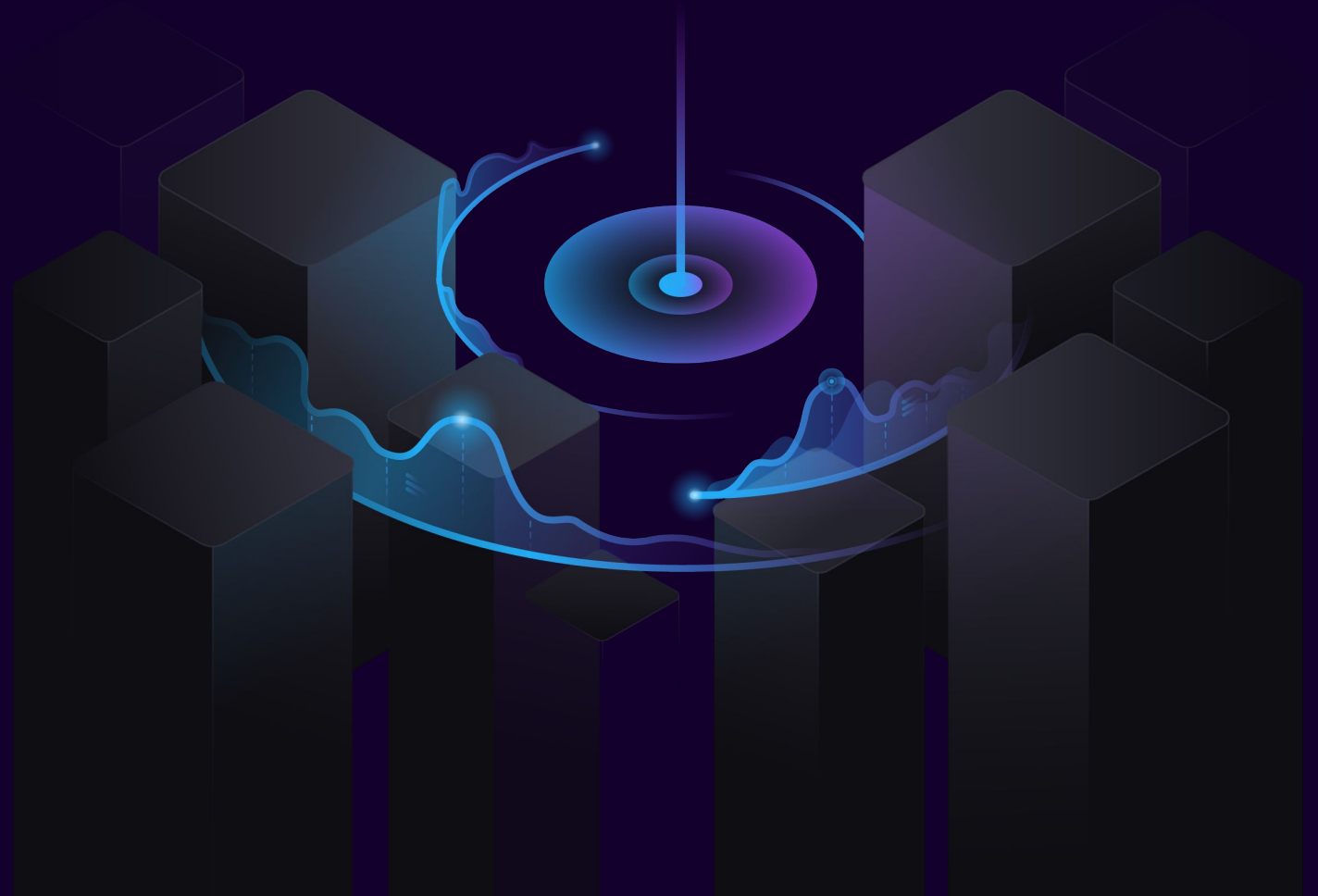




IoT Center

Introduction



Bonitoo – SW Engineering Company

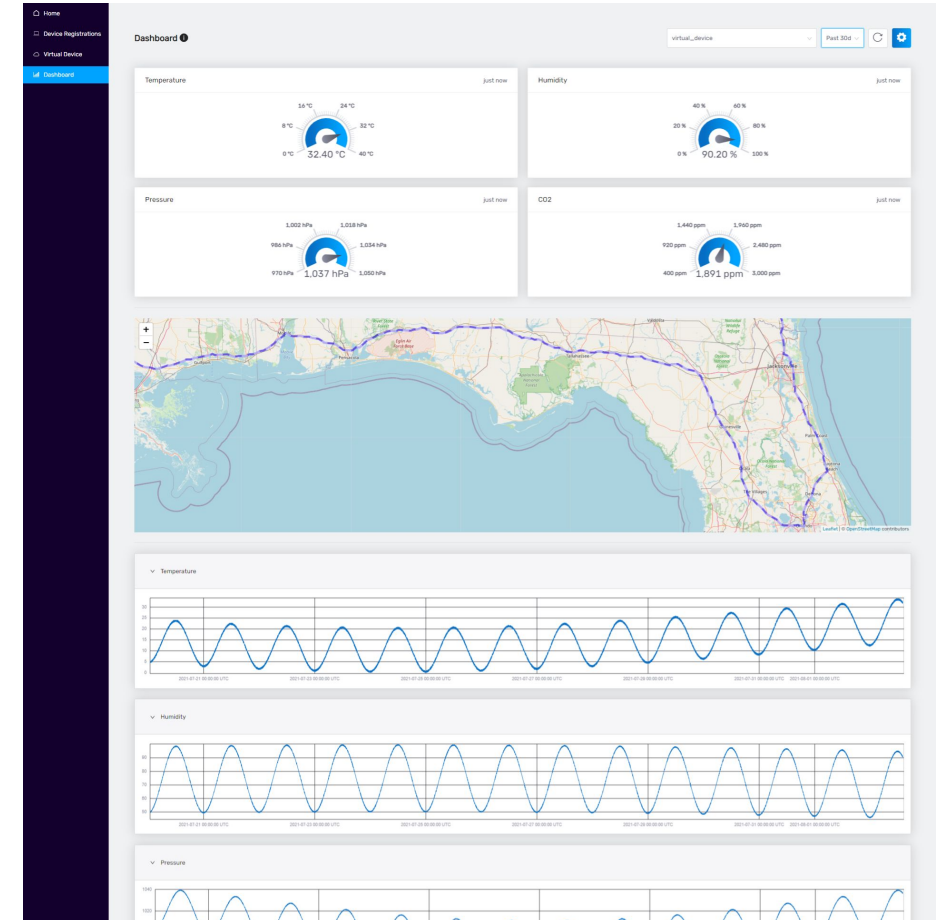


- End-to-end **R&D Services** (architecture, agile development, documentation, support, hosting, operation)
- Development of custom **monitoring** solutions
- Strong team of **professionals** (development for SaaS Startups, Enterprise Software, Mobile applications)
- **InfluxData consulting partner**
Delivered Client Libraries and other deliverables

