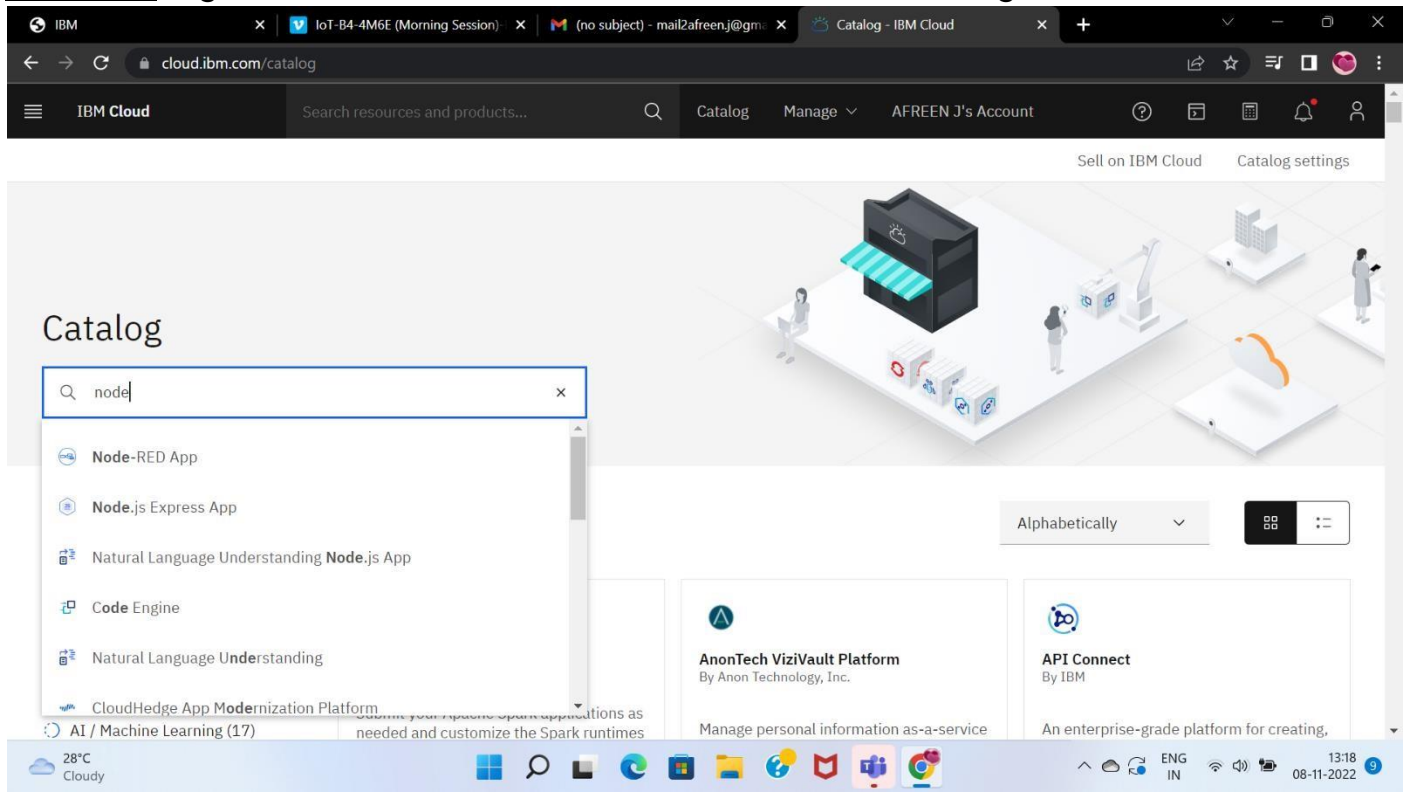


CREATE NODE-RED SERVICES

Team ID	PNT2022TMID14066
Project name	Signs with Smart Connectivity for Better Road Safety

STEPS TO CREATE:

STEP-1: Login to ibm cloud and search for node red in catalog.



STEP-2: Click onto the create tab and check all the details and select next.

The screenshot shows the 'Create' tab in the IBM Cloud App Development console. The 'App details' section includes a text input for 'App name' with the value 'Node RED TTDWU 2022-11-08', a dropdown for 'Resource group' set to 'Default', a 'Tags' input field with placeholder text 'Examples: env:dev, version-1', and a radio button for 'Platform' set to 'Node.js'. The browser's address bar shows the URL 'cloud.ibm.com/developer/appservice/create-app?starterKit=59c9d5bd-4d31-3611-897a-f94eea80dc9f&defaultLanguage=undefined'. The IBM Cloud navigation bar is at the top, and a Windows taskbar is at the bottom.

STEP-3: Now select on deploy your app option and wait for 10 to 15 minutes until app url is available.

The screenshot shows the 'App details' page for the app 'Node RED TTDWU 2022-11-08'. The 'Details' section on the left lists 'App URL' (with a message 'You must deploy your app first'), 'Source' (with a 'Download code' button), 'Resource group' (set to 'Default'), 'Deployment target' (with a message 'You must deploy your app first'), and 'Created' (11/8/2022). The 'Services' section lists 'Cloudant' with links to 'Open dashboard', 'Documentation', and 'API reference'. On the right, the 'Deployment Automation' section has a message 'Continuous Delivery is not enabled for this app' and a 'Deploy your app' button. The browser's address bar shows the URL 'cloud.ibm.com/developer/appservice/apps/88805da6-e36f-4646-93aa-6b11836be404'. The IBM Cloud navigation bar is at the top, and a Windows taskbar is at the bottom.

STEP-4: Select the cloud foundry box and in the right column click on org hyperlink.

The screenshot shows the IBM Cloud Developer console. The main heading is 'Deployment Automation'. Below it, there's a section 'Select the deployment target' with three options: 'Kubernetes Service', 'Red Hat OpenShift', and 'Cloud Foundry'. The 'Cloud Foundry' option is highlighted. To the right, a sidebar titled 'Getting started with apps' shows 'Step 1. Select the deployment target' with instructions on how to select a deployment target and create a cluster. The bottom of the screen shows a Windows taskbar with various application icons and system tray information.

Deployment Automation

Select your deployment target and configure your DevOps toolchain. After you click **Create**, the toolchain is created, and the deployment process is started automatically.

Deployment target

- Kubernetes Service**
IBM
Deploy, scale, and manage your containerized application workloads to highly available clusters.
- Red Hat OpenShift**
IBM
Deploy your apps on highly available clusters that come installed with Red Hat OpenShift on IBM Cloud.
- Cloud Foundry**
IBM
Deploy and run your applications without managing servers or clusters. A Lite plan is available for quick and easy deployment.

Getting started with apps

Step 1. Select the deployment target

Select your deployment target, and then provide the configuration information.

IBM Cloud Kubernetes Service

Kubernetes is an open source platform for managing containerized workloads and services across multiple hosts, and offers management tools for deploying, automating, monitoring, and scaling containerized apps with minimal to no manual intervention. [Learn more.](#)

Before you begin

- One free Kubernetes cluster is available per account.
- If you don't have an available cluster, you must create one before continuing. Allow 10-20 minutes for the cluster to be provisioned. [Create cluster.](#)

Steps

STEP-5: Click on the create button and enter all the required details.

The screenshot shows the IBM Cloud Account page for 'Cloud Foundry Orgs'. A warning message at the top states: 'IBM Cloud Foundry Public is being deprecated. Please see full details.' Below this, there's a table with columns: Name, Date Created, Spaces, Roles, and Actions. The table contains one entry: 'Afreen18' created on '11/8/2022' with '1' space and 'Manager' role. A 'Create' button is located at the top right of the table. The left sidebar shows the account navigation menu.

Cloud Foundry Orgs

IBM Cloud Foundry Public is being deprecated. Please see [full details.](#)

Create

Name	Date Created	Spaces	Roles	Actions
Afreen18	11/8/2022	1	Manager	

STEP-6: Click on the visit app url hyperlink and it gets directed to node-red website.

The screenshot shows the IBM Cloud interface for an application named "Node RED ILUPV 2022-11-08". The application is in a "Running" state. A notification banner at the top states: "IBM Cloud Foundry Public is being deprecated. Please see full details." The left sidebar contains navigation links: "Getting started", "Overview" (selected), "Runtime", "Connections", "Logs", "API Management", and "Autoscaling". The main content area displays the "Instances" section, showing a health status of "100%" and "1/1 instance(s) are running". It also includes a slider for "MB memory per instance" ranging from 0 to 2048, currently set at 256. To the right, the "Runtime" section shows a donut chart for "Node.js" with a "Total MB allocation" of 256 and "1.75 GB still available". The bottom of the screen shows a Windows taskbar with various application icons and system status information (28°C, Cloudy, 13:20, 08-11-2022).

STEP-7: Here click on go to your NODE-RED flow editor.

The screenshot shows the "Node-RED on IBM Cloud" landing page. The header includes the text "Node-RED on IBM Cloud". The main content area features a large red banner with the "Node-RED" logo and the tagline "Flow-based programming for the Internet of Things". Below the banner, there is a section with text: "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](\"http://nodered.org\")." A prominent button labeled "Go to your Node-RED flow editor" is highlighted with a red border. Below the button is a link: "[Learn how to customise Node-RED](\"#\")". The bottom of the screen shows a Windows taskbar with various application icons and system status information (28°C, Cloudy, 13:20, 08-11-2022).

STEP-8: Finally NODE-RED workspace is now available.

The screenshot displays the Node-RED web interface in a browser. The address bar shows the URL: `node-red-ilupy-2022-11-08.eu-gb.mybluemix.net/red/#flow/07640fef98bdd288`. The interface includes a left sidebar with node categories (common, function), a central workspace with a flow diagram, and a right sidebar with a debug console.

Flow Diagram: A flow named "Flow 1" contains two nodes connected by a wire. The first node is a "timestamp" node (blue), and the second node is a "msg.payload" node (green).

Debug Console: The debug console on the right shows three log entries. Each entry includes a timestamp, a node ID, and a message payload.

Timestamp	Node ID	Message Payload
11/8/2022, 1:20:30 PM	f2f2649a.0d0d98	1667893831053
11/8/2022, 1:20:31 PM	node: f2f2649a.0d0d98	1667893832068
11/8/2022, 1:20:32 PM	node: f2f2649a.0d0d98	1667893833077

The bottom of the image shows a Windows taskbar with various application icons and a system tray displaying the date and time: 13:20 on 08-11-2022.