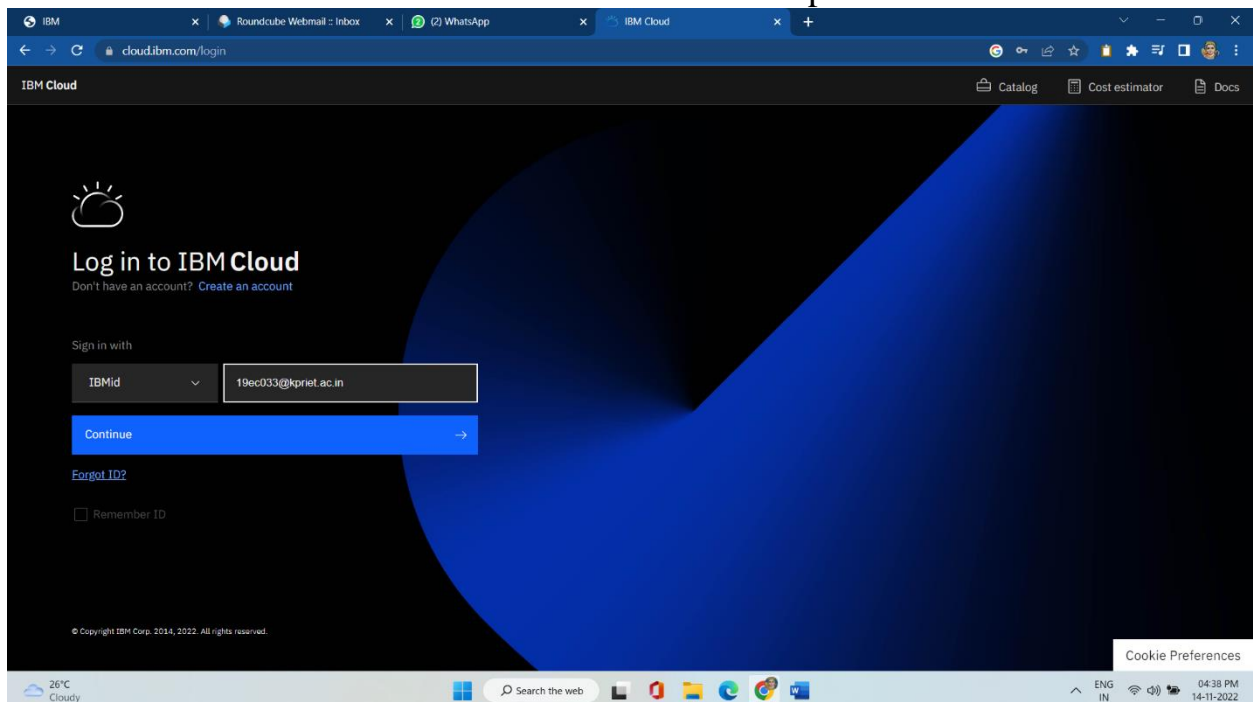


CREATE IBM WATSON IOT PLATFORM AND DEVICE

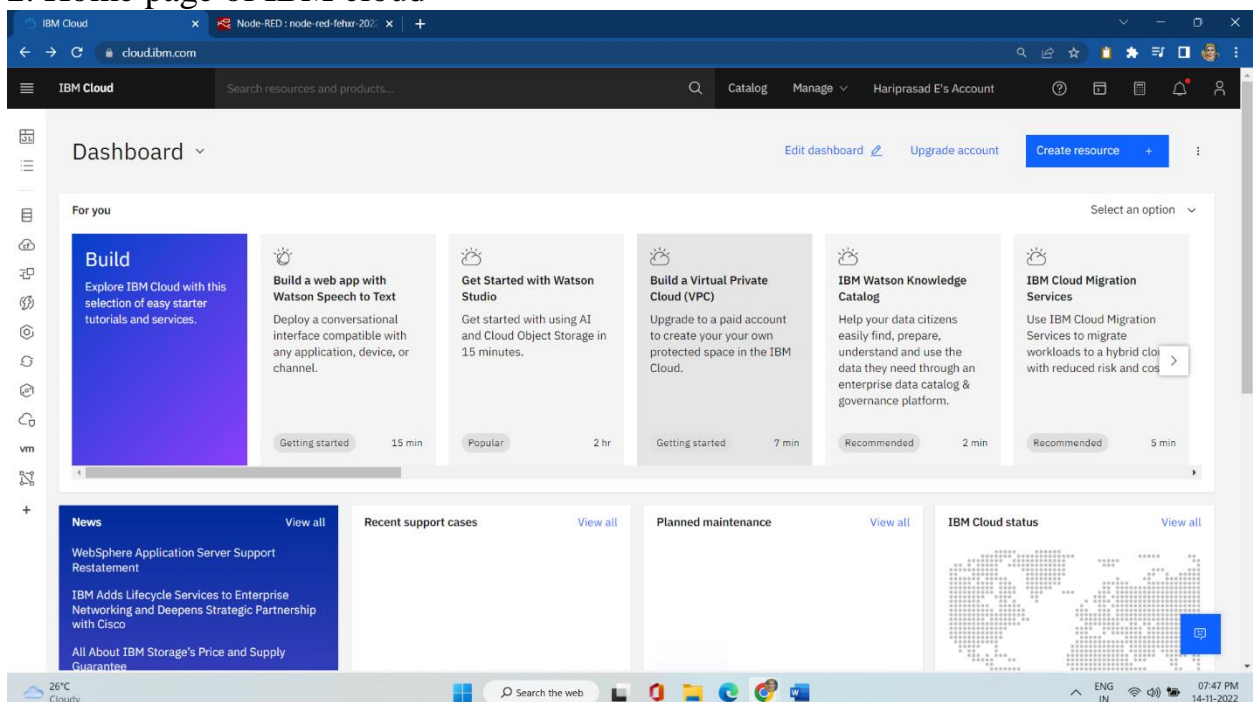
Date	14-11-2022
Team ID	PNT2022TMID14244
Project Name	Project - IOT