

## Create Node Red service

Team ID	PNT2022TMID04392
Project Name	Smart waste management system for metropolitan cities

**Step 1:** Login into IBM CLOUD account

**Step2:** In catalog, search for node red application

**Step 3:** Enter the project details and click on create

**Step 4:** click on deploy option and deploy

**Step 5:** Set up the environment for deploying and click on create

**Step 6:** Now drag and drop the nodes and connect nodes with IOT Watson platform

**Step 7:** setup the settings that connects node red service with Watson IOT

**Step 8:** Finally, output can be seen in node red service

## Screenshots of Nod-Red Application

Firewall Authentico x (53) YouTube x IBM x IBM-Project-2982 x IBM-Project-3522 x Node Red Service x Catalog - IBM Clo x + - x

cloud.ibm.com/catalog?search=node%20red%20#search\_results

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node red

Sell on IBM Cloud Catalog settings

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By CTERA Networks

CTERA Platform - Secured Enterprise file

**Direct Link Dedicated on Classic**  
By IBM

Connect directly to IBM Cloud through a

26°C  
Partly cloudy



ENG  
IN

08:57 PM  
17-11-2022

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Resource list / App details /

Node RED TKMCL 2022-11-17 env:dev

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

11/17/2022

Services

Cloudant

Provisioning service credentials

Connect existing services

Create service

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


26°C Partly cloudy


ENG IN


08:59 PM 17-11-2022


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

.....

 **New** +

#### Container registry region

Dallas ▾

#### Container registry namespace

jbmfyhfuvvmqrrymgrbnfcumphsw ▾

#### Cluster region

Frankfurt ▾

#### Cluster resource group

Default ▾

#### Cluster namespace

default ▾

#### Cluster name

mycluster-free ▾

#### Deployment type

### 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

- Create an IBM Cloud API key, or select an existing one from a secrets store.
- Select the container registry region.
- Enter the container registry namespace if it is not already completed.
- Select the region where your Kubernetes cluster is located.
- Select the resource group, cluster namespace, and the cluster name.

ASK A QUESTION



The screenshot displays the Node-RED web interface. On the left, a sidebar lists node categories: 'common' (including inject, debug, complete, catch, status, link in, link call, link out, and comment) and 'function' (including function, switch, change, and range). The main workspace, titled 'Flow 1', shows a flow with two nodes: an 'IBM IoT' node (blue with a gear icon) and a 'debug 1' node (green with a list icon). They are connected by a curved line. The 'IBM IoT' node has a status indicator showing 'connected'. On the right, a 'debug' console is visible, showing a list of all nodes and a button to 'all'. At the bottom, a system tray shows the date and time as '02-11-2022 18:22' and the temperature as '26°C Rain to stop'.

Node-RED

filter nodes

Flow 1

common

inject

debug

complete

catch

status

link in

link call

link out

comment

function

function

switch

change

range

IBM IoT

connected

debug 1

Edit ibmiot in node

Delete

Cancel

Done

Properties

Authentication

API Key

API Key

Akshaya

Input Type

Device Event

Device Type

All or

Test

Device Id

All or

Test123

Event

All or

+

Format

All or

json

QoS

0

Name

IBM IoT

Service

registered

Use the Input Type property to configure this node to receive Events sent by IoT Devices, Commands sent to IoT Devices, Status Messages referring to IoT Devices, or Status Messages referring to

Enabled

debug

all nodes

all

127.0.0.1:1880/#editor-tab-properties

26°C

Rain off and on

Windows

Search

Task View

Microsoft Edge

Google Chrome

Word

PowerPoint

Outlook

File Explorer

Calendar

Mail

Teams

OneDrive

Settings

System Tray

ENG IN

20:57

02-11-2022

Select node-red

```
11 Nov 12:34:32 - [info] Dashboard version 3.2.0 started at /ui
11 Nov 12:34:32 - [info] Settings file : C:\Users\ARORA_EDITH\.node-red\settings.js
11 Nov 12:34:32 - [info] Context store : 'default' [module-memory]
11 Nov 12:34:32 - [info] User directory : \Users\ARORA_EDITH\.node-red
11 Nov 12:34:32 - [warn] Projects disabled : editorTheme.projects.enabled=false
11 Nov 12:34:32 - [info] Flows file : \Users\ARORA_EDITH\.node-red\flows.json
11 Nov 12:34:32 - [warn]
```

-----  
Your flow credentials file is encrypted using a system-generated key.

If the system-generated key is lost for any reason, your credentials file will not be recoverable, you will have to delete it and re-enter your credentials.

You should set your own key using the 'credentialSecret' option in your settings file. Node-RED will then re-encrypt your credentials file using your chosen key the next time you deploy a change.

-----  
11 Nov 12:34:32 - [info] Server now running at http://127.0.0.1:1880/  
11 Nov 12:34:32 - [info] Starting flows  
11 Nov 12:34:32 - [info] Started flows  
11 Nov 12:47:51 - [info] Stopping flows  
11 Nov 12:47:51 - [info] Stopped flows  
Terminate batch job (Y/N)? y

C:\Users\ARORA\_EDITH>color a

C:\Users\ARORA\_EDITH>node-red

```
11 Nov 12:48:03 - [info]
```

Welcome to Node-RED

-----  
11 Nov 12:48:03 - [info] Node-RED version: v3.0.2  
11 Nov 12:48:03 - [info] Node.js version: v14.17.1  
11 Nov 12:48:03 - [info] Windows\_NT 10.0.19045 x64 LE  
11 Nov 12:48:04 - [info] Loading palette nodes  
11 Nov 12:48:05 - [info] Dashboard version 3.2.0 started at /ui  
11 Nov 12:48:05 - [info] Settings file : C:\Users\ARORA\_EDITH\.node-red\settings.js  
11 Nov 12:48:05 - [info] Context store : 'default' [module-memory]  
11 Nov 12:48:05 - [info] User directory : \Users\ARORA\_EDITH\.node-red  
11 Nov 12:48:05 - [warn] Projects disabled : editorTheme.projects.enabled=false  
11 Nov 12:48:05 - [info] Flows file : \Users\ARORA\_EDITH\.node-red\flows.json

Node-RED

Deploy

filter nodes

Flow 1

common

inject

debug

complete

catch

status

link in

link call

link out

comment

function

function

switch

change

range

template

delay

IBM IoT

connected

level

show notification

config

all

unused

On all flows

ibmiot

SWM

1

TestGogul

0

ui\_base

Node-RED Dashboard

ui\_group

[admin] Default

1

[unassigned] Default

0

ui\_tab

admin

1

> Flow 1

> Flow 2

> Flow 3