

## Create and Configure IBM Cloud Services

Date	14november
Team ID	PNT2022TMID35105
Project Name	IOT based Smart Waste Management System ForMeteropolitanCities

### Create IBM Watson Platform and device:

### Creating and Launching IBM Watson Platform:

The screenshot shows the IBM Cloud Catalog page for the Internet of Things Platform. The page is titled "Internet of Things Platform" and includes a description: "This service is the hub of all things IBM IoT, it is where you can set up and manage your connected devices so that your apps can access their live and historical data." The "Create" tab is selected, and the "Select a location" dropdown is set to "Frankfurt (eu-de)". The "Select a pricing plan" section shows a table with two plans: "Lite" and "Free". The "Lite" plan is selected, and its features are listed: "Includes up to 500 registered devices, and a maximum of 200 MB of each data metric", "Maximum of 500 registered devices", "Maximum of 500 application bindings", "Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed". The "Free" plan is also listed with a price of "Free". The "Create" button is visible at the bottom right.

Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free
Free		

### Create device:

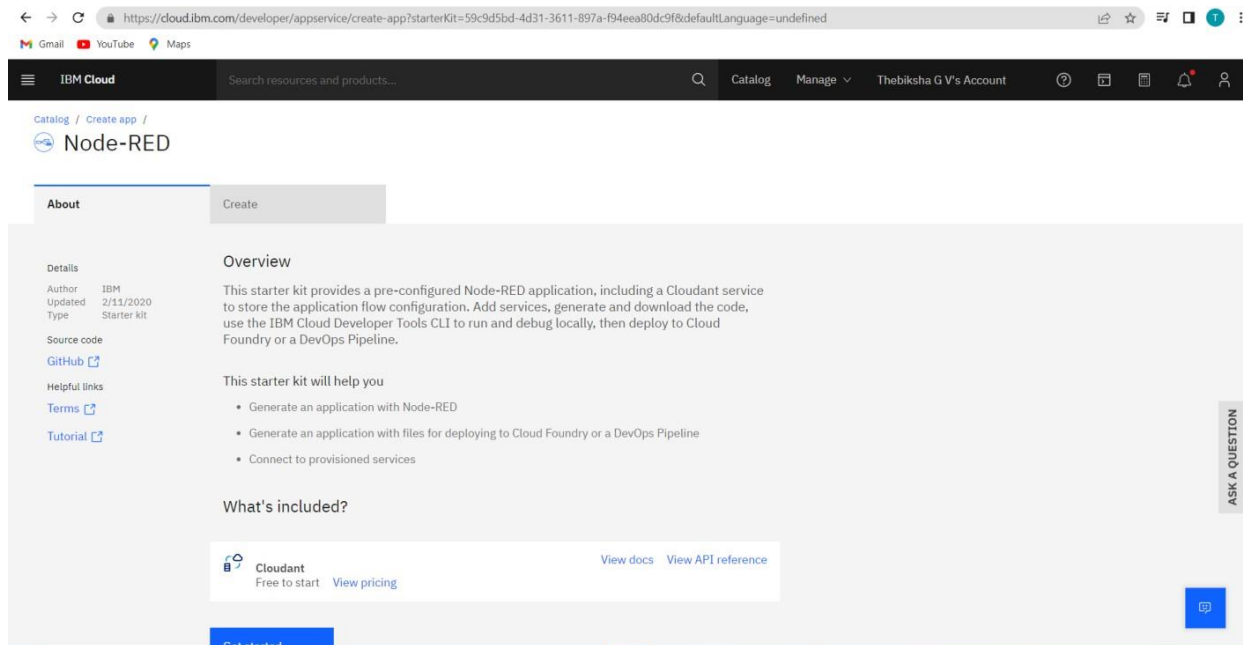
The screenshot shows the IBM Watson IoT Platform dashboard. The "Browse" tab is selected, and the "Add Device" button is visible at the top right. The dashboard displays a table of devices with columns: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. A device with ID 12345 is shown, with status "Disconnected", device type "NodeMCU", and class ID "Device". The device was added on Nov 10, 2022 8:21 PM. The "Device Information" tab is selected, showing details for the device: Device ID (12345), Device Type (NodeMCU), Date Added (Nov 10, 2022 8:21 PM), Added By (thebiksha@gmail.com), and Connection Status (Disconnected).

