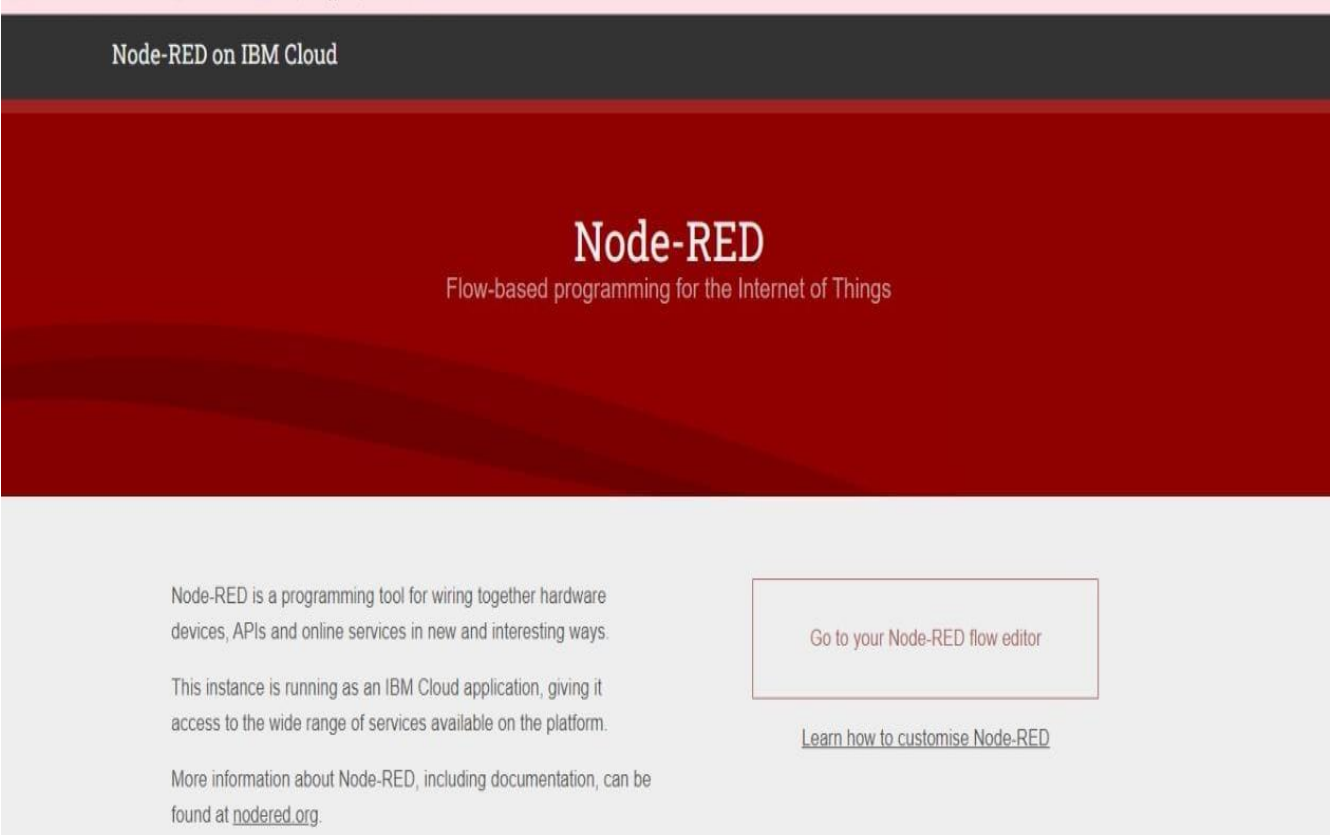


CREATE NODE RED SERVICE

Date	16 November 2022
Team ID	PNT2022TMID13542
Project name	Hazardous area monitoring for industrial power plants by IoT
Maximum marks	2 marks

Create a Node Red Service



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](#)

Configure a node red

The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow named 'Flow 1' with the following components: an 'IBM IoT' node (connected), a 'temperature' function node, and a 'msg.payload' output node. The left sidebar shows a list of nodes under the 'function' category, including 'function', 'switch', 'change', 'range', 'template', 'delay', 'trigger', 'filter', and 'OpenWhisk'. The right sidebar shows the 'debug' console with a list of messages. The messages are objects containing 'temperature' values: 96, 99, 92, and 95. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 20:36 on 14-11-2022.

```
graph LR; IoT[IBM IoT] --> temp[temperature]; temp --> payload[msg.payload];
```

debug console messages:

```
msg.payload: Object
  { temperature: 96 }
11/14/2022, 8:24:09 PM node: 12622ba8d79f54e0
iot-2/hype/NodemcuId/123/ev/leventflow/fmt/json :
msg.payload: Object
  { temperature: 99 }
11/14/2022, 8:24:37 PM node: 12622ba8d79f54e0
iot-2/hype/NodemcuId/123/ev/leventflow/fmt/json :
msg.payload: Object
  { temperature: 92 }
11/14/2022, 8:33:50 PM node: 12622ba8d79f54e0
iot-2/hype/NodemcuId/123/ev/leventflow/fmt/json :
msg.payload: Object
  { temperature: 95 }
11/14/2022, 8:33:50 PM node: 12622ba8d79f54e0
iot-2/hype/NodemcuId/123/ev/leventflow/fmt/json :
msg.payload: number
95
```

The screenshot shows a web dashboard titled 'hazardous area monitoring'. The dashboard features a line graph titled 'temperature' with the y-axis ranging from 80 to 100 and the x-axis showing time from 21:02:29 to 21:03:43. The graph shows a temperature trend that starts at approximately 98, decreases to a minimum of about 85 at 21:02:59, and then rises to a peak of about 98 at 21:03:43. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 21:03 on 14-11-2022.

Time	Temperature
21:02:29	98
21:02:59	85
21:03:43	98