based safety gadget for child safety monitoring and notification
Maximum Marks	4 Marks

STEPS:

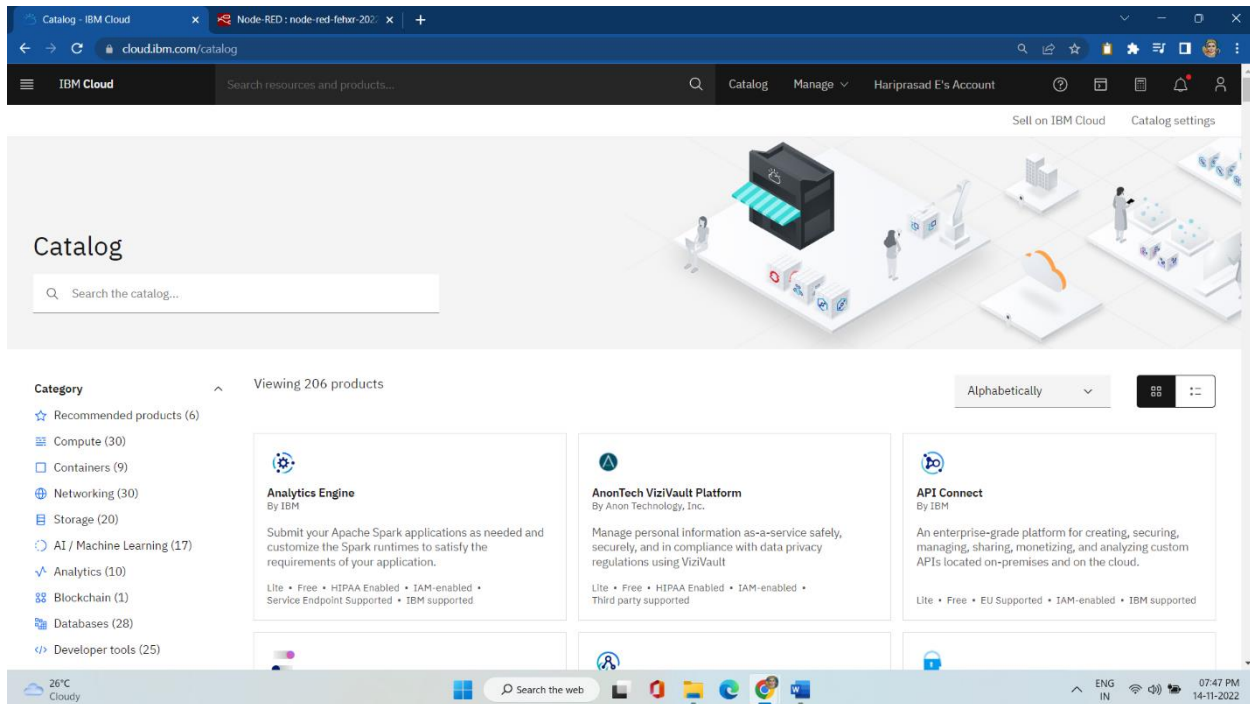
1. First create an IBM cloud account with IBMid and password



