

Experiment Number

Name ::	Rishabh Anand	UID ::	19BCS4525
Branch ::	CSE - IoT	Sec/Grp ::	1/A
Semester ::	6 th	Date ::	2 nd Mar, 2022
Subject ::	CCIoT Lab	CODE ::	CSD-387

1. Aim :

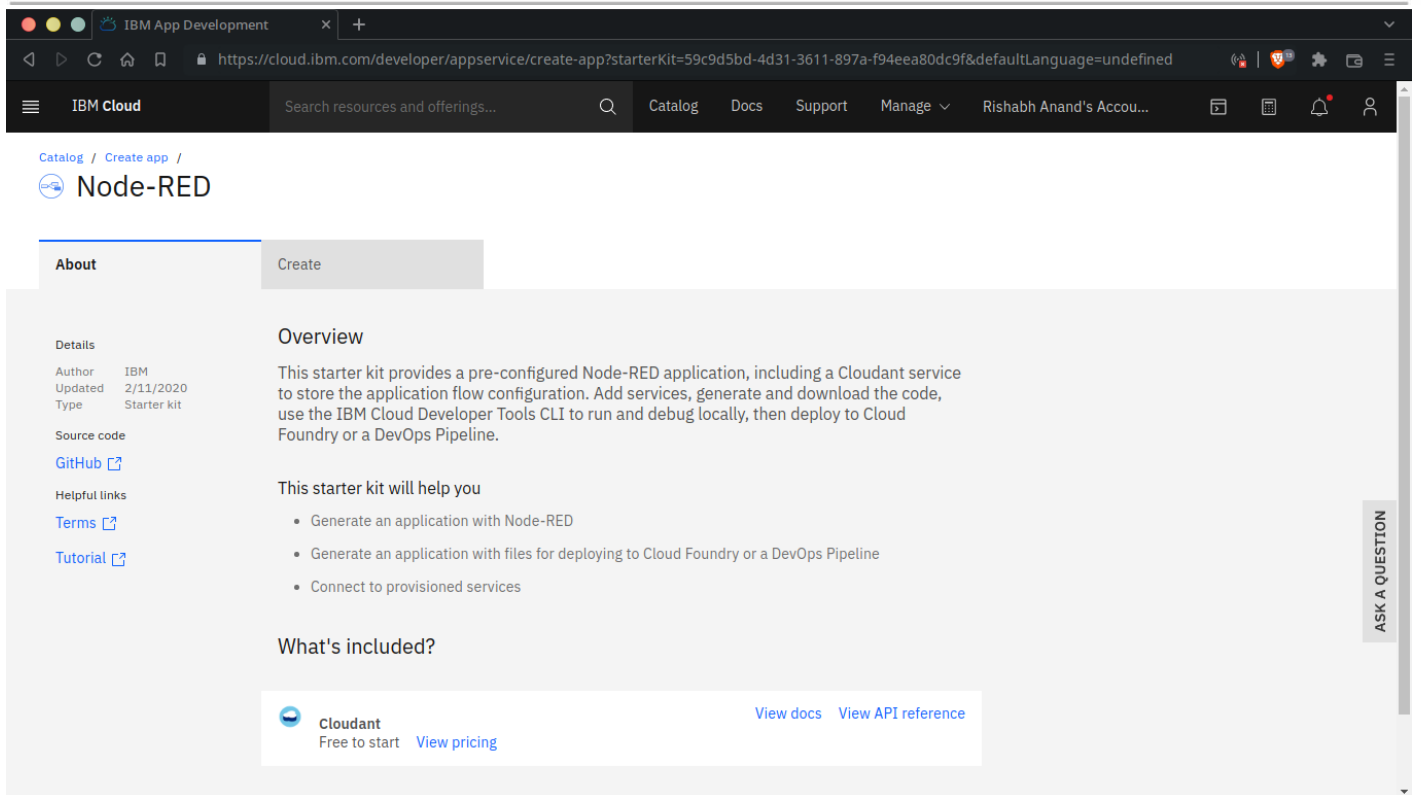
Create a Node-RED starter application in IBM Cloud including a Cloudant database to store the application flow configuration.

2. Task :

1. Create a Node-RED starter application in IBM Cloud including a Cloudant database to store the application flow configuration

3. Steps :

- Login to IBM cloud and click on Catalog -> Link and select Node-RED App.
- Then create Node-RED app with Cloudant Database by selection free pricing.
- Then generate App Url by clicking on Ci-Pipeline link on bottom right.
- At Ci-Pipeline dashboard you will have to activate simple-hosted-pipeline to generate App Url.
- Then click on App Url and select second GIT-Repo link.
- Then commit changes in package.json file.
- You have to add “node-red-dashboard” : “2.x” under the dependencies object.



