

SPRINT 1

TOPIC : SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

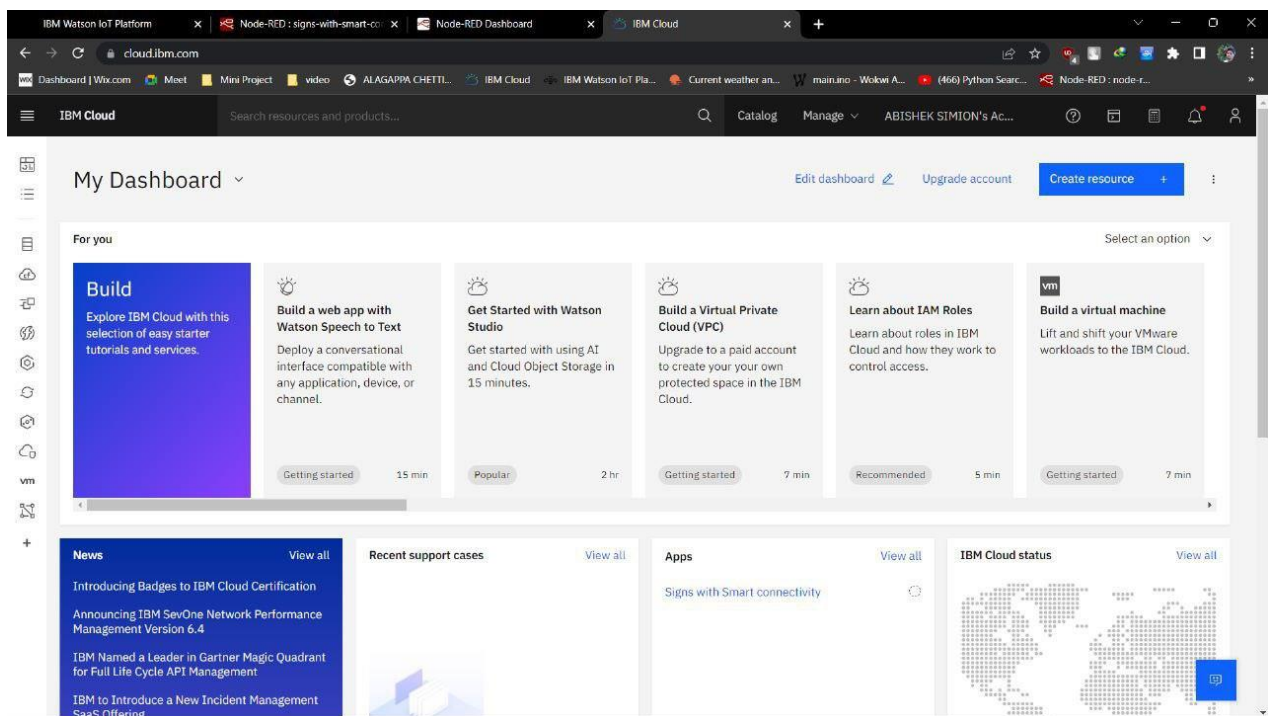
TEAM ID: PNT2022 TMID06138

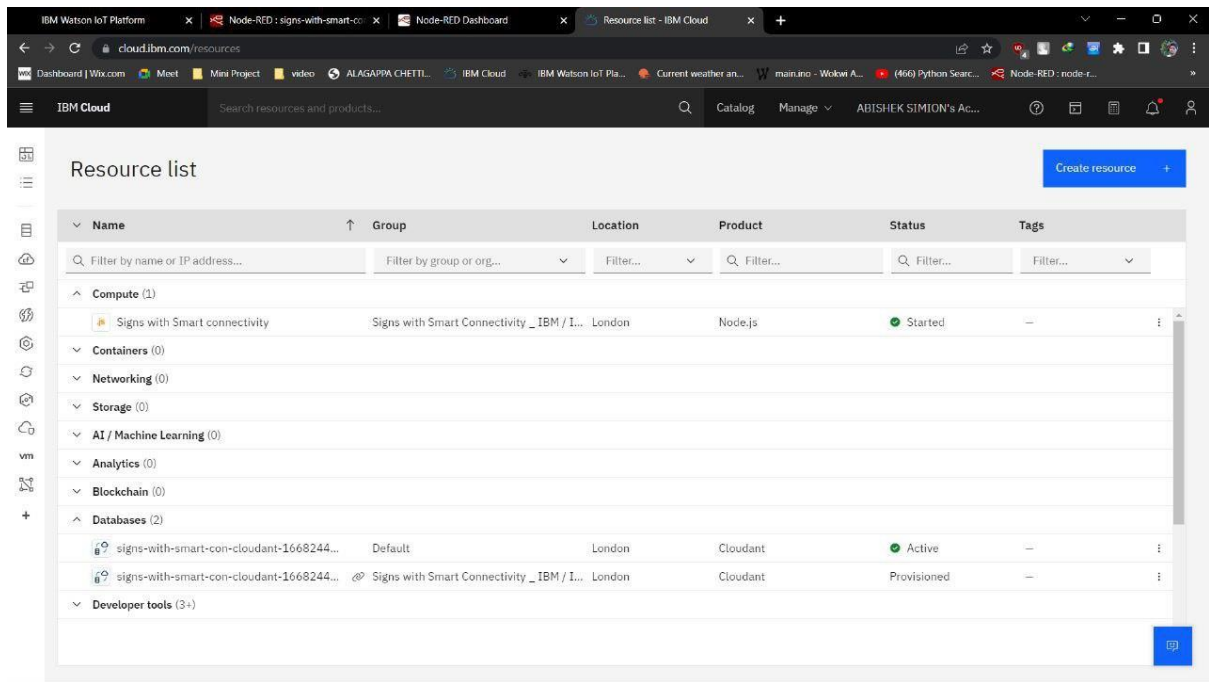
DATE : 29 Oct 2022

SOFTWARE USED:

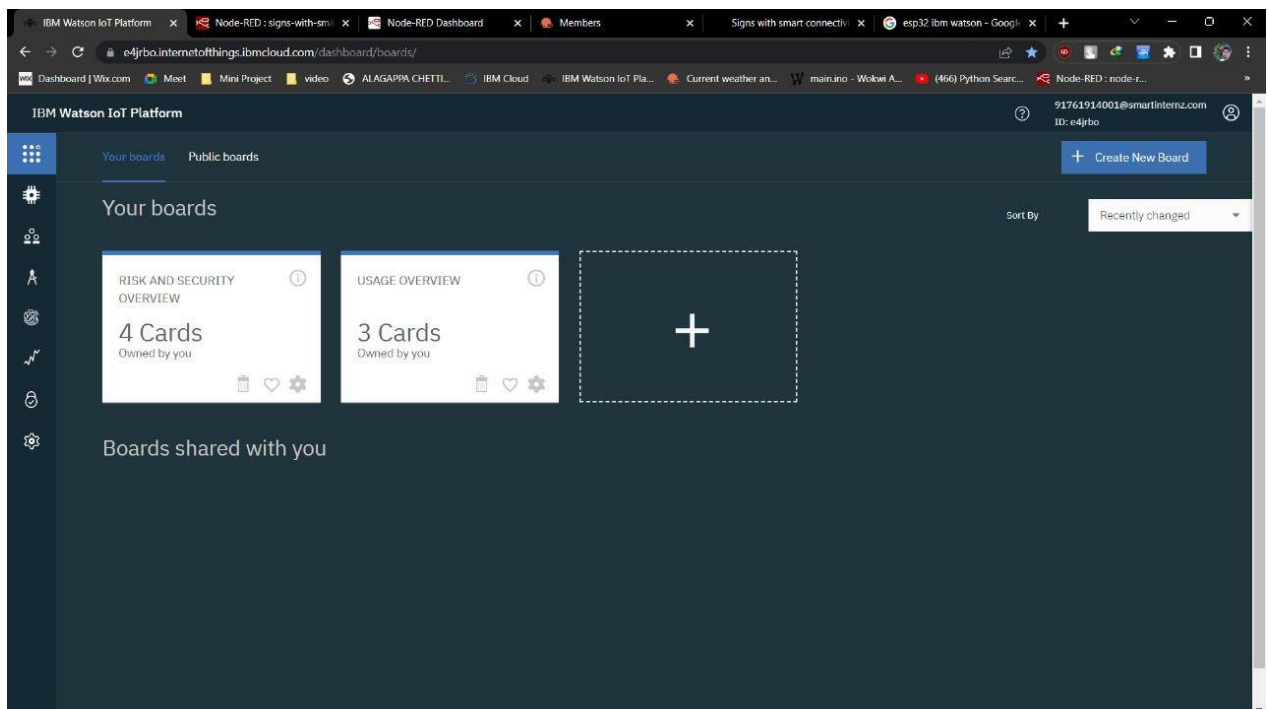
- IBM cloud.
- IBM Watson IOT.
- Node red.
- Open weather API.