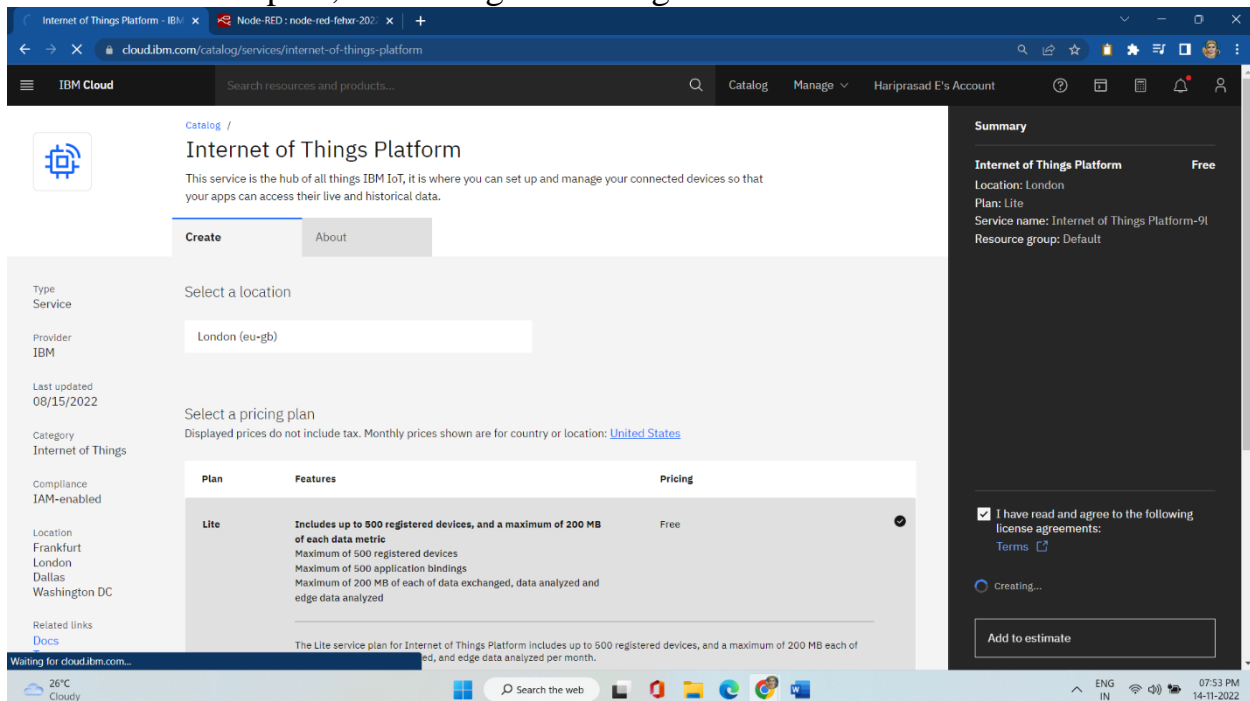
2. Home page of IBM cloud



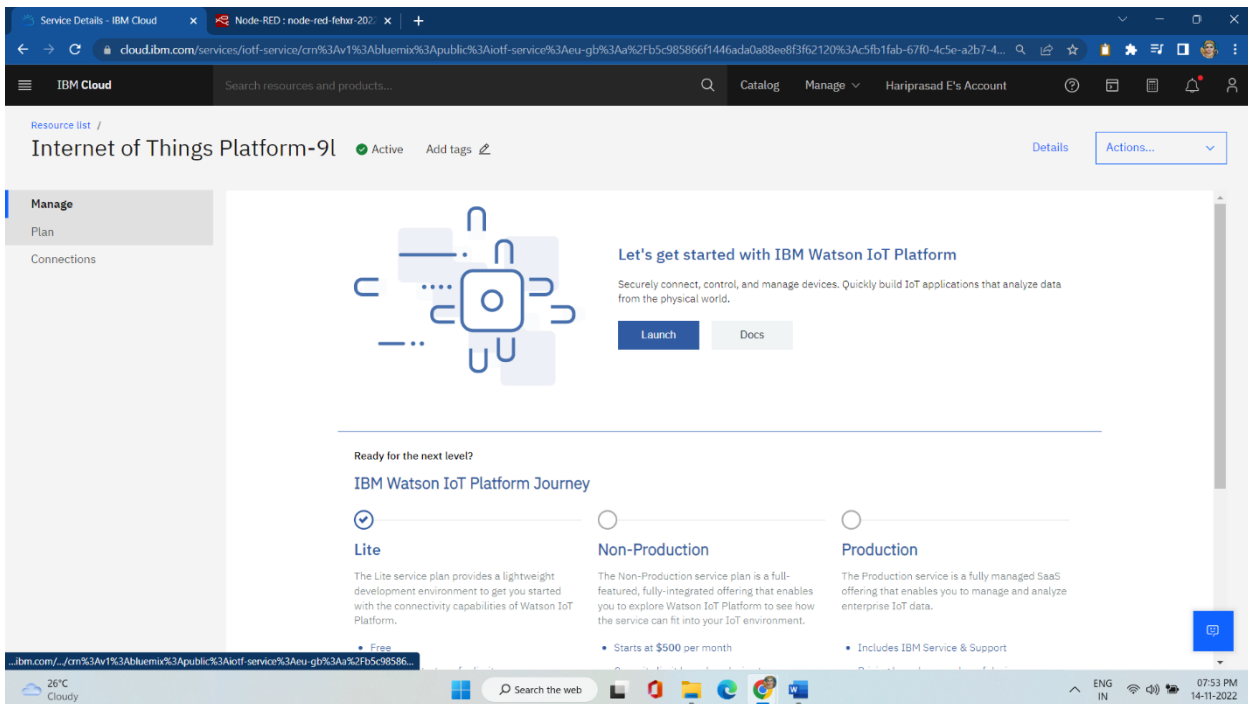
3. Click on the catalog on the top. Search for INTERNET OF THINGS PLATFORM



