

Create a Node-RED Service

Date	15 November 2022
Team ID	PNT2022TMID39018
Project Name	Gas leakage monitoring and alerting system for industries

AIM:

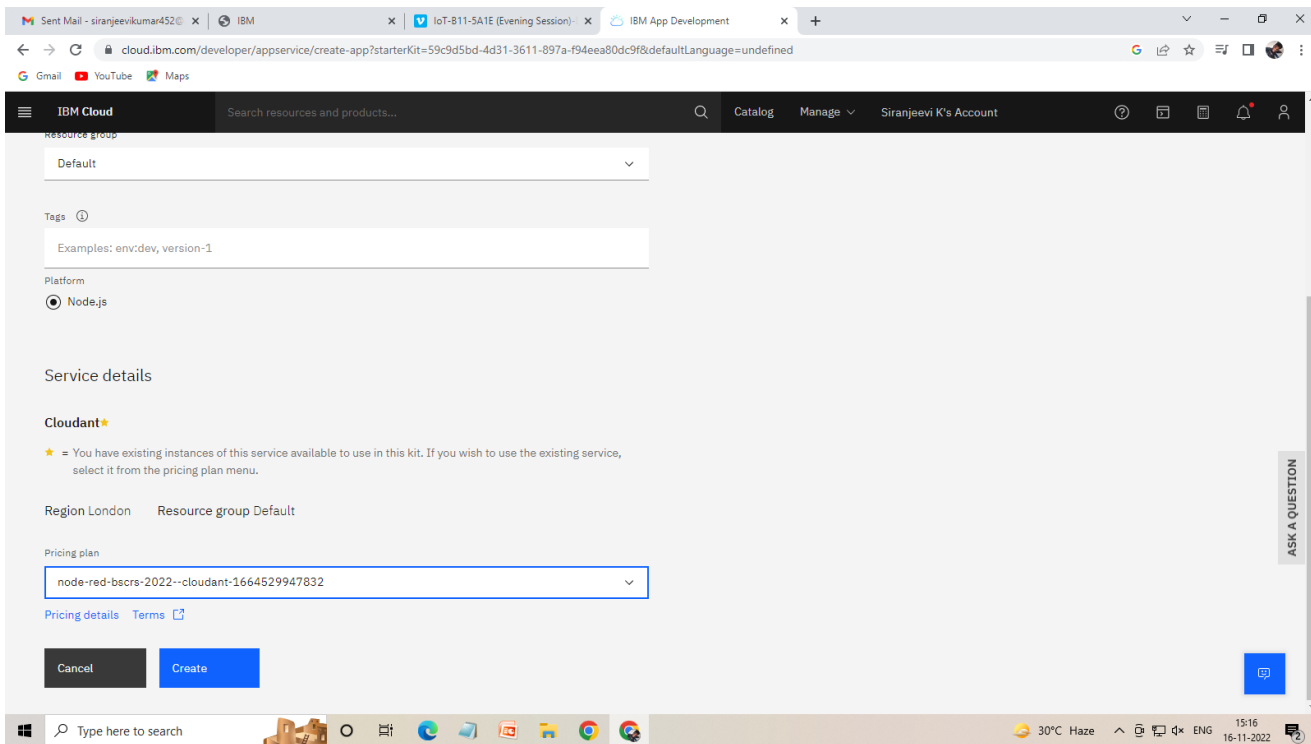
To create a web application, create a Node-RED service.

Steps to be followed:

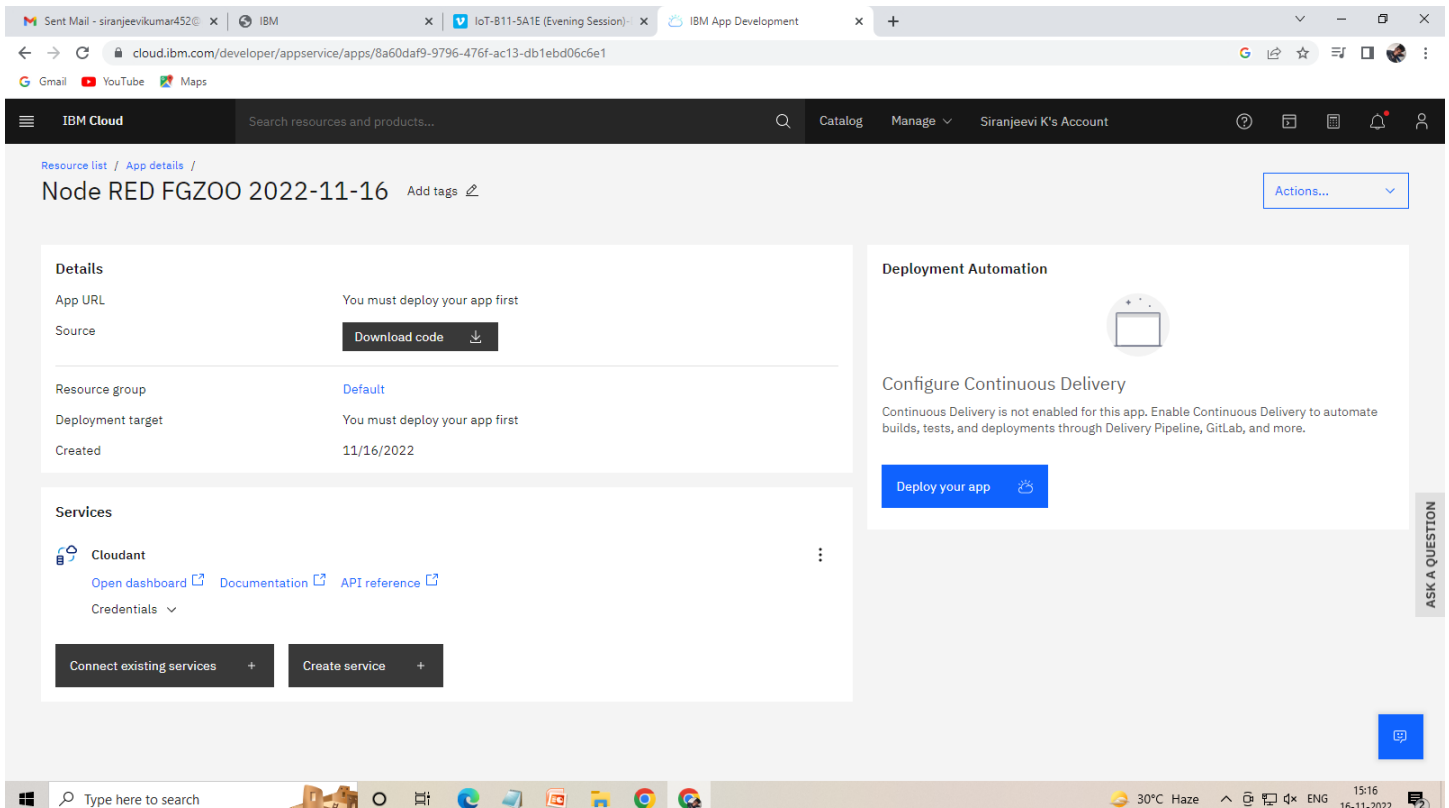
Step 1: Navigated to the App.

The screenshot shows a web browser window with multiple tabs. The active tab is 'IBM App Development'. The address bar shows the URL: `cloud.ibm.com/developer/appservice/create-app?starterKit=59c9d5bd-4d31-3611-897a-f94eea80dc9f&defaultLanguage=undefined`. The page header includes the IBM Cloud logo, a search bar, and navigation links for 'Catalog', 'Manage', and 'Sriranjeevi K's Account'. The main content area is titled 'Node-RED' and has two tabs: 'About' (selected) and 'Create'. The 'About' tab contains details about the starter kit, including its author (IBM), update date (2/11/2020), and type (Starter kit). It also provides links for source code (GitHub), helpful links (Terms, Tutorial), and an overview of the starter kit. The overview section states that the starter kit provides a pre-configured Node-RED application, including a Cloudant service to store the application flow configuration. It lists three steps: 'Generate an application with Node-RED', 'Generate an application with files for deploying to Cloud Foundry or a DevOps Pipeline', and 'Connect to provisioned services'. A 'What's included?' section highlights the 'Cloudant' service, which is 'Free to start' and provides links to 'View docs' and 'View API reference'. A blue 'Get started' button is located at the bottom of the page. The Windows taskbar at the bottom shows the system clock as 15:15 on 16-11-2022, with a temperature of 30°C and a haze condition.

Step 2: Entered project details and clicked on create:



Step 3: Clicking on the “Deploy your App” Button.



