

The Hypothecary Corp.

Inventory Control System - RESTful API Documentation

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Getting Started

The following document gives information about processing orders and adding customers to THC Inventory Control System (abbreviated ICS or THC-ICS).

Orders

The Order Model

Orders are associated to a customer. A given customer can have multiple orders. An order is composed of many order lines. An order line describes a physical product that should be shipped in the order.

For example, a jar of 25g of type X and 3 jars of 75g of type Y constitutes a order for customer John Doe. This would be modelised with a single object Order and two OrderLine objects.

<u>Order</u>	
id	<i>integer</i>
customer_id	<i>integer</i>
ordered_at	<i>datetime</i>
shipped_at	<i>datetime</i>

<u>OrderLine</u>	
id	<i>integer</i>
order_id	<i>integer</i>
product_type	<i>string</i>
product_id	<i>integer</i>
quantity	<i>integer</i>

Creating A New Order

Creating new order through RESTful API requires using an HTTP POST request.

Parameters:

- customer_id : integer
- ordered_at : datetime (optional, set automatically at time processed if unspecified)
- shipped_at : datetime (optional)

Examples:

POST http://ics.thc.vc/orders?customer_id=1

Creates a new order for registered customer with ID = 1.

POST http://ics.thc.vc/orders?customer_id=42

Creates a new order for registered customer with ID = 42.

Updating An Order

Updating an order is done through the RESTful API and requires using the HTTP PUT or PATCH request.

Parameters:

- id : integer (this order's ID)
- customer_id : integer (optional, input only if the customer changed)
- ordered_at : datetime (optional, input only if the date changed)
- shipped_at : datetime (optional, input only if the date changed)

Examples:

PUT http://ics.thc.vc/orders/1?customer_id=1&ordered_at=2015-01-02T18:12:0=4-05:00

This would update order ID 1, change it's customer's ID to 1 and update the ordered date.

PATCH http://ics.thc.vc/orders/42?customer_id=3

This would update order ID 42, and change it's customer's ID to 3.

Deleting An Order

Deleting orders is done through the RESTful API requires using the DELETE HTTP request.

It is unnecessary to then delete all the order lines, because they will be automatically deleted by the dependence relationship between orders and their many order lines.

Examples:

DELETE <http://ics.thc.vc/orders/1>

This would delete order with ID = 1

DELETE <http://ics.thc.vc/orders/42>

This would delete order with ID = 42

Order Lines

An order line represent a physical product. It is associated with a product type and ID, and a quantity.

Creating A New Order Line

Creating an order line is done through the RESTful API and requires using the POST request.

Parameters :

- order_id: integer
- product_id: integer
- product_type: integer
- quantity: integer (optional, assumed quantity is 1 if left empty)

Examples :

POST http://ics.thc.vc/order_lines?order_id=1&product_id=42&product_type=Jar&quantity=2

This request would create an OrderLine for Order with ID = 1, and place twice product type Jar with ID = 42 in said order.

POST http://ics.thc.vc/order_lines?order_id=42&product_id=1337&product_type=Foo

This request would create an OrderLine for Order with ID = 42, and place product type Foo with ID = 1337 in said order.

Updating An Order Line

Updating an order line is done through the RESTful API and requires using the PUT or PATCH HTTP request.

Parameters :

- id: integer (this order line's ID)
- order_id: integer (optional, change only if modified)
- product_id: integer (optional, change only if modified)
- product_type: integer (optional, change only if modified)
- quantity: integer (optional, change only if modified)

Examples :

PUT http://ics.thc.vc/order_lines/1?order_id=42&product_id=3&quantity=3

This would change OrderLine with ID = 1, set order ownership to order with ID = 42, change the product and the quantity.

PATCH http://ics.thc.vc/order_lines/5?product_id=4

This would query for OrderLine with ID = 5 and change the product only.

Destroying An Order Line

Destroying an order line is done through the RESTful API and requires using the DELETE HTTP request.

Examples :

DELETE http://ics.thc.vc/order_lines/1

This would destroy order line with ID = 1

DELETE http://ics.thc.vc/order_lines/42

This would destroy order line with ID = 42

Customers

A customer can have multiple orders.

Creating A New Customer

Creating new customer through the RESTful API requires using the POST request.

Parameters :

- first_name : string
- last_name : string
- shipping_address : text
- billing_address : text
- phone : string
- email : string

Examples :

POST http://ics.thc.vc/customers?first_name=john&last_name=doe

This would create a user with first name "John" and last name "Doe". All fields are necessary this is just an example.

Updating A Customer

Updating customer through RESTful API requires using the PUT or PATCH HTTP request.

Parameters :

- id : integer
- first_name : string
- last_name : string
- shipping_address : text
- billing_address : text
- phone : string
- email : string

Examples :

PUT <http://ics.thc.vc/customers/1?phone=18885555555>

This would change customer with ID = 1 phone number to 1-888-555-5555

PATCH <http://ics.thc.vc/customers/42?email=john.doe@example.com>

This would update's customer with ID = 42 email address to john.doe@example.com

Deleting A Customer

Deleting a customer is done through the RESTful API and requires using the DELETE HTTP request.

Parameters :

- id : integer (this customer's ID)

Examples :

DELETE <http://ics.thc.vc/customers/1>

This would delete customer with ID = 1.

DELETE <http://ics.thc.vc/customers/42>

This would delete customer with ID = 42.

Data Matrixes

In the scope of our application, a data matrix is a PNG image file encoding an encrypted identifier

Querying A Jar's Data Matrix

Querying a jar's data matrix is done through the RESTful API and requires using the HTTP GET request.

Parameters :

- id : integer (the jar's id)

Examples :

GET <http://ics.thc.vc/jars/1/datamatrix>

This would send the datamatrix PNG file for jar with ID = 1

GET <http://ics.thc.vc/jars/42/datamatrix>

This would send the datamatrix PNG file for jar with ID = 42