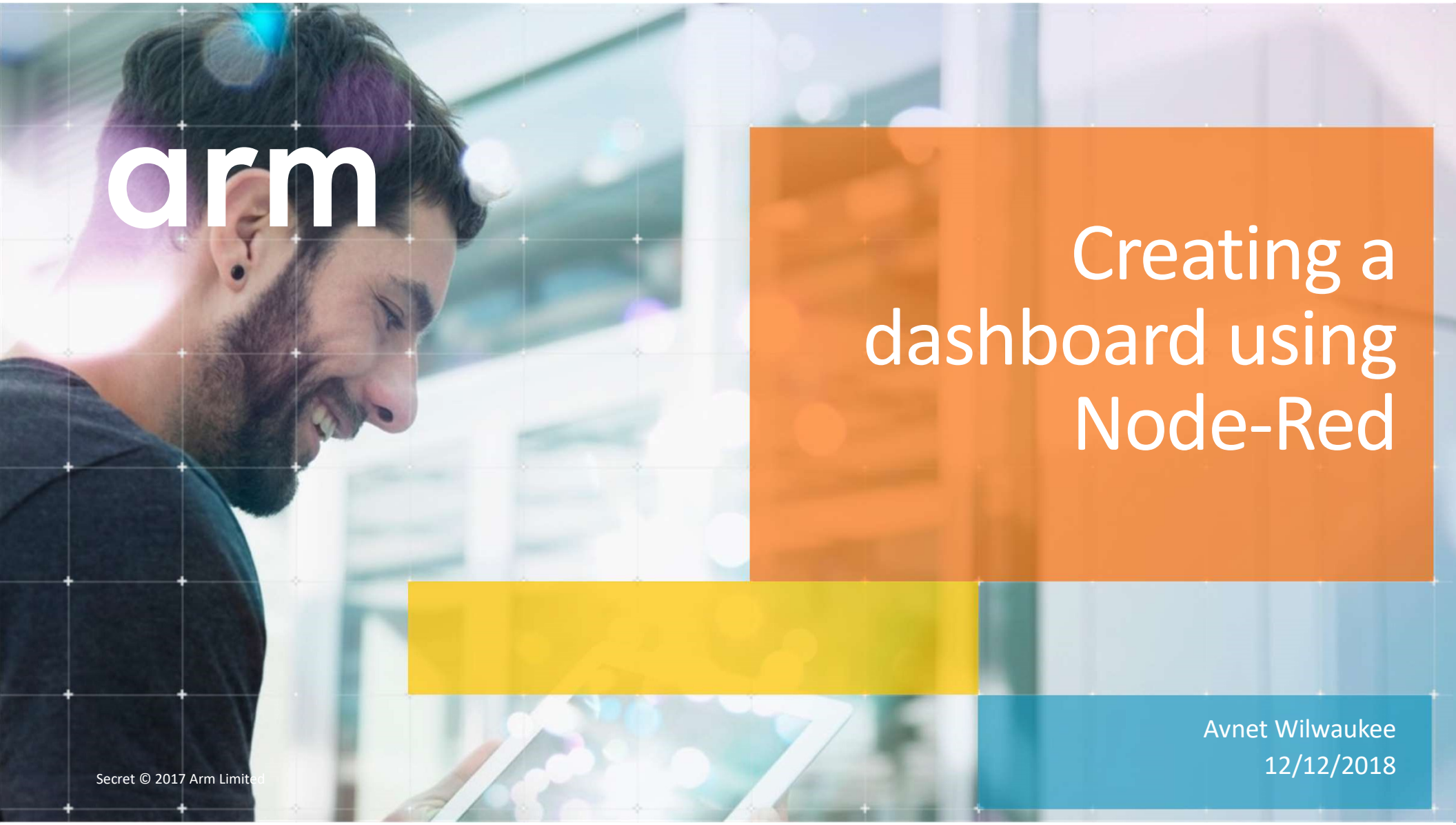


Creating a dashboard using Node-Red

Avnet Wilwaukee
12/12/2018

Install Node-Red and add-ons

Visit: https://nodered.org/docs/platforms/windows

Follow directions to install node-red

In a command line type:

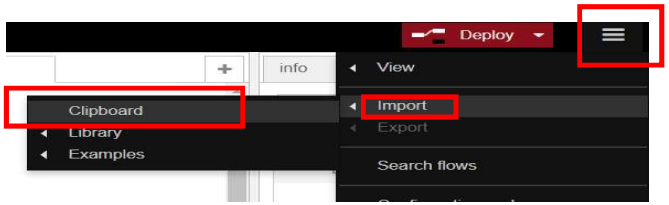
npm install node-red-dashboard

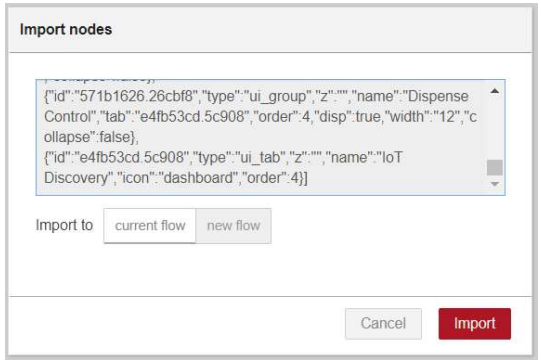
Then:

npm install node-red-contrib-mbed-cloud

Getting started with Node-Red (1)

- Open a command window, enter: “Node-red”
- In your Pelion-DM-Workshop-Project directory open flow1.txt, select and copy the entire contents of the file:
- Open a browser window and navigate to:
  - http://localhost:1880
- Select Menu->Import->Clipboard

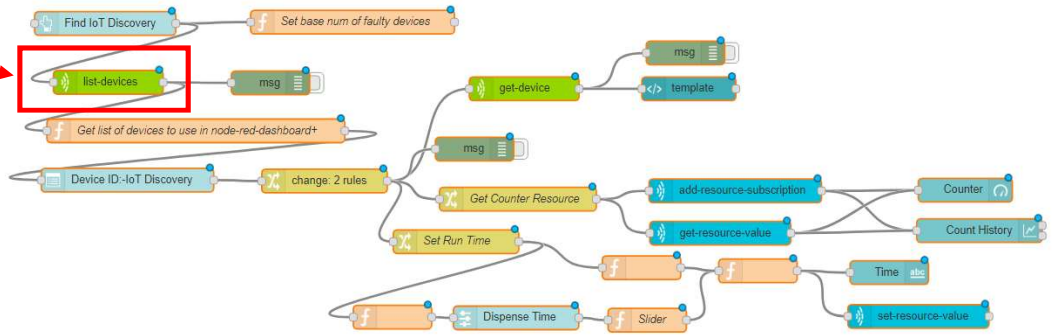


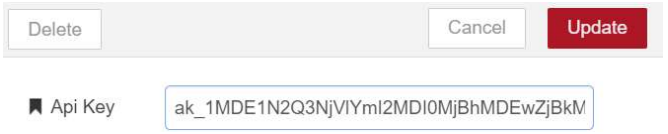


- Paste the contents of flow1.txt
- Select “Import”

Getting started with Node-Red (2)

- Place your new flow into the flow page and click to anchor
- Double click on “list devices”
- Edit the node config:





- Enter your API key and select update:
  - If needed get a new key from your Pelion Portal
- Select “Done” to save the new node configuration
  - All of the nodes in your flow that need Pelion access will share this API key

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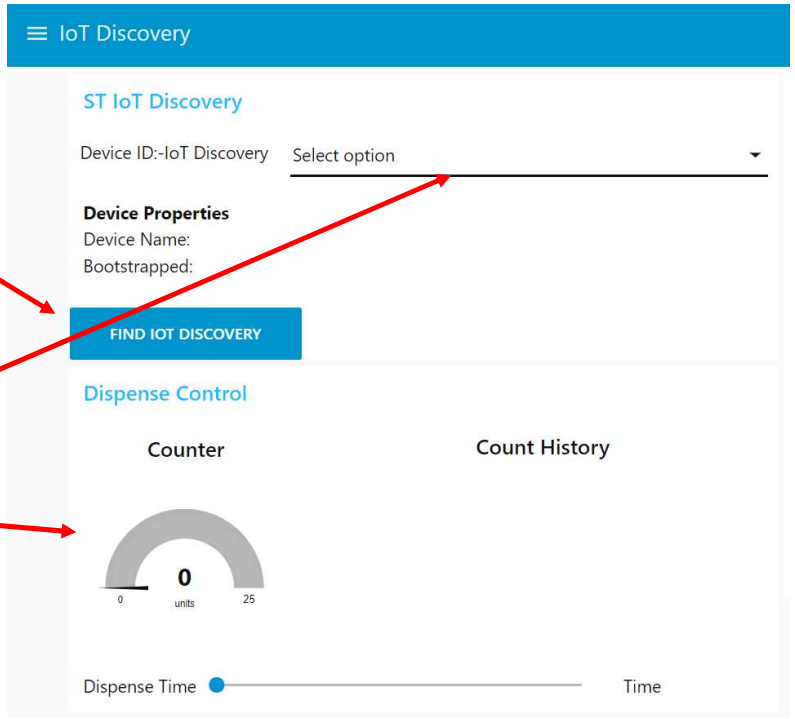
Getting started with Node-Red (3)

