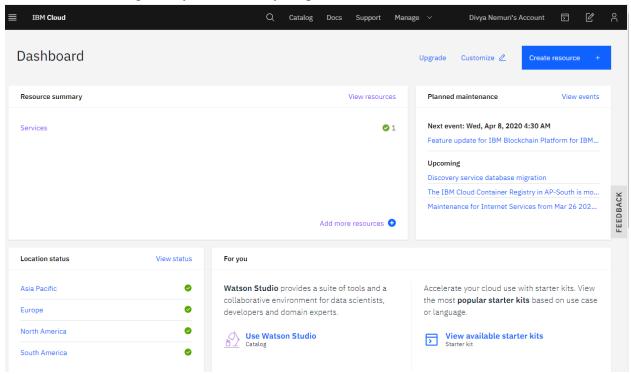**Node-red Creation**

Brief: This tutorial will guide you in creating a device in the IBM IoT platform

Outcome:

In this tutorial, you will learn the following activities and tasks.

- Creating a node-red application
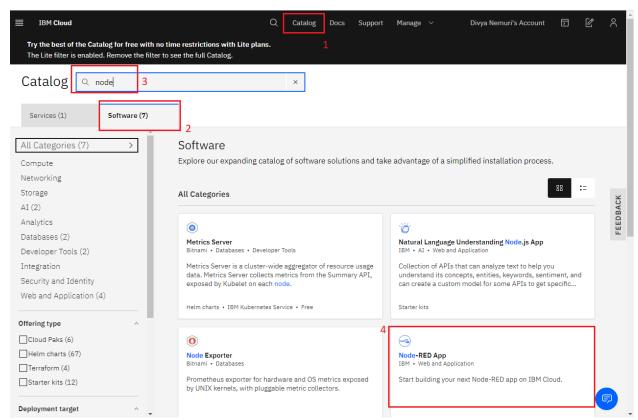- Launch and configure the node-red application

Activity:

Log in to Your IBM account using https://cloud.ibm.com/. Upon successful login to the cloud, you will be on the dashboard page. If you are a new user you won't have any resources listed. For a returning user, you will have your previous resources listed.
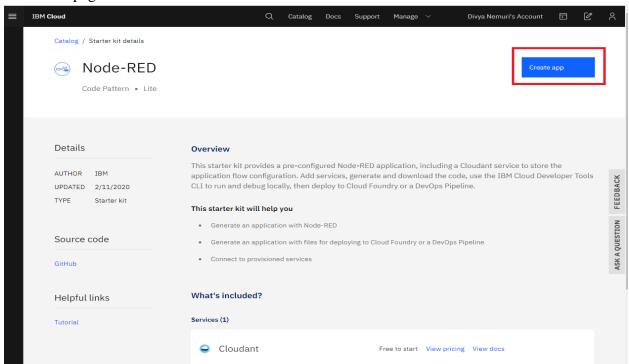

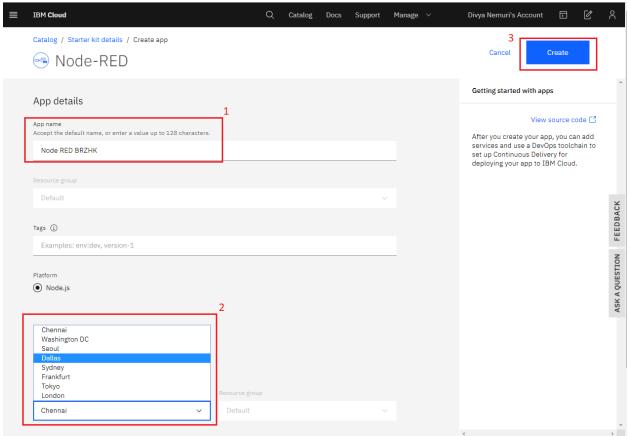**Task-1: Create Node-red application**

- Click on the catalog on the dashboard.
- Click on the software to find the application
- Search for node-red in the search bar provided.
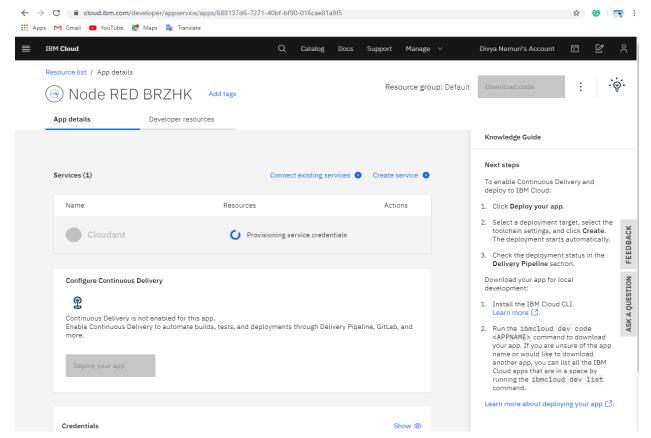- Click on the node-red application to create.