IBM App Development

https://cloud.ibm.com/developer/appservice/create-app?starterKit=59c9d5bd-4d31-3611-897a-f94eea80dc9f&defaultLanguage=undefined

IBM Cloud Search resources and offerings... Catalog Docs Support Manage Rishabh Anand's Accou...

Catalog / Create app /

Node-RED

About Create

Details

Author IBM
Updated 2/11/2020
Type Starter kit

Source code
[GitHub](#)

Helpful links
[Terms](#)
[Tutorial](#)


Overview

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.

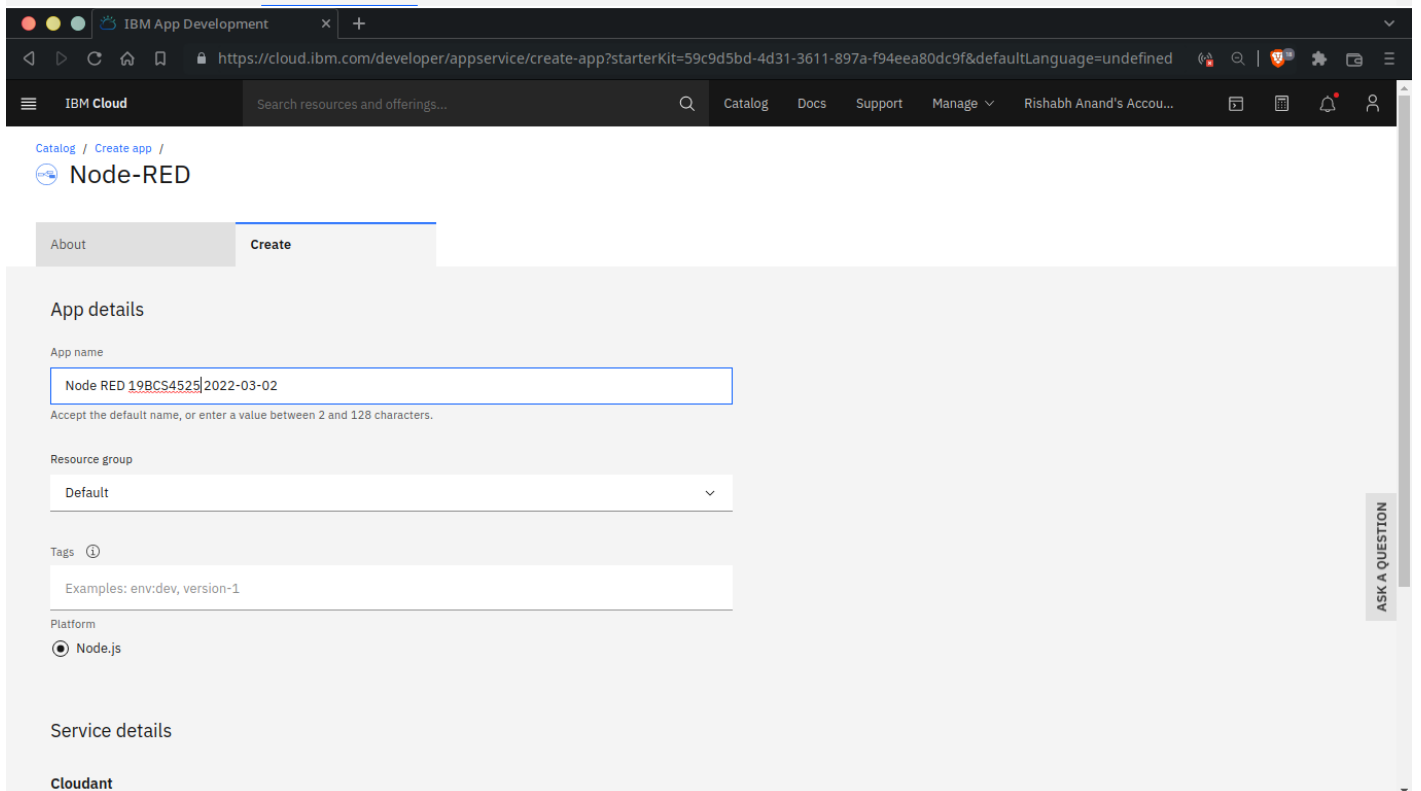
This starter kit will help you

- Generate an application with Node-RED
- Generate an application with files for deploying to Cloud Foundry or a DevOps Pipeline
- Connect to provisioned services

What's included?

