

DEVELOP A WEB APPLICATION USING NODE-RED SERVICE

Develop a Web application using NODE-RED

Date : 04 November 2022

Team ID : PNT2022TMID37707

Project Name Project - SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

The screenshot shows the IBM Cloud account page for 'deepika_project'. The left sidebar contains a navigation menu with options like Account, Account resources, Resource groups, Cloud Foundry orgs, Licenses and entitlements, Tags, Dashboards, Account settings, IBM Cloud Shell settings, Notification distribution list, Classic infrastructure, Subscriptions, Audit log, and Company information. The main content area is titled 'Cloud Foundry Orgs / deepika_project' and has tabs for Spaces, Users, Domains, and Info. The 'Spaces' tab is active, showing a table with columns: Name, Region, ID, Manager, Date Created, and Actions. There is an 'Add a space' button in the top right. A large placeholder image is centered in the main area. The bottom of the screen shows a Windows taskbar with various application icons and a system tray with weather and time information.

The screenshot shows the IBM Cloud developer page for the Node-RED starter kit. The left sidebar has a navigation menu with 'About' and 'Create' options. The main content area is titled 'Overview' and contains the following text: 'This starter kit provides a pre-configured Node-RED application, including a Cloudant service to store the application flow configuration. Add services, generate and download the code, use the IBM Cloud Developer Tools CLI to run and debug locally, then deploy to Cloud Foundry or a DevOps Pipeline.' Below this, it says 'This starter kit will help you' followed by a list of bullet points: '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 section titled 'What's included?' follows. At the bottom, there is a 'Get started' button. The right sidebar has an 'ASK A QUESTION' button. The bottom of the screen shows a Windows taskbar with various application icons and a system tray with weather and time information.

IBM Cloud

Search resources and products...

Catalog

Manage

Deepika A's Account

Resource list / App details /

Node RED UNAJQ 2022-10-22

Add tags

Actions...

Details

App URL

You must deploy your app first

Source

Download code

Resource group

Default

Deployment target

You must deploy your app first

Created

10/22/2022

Services

Cloudant

Open dashboard

Documentation

API reference

Credentials

Deployment Automation

Configure Continuous Delivery

Continuous Delivery is not enabled for this app. Enable Continuous Delivery to automate builds, tests, and deployments through Delivery Pipeline, GitLab, and more.

Deploy your app

ASK A QUESTION

IBM Cloud

Search resources and products...

Catalog

Manage

Deepika A's Account

Cloud Foundry Orgs /

deepika_project

Spaces

Users

Domains

Info

Add a space

Name	Region	ID	Manager	Date Created	Actions
iot	Sydney	c223d638-9ad2-4e7d-b960-e18566ffe3ad	✓	11/9/2022	

IBM Cloud

Search resources and products...

Catalog

Manage

Deepika A's Account

IBM Cloud Foundry Public is deprecated. [Learn more](#)

IBM Cloud API key

.....

New

Number of instances

1

Memory allocation per instance

64 MB

2000 MB

256

Region

Sydney

Organization

deepika_project

Space

iot

Host

node-red-unajq-2022-10-22

Domain

au-syd.mybluemix.net

Cancel

Next

ASK A QUESTION

Type here to search

26°C Cloudy

6:31 AM

11/9/2022

cloud.ibm.com/developer/appservice/apps/244f5358-2b69-4c47-b70d-6067e28fa9c

IBM Cloud

Search resources and products...

Catalog

Manage

Deepika A's Account

[Resource list](#) / [App details](#) /

Node RED UNAJQ 2022-10-22

Select the deployment target

Configure the DevOps toolchain

Configure the DevOps toolchain

Give your toolchain a name and select the region to create your toolchain in.

DevOps toolchain name

NodeREDUNAJQ2022-10-22

Accept the default name, or enter a value up to 100 characters.

