that is generated on Monday contains new unprocessed lines (status pending). If the same orders are retrieved on Thursday the same line items probably have status "confirmed" or "shipped".
- If the retailer system succeeds in downloading the XML but then fails to process it, the API can be called again as many times as needed.

The downside is:

- The API doesn't provide a service to "get only the new orders that have not been transferred before".

For example;

- Customer places order 108 at 1:30pm
- API is called at 3 pm to get orders between 1 pm and 2 pm -> the result is orders 100, 105 and 110
- At 3:30 pm Fruugo releases order 108 to the retailer
- API is called at 4 pm with the same time parameters -> the result is orders 100, 105 and 110
- API is called at 5 pm to get orders between 3 pm and 5pm -> the result is orders 108

Simple logic for a basic integration

Here is an example logic for a simple integration. First some assumed business rules:

- 1) A retailer wants to get the orders every four hours.
- 2) The retailer's system processes the orders and "owns" the order after it is retrieved from Fruugo. The Retailer does not update the orders using the Fruugo Merchant Centre

Every four hours the retailer system runs a batch job that downloads the orders for the previous 4 hour period.

The retailer's system processes the orders in the XML data and:

- Skips all orders that have a status other than 'PENDING' (the other ones have already been processed fully or partially and thus they must already exist in the retailer system)

- Checks if an order with 'PENDING' status in the XML already exists in the retailer system. If it doesn't then it is stored in the retailer system. Otherwise it can be skipped.

Common data formats used in the API

- Dates are in ISO 8601 format, with or without time of day. Example: 2011-01-01 or 2011-01-01T01:00:00
- Currencies are in ISO 4217 format (EUR, GBP, USD)
- Languages are in ISO 639-2 codes (en, fi, se)
- Countries are in ISO 3166 two letter format (GB, FI, SE)
- Item-based operations take arbitrary number of items-parameters in comma separated

API Methods

The API works over HTTPS and follows REST semantics. Authentication is handled with HTTP Basic - method.

Download Orders

URL	https://www.fruugo.com/orders/download
HTTP Method	GET
Returns	Order XML for the orders released between given time boundaries, MIME type "application/xml"

Parameters

Name	Format	Mandatory	Description
from	ISO 8601 date or datetime	Yes	Start date for the order listing
to	ISO 8601 date or datetime	No	End date for the order listing

Confirm Order

URL	https://www.fruugo.com/orders/confirm
HTTP Method	POST
Returns	Order XML for the confirmed order, MIME type "application/xml"

Parameters

Name	Format	Mandatory	Description
orderId	Integer	Yes	The id of the order to confirm, taken from orderId - element in the XML
item	Item Identifiers	No	fruugoProductId, fruugoSkuld and quantity of the item to confirm, separated with commas. The parameter can be repeated multiple times in one request to confirm multiple items at a time. If parameter is not given, all items on the order will be confirmed.
estimatedShippingDate	ISO 8601 date	No	Estimate of the date when the order is likely to ship
messageToCustomer	Text	No	A message relayed to the customer
messageToFruugo	Text	No	A message relayed to Fruugo.

Cancel Order

URL	https://www.fruugo.com/orders/cancel
HTTP Method	POST
Returns	Order XML for the cancelled order, MIME type "application/xml"

Parameters

Name	Format	Mandatory	Description
orderId	Integer	Yes	The id of the order to confirm, taken from orderId - element in the XML
item	Item Identifiers	No	fruugoProductId, fruugoSkuld and quantity of the item to cancel, separated with commas. The parameter can be repeated multiple times in one request to confirm multiple items at a time. If parameter is not given, all items on the order will be cancelled.
cancellationReason	Text	Yes	Reason for the cancellation. Valid values are: <ul style="list-style-type: none"> · out_of_stock, the product is out of stock and thus cannot be delivered · product_discontinued, product is no longer available and thus cannot be delivered · invalid_delivery_address, customer has given a delivery address that appears invalid · customer_cancellation, customer has asked for the order to be cancelled · legislation_restriction, law or contract restriction prevents delivery to customer's address · other, other reason
messageToCustomer	Text	No	A message relayed to the customer
messageToFruugo	Text	No	A message relayed to Fruugo.