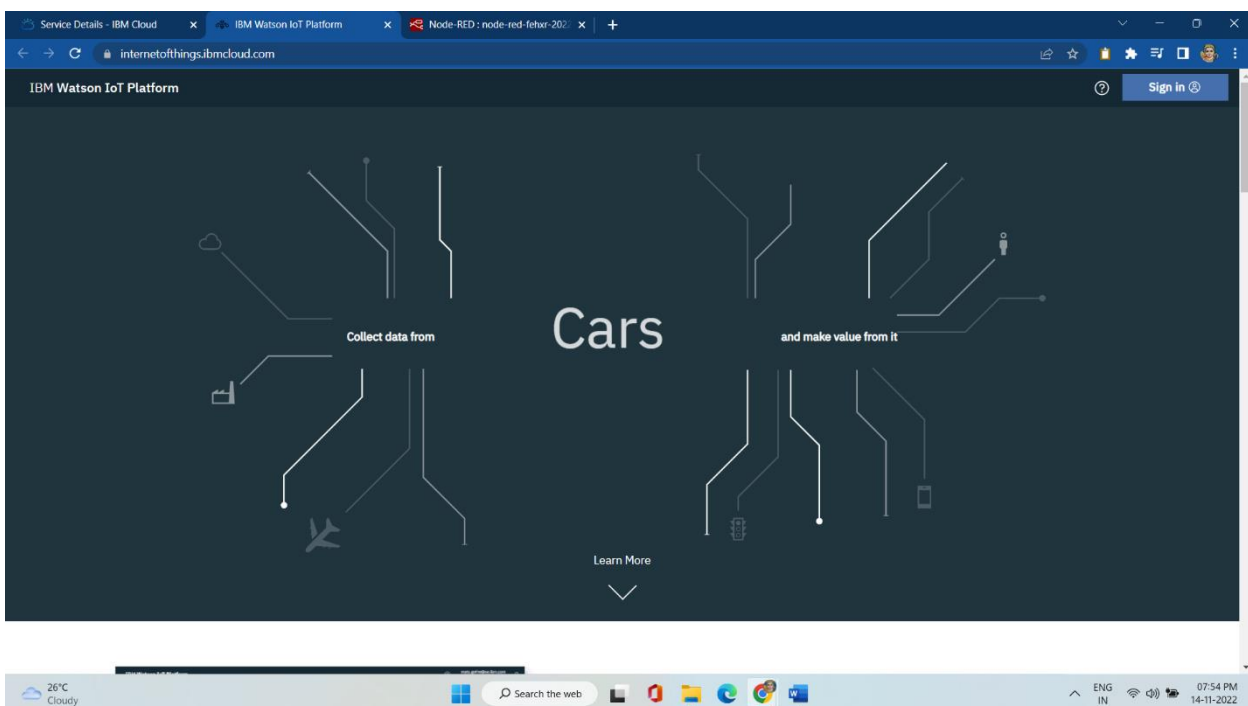
4. Enter the location and in the configure your resource type the service name and choose the plan, tick the agree with agreements and then click on create



