Inventory API Guide

In order to access the public API, you must be a registered user of the Inventory system, which can be achieved by signing in with your Duke University NetID or by contacting an administrator to create an account for you.

API Endpoints

All REST API endpoints have the following base:

https://colab-sbx-379.oit.duke.edu/api/

Authentication

The REST API supports http custom header authentication. The user's personal API token must be included in the http header for any API call.

Once you have registered your account, your API token can be generated or retrieved at https://colab-sbx-379.oit.duke.edu/token/.

You can then use your API token to make calls to the Inventory REST API.

Methods

Most of the core endpoints support GET and POST requests. Some endpoints also allow DELETE or PUT requests if a valid ID number is appended to the url. The available methods for each endpoint can be found using the explorer at https://colab-sbx-379.oit.duke.edu/api/.

Item API

The item API is at https://colab-sbx-379.oit.duke.edu/api/item/.
GET requests will return a list of all items in the inventory.
POST requests can be performed by managers and have the following parameters:
    item_name: the name of the item (required)
    count: the number of available instances of the item

minimum_stock: the minimum stock threshold for the item

model_number: the model number (string) of the item

description: a text description of the item

tags: a list of relevant tags for the item

is_asset: a boolean specifying whether the item is tracked on a per instance basis

Specific items can be accessed at

https://colab-sbx-379.oit.duke.edu/api/item/<item-id>/

GET requests will return the details for the item with the specified id number

PUT requests can be performed by managers and will update the item with new information, using the same parameters as a POST request above.

DELETE requests can be performed by administrators and will remove the item from the inventory system.

Asset API

The asset API is at https://colab-sbx-379.oit.duke.edu/api/asset/.

GET requests will return a list of all assets in the inventory.

POST requests can be performed by managers and have the following parameters:

item_name: the name of the item of which this asset is an instance of (required)

asset_tag: the asset tag of the asset (required)

Specific assets can be accessed at

https://colab-sbx-379.oit.duke.edu/api/asset/<asset-id>/

GET requests will return the details for the asset with the specified id number

PUT requests can be performed by managers will update the asset with new information, using the same parameters as a POST request above.

DELETE requests can be performed by administrators and will remove the asset instance from the inventory system.

Request API

The request API is at https://colab-sbx-379.oit.duke.edu/api/request/.

GET requests will return a list of all requests in the inventory. Unprivileged users will only see their own requests.

POST requests have the following parameters:

owner: the username of the user that the request is being made for (required)

item_id: the name of the item being requested (required)

reason: the reason for the user making the request (required)

admin_comment: an optional comment for administrators responding to or creating a request

quantity: the number of instances of the item being requested

status: one of the following:

‘O’: Outstanding, for users making a request

‘A’: Approved, for disbursement

‘D’: Denied

‘L’: Loaned

‘B’: Backfill

Specific requests can be accessed at

https://colab-sbx-379.oit.duke.edu/api/request/<request-id>/

Unprivileged users can only access their own requests.

GET requests will return the details for the request with the specified id number

PUT requests will update the request with new information, using the same parameters as a
POST request above.

DELETE requests will remove the request from the inventory system.

User API

The user API is at https://colab-sbx-379.oit.duke.edu/api/user/ and can only be
accessed by administrators.

GET requests will return a list of all users in the inventory.

Specific users can be accessed at

https://colab-sbx-379.oit.duke.edu/api/user/<user-id>/

GET requests will return the details for the user with the specified id number

PUT requests will update the user with new information, using the following parameters:

id: the new id number of the user

username: the user's new username

DELETE requests will remove the user from the inventory system.

There is an additional api at https://colab-sbx-379.oit.duke.edu/api/user/create/,
which only administrators can access and only accepts POST requests with the following
parameters:

username: the new user's username (required)

password: the user's password (required)

Custom Field Entry API

The custom field entry API is at https://colab-sbx-379.oit.duke.edu/api/entry/.

GET requests will return a list of all custom field entries in the inventory (only non-private entries
for unprivileged users)

POST requests can be performed by managers and have the following parameters:

field_name: the name of the custom field entry (required)

is_private: a boolean to determine whether the custom field is private or not (required)

per_asset: a boolean to determine whether the custom field is unique to asset-tracked

item instances or not (required)

        value_type: one of the following (required):
                'st': short text
                'lt': long text
                'int': integer
                'float': floating-point number

Specific entries can be accessed at
`https://colab-sbx-379.oit.duke.edu/api/entry/<entry-id>/`

GET requests will return the details for the entry with the specified id number

PUT requests can be performed by managers and will update the entry with new information, using the same parameters as a POST request above.

DELETE requests can be performed by managers and will remove the entry from the inventory system.

Custom Field APIs

The custom short text field, long text field, integer field, and float field APIs are at
`https://colab-sbx-379.oit.duke.edu/api/short/`,
`https://colab-sbx-379.oit.duke.edu/api/long/`,
`https://colab-sbx-379.oit.duke.edu/api/int/`, and
`https://colab-sbx-379.oit.duke.edu/api/float/`

GET requests will return a list of all custom fields of the particular type in the inventory (only non-private entries for unprivileged users)

POST requests can be performed by managers and have the following parameters:
        parent_item: the id number of the item for which the field value is being given (required)
        field_name: the name of the custom field entry that is being assigned a value (required)
        field_value: the value of the custom field for the specified item, using the correct data type for the particular type of custom field (required)

Specific custom fields can be accessed at
`https://colab-sbx-379.oit.duke.edu/api/<short or long or int or float>/<field-id>/`

GET requests will return the details for the custom field with the specified id number

PUT requests can be performed by managers and will update the custom field with new information, using the same parameters as a POST request above.

DELETE requests can be performed by managers and will remove the custom field from the inventory system.

Log API

The log API is at `https://colab-sbx-379.oit.duke.edu/api/logs/` and can only be accessed by managers.

GET requests will return a list of all log entries in the inventory.

Example

An example call using curl to retrieve all items in the inventory is as follows:

```
curl -X GET -H "Authorization: Token <insert API token>"
https://colab-sbx-379.oit.duke.edu/api/item/
```

You can explore the available URL suffixes at https://colab-sbx-379.oit.duke.edu/api/.