- Select “Depoly”
- In another tab navigate to http://localhost:1880/ui

1. Click the “Find IoT Discovery” button:
2. Select your device from the dropdown menu
3. The blue increments the count



Lets explore our flow

Double click on these blocks to explore them

A button to initialize the system

Fetches the device list

Builds the device list for the menu

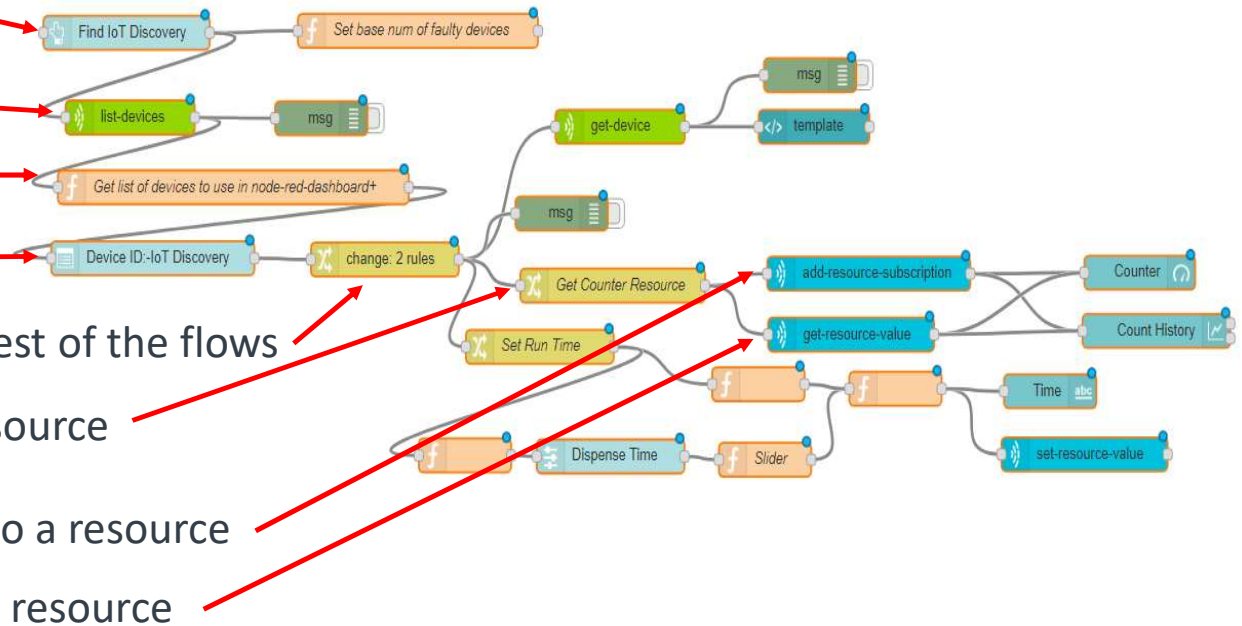
Dropdown menu

Passes the selected DeviceID to the rest of the flows

Sets the URI for a desired resource

Uses DeviceID and URI to subscribe to a resource

Uses DeviceID and URI to GETa resource



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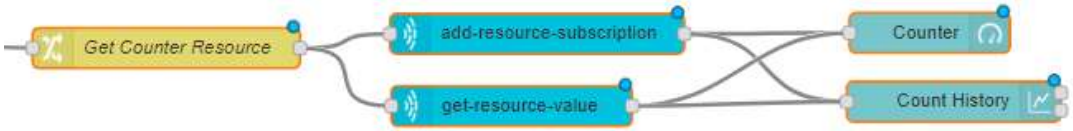
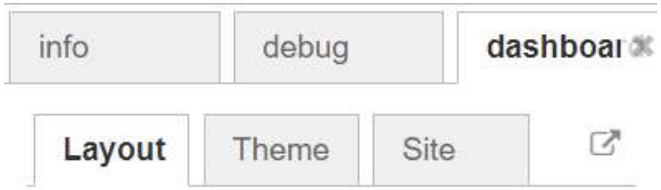
Add Temperature and Humidity to our UI

1. Copy and paste these blocks



2. Modify the URI block to reflect the URI of our temperature resource
3. “Wire” the input of the URI block to the output of the deviceID block
4. Edit the display blocks and give them new names
5. Repeat 1-4 for Humidity
6. The Dashboard tab lets you arrange the display elements