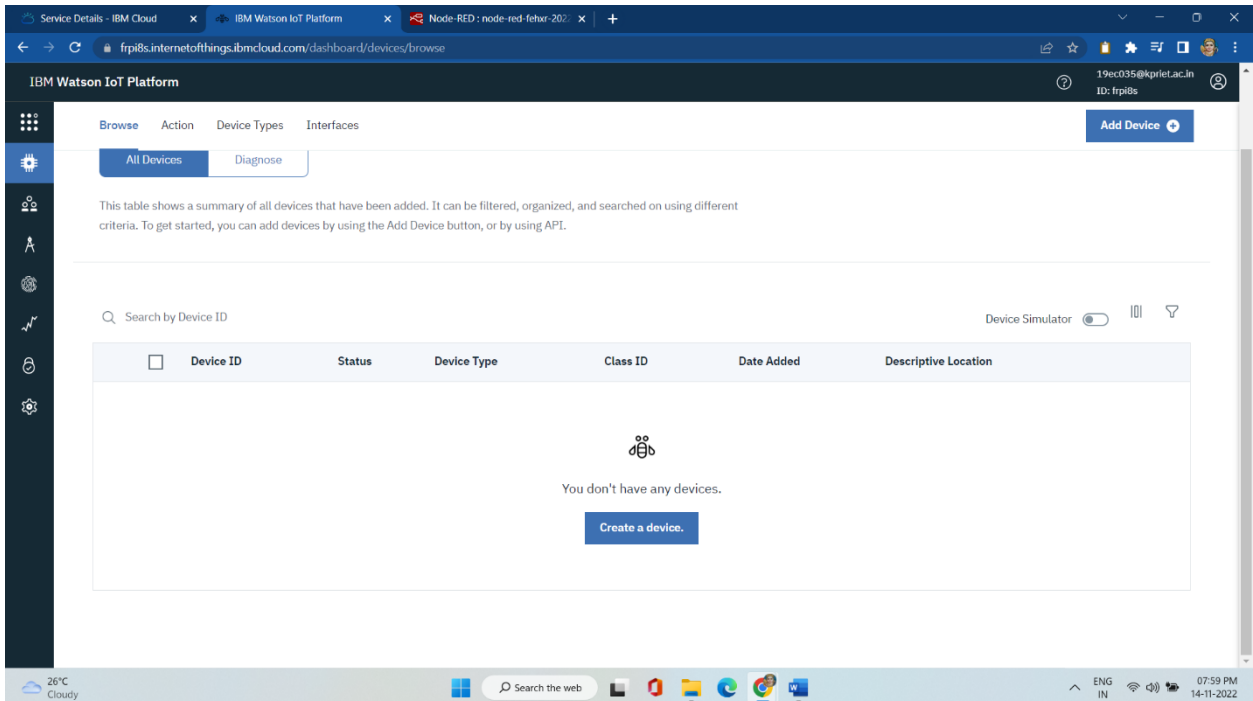
5. Internet of Things Platform Child_safety will be created, where there are different options like manage, plan, and connection (manage is for launch, Plan gives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IoT with other services) .Click on launch.