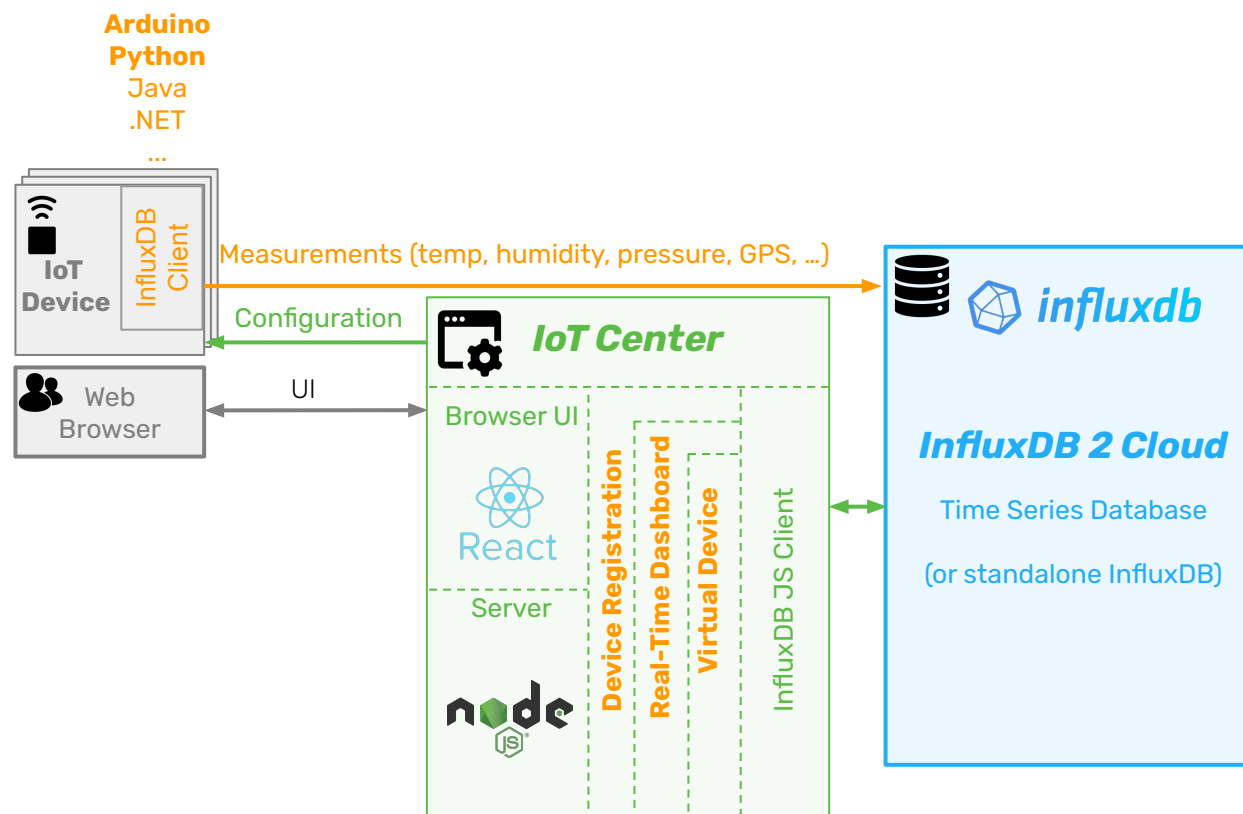


What is IoT Center?

- Simple **demo** application
- How to integrate **InfluxDB**
 - Write measurements
 - Query database
 - Manage InfluxDB
- Based on **Node.js** and **React**
- **IoT Devices** example (out of scope of this workshop)
- Embedded **Virtual Device**
- Links to source code - **GIT**
- No DB installation - InfluxDB **Cloud**



IoT Center Architecture



IoT Center

Three functions

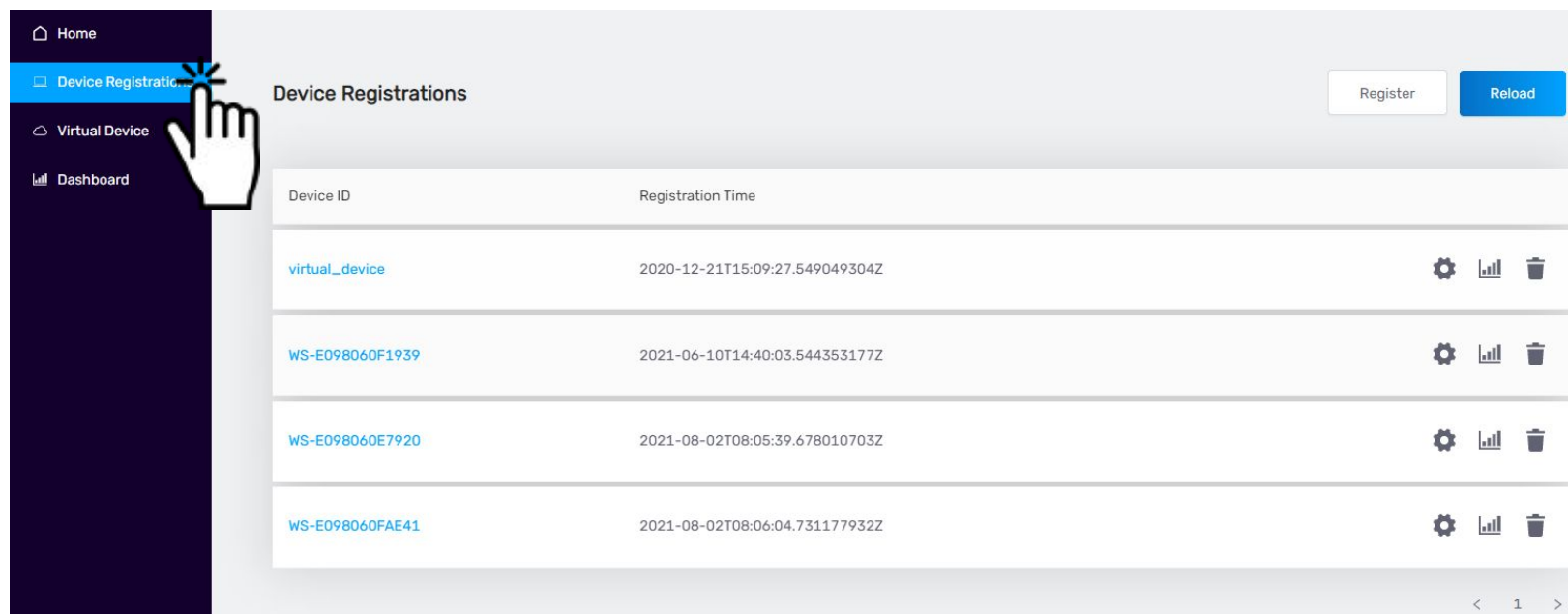
- **Device Registration** – register new IoT Devices
- **Virtual Device** – emulate IoT device
- **Dashboard** – show measured data from the IoT Devices



