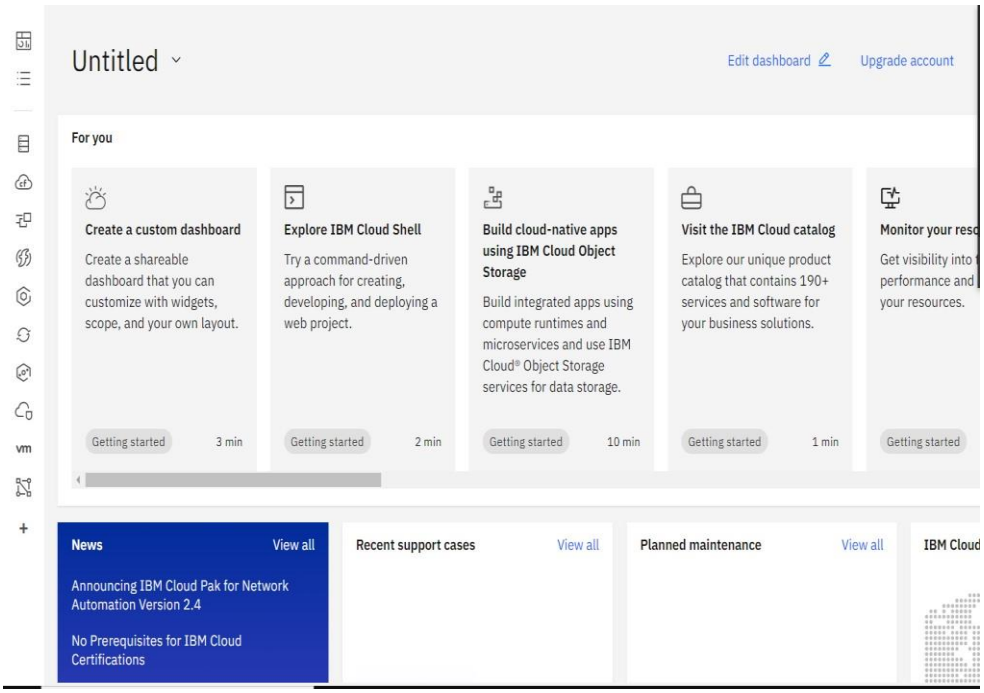
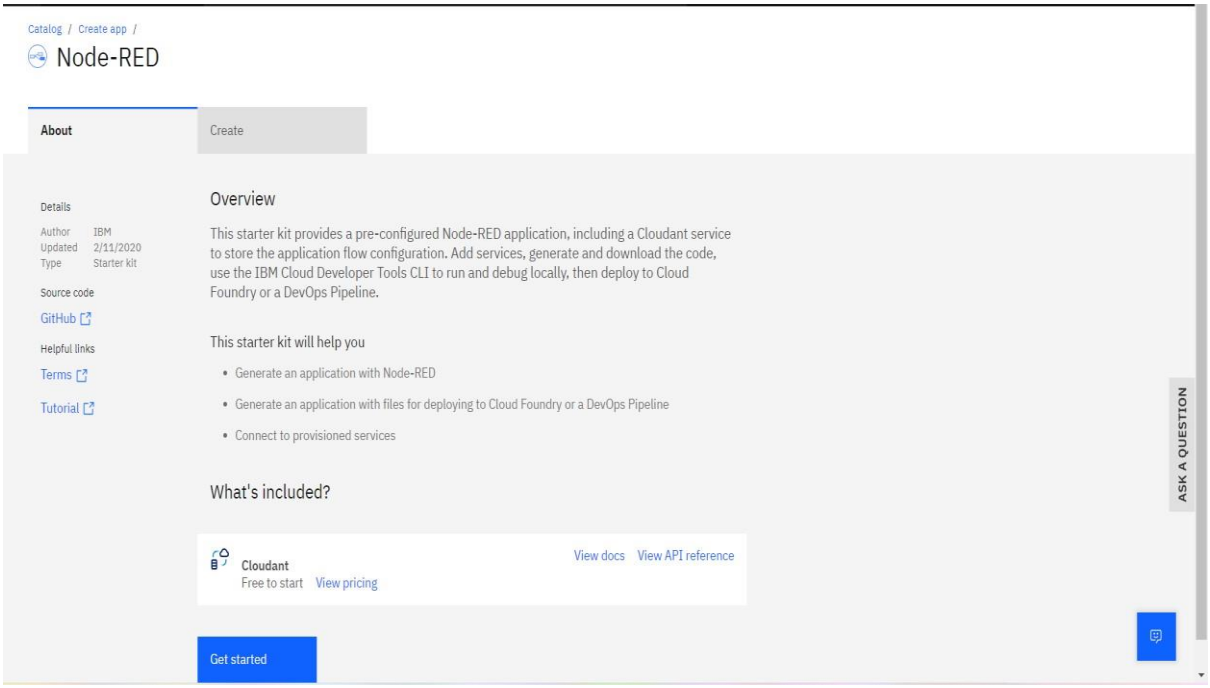
Team ID	PNT2022TMID43868
Project Name	SMART SOLUTIONS FOR RAILWAYS

CREATING NODE-RED IN IBM CLOUD

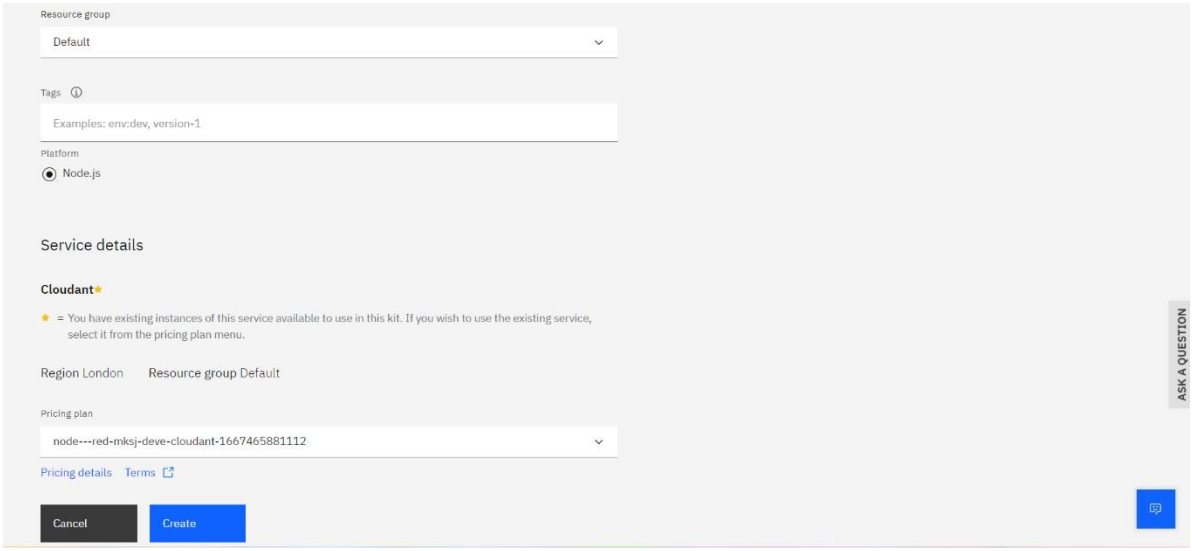
STEP 1: Open IBM cloud:



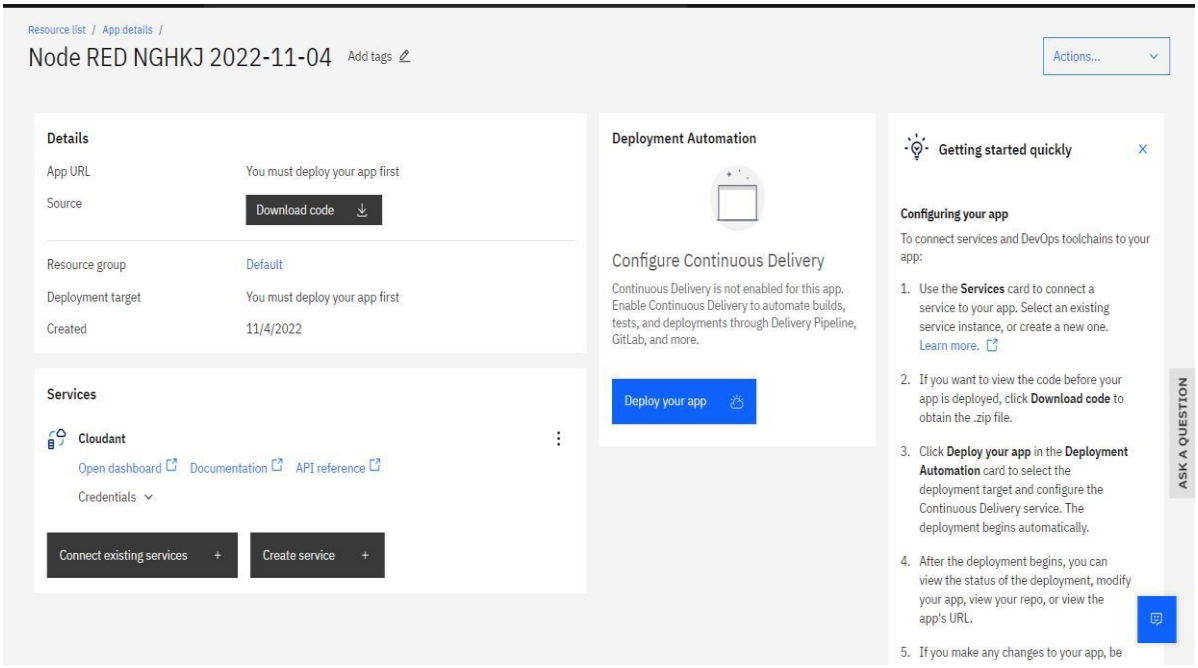
STEP 2: Go to catalogue and search for node red app and open it:



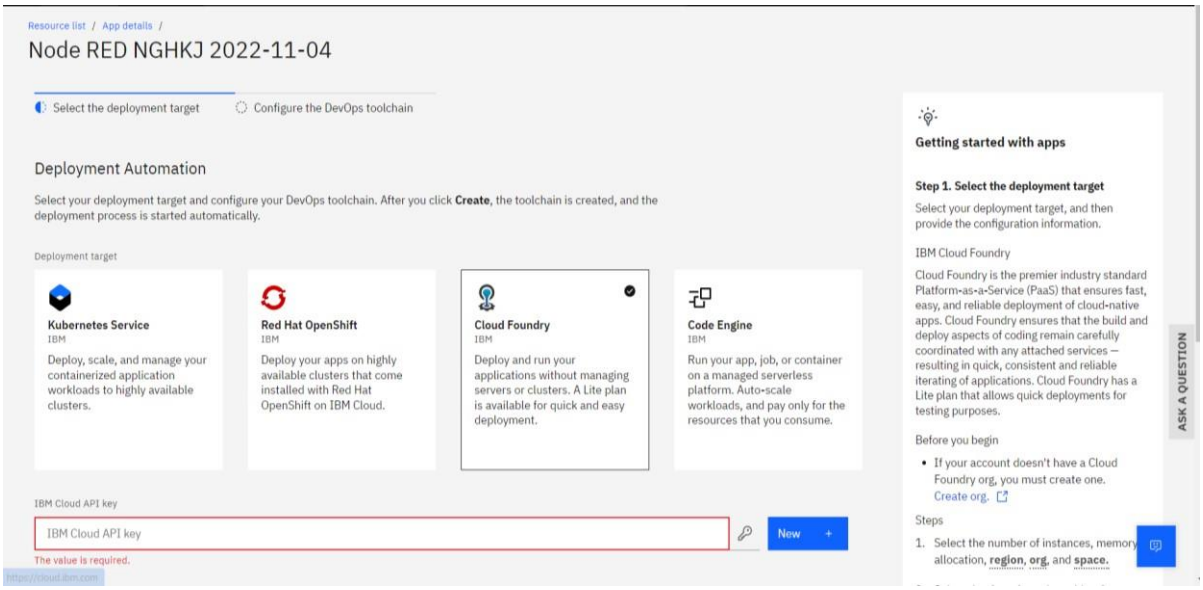
STEP 3: Enter the app name, location and select the plan and click on create.:



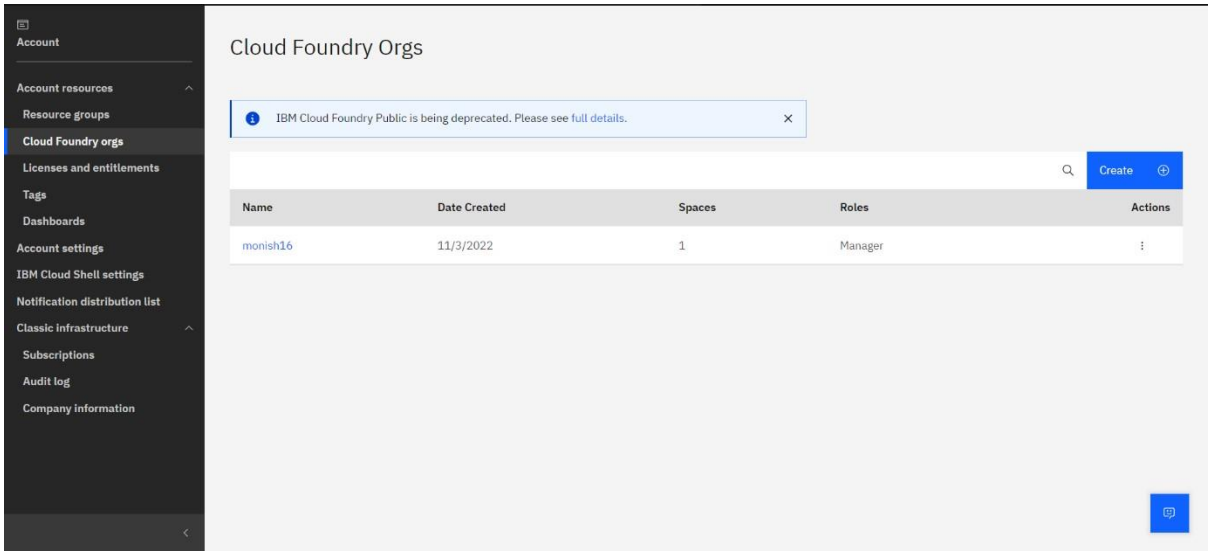
STEP 4: click on deploy your app button:

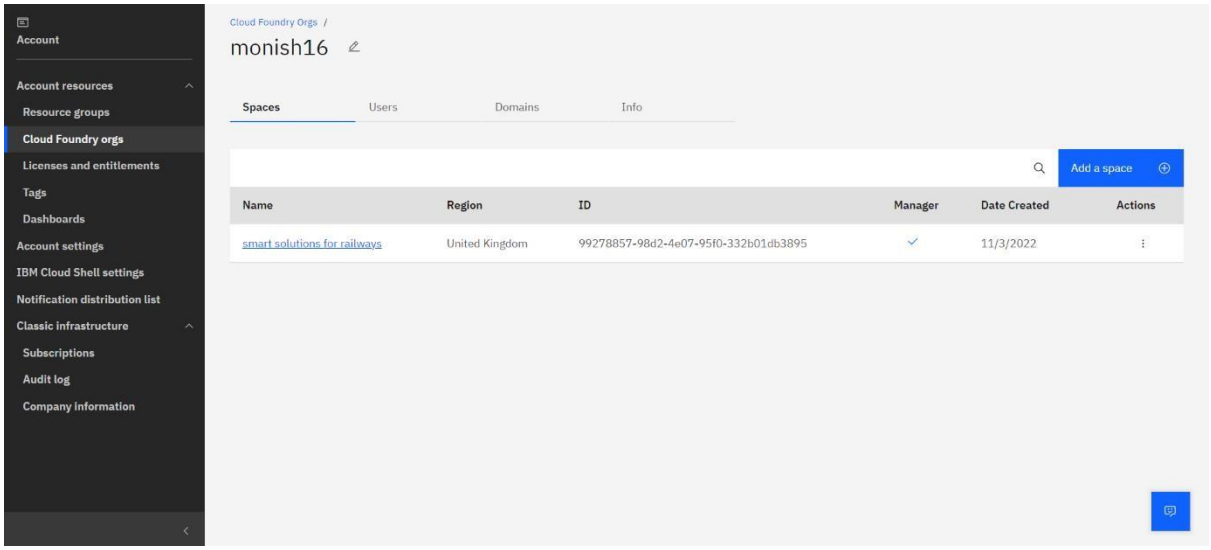


STEP 5: In deployment automation select cloud foundry and click on create.org:

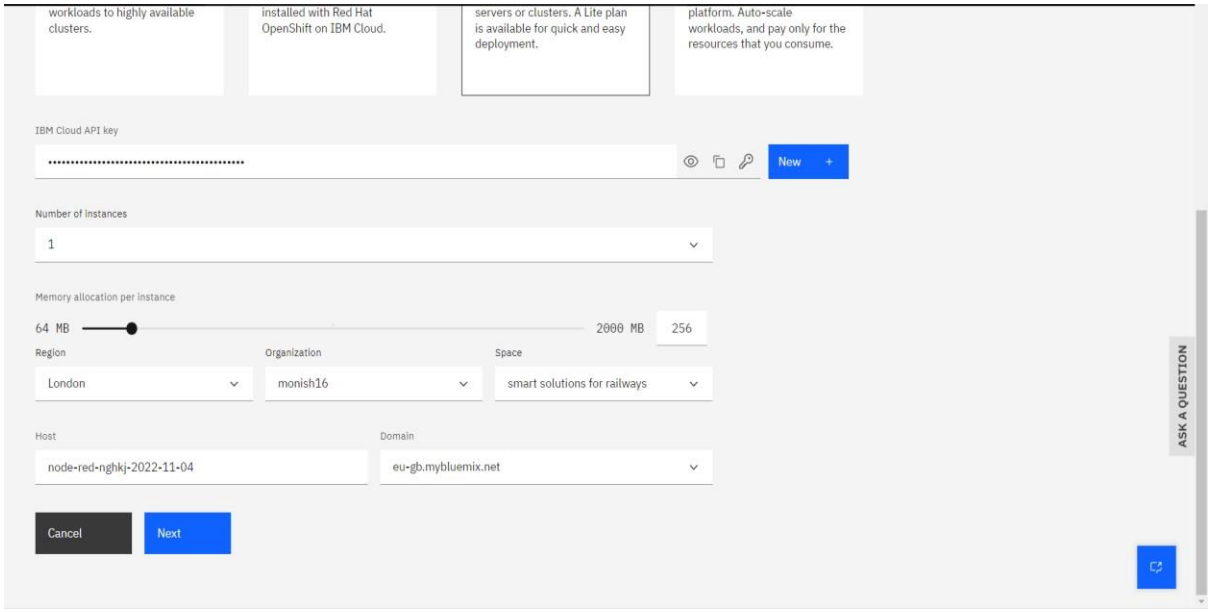


STEP 6: click on create button and enter the name and create a space:

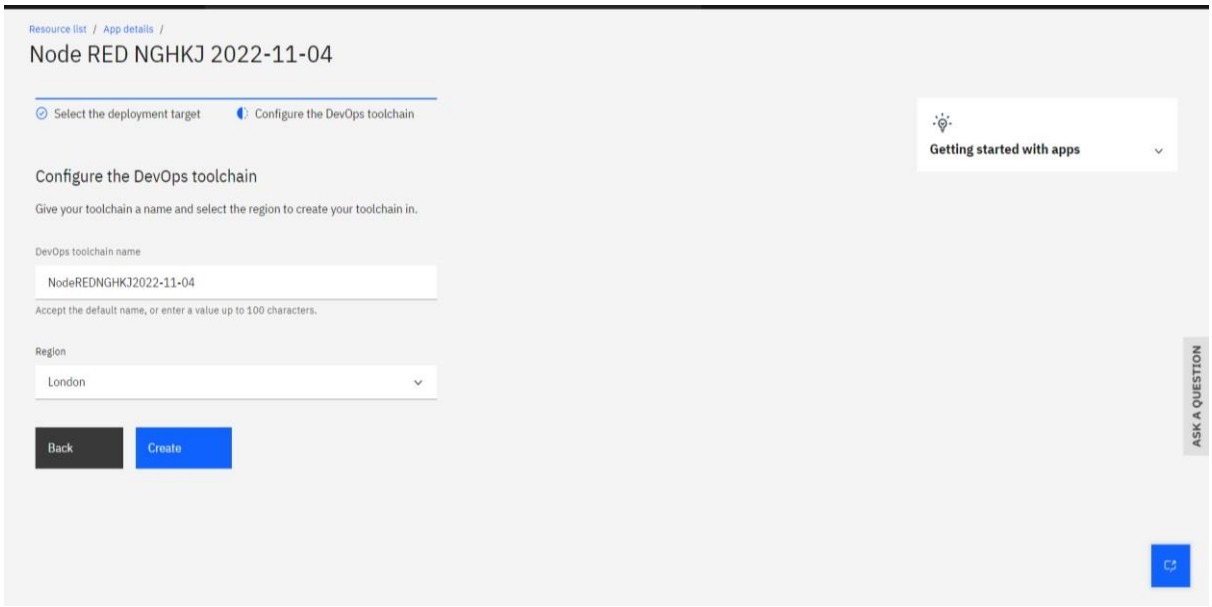




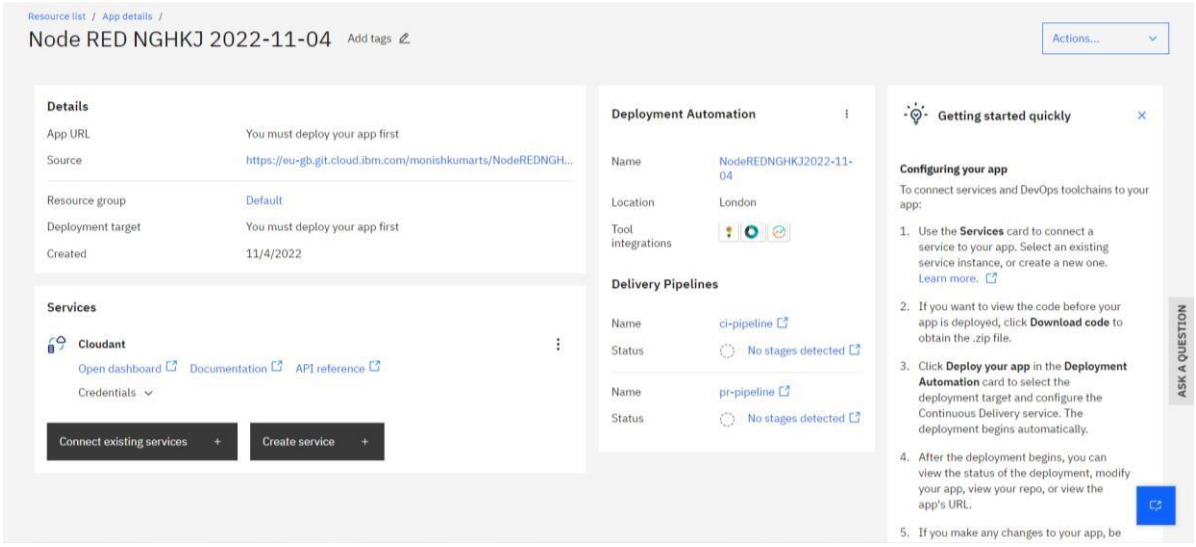
STEP 7: In app development click new on api key and select region and click next:



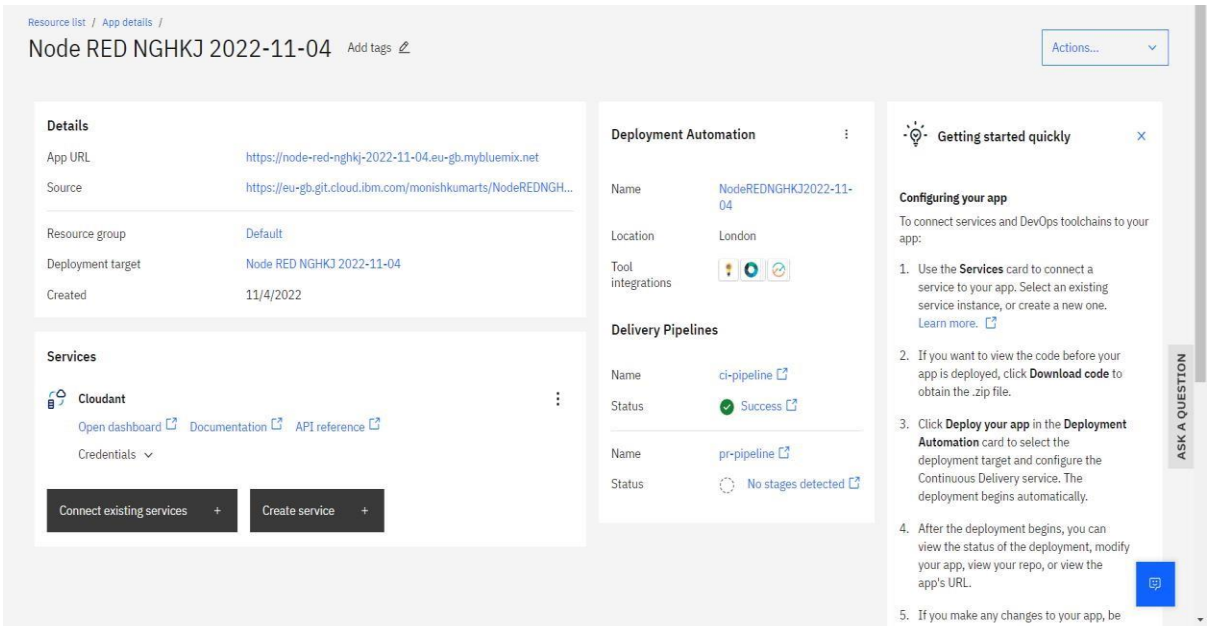
STEP 8: Select the region and click create:



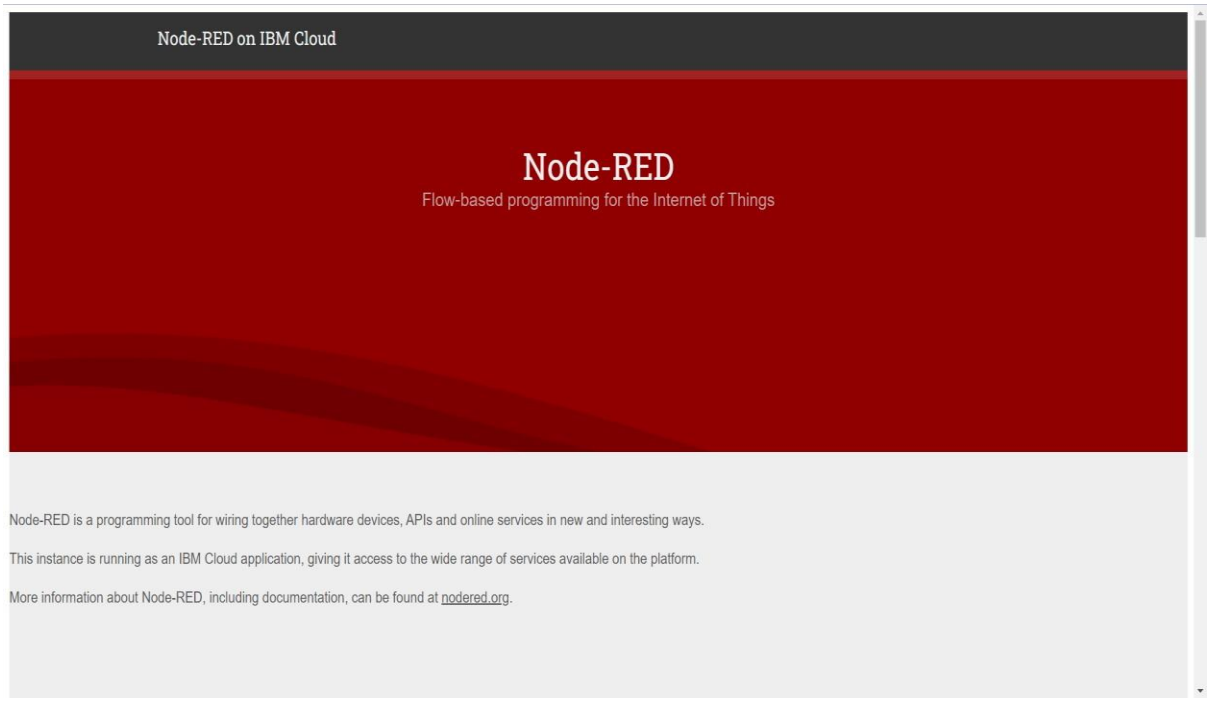
STEP 9: Wait till you get the success in ci-pipeline and app URL is generated:



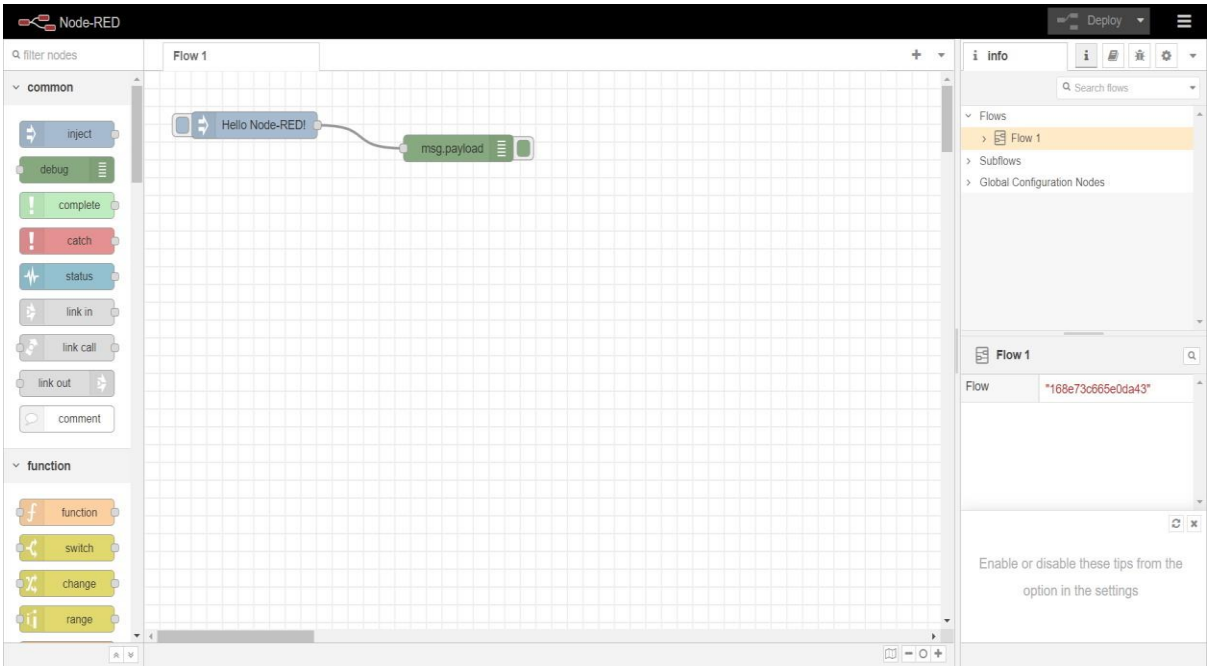
STEP 10: Now click on the generated APP URL:



STEP 11 : You will redirected to your node-red on ibm cloud page:

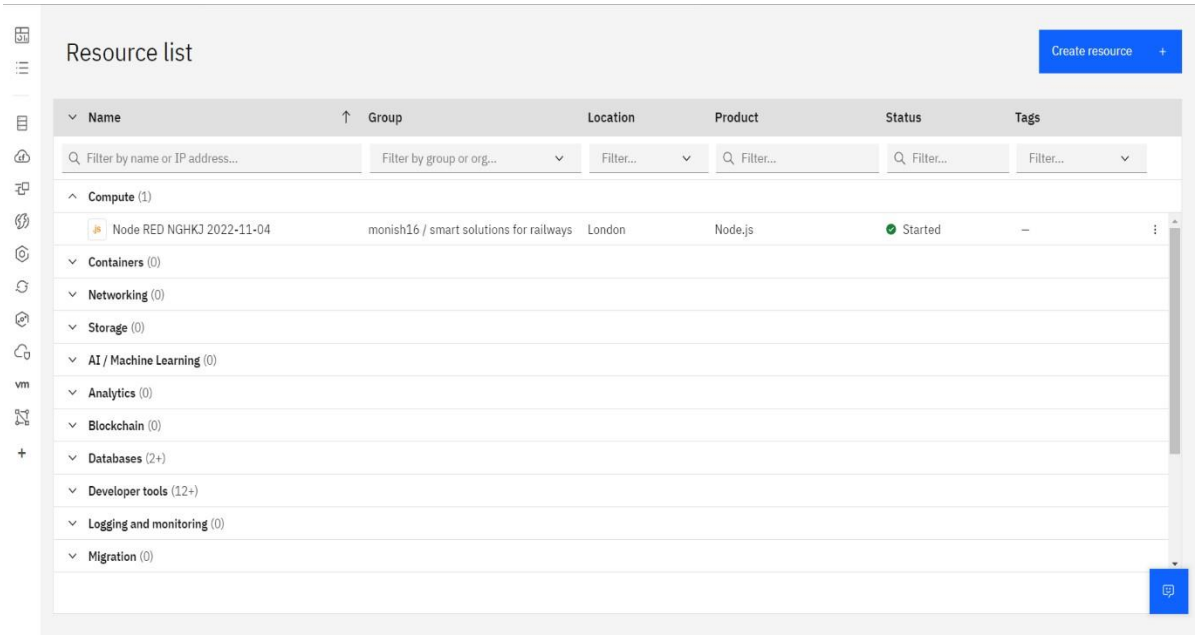


STEP 12: Click on node-red flow editor and you will be redirected to your node-red workspace:

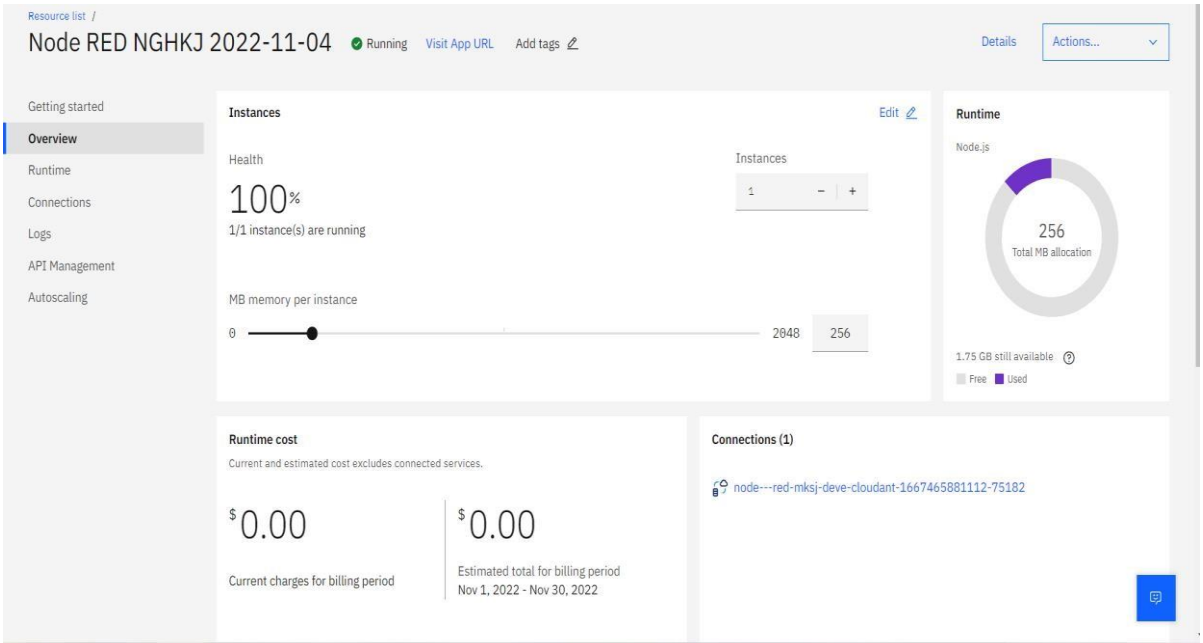


DIRECTING TO CREATED NODE-RED WORKSPACE

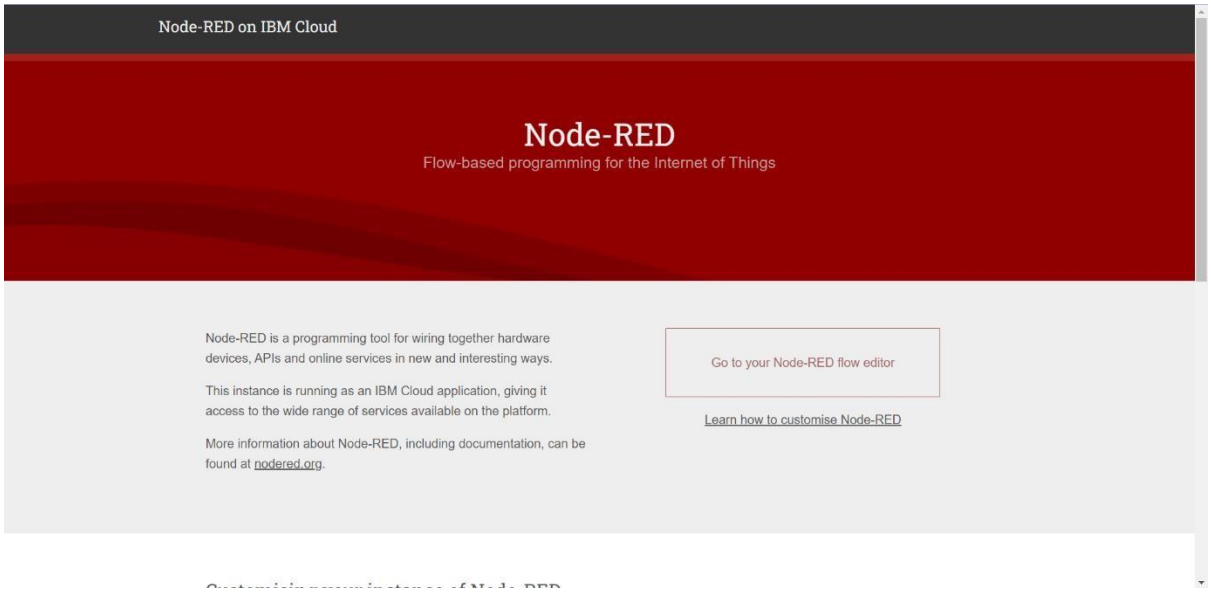
STEP 13: In resource select compute and click on node-red :



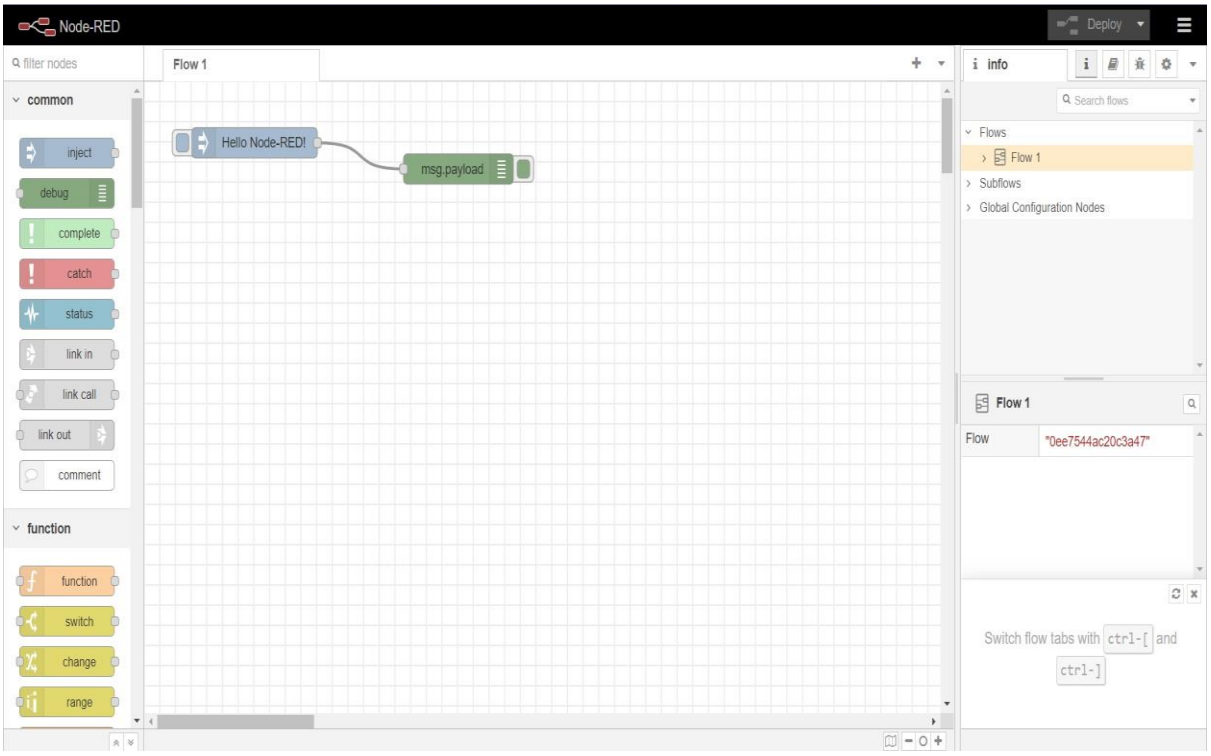
STEP 14: Click on visit app URL to be redirected to node red:



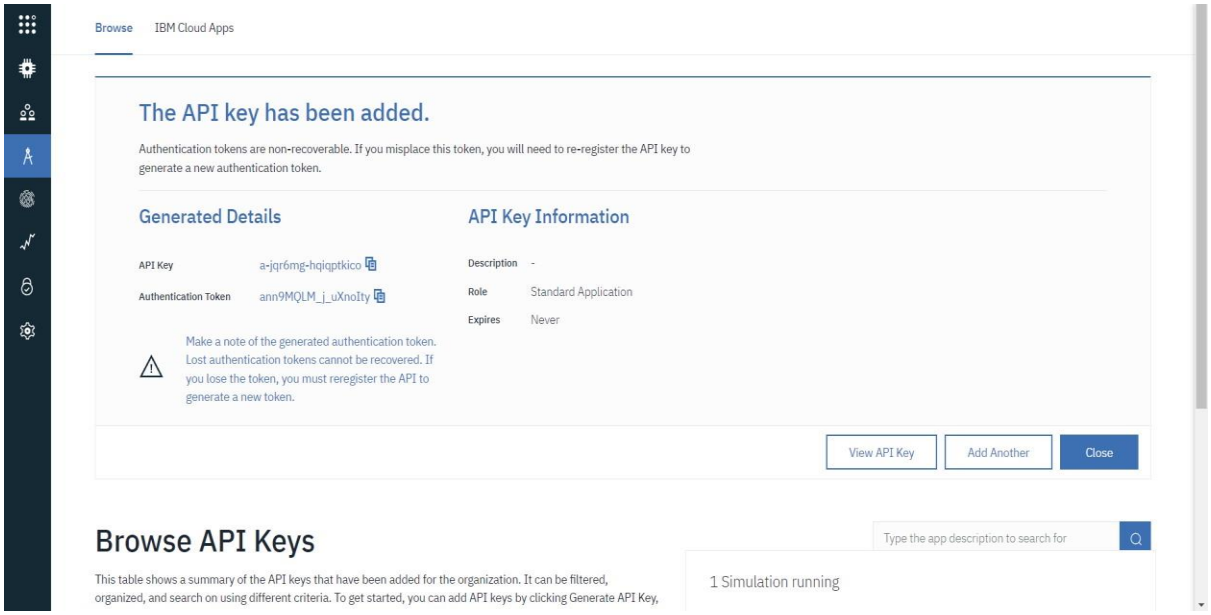
STEP15: Click on go to your NODE-RED flow editor button:



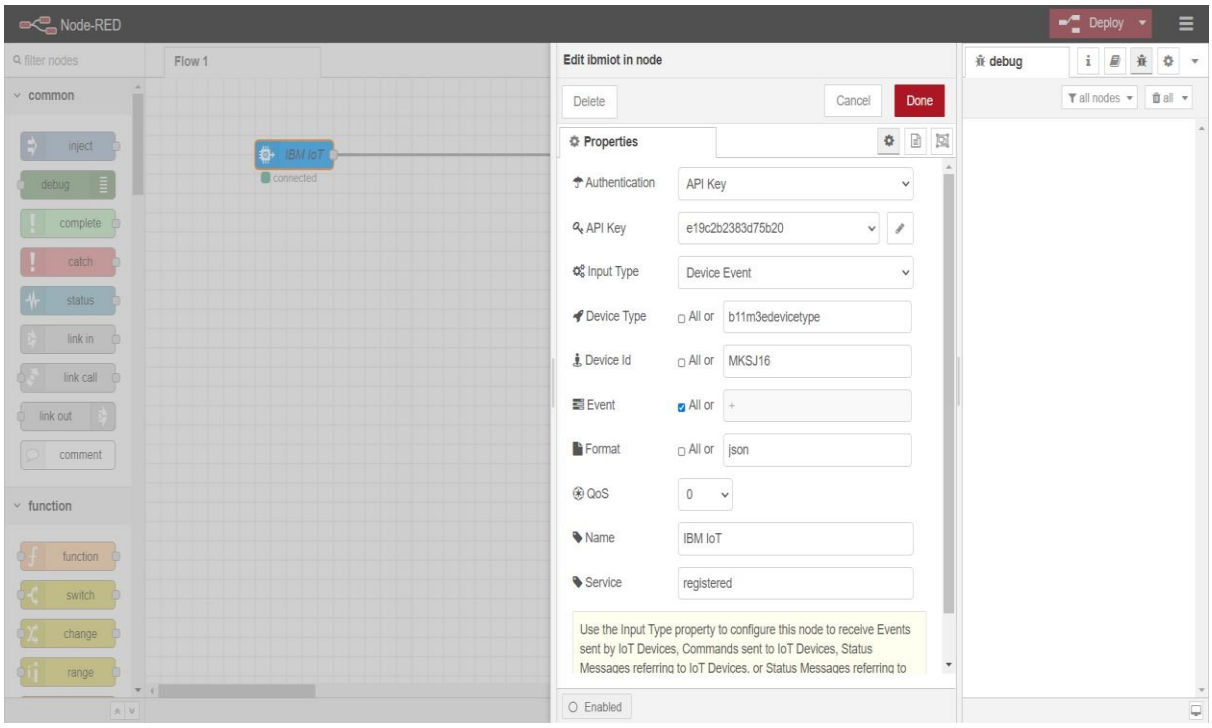
STEP 16: You will be redirected to the node red flow editor:



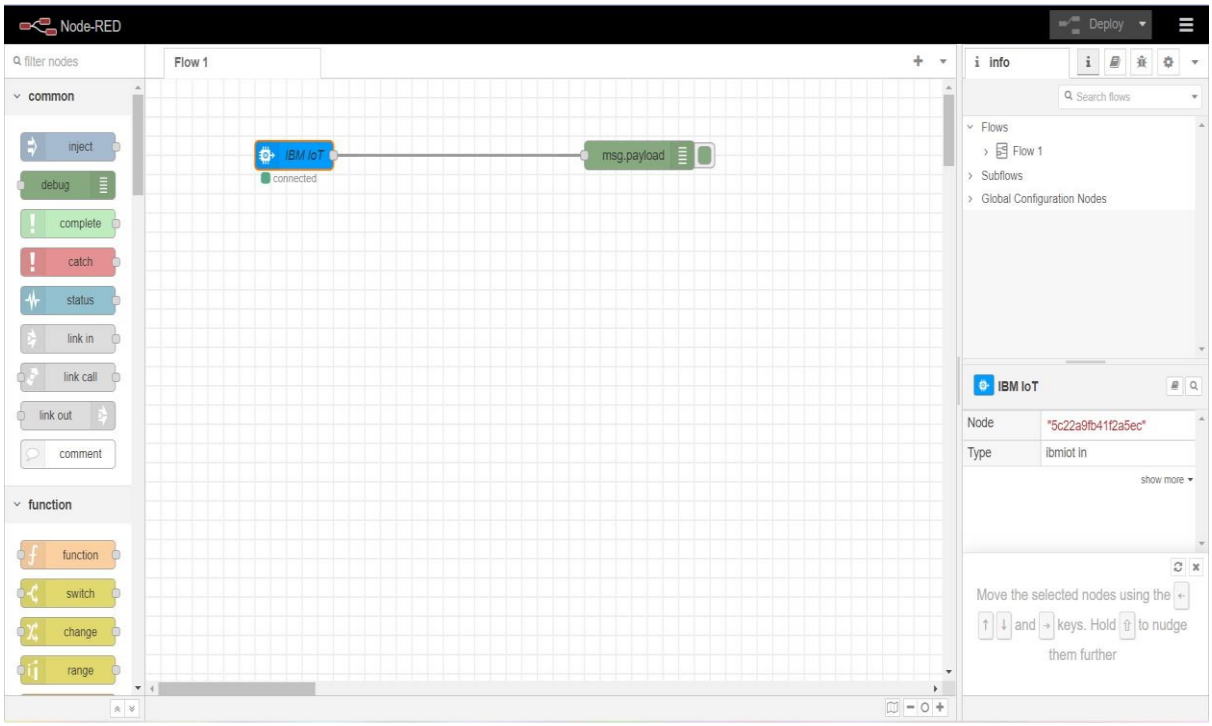
STEP 17: Generating API key and Authentication token:



STEP 18: Edit IBM IOT in node:



STEP 19: Connect IBM IOT in and debug 1 and deploy:



STEP 20: Edit gauge node (the gauge nodes named altitude, longitude and available seats as fig1,fig2,fig3):