Ship Order

URL	https://www.fruugo.com/orders/ship
HTTP Method	POST
Returns	Order XML for the shipped order, MIME type “application/xml”

Parameters

Name	Format	Mandatory	Description
orderId	Integer	Yes	The id of the order to confirm, taken from orderId - element in the XML
item	Item Identifiers	No	fruugoProductId, fruugoSkuld and quantity of the item to ship, separated with commas. The parameter can be repeated multiple times in one request to confirm multiple items at a time. If parameter is not given, all items on the order will be shipped.
trackingUrl	ISO 8601 date	No	A URL of the shipping company where the package can be tracked, relayed to the customer
trackingCode	Text	No	Tracking code of the package, relayed to the customer
messageToCustomer	Text	No	A message relayed to the customer
messageToFruugo	Text	No	A message relayed to Fruugo.

Return Order

URL	https://www.fruugo.com/orders/return
HTTP Method	POST
Returns	Order XML for the returned order, MIME type "application/xml"

Parameters

Name	Format	Mandatory	Description
orderId	Integer	Yes	The id of the order to confirm, taken from orderId - element in the XML
item	Item Identifiers	No	fruugoProductId, fruugoSkuld and quantity of the item to mark returned, separated with commas. The parameter can be repeated multiple times in one request to confirm multiple items at a time. If parameter is not given, all items on the order will be returned.
returnReason	Text	No	Reason for the cancellation. Valid values are: <ul style="list-style-type: none"> · unsatisfied_with_item, customer was not satisfied with the item · item_did_not_match_description, item didn't match the product description · damaged_item, item was damaged · wrong_item, wrong item was shipped to the customer · other, other reason
messageToCustomer	Text	No	A message relayed to the customer
messageToFruugo	Text	No	A message relayed to Fruugo.

Download Packing List

URL	https://www.fruugo.com/orders/packinglist
HTTP Method	GET
Returns	Packing list PDF, MIME type "application/pdf"

Parameters

Name	Format	Mandatory	Description
orderId	Integer	Yes	The id of the order to mark returned, taken from orderID - element in the XML
shipmentId	Integer	Yes	The id of the shipment whose packing list to download, taken from shipmentId - element in the XML

Order feed XML Format

Order <order>

Name	Format	Description
orderID	Long Integer	Unique order number as shown in Fruugo Merchant Centre.
orderDate	Date Time	Time when customer placed the order.
orderReleaseDate	Date Time	Time when order available for the retailer.
orderStatus	Enumeration of valid statuses	Possible values: PENDING: New order that hasn't been processed PROCESSED: At least part of the order has been processed EXCEPTION: There's an error or manual correction related to the order and it cannot be processed through the Order API
customerLanguageCode	String	Language of the customer
shippingAddress	shippingAddress - element	The address where the order is to be shipped
shippingMethod	String	Human readable shipping method name
shippingCostInclVAT	Decimal	Amount of shipping cost charged from customer including VAT
shippingCostVAT	Decimal	Amount of VAT that is included in the shipping cost
orderLineItems	List of orderLine - elements	Collection of orderLineItem elements

Shipping Address <shippingAddress>

Each order has exactly one shipping address.

Name	Format	Description
firstName	String	First name of the customer
lastName	String	Last name of the customer
streetAddress	String	Street address, multiple lines separated by linefeeds
city	String	City
province	String	County or province
postalCode	String	Postal code
countryCode	String	Country
phoneNumber	String	Customer's phone number in the international format

Line Item <orderLine>

There's a line item for each unique SKU in the order.

Name	Format	Description
productID	String	Product id from retailers product information feed
skuID	String	SKU id from retailers product information feed (if retailer didn't provide SKU id , this is the same as product id)
skuName	String	SKU name from retailers product information feed
attributes	List of attribute elements	SKU attributes from retailers product information feed
fruugoProductId	Long Integer	Fruugo's internal product id
fruugoSkuld	Long Integer	Fruugo's internal SKU id
currencyCode	String	Currency of the customer
itemPriceInclVat	Decimal	Price of a single item in customer's currency
itemVat	Decimal	Amount of VAT for a single item in customer's currency
totalPriceInclVat	Decimal	Total price charged from the customer in customer's currency
totalVat	Decimal	Total VAT amount charged from the customer in customer's currency
vatPercentage	Decimal	Percentage of VAT charged from the customer
totalNumberOfItems	Integer	Total number of items ordered of this SKU
pendingItems	Integer	Number of pending items
confirmedItems	Integer	Number of confirmed items
shippedItems	Integer	Number of shipped items
cancelledItems	Integer	Number of cancelled items
returnAnnouncedItems	Integer	Number of items customer will return
returnedItems	Integer	Number of items customer has returned
itemsWithException	Integer	Number of items that are in an error state or have been manually corrected
returnedDate	Date Time	Time of returning the product

Attribute <attribute>

Attribute elements (in the Attributes collection) list the attributes of the SKU that the retailer provided with the SKU.

