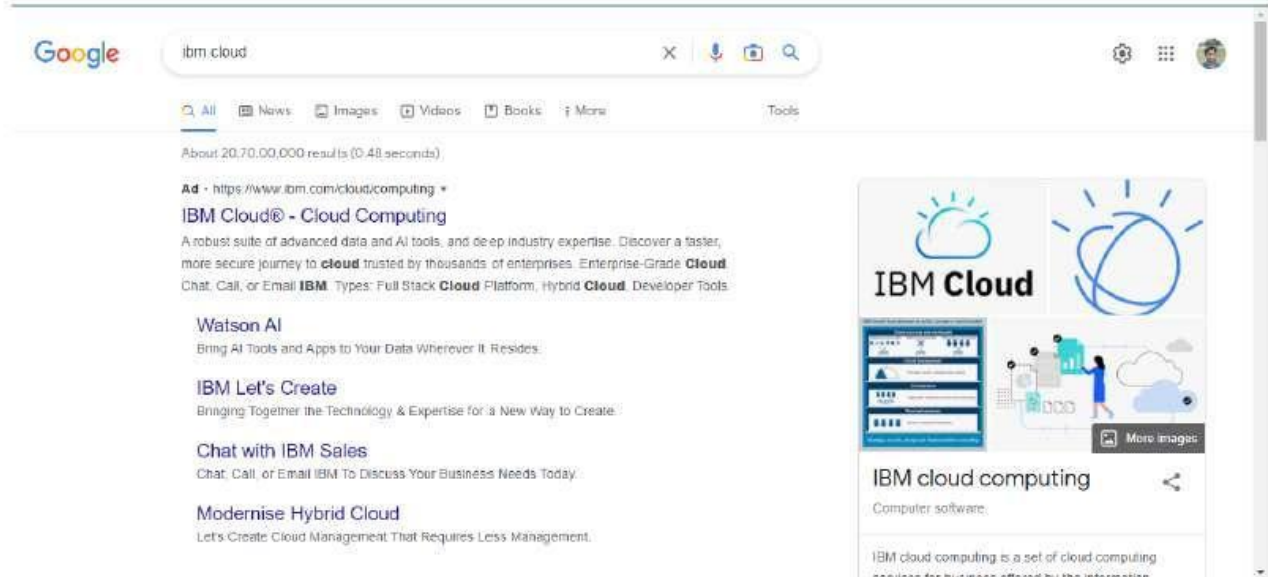


Create and Configure IBM Cloud Services

TEAM ID: PNT2022TMID34341

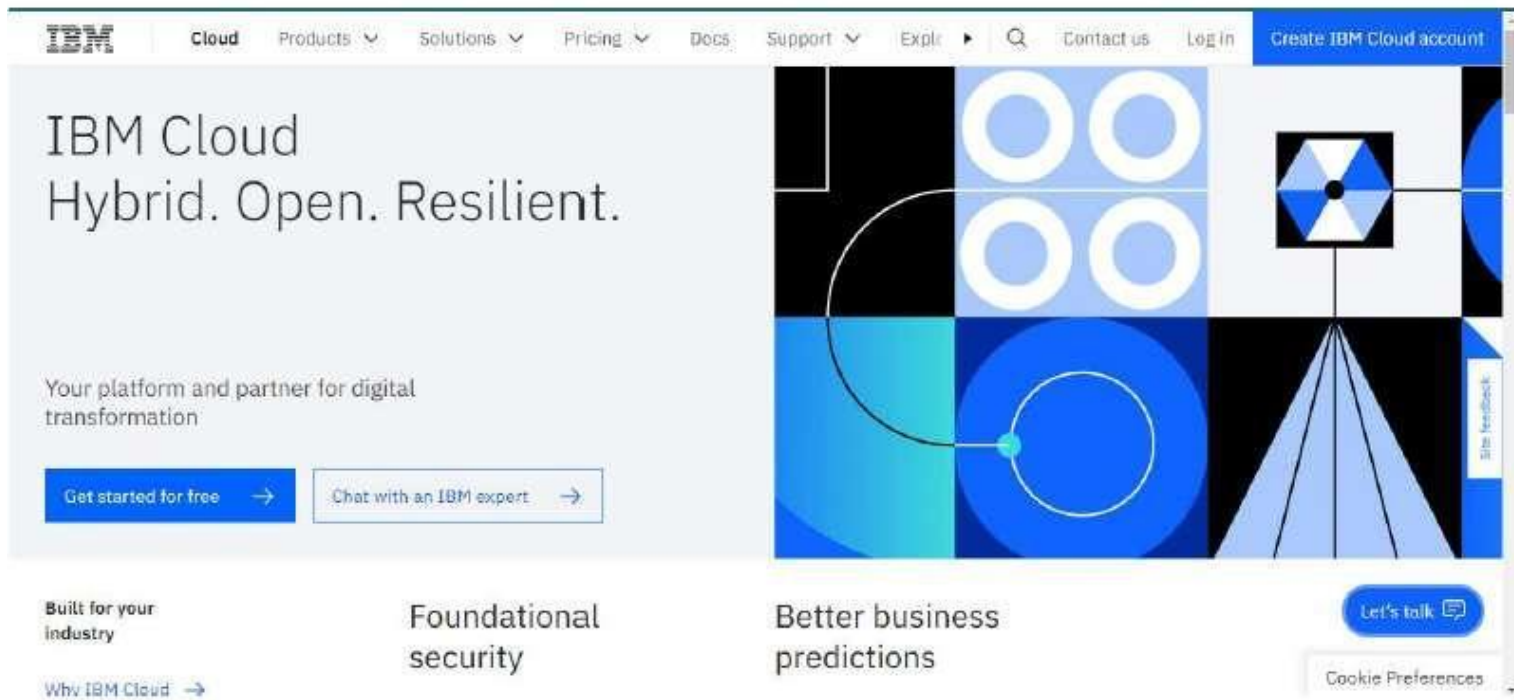
STEP 1:

Type IBM Cloud in Google and click on the first link.



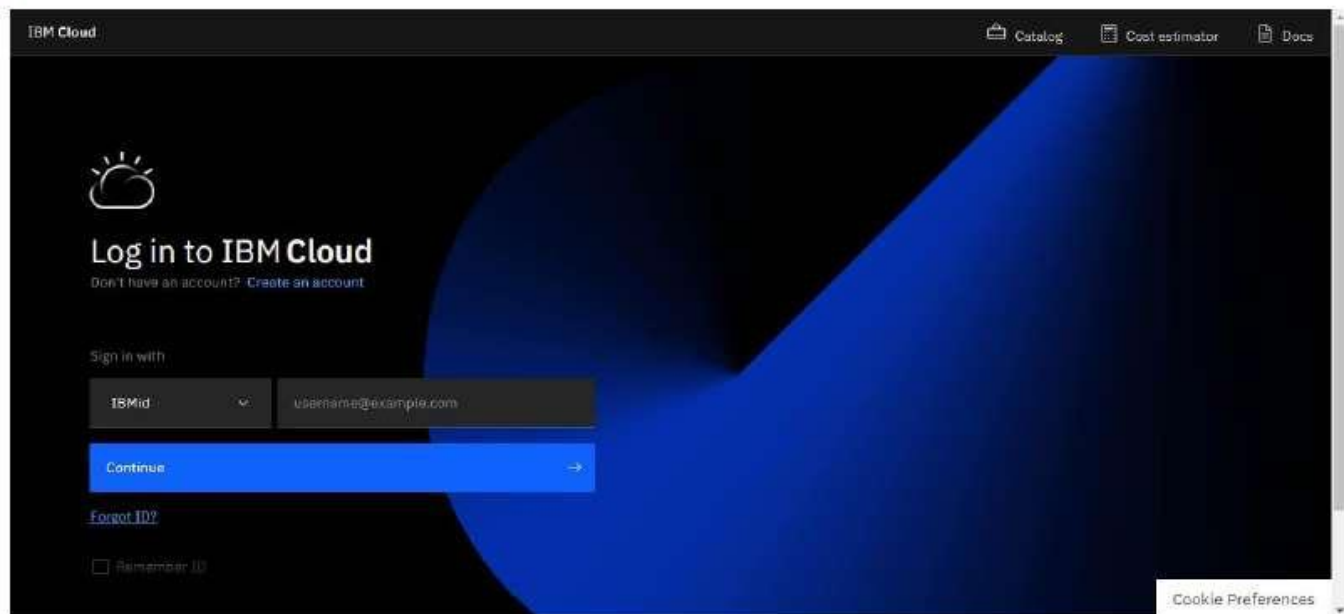
STEP 2:

Click on create IBM Cloud Account Now and enter the details.