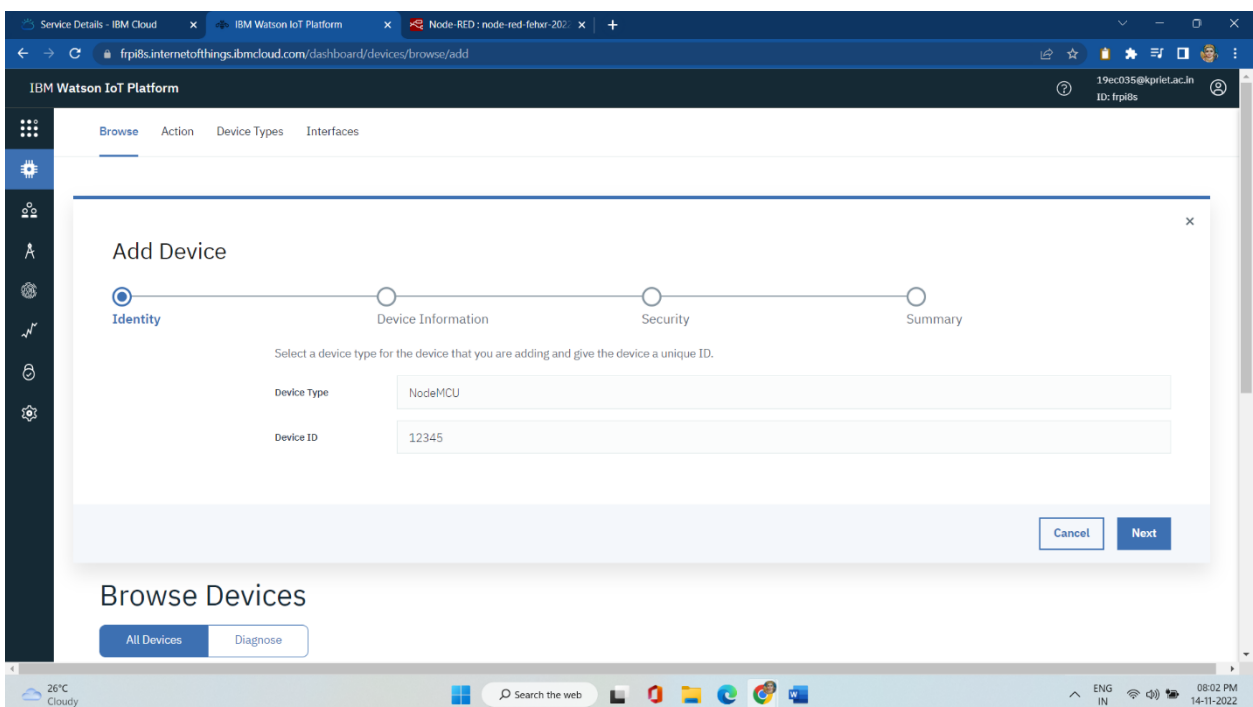
6. Now you need to sign in. Enter the details to sign in to the Watson Cloud to create a device.



7. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices



8. Click on the device tab and click on the add device button, then give the device type and device id and click next



9. This page to enter extra details and of the hardware

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The progress bar indicates four steps: Identity (completed), Device Information (current), Security, and Summary. The 'Device Information' step contains two columns of input fields. The left column includes 'Serial Number', 'Model', 'Description', and 'Hardware Version'. The right column includes 'Manufacturer', 'Device Class', 'Firmware Version', and 'Descriptive Location'. Each field has a placeholder text 'Enter [field name]'. Below the left column is an 'Add Metadata' button with a plus icon. At the bottom right of the form are 'Back' and 'Next' buttons. The browser's address bar shows the URL 'frp8s.internetofthings.ibmcloud.com/dashboard/devices/browse/add'. The system tray at the bottom shows a temperature of 26°C, a search bar, and the date/time '08:02 PM 14-11-2022'.

Service Details - IBM Cloud | IBM Watson IoT Platform | Node-RED: node-red-feb-2022

frp8s.internetofthings.ibmcloud.com/dashboard/devices/browse/add

IBM Watson IoT Platform

19ec035@kpiet.ac.in
ID: frp8s

Browse | Action | Device Types | Interfaces

Add Device

Identity | **Device Information** | Security | Summary

You can modify the default device information and enter more information about the device for identification purposes.