Step:4 Choose Cloud Foundry Organisation

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. ✓
- Code Engine**
IBM
Run your app, job, or container on a managed serverless platform. Auto-scale workloads, and pay only for the resources that you consume.

IBM Cloud API key

Number of instances

Getting started with apps

Step 1. Select the deployment target

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

IBM Cloud Foundry

Cloud Foundry is the premier industry standard Platform-as-a-Service (PaaS) that ensures fast, easy, and reliable deployment of cloud-native apps. Cloud Foundry ensures that the build and deploy aspects of coding remain carefully coordinated with any attached services — resulting in quick, consistent and reliable iterating of applications. Cloud Foundry has a Lite plan that allows quick deployments for testing purposes.

Before you begin

- If your account doesn't have a Cloud Foundry org, you must create one. [Create org.](#)

Steps

- Select the **number of instances**, **memory allocation**, **region**, **org**, and **space**.
- Select the **domain** and provide a **host name**.

Step 5: create Organisation and Spaces

Cloud Foundry Orgs

IBM Cloud Foundry Public is being deprecated. Please see full details.

Create

Name	Date Created	Spaces	Roles	Actions
Siranjevi	11/16/2022	1	Manager	

Step 6: Setting up the environment and deploying the app.

The screenshot shows the IBM Cloud Foundry Public console for a new application. The top navigation bar includes the IBM Cloud logo, a search bar, and links to Catalog, Manage, and the user's account (Siranjeevi K's Account). A notification banner at the top states "IBM Cloud Foundry Public is deprecated." with a "Learn more" link.

The main configuration area includes the following fields:

- IBM Cloud API key:** A text field with a masked key and a "New +" button.
- Number of instances:** A dropdown menu set to "1".
- Memory allocation per instance:** A slider ranging from 64 MB to 256 MB, currently set at 2000 MB.
- Region:** A dropdown menu set to "Sydney".
- Organization:** A dropdown menu set to "Siranjeevi".
- Space:** A dropdown menu set to "siranjeevi452".
- Host:** A text field containing "node-red-fgzoo-2022-11-16".
- Domain:** A dropdown menu set to "au-syd.mybluemix.net".

At the bottom of the configuration area are "Cancel" and "Next" buttons. A vertical "ASK A QUESTION" button is located on the right side of the console.

Step 7: Successfully deployed the app

The screenshot shows the IBM Cloud Foundry Public console for the application "Node RED FGZOO 2022-11-16". The top navigation bar is the same as in Step 6. The main content area is divided into two columns.

Left Column:

- Resource list / App details /** Node RED FGZOO 2022-11-16 [Add tags](#)
- Details:** A section with several horizontal bars representing details.
- Services:** A section showing the "Cloudant" service with links to "Open dashboard", "Documentation", and "API reference". Below the service list are buttons for "Connect existing services" and "Create service".

Right Column:

- Deployment Automation:** A section with a "Configure Continuous Delivery" button and a description: "Continuous Delivery is not enabled for this app. Enable Continuous Delivery to automate builds, tests, and deployments through Delivery Pipeline, GitLab, and more."
- Checking cache...** A status indicator.

A green success notification banner at the top right of the right column reads: "Success! Your DevOps toolchain is created 11/16/2022, 3:18:18 PM". A vertical "ASK A QUESTION" button is located on the right side of the console.

Sent Mail - siranjeevikumar452@ x IBM x IoT-B11-5A1E (Evening Session) x IBM App Development x +

cloud.ibm.com/developer/appservice/apps/8a60daf9-9796-476f-ac13-db1ebd06c6e1

IBM Cloud Search resources and products... Catalog Manage Siranjeevi K's Account

Resource list / App details / Node RED FGZOO 2022-11-16 Add tags Actions...

Details

App URL You must deploy your app first

Source <https://au-syd.git.cloud.ibm.com/422119104025/NodeREDFGZOO2022-11-16>

Resource group Default

Deployment target You must deploy your app first

Created 11/16/2022

Services

Cloudant

[Open dashboard](#) [Documentation](#) [API reference](#)

Credentials

Connect existing services + Create service +

Deployment Automation

Name NodeREDFGZOO2022-11-16

Location Sydney

Tool integrations

Delivery Pipelines

Name ci-pipeline

Status No stages detected

Name pr-pipeline

Status No stages detected

ASK A QUESTION

https://cloud.ibm.com/devops/pipelines/tekton/0e383aed-5c0b-4225-90ff-78a1b612a2e3?env_id=ibmypau-syd&app_id=8a60daf9-9796-476f-ac13-db1ebd06c6e1

Type here to search 30°C Haze 15:18 16-11-2022

Step 8: Dragged and dropped components into the editor.