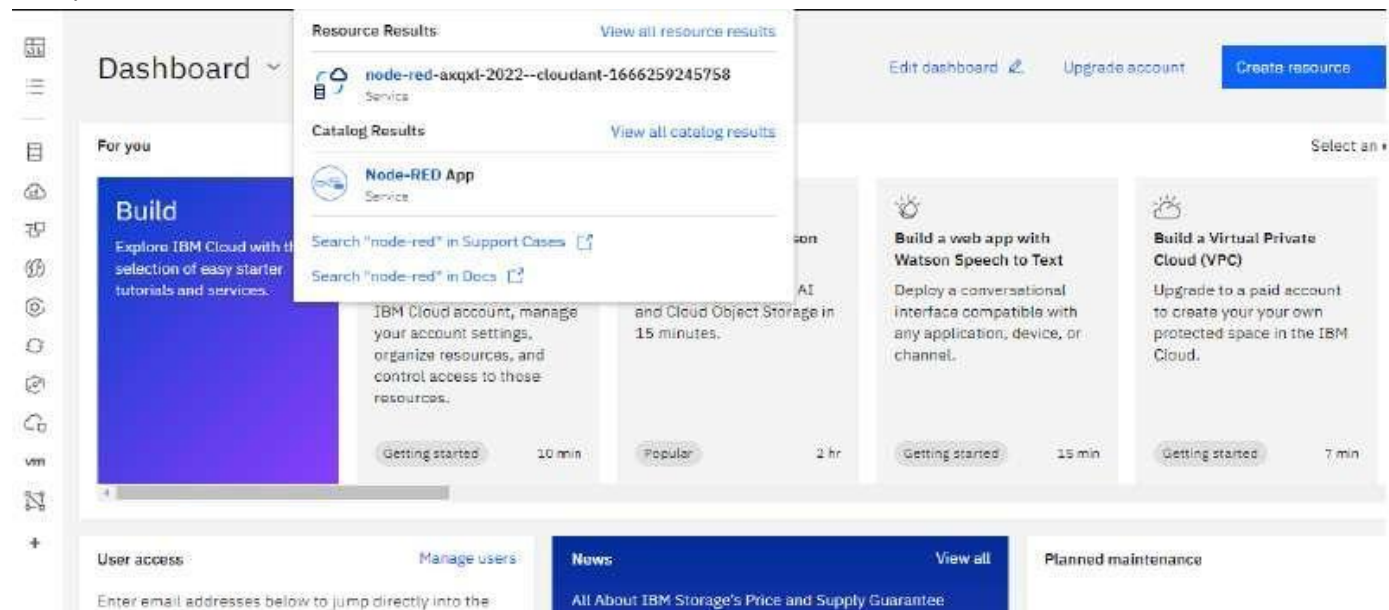
STEP 3:

You will get the email with your password. Type your mail Id and the password then click on the login button.



STEP 4:

Now you are in Dashboard. Now search Node-Red and click on it.



STEP 5:

Now click on Get Started. After choose node-red-xxxxxxx in pricing plan or you can choose Lite. Then click on create option.

Examples; env:dev, version:1

Platform

☒ Node.js

Service details

Cloudant ★

★ = 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.

Region Frankfurt Resource group Default

Pricing plan

node-red-axqxl-2022--cloudant-1666259245758

[Pricing details](#) [Terms](#)

Cancel Create

STEP 6:

Now you will be redirected to your node-red app page.

Resource list / App details /

Node RED CBGMG 2022-11-11

[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 | 11/11/2022 |

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 Delivers Pipeline, GitLab, and more.

[Deploy your app](#)

STEP 7:

Now click Deploy your app option.

Resource list / App details /


Node RED CBGMG 2022-11-11


Select the deployment target Configure the DevOps toolchain


Deployment Automation


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.



Getting started with apps

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 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 created.

STEP 8:

Now choose Kubernetes Service and below you will see IBM Cloud API Key there click on New and then click OK. Your API Key will be generated.

IBM Cloud API key

.....



Note: Your cluster status must be available before you can select it.

Container registry region

Container registry namespace

Cluster region


Cluster resource group

Cluster namespace

Cluster name

Create new

Deployment type

 **Helm**

4. Select the region where your Kubernetes cluster is located.

5. Select the resource group, cluster namespace, and the cluster name.


6. The deployment type of Helm is set for you.

7. Click Next.

<https://cloud.ibm.com/container-kubernetes/launch>

STEP 9:

Now click on Create New below the cluster name. You will be redirected to new page. In new page, choose pricing plan as Free and then click on Create.



Kubernetes cluster

Author: IBM • Docs • API docs

[Create](#)
[About](#)

Deliver your apps quicker across clouds with **Red Hat OpenShift**

Plan details

Learn more about the differences between plans in our docs.

Pricing plan

Free

Kubernetes version

Summary

Kubernetes cluster

Worker node

Free - 2 vCPUs 4GB RAM
Virtual - shared
Ubuntu 18

Total estimated cost

Additional charges for networking might apply.
Actual monthly total will vary with use.
Estimate does not include costs for


[Create](#)

[Add to estimate](#)

STEP 10:

For cluster creation you need to wait for 20 minutes. After creation come back to node red app tab.