Serial Number	<input type="text" value="Enter Serial Number"/>	Manufacturer	<input type="text" value="Enter Manufacturer"/>
Model	<input type="text" value="Enter Model"/>	Device Class	<input type="text" value="Enter Device Class"/>
Description	<input type="text" value="Enter Description"/>	Firmware Version	<input type="text" value="Enter Firmware Version"/>
Hardware Version	<input type="text" value="Enter Hardware Version"/>	Descriptive Location	<input type="text" value="Enter Descriptive Location"/>

26°C Cloudy | Search the web | ENG IN | 08:02 PM 14-11-2022

10. Clicking next it goes to the security where we do authentication token id.

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, now at the 'Security' step. The progress bar shows 'Identity' and 'Device Information' as completed, 'Security' as the current step, and 'Summary' as the next step. The 'Security' step is titled 'Self-provided authentication token' and explains that the user must provide their own token. It specifies that the token must be between 8 and 36 characters and contain a mix of lowercase and uppercase letters, numbers, and symbols, including hyphens, underscores, and periods. A text input field labeled 'Authentication Token' contains the value '12345678'. Below the input field, a note states: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.' and 'Authentication token are encrypted before we store them.' At the bottom right of the form are 'Back' and 'Next' buttons. The browser's address bar shows the URL 'frp8s.internetofthings.ibmcloud.com/dashboard/devices/browse/add'. The system tray at the bottom shows a temperature of 26°C, a search bar, and the date/time '08:02 PM 14-11-2022'.

Service Details - IBM Cloud | IBM Watson IoT Platform | Node-RED: node-red-feb-2022

frp8s.internetofthings.ibmcloud.com/dashboard/devices/browse/add

IBM Watson IoT Platform

19ec035@kpiet.ac.in
ID: frp8s

Browse | Action | Device Types | Interfaces

Add Device

Identity | Device Information | **Security** | Summary

There are two options for selecting a device authentication token.

Auto-generated authentication token (default)

Allow the service to generate an authentication token for you. Tokens are 18 characters and contain a mix of alphanumeric characters and symbols. The token is returned to you at the end of the device registration process.

Self-provided authentication token

Provide your own authentication token for this device. The token must be between 8 and 36 characters and contain a mix of lowercase and uppercase letters, numbers, and symbols, which can include hyphens, underscores, and periods. Do not use repeated characters, dictionary words, user names, or other predefined sequences.