 **Cloudant**
Free to start [View pricing](#) [View docs](#) [View API reference](#)

ASK A QUESTION



IBM App Development

https://cloud.ibm.com/developer/appservice/create-app?starterKit=59c9d5bd-4d31-3611-897a-f94eea80dc9f&defaultLanguage=undefined

IBM Cloud Search resources and offerings... Catalog Docs Support Manage Rishabh Anand's Accou...

Catalog / Create app /

Node-RED


About Create

App details

App name

Accept the default name, or enter a value between 2 and 128 characters.

Resource group

Tags 

Platform
☒ Node.js

Service details

Cloudant

ASK A QUESTION

IBM App Development

Experiment Worksheet 3 - Google

<https://cloud.ibm.com/developer/appservice/apps/e69f54d0-4d0b-4611-90df-17b73ef103dd>

IBM Cloud

Search resources and offerings...

Catalog Docs Support Manage

Rishabh Anand's Accou...

Resource list / App details /

Node RED 19BCS4525 2022-03-02 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

3/2/2022

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

Getting started quickly

Configuring your app

To connect services and DevOps toolchains to your app:

1. Use the **Services** card to connect a service to your app. Select an existing service instance, or create a new one. [Learn more.](#)
2. If you want to view the code before your app is deployed, click **Download code** to obtain the .zip file.
3. Click **Deploy your app** in the **Deployment Automation** card to select the deployment target and configure the Continuous Delivery service. The deployment begins automatically.
4. After the deployment begins, you can view the status of the deployment, modify your app, view your repo, or view the app's URL.
5. If you make any changes to your app, be sure to deploy it again.

Details

App URL

You must deploy your app first

Source

Download code

Resource group

Default

Deployment target

You must deploy your app first

Created

3/2/2022

Services

Cloudant

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

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

Getting started quickly

Configuring your app

To connect services and DevOps toolchains to your app:

1. Use the **Services** card to connect a service to your app. Select an existing service instance, or create a new one. [Learn more.](#)
2. If you want to view the code before your app is deployed, click **Download code** to obtain the .zip file.
3. Click **Deploy your app** in the **Deployment Automation** card to select the deployment target and configure the Continuous Delivery service. The deployment begins automatically.
4. After the deployment begins, you can view the status of the deployment, modify your app, view your repo, or view the app's URL.
5. If you make any changes to your app, be sure to deploy it again.

Building, running, and deploying your app locally

To build and run your app locally:

1. Run the `ibmcloud dev code <APPNAME>` command from the IBM Cloud CLI. [Learn more.](#)
2. Run the following commands in a local development container from the app directory:

```
ibmcloud dev build
ibmcloud dev run
ibmcloud dev deploy
```

ci-pipeline Dashboard

Run pipeline

PipelineRuns

Definitions
Worker
Triggers
Environment properties
Other settings

Status: All

Trigger: All

#	Status	Name	Pipeline	Trigger	Created	Duration
3	✓	simple-hosted-pipelin...	simple-hosted-pipeline	commit-push	24 February 2022, 15:...	9 minutes 19 seconds
2	✓	simple-hosted-pipelin...	simple-hosted-pipeline	manual-run	24 February 2022, 15:...	8 minutes 23 seconds
1	✗	simple-hosted-pipelin...	simple-hosted-pipeline	manual-run	24 February 2022, 14:...	6 minutes 31 seconds

Items per page: 25
1 - 3 items

Details

App URL
Source
Resource group
Deployment target
Created

Services

Cloudant
[Open dashboard](#) [Documentation](#) [API reference](#)
[Connect existing services](#) [Create service](#)

Deployment Automation

Name
Location
Tool integrations

Delivery Pipelines

Name
Status
Name
Status

Getting started quickly

Configuring your app

- Use the **Services** card to connect a service to your app. Select an existing service instance, or create a new one. [Learn more.](#)
- If you want to view the code before your app is deployed, click **Download code** to obtain the .zip file.
- Click **Deploy your app** in the **Deployment Automation** card to select the deployment target and configure the Continuous Delivery service. The deployment begins automatically.
- After the deployment begins, you can view the status of the deployment, modify your app, view your repo, or view the app's URL.
- If you make any changes to your app, be sure to deploy it again.

Building, running, and deploying your app locally

Overview

Connections
Manage

Think

Issues
NodeREDJRKLQ202...
✓ Configured

Repositories

Git
NodeREDJRKLQ202...
✓ Configured

Git
NodeREDJRKLQ202...
✓ Configured

Git
NodeREDJRKLQ202...
✓ Configured

Eclipse Orion Web IDE
✓ Configured

Deliver

Delivery Pipeline
ci-pipeline
✓ Success

Delivery Pipeline
pr-pipeline
No stages detected

Learn

DevOps Insights
✓ Configured

package.json 686 Bytes

Edit

Replace

Delete



```
1 {
2   "name": "node-red-app",
3   "version": "1.1.3",
4   "dependencies": {
5     "@ibm-cloud/cloudant": "^0.0.25",
6     "bcrypt": "^5.0.1",
7     "body-parser": "1.x",
8     "express": "4.x",
9     "http-shutdown": "1.2.2",
10    "ibm-cloud-env": "^0",
11    "node-red": "^2.2.2",
12    "node-red-contrib-ibm-db2": "0.x",
13    "node-red-node-cf-cloudant": "0.x",
14    "node-red-node-openwhisk": "0.x",
15    "node-red-node-watson": "0.x",
16    "node-red-nodes-cf-sqlldb-dashdb": "0.x"
17  },
18  "scripts": {
19    "start": "node --max-old-space-size=160 index.js --settings ./bluemix-settings.js -v"
20  },
21  "engines": {
22    "node": "14.x"
23  }
24 }
```

Welcome to your new Node-RED instance on IBM Cloud

We know you're eager to start wiring up your flows, but first there are a couple of tasks you should do:

- Secure your Node-RED editor
- Learn how to install additional nodes



Previous

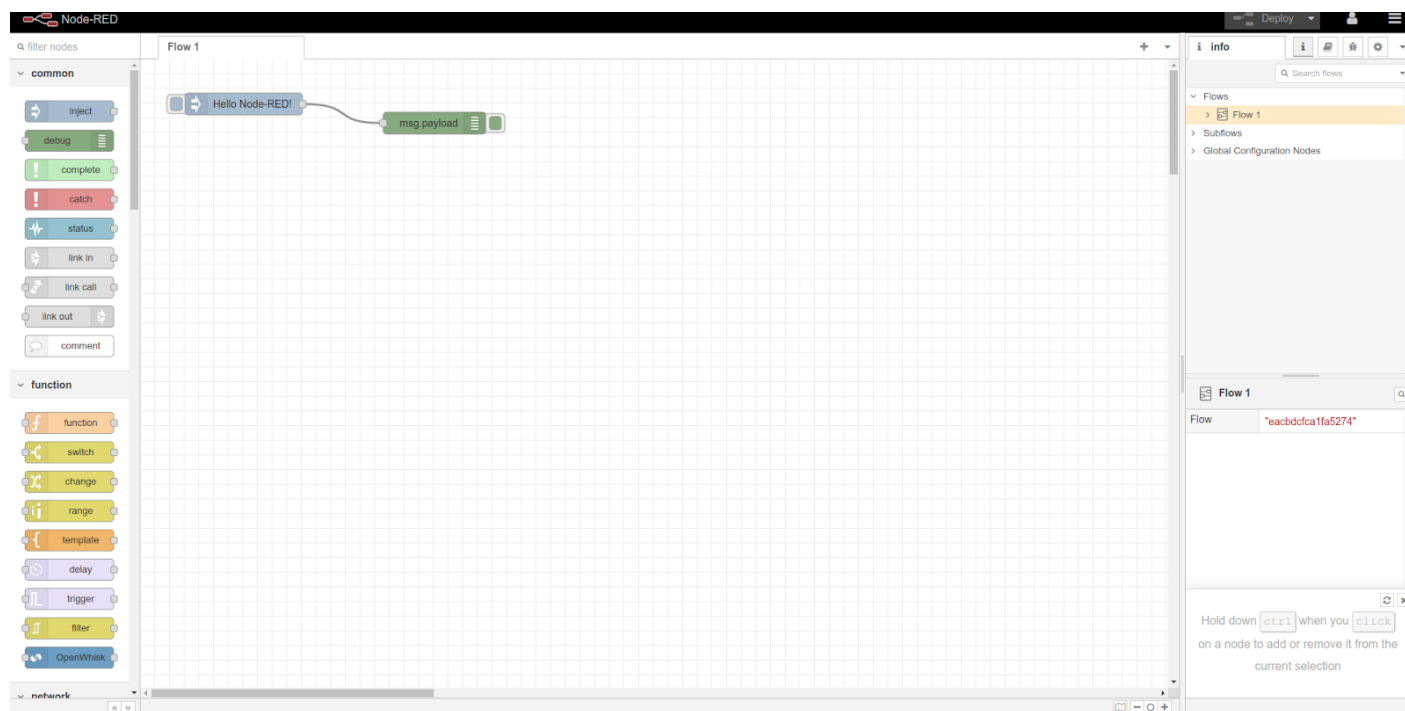
Next



Applying your settings and starting Node-RED



4. Observations :



Learning Outcomes :

- Cloudbant Database

S. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			