Clusters /



mycluster-free

Normal Expires in 30 days Add tags

[Help](#)
[Kubernetes dashboard](#)

Actions...

Overview

- Worker nodes
- Worker pools
- DevOps New

Expires in 30 days:
Be sure to back up your data, your cluster will be deleted in 30 days. To access the full capabilities of the service, try out a [standard cluster](#).

Node status

1 of 1

Normal

[Details](#)

Add-on status

0 of 0

Normal

[Details](#)

Master status

Normal

[Docs](#)

Ingress status

Unknown

[Docs](#)

Details

| | | | |
|----------------|----------------|----------------------------|----------|
| Cluster ID | Version | Infrastructure | Zones |
| cdeth3gE8uv95e | 1.24.7_1542 | Classic | Milan 01 |
| Created | Resource group | Image security enforcement | |

Help

- Log in to your cluster
- Deploy your app
- Expose your app
- Add storage to your app
- Connect integrations
- Install add-ons
- Troubleshoot

STEP 11:

In cluster name, choose mycluster-free and click on Next.

IBM Cloud API key

Container registry region: Dallas

Container registry namespace: Container registry namespace

Cluster region: Frankfurt

Cluster resource group: Default

Cluster namespace: default

Cluster name: mycluster-free

Deployment type: Helm

Buttons: Cancel, Next

4. Select the region where your Kubernetes cluster is located.
5. Select the resource group, cluster namespace, and the cluster name.
6. The deployment type of Helm is selected for you.
7. Click **Next**.

STEP 12:
Then click on Create.

