

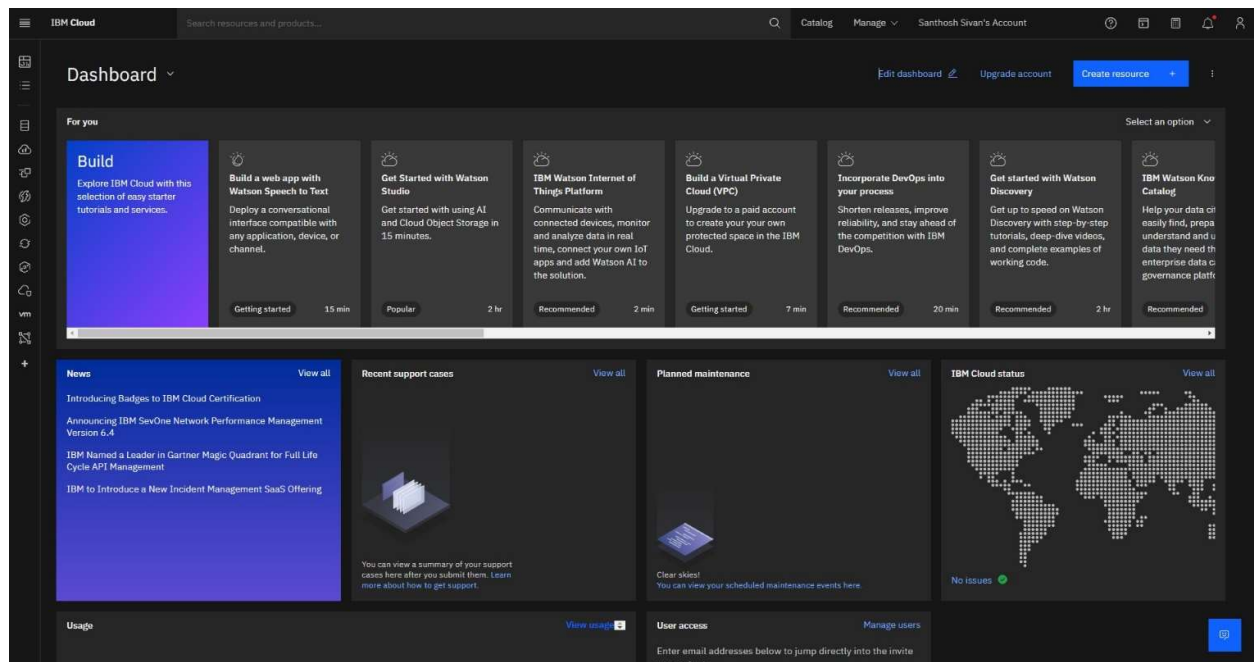
# DEPLOYMENT OF APP IN IBM CLOUD

## Deploy in Kubernetes Cluster

<u>TEAM ID</u>	<u>PNT2022TMID22972</u>
<u>PROJECT NAME</u>	Skill and Job Recommender

### Create a Kubernetes cluster

- Sign in to your IBM cloud dashboard .
- Open **IBM Kubernetes Service**.



- Click **Create Cluster**.

The screenshot displays the IBM Cloud Kubernetes dashboard. The left sidebar contains navigation links for Kubernetes, Clusters, Reservations, Helm catalog, and Container Registry. The main content area features a large header with the text "Deploy, scale, and manage your containerized application workloads" and a prominent blue "Create a cluster" button. Below this, the "Cluster capabilities" section highlights three features: Clusters (Automate deployments and manage your containerized apps in a native Kubernetes experience), Image registry (Safely store and share your Docker images with users in your IBM Cloud account), and Vulnerability Advisor (Use status reports to protect your workloads and stop non-secure images from running). The "Daily use" section provides instructions on how to create a cluster using the CLI, including a code snippet: `ibmcloud ks cluster create --location dal10 --public-vlan <public_vlan_id> --private-vlan <private_vlan_id> --machine-type b2c.4x16 --workers 3 --name <cluster_name>`. It also includes a section for adding a namespace to the registry with the command: `ibmcloud cr namespace-add <namespace_name>`.