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Disconnected	NodeMCU	Device	Nov 10, 2022 8:21 PM	

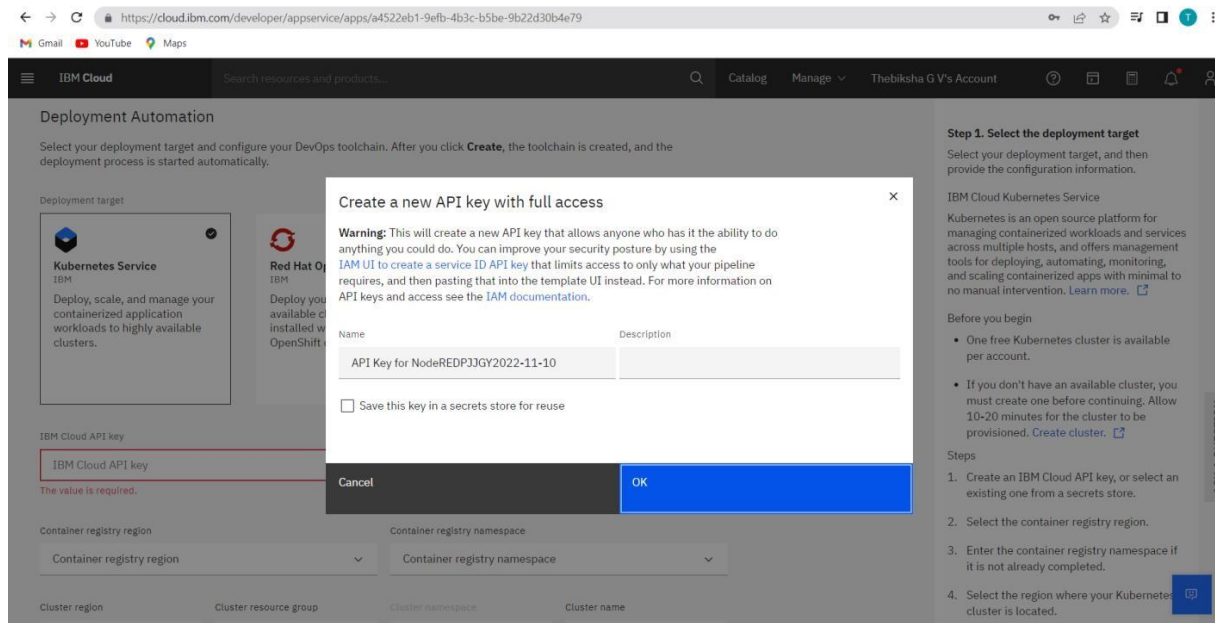
Identity	Device Information	Recent Events	State	Logs
Device ID	12345			
Device Type	NodeMCU			
Date Added	Nov 10, 2022 8:21 PM			
Added By	thebiksha@gmail.com			
Connection Status	Disconnected			

## NODE RED Service:

### To create a Node RED Service:



### Generate your API key:



## Creating Node RED:

Resource list / App details / Node RED PJJGY 2022-11-10 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 11/10/2022

**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.

Checking cache...

**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.

## Click on the App URL after the Deployment Automation:

Resource list / App details / Node RED PJJGY 2022-11-10 Add tags Actions...