Resource list / App details / Node RED CBGMG 2022-11-11

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: NodeREDCBGMG2022-11-11

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

Region: Dallas

Buttons: Back, Create

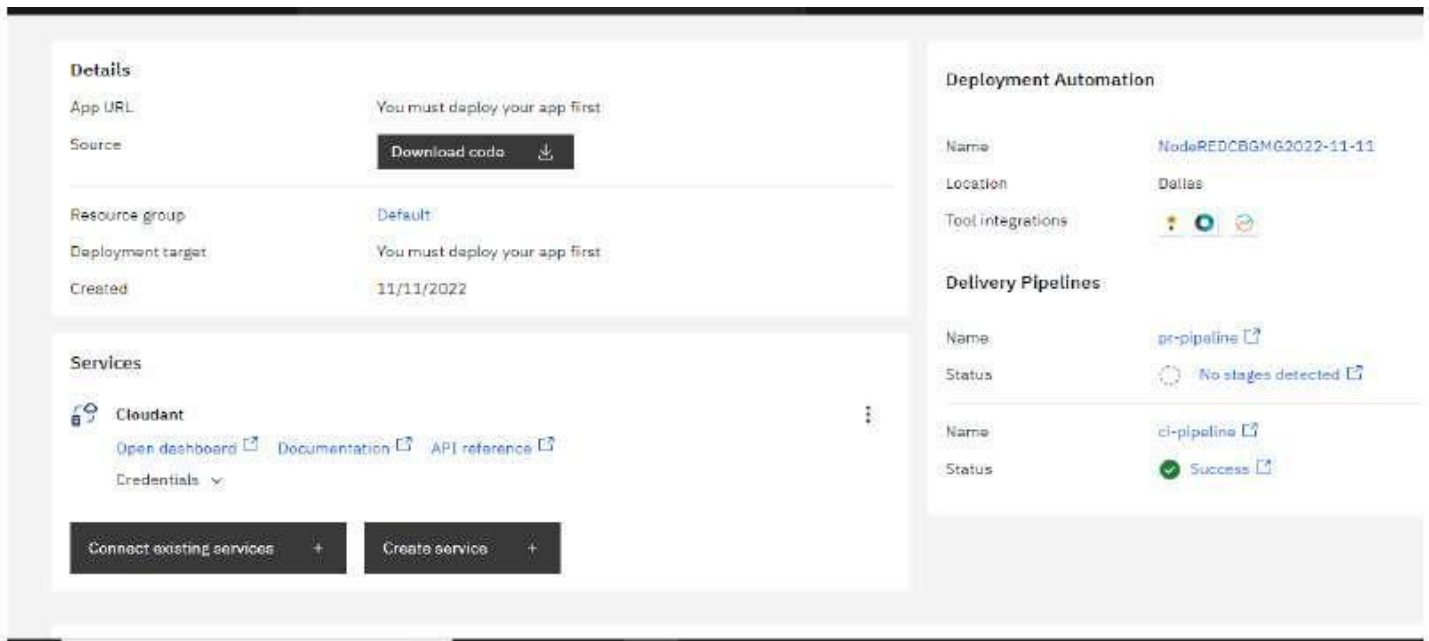
Getting started with apps

Step 2. Configure the DevOps tool

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

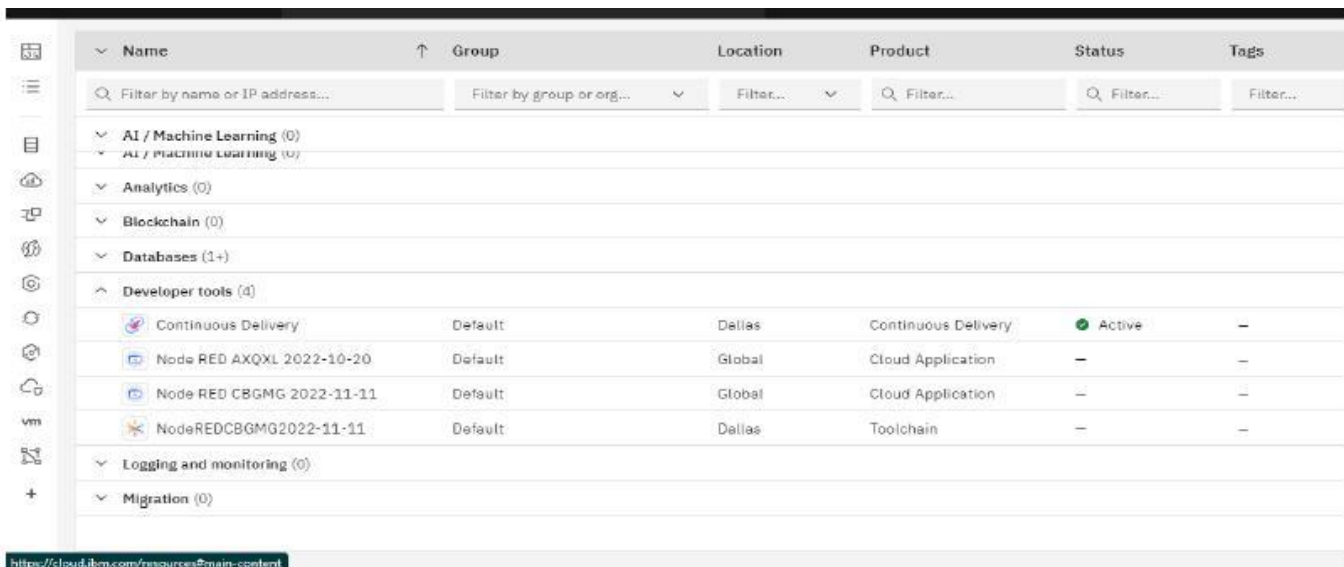
1. Provide a name for your toolchain.
2. Select the region where your toolchain is created.
3. Select the resource group that you want to use for your new toolchain. [Learn more](#)
4. After you're finished with your configuration, click **Create**.

STEP 13:
You need to wait until ci-pipeline status success.



STEP 14:

Now go to Dashboard, in sidebar menu choose Resource list > Developer Tools. Click on your Node-red (Cloud Application)



STEP 15:

Now you will be redirected your Node-red app there you can see your App url and Source. To open Node-red editor copy the app url and paste in new tab.

Resource list / App details /

Node RED CBGMG 2022-11-11 [Add tags](#)

[Actions...](#)

Details

| | |
|-------------------|---|
| App URL | http://169.150.130.130/ |
| Source | https://us-south.git.cloud.ibm.com/312819106035/NodeREDCBGMG2022-11-11 |
| Resource group | Default |
| Deployment target | mycluster-free |
| Created | 11/11/2022 |

Services

Cloudant

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

[Credentials](#)

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

Deployment Automation

| | |
|-------------------|------------------------|
| Name | NodeREDCBGMG2022-11-11 |
| Location | Dallas |
| Tool integrations | |

Delivery Pipelines

| | |
|--------|--------------------|
| Name | pr-pipeline |
| Status | No stages detected |
| Name | ci-pipeline |
| Status | Success |

STEP 16:

Click on Next and then choose Not Recommended and click on next and then click finish. Then click on go to Node-RED flow editor. Now start work on your flows.

← → 🔍 Not secure | 169.150.130.130

Node-RED on IBM Cloud

Node-RED

Flow-based programming for the Internet of Things

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.

More information about Node-RED, including documentation, can be found at nodered.org

[Go to your Node-RED flow editor](#)

[Learn how to customise Node-RED](#)