Region

Sydney

Back

Create

Getting started with apps

Step 2. Configure the DevOps toolchain

The DevOps toolchain includes a Delivery Pipeline tool where you can check the deployment status, start builds, manage deployment, and view logs and history.

1. Provide a name for your toolchain.

2. Select the region where your toolchain is created.

3. Select the resource group that has access to your new toolchain. [Learn more.](#)

4. After you're finished with your selections, click **Create**.

Type here to search

26°C Cloudy

6:31 AM

11/9/2022

Welcome | IBM | IoT-B6-6M | IBM-Proje | Search - S | IoT-B6 | IBM App | IBM Cloud | IBM-Proje

cloud.ibm.com/developer/appservice/apps/244f5358-2b69-4c47-b70d-6067e28fa9c

Gmail | YouTube | Maps | New Raspberry Pi P... | Colorful Clean 5 Poi... | IBM Watson IoT Pla... | IBM-EPBL/IBM-Proj...

IBM Cloud

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Resource list / App details /

Node RED UNAJQ 2022-10-22

Add tags

Details

Services

Cloudant

Open dashboard | Documentation | API reference

Credentials

Deployment Automation

Success! Your DevOps toolchain is created

11/9/2022, 6:33:38 AM

Configure Continuous Delivery

Continuous Delivery is not enabled for this app. Enable Continuous Delivery to automate builds, tests, and deployments through Delivery Pipeline, GitLab, and more.

Allocating resources...

ASK A QUESTION

Welcome | IBM | IoT-B6-6M | IBM-Proje | Search - S | IoT-B6 | IBM App | IBM Cloud | IBM-Proje

cloud.ibm.com/developer/appservice/apps/244f5358-2b69-4c47-b70d-6067e28fa9c

Gmail | YouTube | Maps | New Raspberry Pi P... | Colorful Clean 5 Poi... | IBM Watson IoT Pla... | IBM-EPBL/IBM-Proj...

IBM Cloud

Search resources and products...

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Node RED UNAJQ 2022-10-22

Add tags

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App URL

You must deploy your app first

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Default

Deployment target

You must deploy your app first

Created

10/22/2022

Services

Cloudant

Open dashboard | Documentation | API reference

Credentials

Connect existing services

Create service

Deployment Automation

Name

NodeREDUNAJQ2022-10-22

Location

Sydney

Tool integrations

Delivery Pipelines

Name

pr-pipeline

Status

No stages detected

Name

ci-pipeline

Status

No stages detected

ASK A QUESTION

cloud.ibm.com/resources

IBM Cloud

Search resources and products...

Catalog Manage Deepika A's Account

Name	Group	Location	Product	Status	Tags
Filter by name or IP address... Filter by group or org... Filter... Filter... Filter... Filter...					
Analytics (0)					
Blockchain (0)					
Databases (2)					
node-red-unajq-2022--cloudant-1...	Default	Frankfurt	Cloudant	Active	—
node-red-unajq-2022--cloudant-1...	deepika_project / iot	Sydney	Cloudant	Provisioned	—
Developer tools (4)					
Continuous Delivery	Default	Sydney	Continuous Delivery	Active	—
Node RED UNAJQ 2022-10-22	Default	Global	Cloud Application	—	—
NodeREDUNAJQ2022-10-22	Default	Sydney	Toolchain	—	—
NodeREDUNAJQ2022-10-22	Default	Sydney	Toolchain	—	—
Logging and monitoring (0)					

Type here to search

26°C Cloudy 6:38 AM 11/9/2022

Node-RED

Deploy

filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function

Flow 1

Hello Node-RED!