- Select the **Region** where you want to deploy the cluster, type in a **name** for your cluster ,then click **Create Cluster**.
- Select the appropriate cluster type depending on your account.
- It takes some time for the cluster to get ready (around 30 minutes).

The screenshot shows the IBM Cloud console interface for creating a Kubernetes cluster. The page is titled "Kubernetes cluster" and includes a search bar at the top. The main content area is divided into sections: "Plan details" with a "Pricing plan" dropdown set to "Free", "Kubernetes version" with a dropdown set to "1.24.0", and "Resource details" with fields for "Cluster name" (mycluster-free) and "Resource group" (Default). A right-hand sidebar shows a "Summary" section with a "Worker node" configuration (Free - 2 vCPUs, 4GB RAM, Virtual - shared, Ubuntu 18) and a "Total estimated cost" section showing "Free/mo". A blue "Create" button is visible at the bottom right of the main content area.

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### Kubernetes cluster

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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

Select the Kubernetes platform version for your cluster. For more information about versions, including links to the container platform community release notes, see the docs.

1.24.0

#### Resource details

Cluster name

mycluster-free

Resource group

Default

#### Summary

United States

##### Kubernetes cluster

Worker node Free

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

#### Total estimated cost Free/mo

Additional charges for networking and bandwidth might apply.  
Actual monthly total will vary with tiered pricing.  
Estimate does not include costs for integrations.

Create

Add to estimate

- Once the cluster is ready, click on your cluster's name and you will be redirected to a new page with information about your cluster and worker node.

The screenshot displays the IBM Cloud 'mycluster-free' dashboard. At the top, a navigation bar includes the IBM Cloud logo, a search bar, and links for Catalog, Manage, and the user's account (Santosh Sivan). The main header shows the cluster name 'mycluster-free' with a status indicator 'Preparing master, workers...' and a warning 'Expires in 30 days'. A left sidebar lists navigation options: Overview (selected), Worker nodes, Worker pools, and DevOps (marked as 'New'). The main content area is divided into several sections: a top warning banner about the 30-day expiration; a row of four status cards (Node status: 1 of 1 Pending, Add-on status: Error Unknown, Master status: Unknown, Ingress status: Pending); a 'Details' section with metadata like Cluster ID, Version (1.24.8\_1544), Infrastructure (Classic), Zones (Milan 01), and creation time; a 'Node health' section with a bar chart showing 1 total node and a 100% pending status; and a 'Networking' section with options for public and private endpoints. A right sidebar contains a 'Help' menu with links for logging in, deploying, exposing, and adding storage to an app, as well as integration, add-ons, and troubleshooting links.

- Click on the **Worker Nodes** tab to note the cluster's Public IP.

The screenshot displays the IBM Cloud Clusters management interface. The left sidebar shows navigation options: Overview, Worker nodes (selected), Worker pools, and DevOps. The main content area shows the 'mycluster-free' cluster status as 'Preparing master, workers...' with a 30-day expiration timer. Below this, the 'Worker nodes' tab is active, displaying a table with one worker node.

Name	Status	Worker pool	Zone	Private IP	Public IP	Version
00000001	Provision pending - Preparing to provision worker	default	Milan 01		1.24.7.1543	

Below the table, details for the selected worker node are shown:

- ID: kube-cd6w6f05i2vtac000-myclusterfr-default-00000001
- Status: Preparing to provision worker
- Flavor: Free - 2 vCPUs 4GB RAM
- Private VLAN: 2218181
- Public VLAN: 2218179

The bottom of the table shows 'Items per page: 25' and '1-1 of 1 item'.

On the right side, a 'Help' sidebar is visible with links: Log in to your cluster, Deploy your app, Expose your app, Add storage to your app, Connect integrations, Install add-ons, and Troubleshoot.