- After clicking on the node-red app you will be redirected to the node-red application starter kit page. Click on create

● To create the node-red application give the App name. The name should be unique. One may use the default name provided or can be of their choice. Select the region as Dallas for avoiding the conflicts on installing the nodes in the future. Then click on create

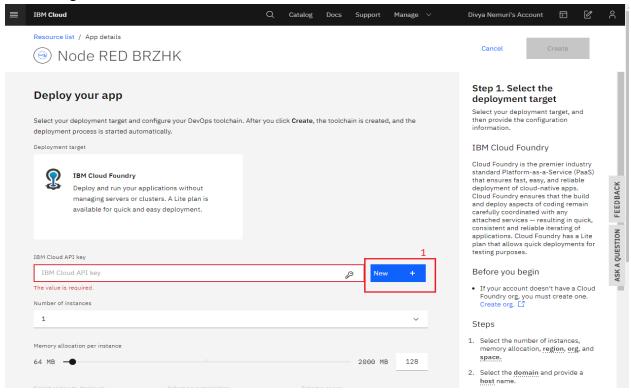● To create the app it will take some time meanwhile the cloudant service will be created.

● After the successful creation of cloudant service, click on deploy your app button

- In the process of deploying you will be prompted for the IBM cloud API key. Click on new to generate the one.

- At the time of API key generation click OK on the popup.

- Increase your memory allocation per instance to 256

- Upon successful creation of the node-red app, you will be prompted with success message popup.

Task-2: Launch the node-red application and customization

- To launch the node-red application click on cloud foundry apps in the dashboard

- If it is stopped click on start to start the application. Click on the service to launch

- Click on visit app URL to launch the app

- Upon launching the app you are redirected to the following page. Click on next

Welcome to your new Node-RED instance on IBM Cloud

We know you're eager to start wiring up your flows, but first there are a couple of tasks you should do:

- Secure your Node-RED editor
- Learn how to install additional nodes

Previous   Next

- In the next step, you are asked for securing the node-red app, if you want you can provide the credentials as your wish but remember forgetting those credentials leads to deleting the app and have to be started from the beginning. So better avoid giving credentials.
- Click the two checkboxes as shown in the below image. This step is for not securing the node-red editor.

- Then after selecting the not recommended you are asked for confirmation proceed with that and click on next

- Click on next and finish for the two further steps to finish the launch of node-red.
- This procedure is done only for the first time launch.
- For a returning user, you can directly browse from the cloud foundry apps in the dashboard. And click on the visit app URL after getting the app is awake/running.

Learn how to install additional nodes

Node-RED provides a huge catalog of extra nodes you can install into the editor.

Many of these nodes can be installed directly from the editor's palette manager feature. However that can cause issues due to the limited memory of the default Node-RED starter application.

The *recommended approach* is to edit your application's `package.json` file to include the additional node modules and then redeploy the application. This can be done using the Continuous Delivery feature on the application's IBM Cloud dashboard.

For more information, follow this tutorial on IBM Developer.

Previous   Next

Finish the install

You have made the following selections:

- *Not recommended:* Allow anyone to access the editor and make changes

You can change these settings at any time by setting the following environment variables via the IBM Cloud console:

- `NODE_RED_USERNAME` - the username
- `NODE_RED_PASSWORD` - the password
- `NODE_RED_GUEST_ACCESS` - if set to `true`, allows anyone read-only access to the editor

Previous   Finish

- After completing the procedure of launching node-red you are asked to go to the editor. Click on go to the editor button to launch the application

Node-RED on IBM Cloud

Node-RED
Flow-based programming for the Internet of Things

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.

More information about Node-RED, including documentation, can be found at nodered.org.

Go to your Node-RED flow editor

Learn how to customise Node-RED