Name	Format	Description
attributeName	String	Name of attribute (for example "Colour", "Size" or "Age group")
attributeValue	String	Value of attribute (for example "Red", "XXL" or "3-7 years")

Shipment <shipment>

Shipment element appears when at least part of the order has been shipped

Name	Format	Description
shipmentId	Long Integer	The id of the shipment. It may be used to download the packing list
shippingDate	Date Time	Date and time of the shipment
shipmentLines	List of shipmentLine -elements	Items that were included in the shipment

ShipmentLine <shipmentLine>

There's a line item for each unique SKU in the order. Shipment line is analogous to the orderLine, but only contains basic identifying information about the shipped SKU to avoid repetition.

Name	Format	Description
fruugoProductId	Long Integer	Fruugo's internal product id
fruugoSkuld	Long Integer	Fruugo's internal SKU id
skuName	String	SKU name from retailers product information feed
quantity	Integer	Number of items shipped in this shipment

An example of the XML output

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<orders merchantId="4048" xmlns:o="https://www.fruugo.com/orders/schema">
  <o:order>
    <o:orderId>993557001004048</o:orderId>
    <o:orderDate>2011-01-18T08:43:38.000+02:00</o:orderDate>
    <o:orderStatus>PROCESSED</o:orderStatus>
    <o:customerLanguageCode>EN</o:customerLanguageCode>
    <o:shippingAddress>
      <o:firstName>Jukka</o:firstName>
      <o:lastName>Koivusalo</o:lastName>
      <o:streetAddress>Mikonkatu 15A</o:streetAddress>
      <o:city>Helsinki</o:city>
      <o:postalCode>00100</o:postalCode>
      <o:countryCode>FI</o:countryCode>
      <o:phoneNumber>+358405602916</o:phoneNumber>
    </o:shippingAddress>
    <o:shippingMethod>Economy</o:shippingMethod>
    <o:shippingCostInclVAT>6.17</o:shippingCostInclVAT>
    <o:shippingCostVAT>0.92</o:shippingCostVAT>
    <o:orderLines>
      <o:orderLine>
        <o:productId>2490-3300</o:productId>
        <o:skuld>2490-3300</o:skuld>
        <o:skuName>Tigi Catwalk Oatmeal & Honey Shampoo</o:skuName>
        <o:attributes>
          <o:attribute>
            <o:attributeName>Size</o:attributeName>
            <o:attributeValue>350ml</o:attributeValue>
          </o:attribute>
        </o:attributes>
        <o:fruugoProductId>777183</o:fruugoProductId>
        <o:fruugoSkuld>1565337</o:fruugoSkuld>
        <o:currencyCode>GBP</o:currencyCode>
        <o:itemPriceInclVat>11.1</o:itemPriceInclVat>
        <o:itemVat>1.65</o:itemVat>
        <o:totalPriceInclVat>11.1</o:totalPriceInclVat>
        <o:totalVat>1.65</o:totalVat>
        <o:vatPercentage>17.5</o:vatPercentage>
        <o:totalNumberOfItems>1</o:totalNumberOfItems>
        <o:pendingItems>0</o:pendingItems>
        <o:confirmedItems>0</o:confirmedItems>
        <o:shippedItems>1</o:shippedItems>
        <o:cancelledItems>0</o:cancelledItems>
        <o:returnAnnouncedItems>0</o:returnAnnouncedItems>
        <o:returnedItems>0</o:returnedItems>
        <o:itemsWithException>0</o:itemsWithException>
      </o:orderLine>
    </o:orderLines>
    <o:shipments>
      <o:shipment>
        <o:shipmentId>1</o:shipmentId>
        <o:shippingDate>2011-11-30T00:00:00.000+02:00</o:shippingDate>
        <o:shipmentLines>
          <o:shipmentLine>
            <o:fruugoProductId>777183</o:fruugoProductId>
            <o:fruugoSkuld>1565337</o:fruugoSkuld>
            <o:quantity>1</o:quantity>
          </o:shipmentLine>
        </o:shipmentLines>
      </o:shipment>
    </o:shipments>
  </o:order>
</o:orders>

```