Devices Registration













Left menu

- **Devices Registration**



Device Registrations

Register Reload

Device ID	Registration Time	
virtual_device	2020-12-21T15:09:27.549049304Z	  
WS-E098060F1939	2021-06-10T14:40:03.544353177Z	  
WS-E098060E7920	2021-08-02T08:05:39.678010703Z	  
WS-E098060FAE41	2021-08-02T08:06:04.731177932Z	  

< 1 >



Virtual Device - Generate demo data

Left menu

- **Virtual Device**

Top screen

- **Button** with pencil
- Generate data up to for the last 7 days

Virtual Device

Device Configuration

Device ID	virtual_device	Registration Time	2020-12-21T15:09:27.549049304Z
InfluxDB URL	https://us-west-2-1.aws.cloud2.influxdata.com	InfluxDB Organization	iot-center-workshop@bonitoo.io
InfluxDB Bucket	iot_center	InfluxDB Token	***

Measurements

Field	min	max	max time	entry count	sensor
CO2	780	2620	2021-07-27T01:02:00Z	10080	virtual_CO2Sensor
Humidity	48.8	99.9	2021-07-27T01:02:00Z	10080	virtual_HumiditySensor
Lat	28.53	36.22	2021-07-27T01:02:00Z	10080	virtual_GPSSensor
Lon	-104.2	-77.75	2021-07-27T01:02:00Z	10080	virtual_GPSSensor
Pressure	970	1040	2021-07-27T01:02:00Z	10080	virtual_PressureSensor
TVOC	506	1744	2021-07-27T01:02:00Z	10080	virtual_TVOCSensor
Temperature	0	24.1	2021-07-27T01:02:00Z	10080	virtual_TemperatureSensor

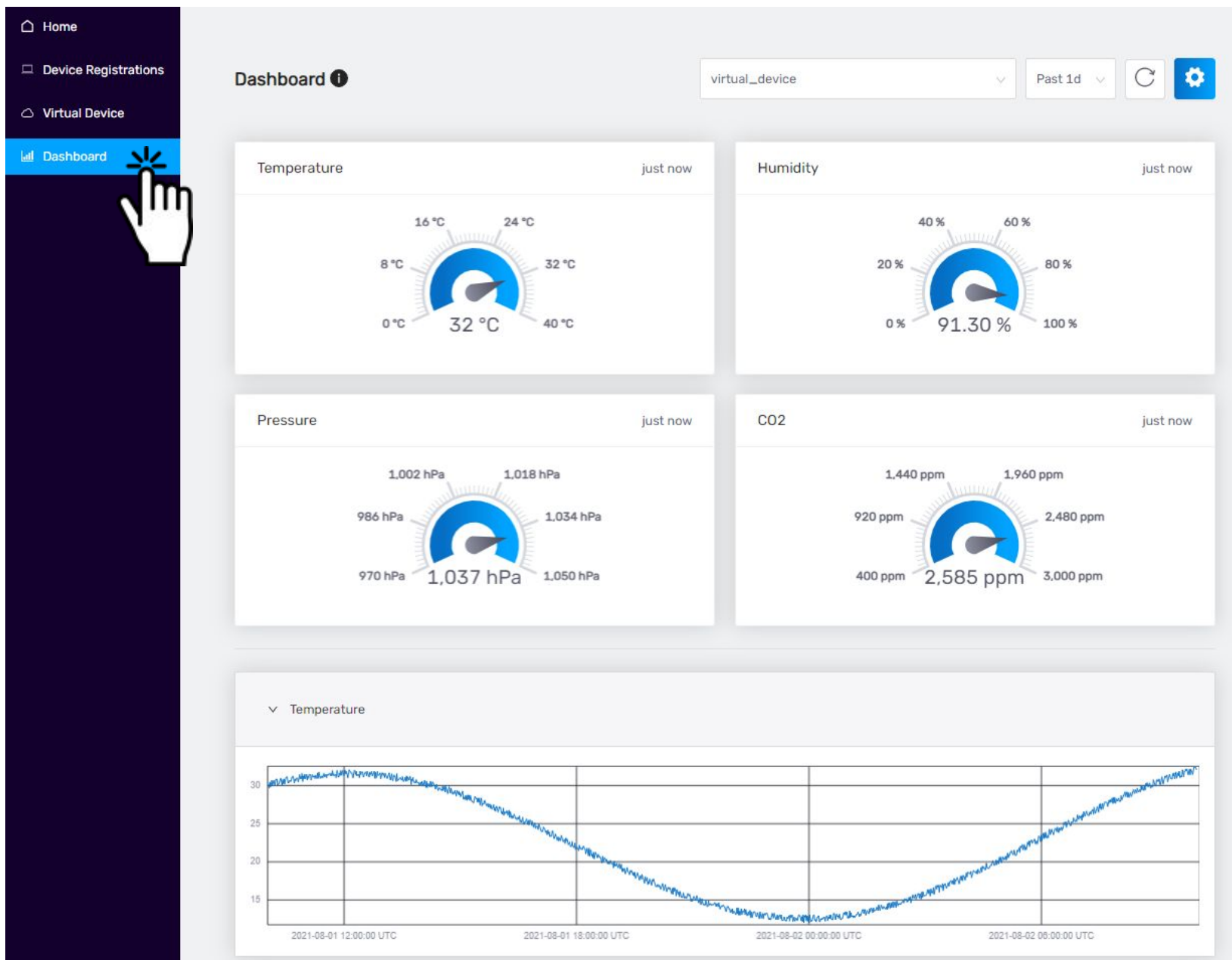
Visualisation

Left Menu

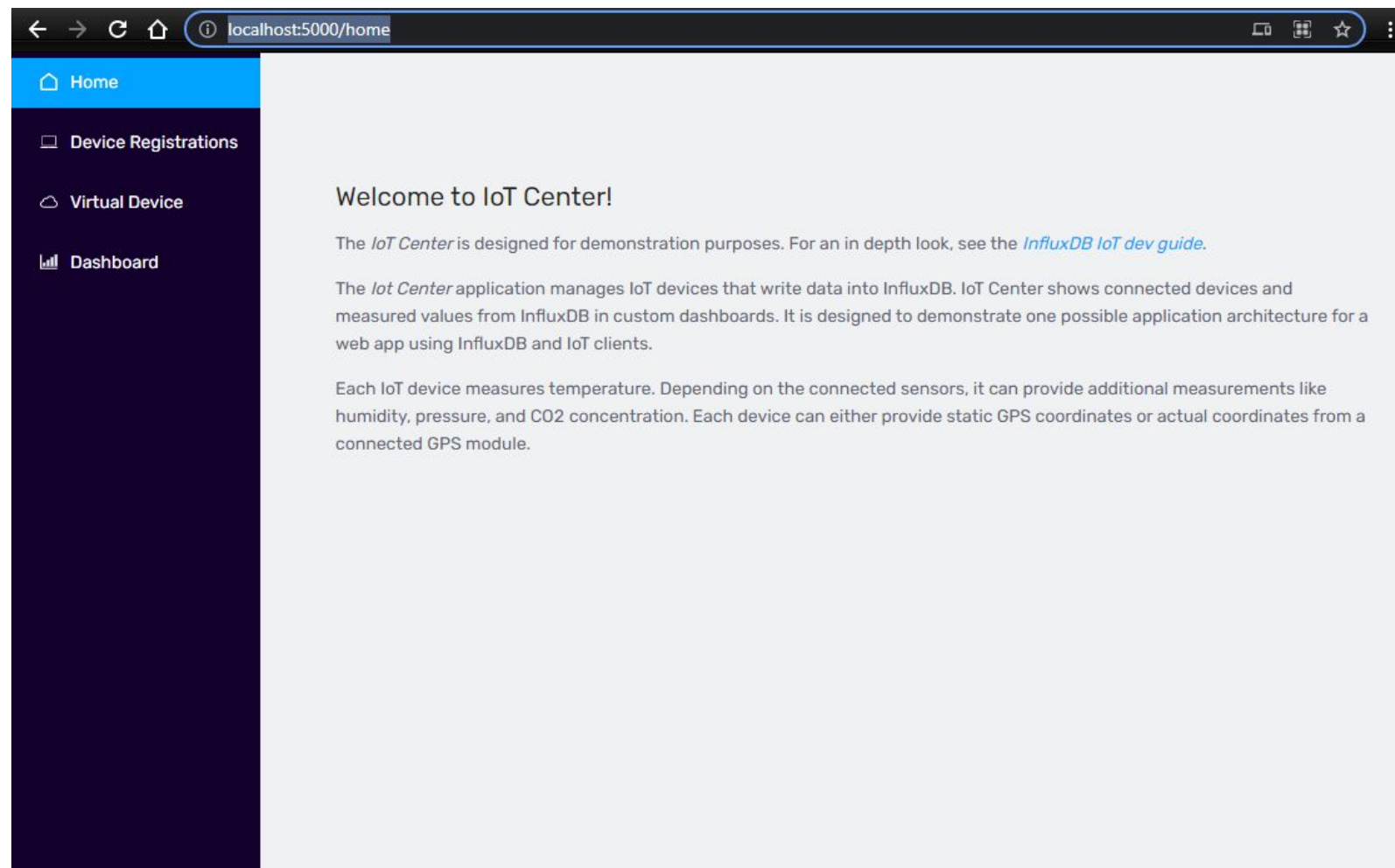
- **Dashboard**

Filters

- **Device**
- **Time**



IoT Center Demo



Link - <http://localhost:5000>



Source code organization

<https://github.com/bonitoo-io/iot-center-v2>

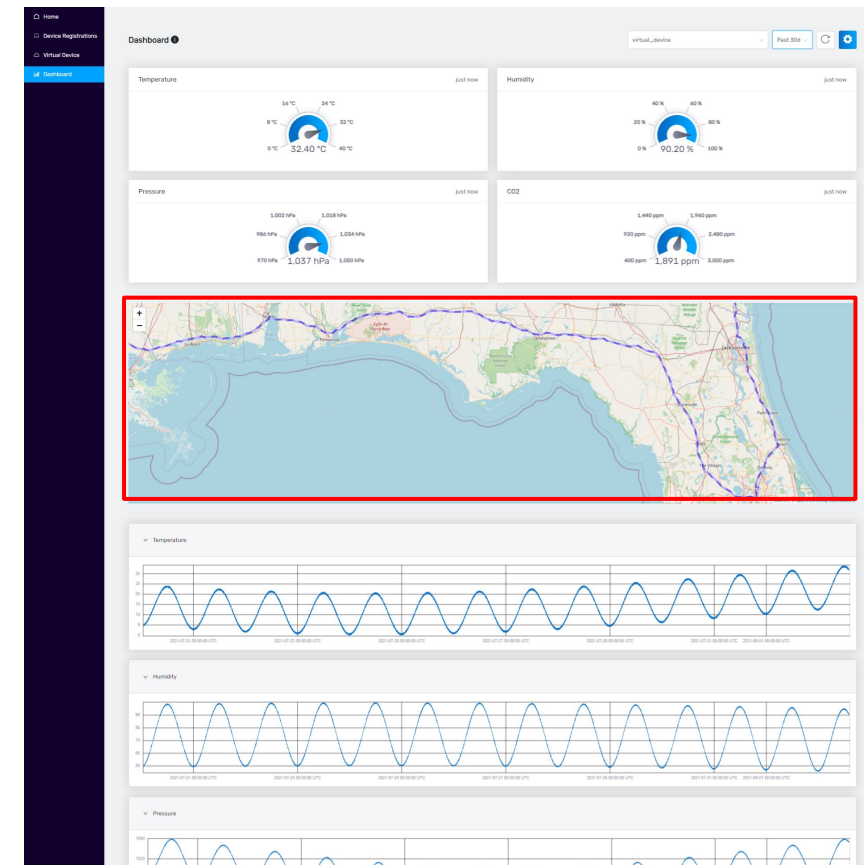
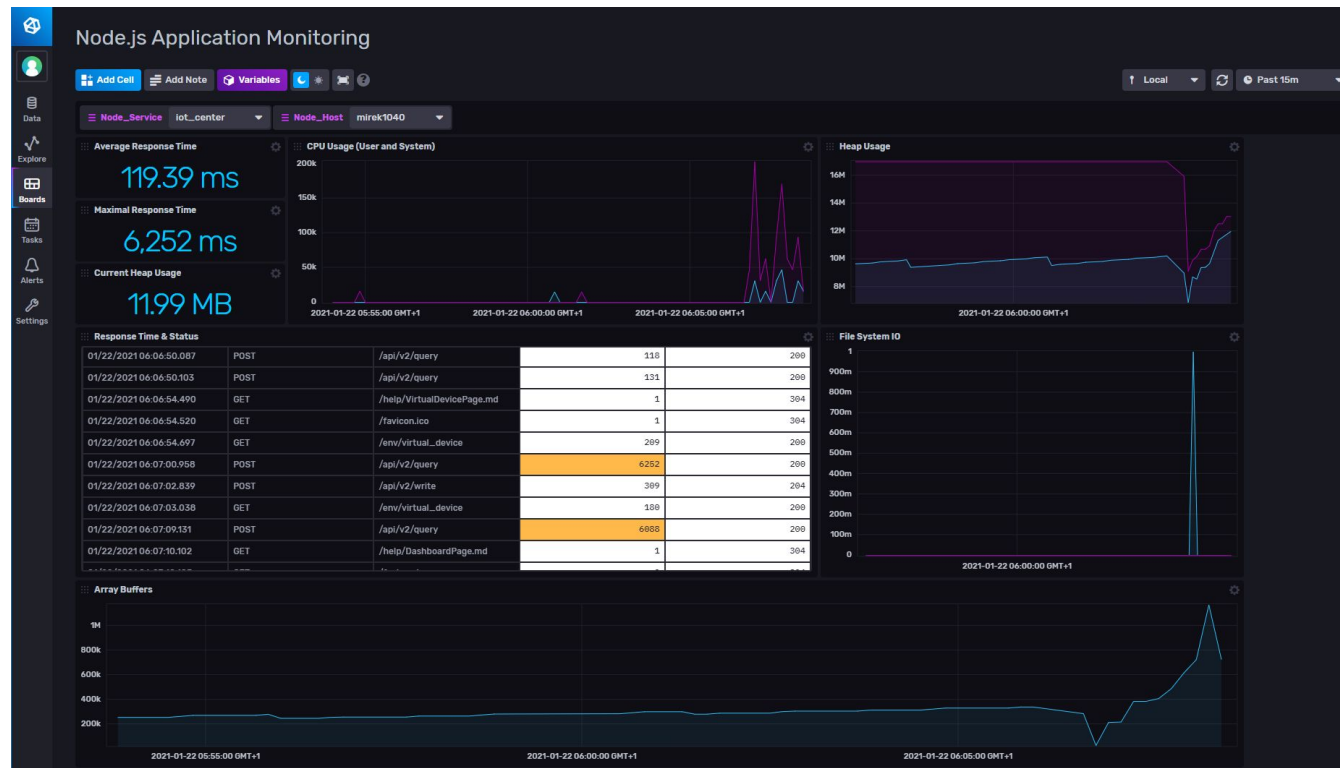
Directories

- app
 - server
 - ui
- client_arduino
- client_python
- **slides**



Goal of this workshop

1. Extend visualisations - add GEO widget
2. Node.js applications monitoring



Documentation

1. Help windows embedded into IoT Center
2. Dev guide <https://influxdata.github.io/iot-dev-guide>