**Details**

App URL <https://node-red-pjjgy-2022-11-10.eu-gb.mybluemix.net>

Source <https://us-south.git.cloud.ibm.com/thebiksha/NodeREDPJJGY...>

Resource group Default

Deployment target Node RED PJJGY 2022-11-10

Created 11/10/2022

**Services**

Cloudant

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

Credentials

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

**Deployment Automation**

Name NodeREDPJJGY2022-11-10

Location Dallas

Tool integrations

**Delivery Pipelines**

Name pr-pipeline

Status No stages detected

Name ci-pipeline

Status Success

**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.

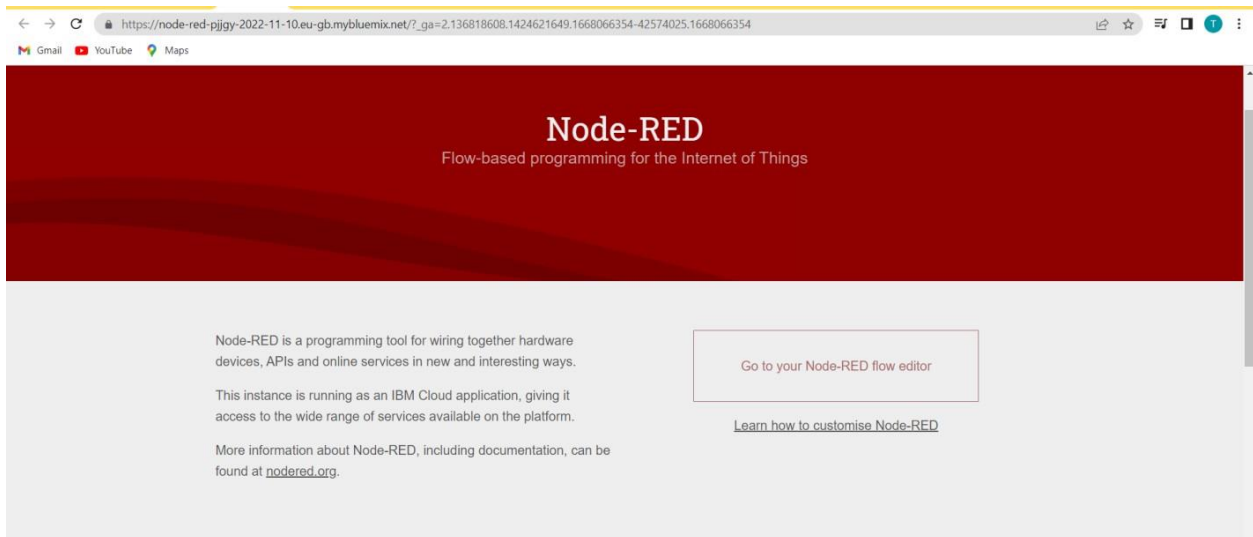
Welcome to your new Node-RED instance on IBM Cloud

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

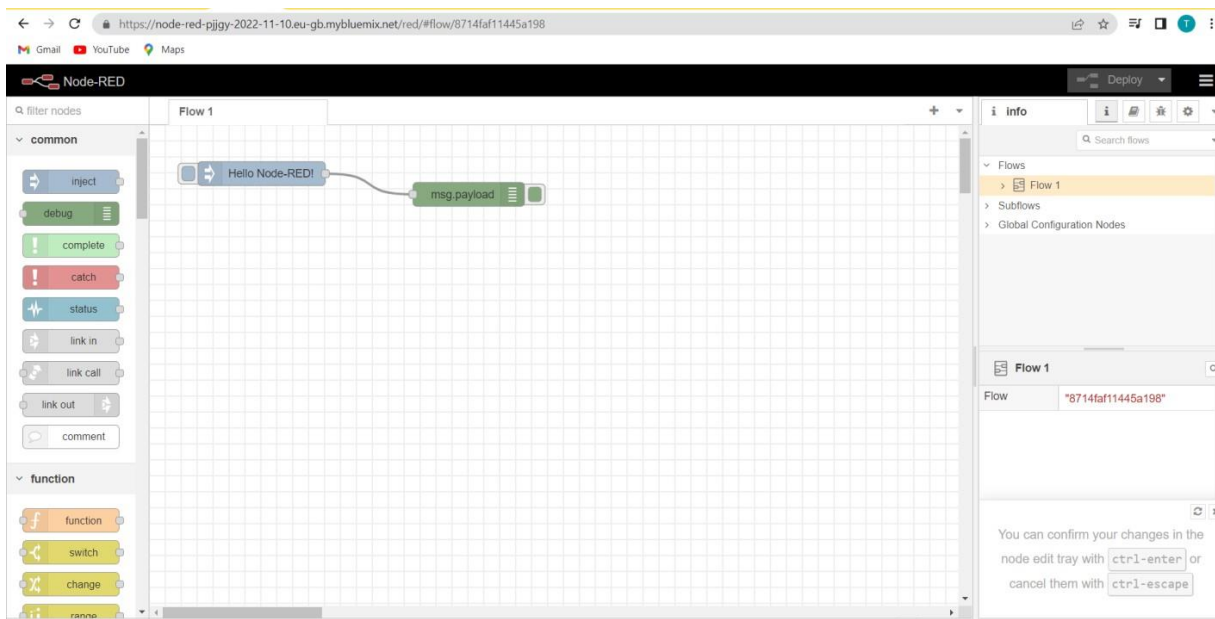
## Successful creation of the Service:



### Customising your instance of Node-RED

This instance of Node-RED is enough to get you started creating flows.

## Node RED Flow Editor:



# Create a Database in Cloudant DB

## Cloudant Database:

← → ↻

https://e8910d10-acc5-4a51-b255-54a402c58c7d-bluemix.cloudant.com/dashboard.html

🔗 ☆ 📄 🔔

Gmail YouTube Maps

Databases

Database name ▾

Create Database

{ } JSON

📄 🔔

Your Databases

Name	Size	# of Docs	Partitioned	Actions
noderedpijgy20221110	16.2 KB	4	No	<div>↔ ↕ 📄</div>

Showing 1–1 of 1 databases.

Databases per page 20 ▾

« 1

## Create a document

← → ↻

https://e8910d10-acc5-4a51-b255-54a402c58c7d-bluemix.cloudant.com/dashboard.html#database/cloudant/\_all\_docs

🔗 ☆ 📄 🔔

Gmail YouTube Maps

cloudant

Document ID ▾

Options

{ } JSON

📄 🔔

All Documents +

Query

Permissions

Changes

Design Documents +

Database created successfully

📄

No Documents Found

Showing 0 documents.

Documents per page: 20 ▾

◀ ▶

## Integrating Python to Cloudant DB:

← → ↺

https://cloud.ibm.com/apidocs/cloudant:code=python

Gmail YouTube Maps

IBM

Cloud Products Solutions Pricing Docs Support Explore more

Cloudant

Overview

Introduction

Endpoint URLs

Authentication

Auditing

Event tracking

Error handling

Additional headers

Rate limits

Related APIs

Logging

Methods

Server

Databases

Documents

IBM Cloud API Docs / Cloudant

## Introduction

Last updated: 2022-10-24

IBM® Cloudant® for IBM Cloud® is a document-oriented database as a service (DBaaS). It stores data as documents in JSON format. It is built with scalability, high availability, and durability in mind. It comes with a wide variety of indexing options that include MapReduce, IBM Cloudant Query, full-text indexing, and geospatial indexing. The replication capabilities make it easy to keep data in sync between database clusters, desktop PCs, and mobile devices.

Detailed documentation is also available such as a [Getting started tutorial](#), [API overview](#), [documentation, tutorials, and guides](#).

This documentation describes the Python SDK and examples. To see usage information and examples in your preferred SDK, select the language tab in the right pane.

## Endpoint URLs

The IBM Cloudant API uses an instance-specific endpoint URL for all regions. You can find your external endpoint by following these steps:

1. Go to the IBM Cloud dashboard and open an instance.
2. Click the Service credentials tab.
3. Click the chevron next to the service credentials to open the credentials pane.
4. Copy the value from the `host` field and prefix it with the `https://` protocol. This value is the external endpoint.

Curl Java Node Python Go

The code examples on this tab use the IBM Cloudant SDK for Python.

Installation

```
pip3 install ibmcloudant
```

GitHub

<https://github.com/ibm/cloudant-python-sdk>