msg.payload

info

Search flows

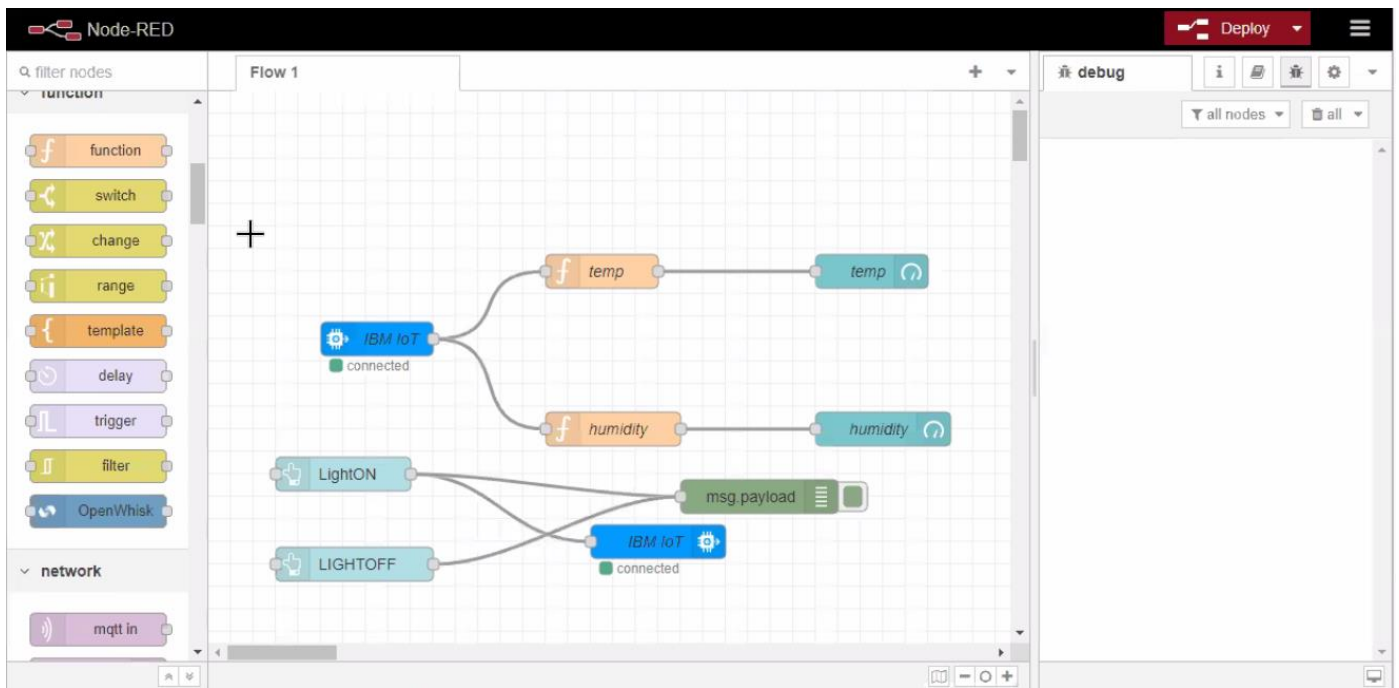
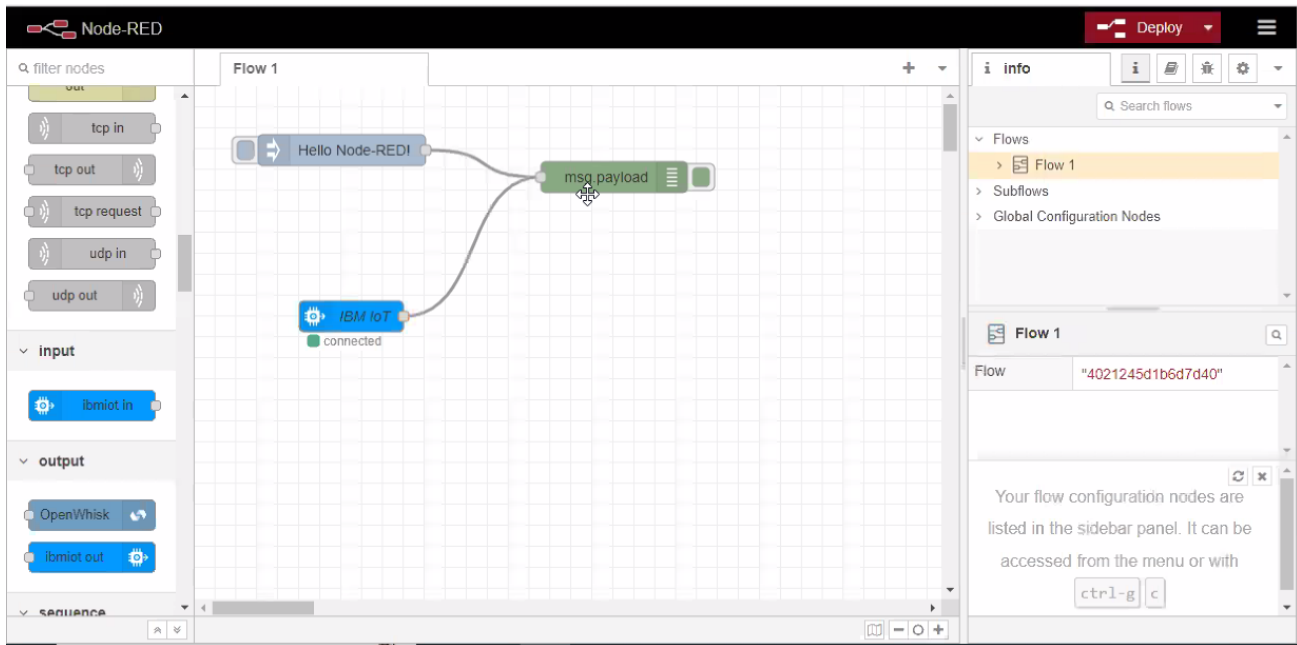
Flows