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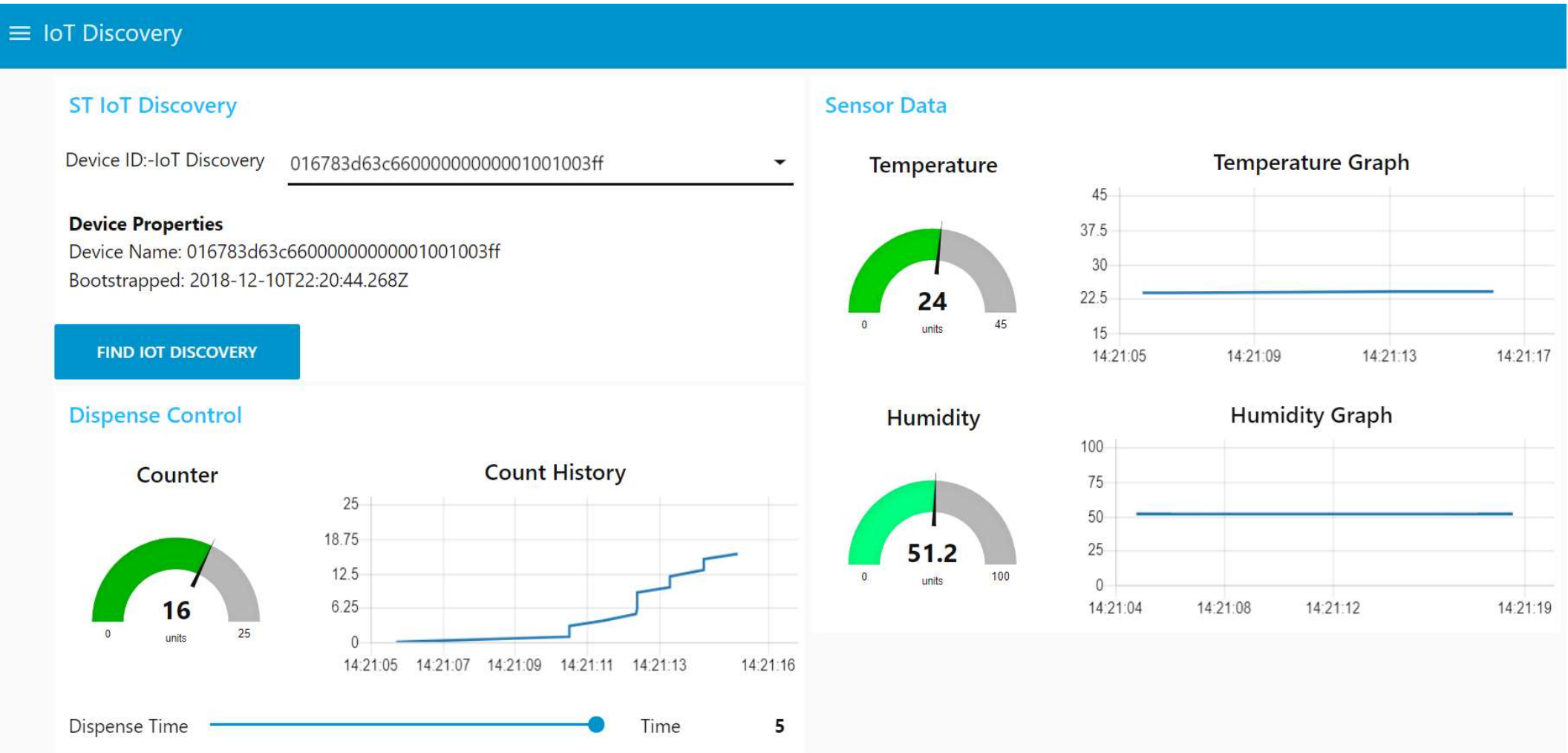
The Result!


IoT Discovery
ST IoT Discovery
Device ID:-IoT Discovery
016783d63c6600000000000001001003ff
Device Properties
Device Name: 016783d63c6600000000000001001003ff
Bootstrapped: 2018-12-10T22:20:44.268Z
FIND IOT DISCOVERY
Dispense Control
Counter
16
0
units
25
Count History
25
18.75
12.5
6.25
0
14:21:05
14:21:07
14:21:09
14:21:11
14:21:13
14:21:16
Dispense Time
Time
5
Sensor Data
Temperature
24
0
units
45
Temperature Graph
45
37.5
30
22.5
15
14:21:05
14:21:09
14:21:13
14:21:17
Humidity
51.2
0
units
100
Humidity Graph
100
75
50
25
0
14:21:04
14:21:08
14:21:12
14:21:19

Thank You!
Danke!
Merci!
谢谢!
ありがとう!
Gracias!
Kiitos!
감사합니다
धन्यवाद