Sent Mail - siranjeevikumar452@ x IBM x Application Details - IBM Cloud x Node-RED : node-red-pkozm-20 x +

node-red-pkozm-2022-11-16.au-syd.mybluemix.net/red/#flow/abc7243a270ee597

Node-RED

Flow 1

inject

debug

complete

catch

status

link in

link call

link out

comment

function

function

switch

change

range

msg.payload = Hello Node-RED!

msg.topic =

Properties

Name

msg.payload =

msg.topic =

Inject once after 0.1 seconds, then

Repeat none

Enabled

info

Search flows

Flows

Flow 1

Flow 2

Subflows

Global Configuration Nodes

Hello Node-RED!

Node "b1b11140.4e4ef"

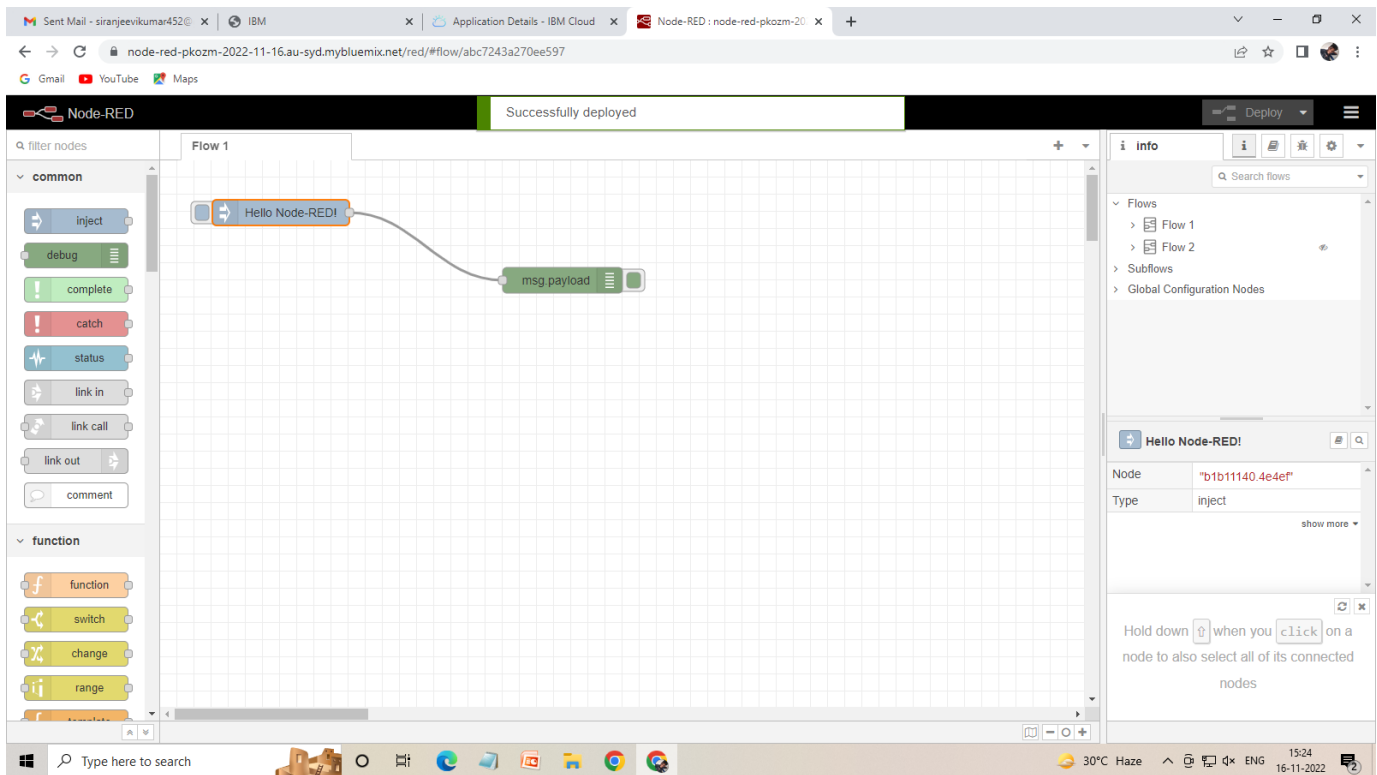
Type inject

show more

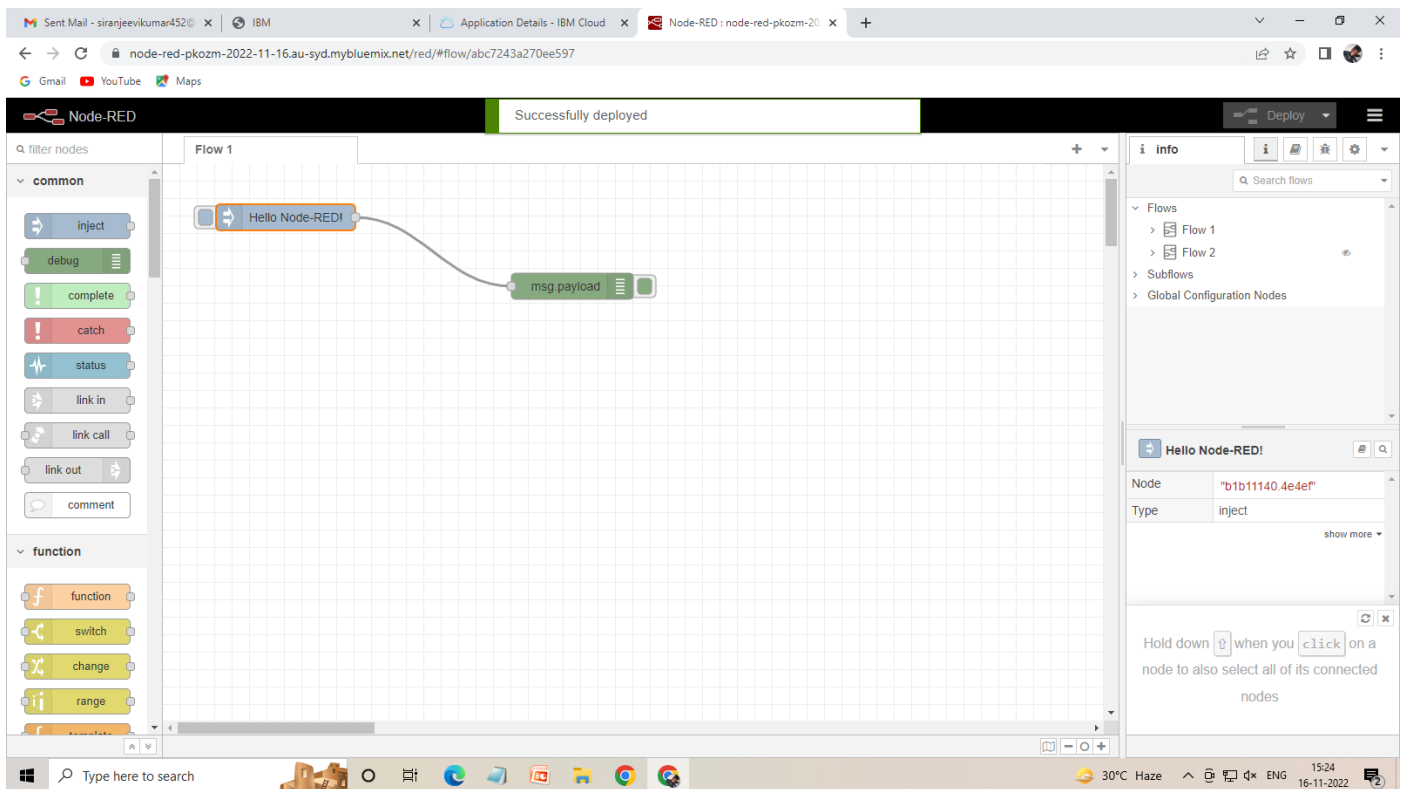
ctrl-space will toggle the view of this sidebar

Type here to search 30°C Haze 15:23 16-11-2022

Step 10: Editing some values of the properties.



Step 11: Successfully deployed the app.



RESULT:

Successfully created a Node RED service on IBM Cloud