Project Development Phase

Sprint-1

Project Title : Real-Time River Water Quality Monitoring And Control System

Team ID : PNT2022TMID34542

Project Description:

River water quality monitoring system using IoT are hence required to automatically monitor various parameters that determine the quality of water.

Internet of Things has enabled the development of automatic water quality monitoring systems that mitigate the challenges. By using devices like sensors and probes, several parameters of water can be measured in real-time from remote locations.

These devices share live data about the quality of a water body to a platform suite. By using this platform, a person or a company can take useful actions to ensure optimum water quality. Some variables that can be measured through remote water quality monitoring devices are temperature, turbidity, pH, dissolved oxygen, conductivity and salinity.

The technology of Internet of Things has enabled the creation of river water quality monitoring solutions that are evolving the modus operandi of different industries.

Plan of action:

- To develop the Application using given deliverables
- To create IBM Watson Cloud and to link with the application developed
- To create Node Red Service

- To express the Python Code and simulate successfully in IBM Cloud.

IBM Watson IoT Platform:

IBM Watson IoT Platform Lite is a cloud-hosted service on IBM Cloud that makes it simple to derive value from Internet of Things (IoT) devices.

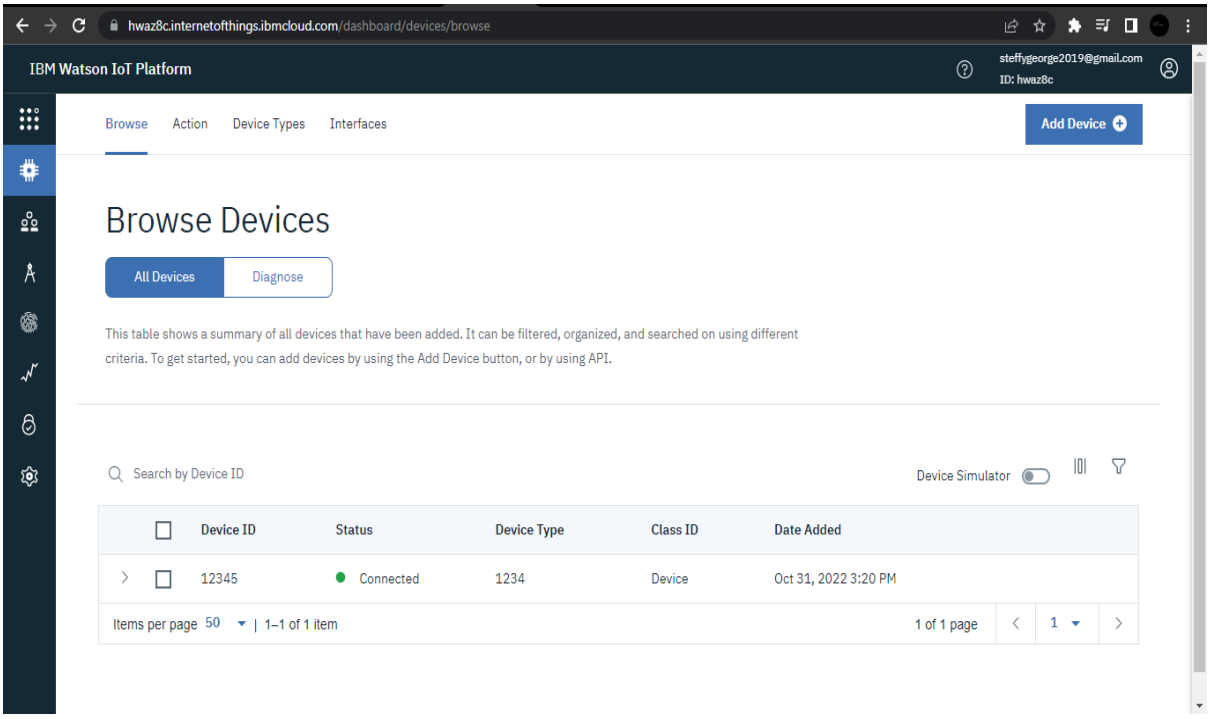
A device can be anything that has a connection to the internet and that can push data into the cloud. However, devices cannot communicate directly with other devices, instead devices accept commands from applications, and send events to applications.

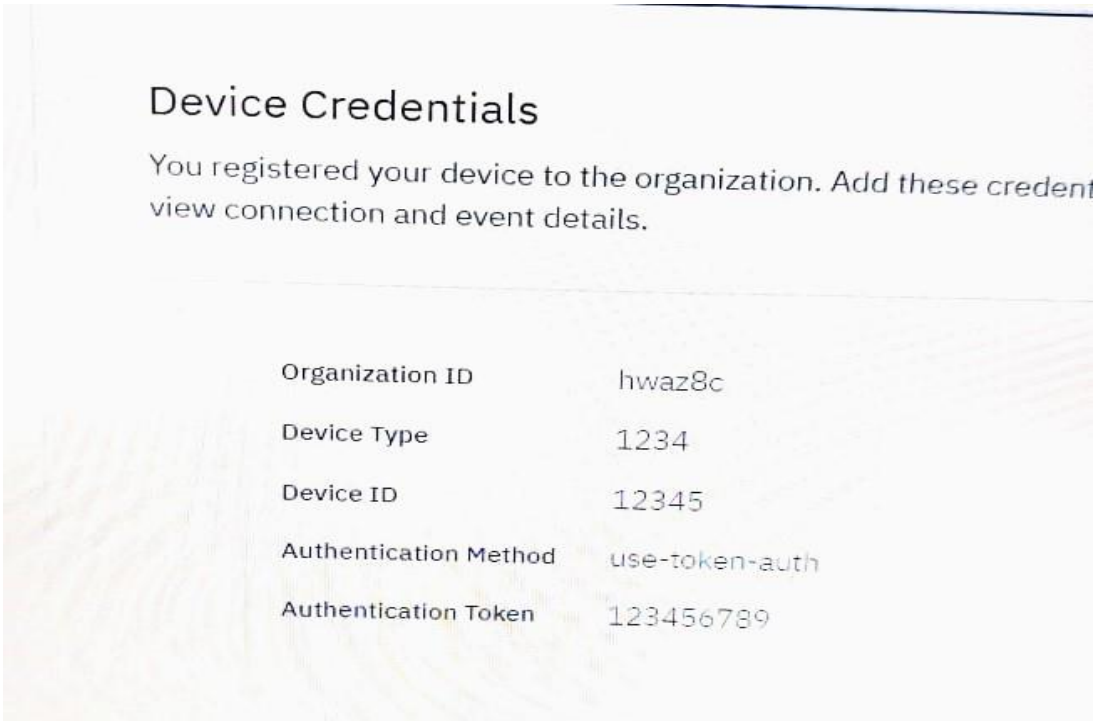
Devices in Platform Service are identified by a unique authentication token. Devices must be registered before they can connect to Platform Service.

Device Description:

We have created a New Device 1234, where the Device Type is 1234. And we have set the composed of following data's such as temperatue(), humidity(), Ph(). When the codes uploaded in the simulation device section becomes true, the outputs will be displayed in the Recent Event site below the Respected Device Block. The output displays until the python code is switched OFF.

IBM Watson IoT Platform account was created and configured, a device type was created, and a device was added.




Device Credentials
You registered your device to the organization. Add these credent
view connection and event details.
Organization ID
hwaz8c
Device Type
1234
Device ID
12345
Authentication Method
use-token-auth
Authentication Token
123456789