- Flow 1
- Subflows
- Global Configuration Nodes

Flow 1

Flow "4a7855400c60c63e"

Enable or disable these tips from the option in the settings



Node-RED interface showing a flow named "testing_flow". The flow contains a "my_inject_node" and a "complete: 1" node. The "Edit debug node" dialog is open, showing properties for the selected node:

- Output: msg.payload
- To: ☒ debug window
- ☐ system console
- ☐ node status (32 characters)
- Name: Output_node

The "config" panel on the right shows the flow configuration. The bottom status bar indicates 33°C, Partly sunny, and the time 2:37 AM on 10/16/2022.

Node-RED interface showing a flow named "Flow 1". The flow contains a "testpox" node. The "Edit inject node" dialog is open, showing properties for the selected node:

- Name: testpox
- msg.payload: HI Deepika
- msg.topic:
- ☐ Inject once after 0.1 seconds, then
- Repeat: none

The "debug" panel on the right shows the output of the flow:

```
11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"
11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"
11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"
11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"
11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"
11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"
```

The bottom status bar indicates 26°C, Mostly cloudy, and the time 10:35 AM on 11/4/2022.

Welcome to Project! Delight... x IBM x sketch.ino - Wokwi Arduino x IBM Watson IoT Platform x Node-RED : node-red-rjzof-2 x

Not secure | node-red-rjzof-2022-10-11.eu-gb.mybluemix.net/red/#flow/280dad2f454afc9d

Gmail YouTube Maps W New Raspberry Pi P... Colorful Clean 5 Poi... IBM Watson IoT Pla... IBM-EPBL/IBM-Proj...

Node-RED

Successfully injected: testpox

Deploy

filter nodes

Flow 1Flow 4

common

inject

debug

complete

catch

status

link in

link call

link out

comment

function

function

testpox

yes

debug

all nodesall

11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"

Type here to search

26°C Mostly cloudy 10:34 AM 11/4/2022

testpox

yes

11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:02 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"

11/4/2022, 10:34:07 AM node: yes
msg.payload : string[10]
"HI Deepika"