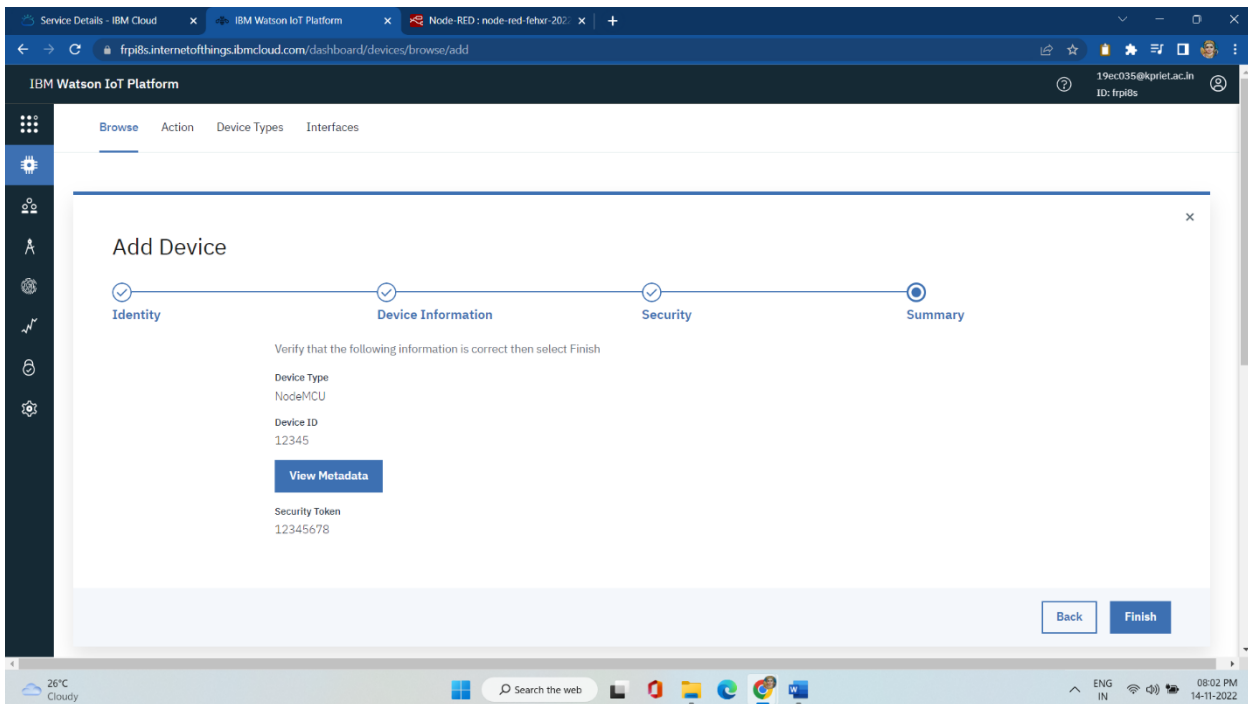
Authentication Token

Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.

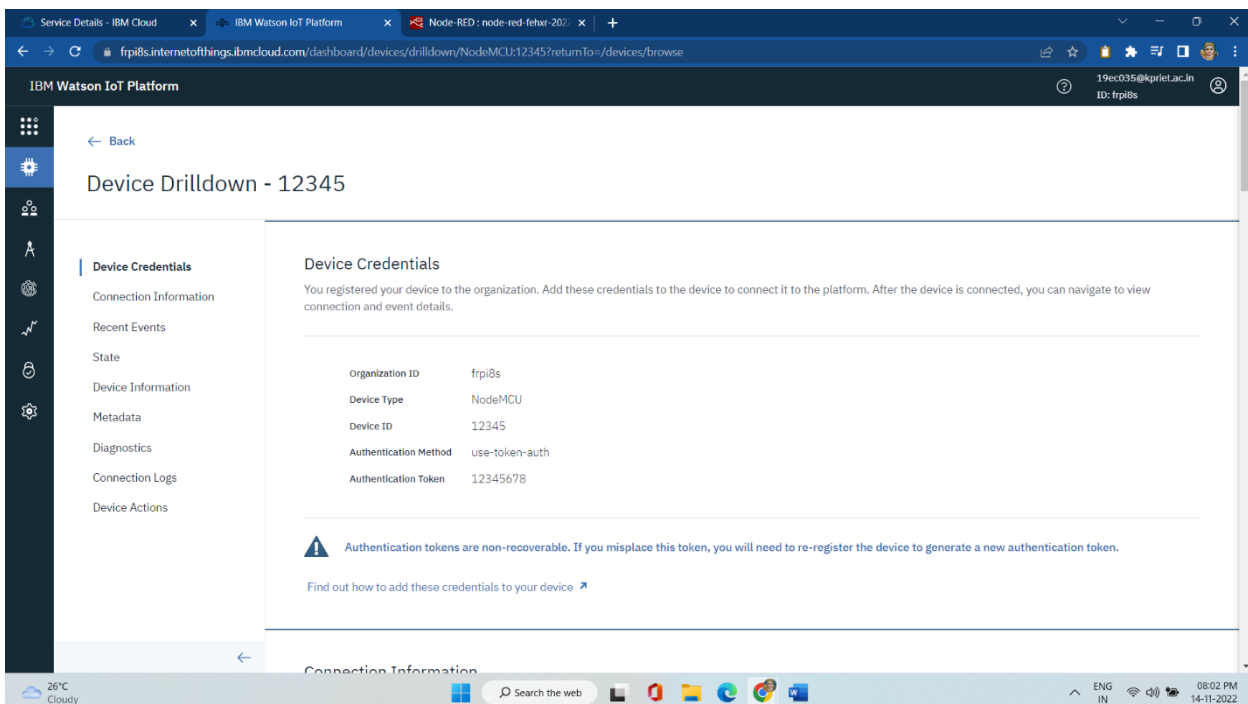
Authentication token are encrypted before we store them.

26°C Cloudy | Search the web | ENG IN | 08:02 PM 14-11-2022

11. Clicking on next it goes to the summary of the device then click finish



12. The device credentials will be displayed with all the details. Safe the details of the device as the authentication tokens are non- recoverable and if misplaced then we have to create a new one.



13. Clicking on the device tab we can now see the added device. Clicking on it will display the other details.

It has different tabs like Identity, Device Information, State and login.

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	NodeMCU	Device	Nov 14, 2022 7:59 PM	

Items per page 50 | 1-1 of 1 item

1 of 1 page

RESULT:

An IBM Watson cloud for IoT and a device is created