**Create AKS Using GUI**

Create Master Node

Go to the Azure Portal and search for Kubernetes Service in the search bar and click on it.

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Once you reach the Kubernetes Services page, click on Create and then Create Kubernetes Cluster.

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Once you click on add Kubernetes cluster, the next step is to update the specifications of the cluster. So, click on Basics.

* Give the Resource Group name as per your requirement. You can create a new one or choose an existing one.
* Specify a name for your cluster in the Kubernetes cluster name field.
* Choose a Region in which you want to create your AKS cluster. In the specified region, our master node will be created.
* Based on the region select the availability zones.
* Select the Kubernetes Version. Here I am choosing the default, i.e., 1.25.6

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Next, comes the size and count of the nodes of the AKS cluster that we are going to create. These can be updated as per the requirements.

* Select the Node Size. We are choosing Standard Ds2 v2 which has the following configuration: 2 vCPUs, 7 GiB RAM, 8 Data Disks, 14 GiB Temp Storage.
* Give the Node Count value which specifies how many Worker Nodes we want.

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Next comes the Node Pools, follow the steps given below:

* In Azure Kubernetes Service (AKS), nodes of the same configuration are grouped together into node pools. Node pools contain the underlying VMs that run your applications.
* The Virtual nodes are a type of Serverless container instance. As we want to create the Worker nodes as Virtual Machines, so we won’t enable this option.

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Next is to click on Access.  
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Next is the Networking part.

* Select the **Network Configuration.**I will be choosing**Azure CNI**
* The **Cluster Subnet**option is to choose which Subnet you want the Nodes and Containers to be placed in.
* **Kubernetes service address range**is the CIDR notation IP range from which to assign server cluster IPs.
* **Docker Bridge address**is the IP address assigned to Docker Bridge. The Bridge Network is for the container-to-container communication.
* In a **Private Cluster**, the communication between the nodes and the API server happens internally.
* So, I am **Disabling**the Private Cluster.
* Keep the Network Policy to **Azure**.
* Do not enable**HTTP**application routing.

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Next is the Integration.

Here we keep all settings to default and move to the next step.

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The final step is to click on Review & Create. If you click on Create, it will first Validate your AKS Cluster and if everything is fine then the cluster will be created.

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You can see that our new Azure Kubernetes cluster has been successfully created.

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To view the cluster, go to Kubernetes services and there you can access the AKS cluster.

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Connect to the Azure Kubernetes Cluster

There are two ways to connect the AKS cluster:

I) Using Cloud Shell

II) Using Azure CLI

Cloud Shell: we can see the option on top of our screen.

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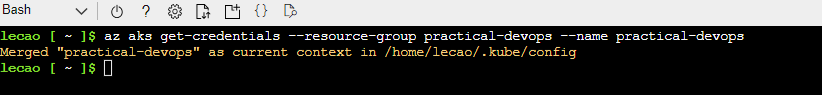
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Run the following command, on the Azure bash shell:

az aks get-credentials --resource-group practical-devops --name practical-devops



To get the Nodes running in our cluster, run the following command, and you will see all the nodes in your AKS cluster.

kubectl get nodes

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Azure CLI

Login to your commands

az login

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Download cluster credentials .

az aks get-credentials --resource-group practical-devops --name practical-devops

  
Deploy app to the Azure Kubernetes Cluster

Refer to Refer to Application\_deployed\_EKS.pdf file

(We don’t need to set EBS driver)