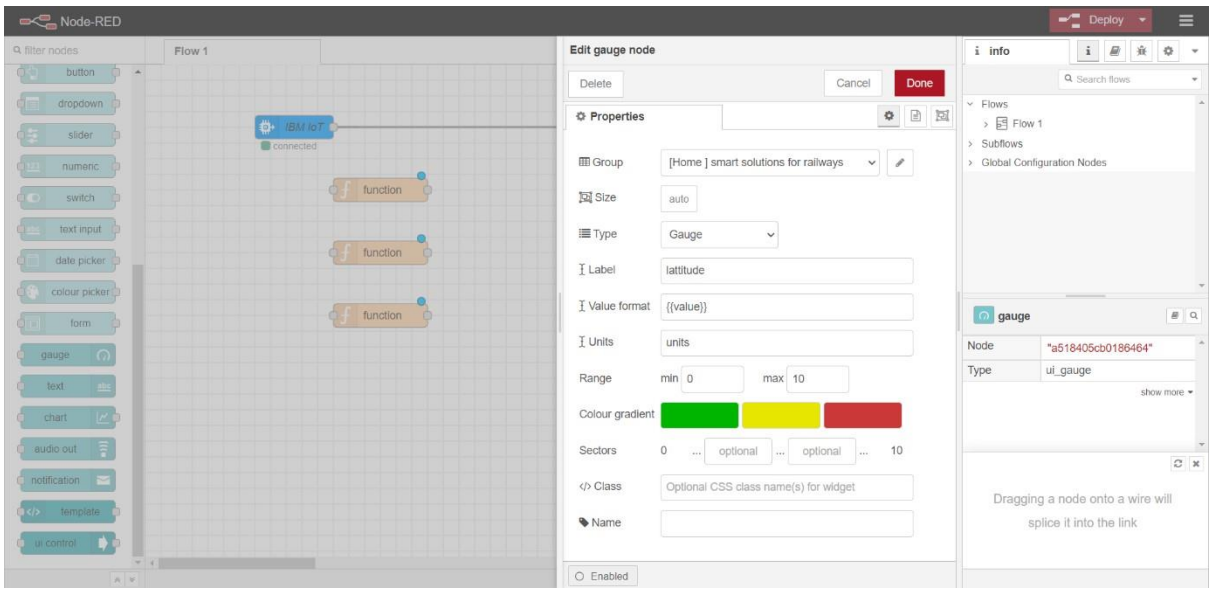


FIG 1

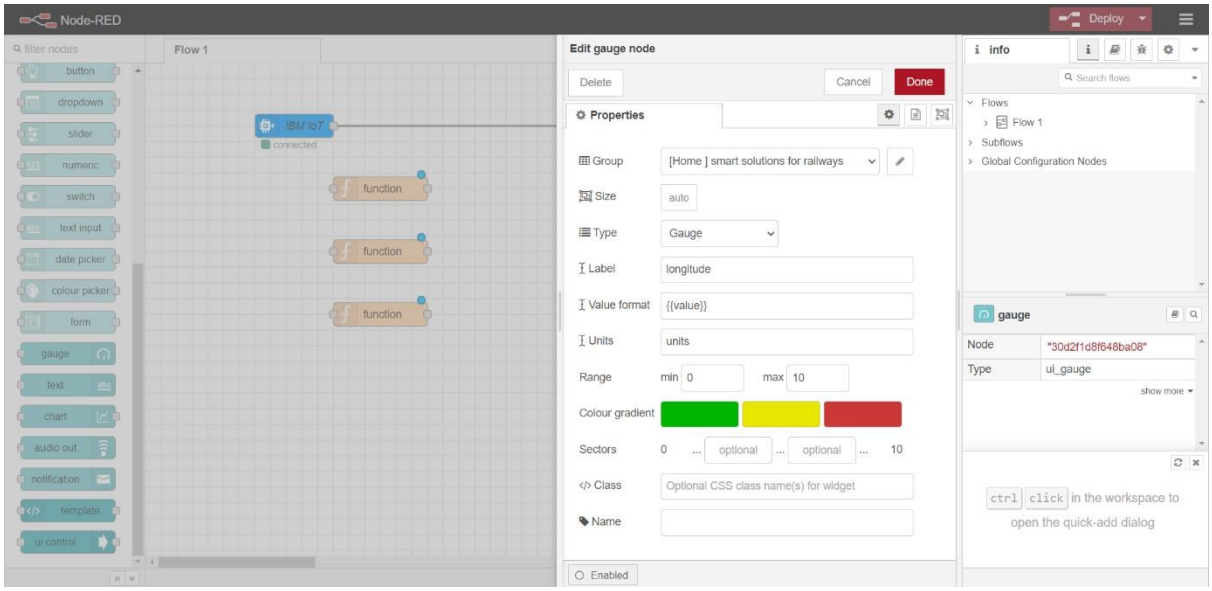

Node-RED
Deploy
Flow 1
Edit gauge node
Delete
Cancel
Done
Properties
Group
[Home] smart solutions for railways
Size
auto
Type
Gauge
Label
longitude
Value format
{{value}}
Units
units
Range
min 0
max 10
Colour gradient
Sectors
0 ... optional ... optional ... 10
Class
Optional CSS class name(s) for widget
Name
Enabled
info
Flows
Flow 1
Subflows
Global Configuration Nodes
gauge
Node
"30d2f1d8f648ba08"
Type
ui_gauge
show more
ctrl click in the workspace to open the quick-add dialog
IBM IoT
connected
function
function
function

FIG 2

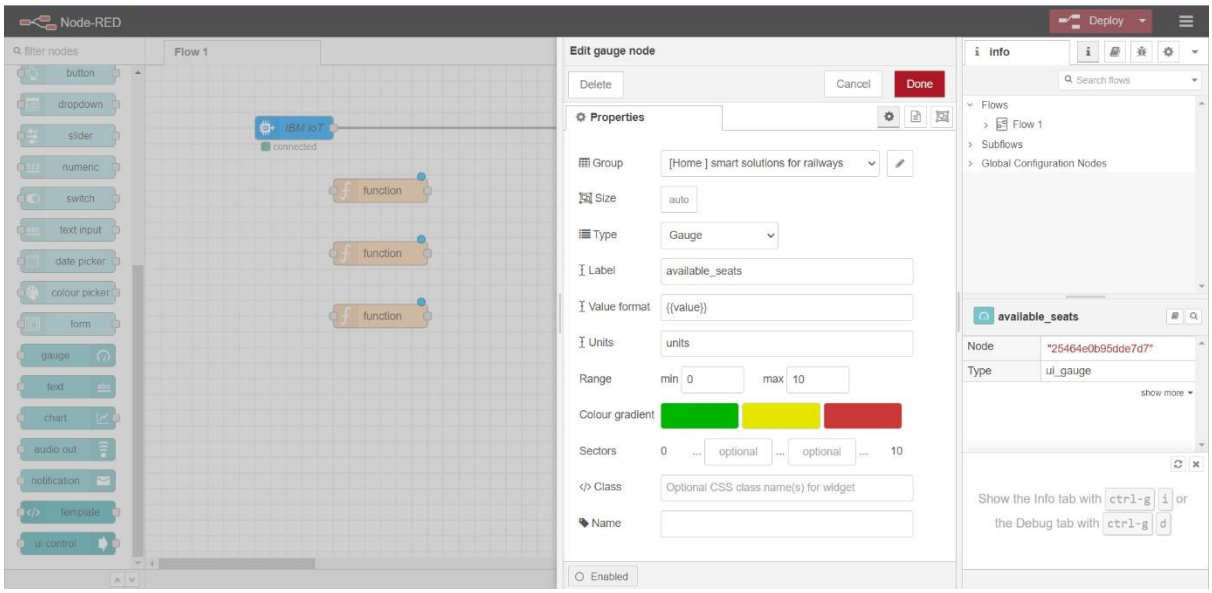

Node-RED
Deploy
Flow 1
Edit gauge node
Delete
Cancel
Done
Properties
Group
[Home] smart solutions for railways
Size
auto
Type
Gauge
Label
available_seats
Value format
{{value}}
Units
units
Range
min 0
max 10
Colour gradient
Sectors
0 ... optional ... optional ... 10
Class
Optional CSS class name(s) for widget
Name
Enabled
info
Flows
Flow 1
Subflows
Global Configuration Nodes
available_seats
Node
"25464e0b95dde7d7"
Type
ui_gauge
show more
Show the Info tab with ctrl-g i or the Debug tab with ctrl-g d
IBM IoT
connected
function
function
function

FIG 3

STEP 21: Generate debug message from IBM Watson IoT Platform and connect the nodes: