

Team id: PNT2022TMID04560

Project name: Gas leakage monitoring and Alerting system for industries

Node red creation and connecting it to IBM:

The screenshot displays the IBM Cloud Developer console interface for creating a new Node-RED application. The browser address bar shows the URL: `cloud.ibm.com/developer/appservice/create-app?starterKit=59c9d5bd-4d31-3611-897a-f94eea80dc9f&defaultLanguage=undefined`. The page title is "Node-RED".

The "Create" tab is active, showing the "App details" section. The "App name" field is populated with "Node RED INWRD 2022-11-18". Below it, a note states: "Accept the default name, or enter a value between 2 and 128 characters." The "Resource group" is set to "Default". The "Tags" field contains the example text "Examples: env:dev, version-1". The "Platform" is selected as "Node.js".

The "Service details" section is partially visible, showing the "Cloudant" service. A note indicates: "★ = You have existing instances of this service available to use in this kit. If you wish to use the existing service, select it from the pricing plan menu." The "Region" is set to "Sydney" and the "Resource group" is "Default". The "Pricing plan" dropdown is open, showing the selected plan: "node-red-jpmm-2022--cloudant-1666677900565".

At the bottom of the form, there are two buttons: "Cancel" and "Create".

IBM Cloud

cloud.ibm.com/developer/appservice/apps/0b95d8db-6456-4fef-85cb-55685e40ac79

Node RED INWRD 2022-11-18

Resource list / App details /

Details

App URL: You must deploy your app first

Source: [Download code](#)

Resource group: Default

Deployment target: You must deploy your app first

Created: 11/18/2022

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.

IBM Cloud

cloud.ibm.com/account/cloud-foundry

Cloud Foundry Orgs

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

Name	Date Created	Spaces	Roles	Actions
DharanSamy21	11/18/2022	1	Manager	

IBM Cloud Account page for DharanSamy21. The page shows a sidebar with navigation 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 displays the 'Spaces' tab for the 'DharanSamy21' account. A table lists the spaces, with one space named 'ibm1' in the Sydney region, ID 'f42f45ac-5786-437f-82bf-b17f68f1465f', managed by 'ibm1', and created on 11/18/2022. An 'Add a space' button is visible in the top right corner of the table area.

Name	Region	ID	Manager	Date Created	Actions
ibm1	Sydney	f42f45ac-5786-437f-82bf-b17f68f1465f	ibm1	11/18/2022	

IBM Cloud Developer page for Node RED INWRD 2022-11-18. The page shows a sidebar with navigation options like Resource list, App details, and Actions. The main content area displays the 'Node RED INWRD 2022-11-18' app details. The 'Details' section shows the App URL, Source (Download code), Resource group (Default), Deployment target, and Created date (11/18/2022). The 'Services' section shows the Cloudant service and options to Connect existing services or Create service. The 'Deployment Automation' section shows a 'Deploy your app' button. The 'Getting started quickly' section provides a list of steps for configuring the app.

Details

App URL: You must deploy your app first

Source: [Download code](#)

Resource group: Default

Deployment target: You must deploy your app first

Created: 11/18/2022

Services

Cloudant

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

Credentials

[Connect existing services](#) [Create service](#)

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Getting started quickly

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

IBM Cloud API key

Number of instances

Memory allocation per instance

Region

Organization

Space

Host

Domain

Cancel Next

ASK A QUESTION

Node RED INWRD 2022-11-18

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

Region

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.

ASK A QUESTION

IBM Cloud Developer Portal interface showing the details of an application named "Node RED INWRD 2022-11-18".

Details:

- App URL: You must deploy your app first
- Source: <https://au-syd.git.cloud.ibm.com/bharanidharand.19ece/Node...>
- Resource group: Default
- Deployment target: You must deploy your app first
- Created: 11/18/2022

Services:

- Cloudant
 - [Open dashboard](#)
 - [Documentation](#)
 - [API reference](#)
 - Credentials

Deployment Automation:

- Name: NodeREDINWRD2022-11-18
- Location: Sydney
- Tool integrations:

Delivery Pipelines:

- pr-pipeline
 - Status: No stages detected
- ci-pipeline
 - Status: No stages detected

Getting started quickly:

- 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.
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- 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.

IBM Cloud Developer Portal interface showing the details of an application named "Node RED INWRD 2022-11-18".

Details:

- App URL: <https://node-red-inwr-2022-11-18.au-syd.mybluemix.net>
- Source: <https://au-syd.git.cloud.ibm.com/bharanidharand.19ece/Node...>
- Resource group: Default
- Deployment target: Node RED INWRD 2022-11-18
- Created: 11/18/2022

Services:

- Cloudant
 - [Open dashboard](#)
 - [Documentation](#)
 - [API reference](#)
 - Credentials

Deployment Automation:

- Name: NodeREDINWRD2022-11-18
- Location: Sydney
- Tool integrations:

Delivery Pipelines:

- pr-pipeline
 - Status: No stages detected
- ci-pipeline
 - Status: Success

Getting started quickly:

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

Node RED INWRD 2022-11-18

Running Visit App URL Add tags

Getting started

- Overview
- Runtime
- Connections
- Logs
- API Management
- Autoscaling

Instances

Health

100%

1/1 instance(s) are running

Instances

1 - +

MB memory per instance

0 2048 256

Runtime

Node.js

256

Total MB allocation

1.75 GB still available

Free Used

Runtime cost

Current and estimated cost excludes connected services.

Connections (1)

Node-RED

Successfully deployed

Deploy

filter nodes

- common
 - inject
 - debug
 - complete
 - catch
 - status
 - link in
 - link call
 - link out
 - comment
- function
 - function
 - switch

Flow 1

Test

msg payload

info

Search flows

- Flows
 - Flow 1
 - Subflows
 - Global Configuration Nodes

Test

Node "b1b11140.4e4ef"

Type inject

show more

ctrl click in the workspace to open the quick-add dialog

node-red-inwrd-2022-11-18.au-syd.mybluemix.net/red/#flow/bb14349dec661cbe

Node-RED

Flow 1

Test

msg.payload

debug

11/18/2022, 9:10:30 AM node: f2f2649a-0d0d98
msg.payload: string[6]
"Hi IBM"

11/18/2022, 9:10:36 AM node: f2f2649a-0d0d98
msg.payload: string[6]
"Hi IBM"

11/18/2022, 9:10:39 AM node: f2f2649a-0d0d98
msg.payload: string[6]
"Hi IBM"

11/18/2022, 9:10:49 AM node: f2f2649a-0d0d98
msg.payload: string[6]
"Hi IBM"

19xuti.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

Browse Action Device Types Interfaces

1 Disconnected NodeMcu

Identity Device Information Recent Events State

The recent events listed show the live stream of data that is coming and going

Event	Value
event_1	{"randomNumber":44,"temp":90,"humid":8}
event_1	{"randomNumber":88,"temp":97,"humid":38}

Items per page 50 | 1-1 of 1 item

Device Type: NodeMcu

Events 1 New event type +

Event type name event_1 Send

Schedule 1 Every Minute

Payload

Specify the event payload in the editor window or by uploading a CSV file.

```
{
  0 {
  1 "randomNumber": random(0, 100)
  2 "temp": random(90, 110)
  3 "humid": random(1, 50)
  4 }
  5 }
```

Upload a CSV file

Cancel Save

IBM x IoT-B7-1A x Project P... x IBM-Proje... x Inbox (865) x IBM App... x Application x Node-RED x IBM Wats... x

node-red-inwrd-2022-11-18-au-syd.mybluemix.net/red/#flow/bb14349dec661cbe

Node-RED

filter nodes

Flow 1

tcp out
tcp request
udp in
udp out

input

ibmiot in

output

OpenWhisk
ibmiot out

sequence

split
join

Test

msg payload

IBM IoT
connected

debug

all nodes all

msg.payload : string[6]
"HI IBM"

11/18/2022, 9:26:50 AM node: f2f2649a.0d0d98
msg.payload : string[6]
"HI IBM"

11/18/2022, 9:27:00 AM node: f2f2649a.0d0d98
msg.payload : string[6]
"HI IBM"

11/18/2022, 9:27:10 AM node: f2f2649a.0d0d98
msg.payload : string[6]
"HI IBM"

11/18/2022, 9:27:21 AM node: f2f2649a.0d0d98
msg.payload : string[6]
"HI IBM"

11/18/2022, 9:27:30 AM node: f2f2649a.0d0d98
msg.payload : string[6]
"HI IBM"

11/18/2022, 9:28:51 AM node: f2f2649a.0d0d98
iot-2/type/NodeMcu/d/1/evt/event_1/mqttjson :
msg.payload : Object
{
 randomNumber: 44,
 temp: 90,
 humid: 8
}

Type here to search

ENG 9:30 AM
IN 11/18/2022