### **GET**

# /api/:role/inStock

## Path variables

- role: Role in the Inventory Management

# Description

This API allows the retrieval of the in stock levels for all resources in the inventory, based on the role. For example, if the role of INVENTORY\_MANAGER is assumed, then the current inventory for the incoming components is returned.

# Example

/api/INVENTORY\_MANAGER/inStock

Request body

**Empty** 

### Response

#### **GET**

api/:role/:resource/inStock

#### Path variables

- role: Role in the Inventory Management
- resource : Resource maintained in the Inventory

## Description

This API allows the retrieval of the in stock levels for a particular resource in the inventory, based on the role. For example, if the role of INVENTORY\_MANAGER is assumed, then the current inventory for a specific incoming component is returned.

# Example

/api/INVENTORY\_MANAGER/REV/inStock

Request body

**Empty** 

#### Response

```
{
    "id": "5e19ad6e0274390007e95477",
    "name": "REV",
    "inStock": 5
}
```

#### **GET**

### api/:role/:resource/daysOfStock

#### Path variables

- role : Role in the Inventory Management
- resource : Resource maintained in the Inventory

#### Description

This API allows the calculation of the days of stock available for a particular resource in the inventory, based on the role and current inventory. For example, if the role of INVENTORY\_MANAGER is assumed, then the days of stock available for a specific incoming component is returned.

#### Example

/api/INVENTORY\_MANAGER/REV/inStock

```
Request body
{
     "demand":3
}
demand - daily demand of the resource
```

# Response

```
"id": "5e19ad6e0274390007e95477",
    "name": "REV",
    "inStock": 5,
    "daysOfStock": 1
}
```

#### **GET**

api/:role/:resource/safetyStock

#### Path variables

- role : Role in the Inventory Management
- resource : Resource maintained in the Inventory

## Description

This API allows the calculation of the safety stock of a particular resource to be maintained, based on the role, lead time, and average demand. For example, if the role of INVENTORY\_MANAGER is assumed, then the safety stock to be maintained for a specific incoming component is returned.

## Example

/api/INVENTORY\_MANAGER/REV/safetyStock

```
Request body
{
    "leadTime":2,
    "demandAvg":5
```

leadTime - Lead time for the resource demandAvg - average demand of the resource in terms of days

# Response

```
{
    "id": "5e19ad6e0274390007e95477",
    "name": "REV",
    "safetyStock": 10
}
```

#### **GET**

api/:role/:model/components

#### Path variables

- role : Role in the Inventory Management

- model: Model name of bike

# Description

This API allows the retrieval of all the components required to assemble a bike model, and each of the possible choices for the same.

# Example

/api/ASSEMBLY\_MANAGER/Battre\_RS/components

Request body

**Empty** 

Response

```
"Components": {
```

```
"SP1"
"TY1",
"TY2"
"MO2"
"LI2"
"OT1"
```

### **GET**

api/:role/:model/makes

### Path variables

- role: Role in the Inventory Management
- model : Model name of bike

# Description

This API allows the retrieval of the different makes of a bike model based on the different choices of components that can be used.

Example

/api/ASSEMBLY\_MANAGER/Battre\_RS/makes

Request body

Empty

Response

#### **GET**

# api/:role/:model/counts

# Path variables

- role: Role in the Inventory Management
- model: Model name of bike

# Description

This API allows the retrieval of the number of different makes of a bike model that can be assembled based on the current inventory.

# Example

/api/ASSEMBLY\_MANAGER/Battre\_RS/counts

```
Request body
```

```
[
"available": [9,8,8,9,8,7,8,7,9,8,9,7,9,8]
```

available - list of in stock values for the list of components returned by the api/:role/:model/components api

### Response

```
"Configuration": {
    "Co1": 1,
    "Co2": 0,
    "BA1": 1,
    "BA2": 0,
    "SP1": 1,
    "TY1": 1,
    "TY2": 0,
    "Mo1": 1,
    "Mo2": 0,
    "CH1": 1,
    "DC1": 1,
    "LI1": 1,
    "LI2": 0,
    "SW1": 1,
```

```
"OT1": 1
"OT1": 1
```