



## Solution Data Structures

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## INVENTORY DATA

### INVENTORY GENERAL DATA

#### KIT COMPOSITIONS

- Garments Only
- Sensor Kit Only
- Brainpack Only
- Full Kit

#### EQUIPMENT STATUSES POSSIBLE

- ready
- in use
- defective
- In production
- Testing

#### SENSOR TYPES

- Nod IMU
- EM IMU
- StretchSense

#### BRAINPACKS QA STATUSES POSSIBLE

- Charging Cycle Tested
- Buttons Tested
- LED Tested
- Sensors Connection Tested
- Software Connection Tested
- Command Tested
- Streaming Tested
- Tested and Ready

#### SENSORS QA STATUSES POSSIBLE

- Firmware tested
- Power Tested
- Orientation Tested
- Firmware test FAIL
- Power Test FAIL
- Orientation Test FAIL
- Tested and Ready

#### SUITS/OCTOPI QA STATUSES POSSIBLE

- Baseplate tested
- Wiring tested
- Connector tested
- Power tested
- Tested and Ready

#### ANATOMICAL LOCATIONS POSSIBLE

- Torso

- Left Upper arm
- Left Fore arm
- Left Thigh
- Left Tibia
- Right Upper arm
- Right Fore arm
- Right Thigh
- Right Tibia

#### INVENTORY DATA EXTRACTION

- Kits ready to use
- Kits producible
- Brainpacks ready to use
- Brainpacks producible
- Sensor sets ready to use
- Sensor sets producible
- Shirts ready to use
- Shirts producible
- Pants ready to use
- Pants producible
- Sensors ready to use
- Sensors defective

#### COMPONENTS TYPES

- Batteries
- BP Screws
- Capsule Screws
- USB Cables
- USB Chargers
- Narrows (m)
- Over-mold Bases
- Light Pipes
- BP top
- BP bottom
- Old BP top
- Old BP bottom
- Micro SD
- SD Cover
- Capsule top
- Capsule Bottom
- Sensor PCB
- Ribbon Cable (m)
- BP Buttons
- Capsule Washers
- Aux Cables
- Capsule Buttons

## INVENTORY DATA STRUCTURES

### COMPANY (CONTINUED)

- Company ID
- List of Related Kits

### KITS

- Kit ID (=serial number)
- Kit location
- Kit status
- Related Brainpack ID
- Related Sensors Set ID
- Related Shirt ID
- Related Pants ID
- Related Company ID

### COMPONENTS

- Component type ID
- Component Status
- Quantity

### BRAINPACKS

- Brainpack ID (=serial number)
- Brainpack Location
- Brainpack Version
- Brainpack Status
- Brainpack QA status
- Related Power Board ID
- Related Data Board ID
- Related Kit ID

### POWER BOARDS

- Power board ID (=Serial Number)
- Power board Version
- Power board Firmware version
- Power board Status
- Related Brainpack ID

### DATA BOARDS

- Data board ID (=Serial Number)
- Data board Version
- Data board Firmware version
- Data board Status
- Related Brainpack ID

### SENSOR SETS

- Sensor Set ID
- List of related sensors
- Sensor set QA status

- Related Kit ID

### SENSORS

- Sensor ID (=Serial Number)
- Sensor Type
- Sensor Version
- Sensor Location
- Sensor Firmware
- Sensor Status
- Sensor QA Status
- Related Sensor Set ID
- Sensor Anatomical location ID

### TOP GARMENTS

- Shirt ID (=Serial Number)
- Related Octopus ID
- Related Kit ID
- Shirt Size
- Shirt Location
- Shirt Status
- Shirt QA Status

### BOTTOM GARMENTS

- Pants ID (=Serial Number)
- Related Octopus ID
- Related Kit ID
- Pants Size
- Pants Location
- Pants Status
- Pants QA Status

### SHIRTS OCTOPI

- Shirt Octopus ID (=Serial Number)
- Related top garment ID
- Shirt Octopus Size
- Shirt Octopus Location
- Shirt Octopus Status
- Shirt Octopus QA Status

### PANTS OCTOPI

- Pants Octopus ID (=Serial Number)
- Related bottom garment ID
- Pants Octopus Size
- Pants Octopus Location
- Pants Octopus Status
- Pants Octopus QA Status

## USERS & LICENSING DATA

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### COMPANY (CONTINUED)

- Company ID
- List of Related Licenses
- List of Related Users

### ROLES

- Collector
- Analyst
- Company
- Admin

### LICENSE TYPES

- Collector
- Analyst

### LICENSE STATUSES

- Unassigned
- Assigned
- Activated
- Expired

### USERS

- User ID (= User Name)
- User Password
- User Role
- User email
- User Related License ID
- User Related Meta Data ID

### META DATA

- Meta Data ID
- Height
- Weight
- Gender
- DOB
- First Name
- Last Name

### LICENSE

- License ID
- License generated key
- License Type
- License Status
- License Expiry date

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