US 1: Create and configure the IBM Cloud services which are being used in this project.





US 2: In order to connect the IoT device to the IBM Cloud, create a device in IBM Watson IoT platform and get device credentials.



IBM Watson IoT Platform

Browse Action Device Types Interfaces

Add Device

Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Disconnected	SignsWithSmartConnectivity	Device	Nov 14, 2022 10:30 AM	

Items per page 50 | 1-1 of 1 item 1 of 1 page

US 3: Opening node red services.

Node-RED

Filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch
- change
- range
- template

help

mqtt out

Connects to a MQTT broker and publishes messages.

Inputs

payload: the payload to publish. If this property is not set, no message will be sent. To send a blank message, set this property to an empty String.

topic: the MQTT topic to publish to.

qos: 0, fire and forget - 1, at least once - 2, once and once only. Default 0.

retain: set to true to retain the message on the broker. Default false.

US 4: Opening account in openweather API and getting API key.

The screenshot shows the OpenWeather API dashboard. The browser's address bar displays `home.openweathermap.org/api_keys`. The navigation bar includes links for Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, ABI..., and Support. Below the navigation bar, a sub-header contains links for New Products, Services, API keys (selected), Billing plans, Payments, Block logs, My orders, My profile, and Ask a question. A message states: "You can generate as many API keys as needed for your subscription. We accumulate the total load from all of them." Below this is a table of API keys with columns for Key, Name, Status, and Actions. One key is listed with the value `76e08ef85f6173baed5302d8d21a6d24`, Name `Default`, and Status `Active`. To the right of the table is a 'Create key' section with an input field for 'API key name' and a 'Generate' button. The footer is divided into three sections: 'Product Collections' (Current and Forecast APIs, Historical Weather Data, Weather Maps, Weather Dashboard, Widgets), 'Subscription' (How to start, Pricing, Subscribe for free, FAQ), and 'Company' (OpenWeather is a team of IT experts and data scientists that has been practising deep weather data science since 2014. For each point on the globe, OpenWeather provides historical, current and forecasted weather data via light-speed APIs. Headquarters in London, UK).

Key	Name	Status	Actions
76e08ef85f6173baed5302d8d21a6d24	Default	Active	🔍 🗑️

Create key
 Generate

Product Collections

- Current and Forecast APIs
- Historical Weather Data
- Weather Maps
- Weather Dashboard
- Widgets

Subscription

- How to start
- Pricing
- Subscribe for free
- FAQ

Company

OpenWeather is a team of IT experts and data scientists that has been practising deep weather data science since 2014. For each point on the globe, OpenWeather provides historical, current and forecasted weather data via light-speed APIs. Headquarters in London, UK.