

## Placement Empowerment Program Cloud Computing and DevOps Centre

Set Up a Private Network in the Cloud  
Create a Virtual Private Cloud (VPC) with subnets for your instances. Configure routing for internal communication between subnets.

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# Step 1: Create a Virtual Network (VNet)

Select your Subscription and Resource Group (or create a new one).

Enter a Name for your Virtual Network (e.g., MyPrivateVNet).

Choose a Region (e.g., East US).

Under IPv4 address space, enter a CIDR block (e.g., 10.0.0.0/16).

Click Next: Security (keep default security settings).

Click Next: Tags (optional).

Click Next: Review + Create, then click Create.

## Step 2:

### Create Subnets

Once your VNet is created, go to Virtual Networks and select your newly created VNet (MyPrivateVNet).

Click on Subnets in the left menu.

Click + Subnet to create a new subnet.

Enter a Subnet Name (e.g., SubnetA).

Enter the Subnet Address Range (e.g., 10.0.1.0/24).

Keep the default settings for security and NAT Gateway.

Click Save.

Repeat steps 3-7 to create another subnet (e.g., SubnetB with 10.0.2.0/24).

## Step 3:

### Configure Routing for Internal Communication

By default, subnets in a VNet can communicate with each other. However, if you want to customize routing, follow these steps:

#### Create a Route Table

Go to Azure Portal and search for Route Tables.

Click Create.

Select your Subscription and Resource Group.

Enter a Name (e.g., PrivateRouteTable).

Select the Region (same as your VNet).

Click Review + Create, then Create.

#### Associate Route Table with Subnets

Open the newly created Route Table (PrivateRouteTable).

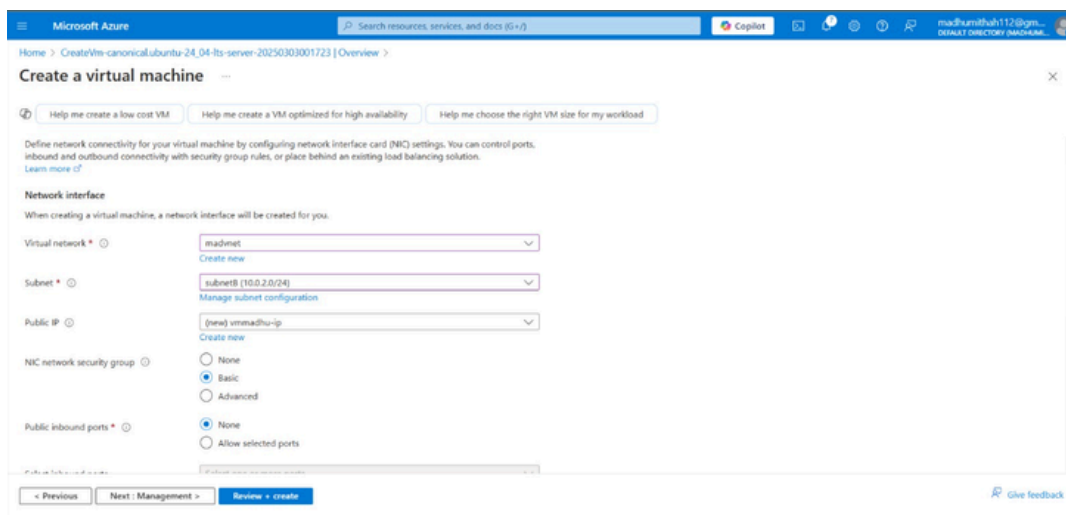
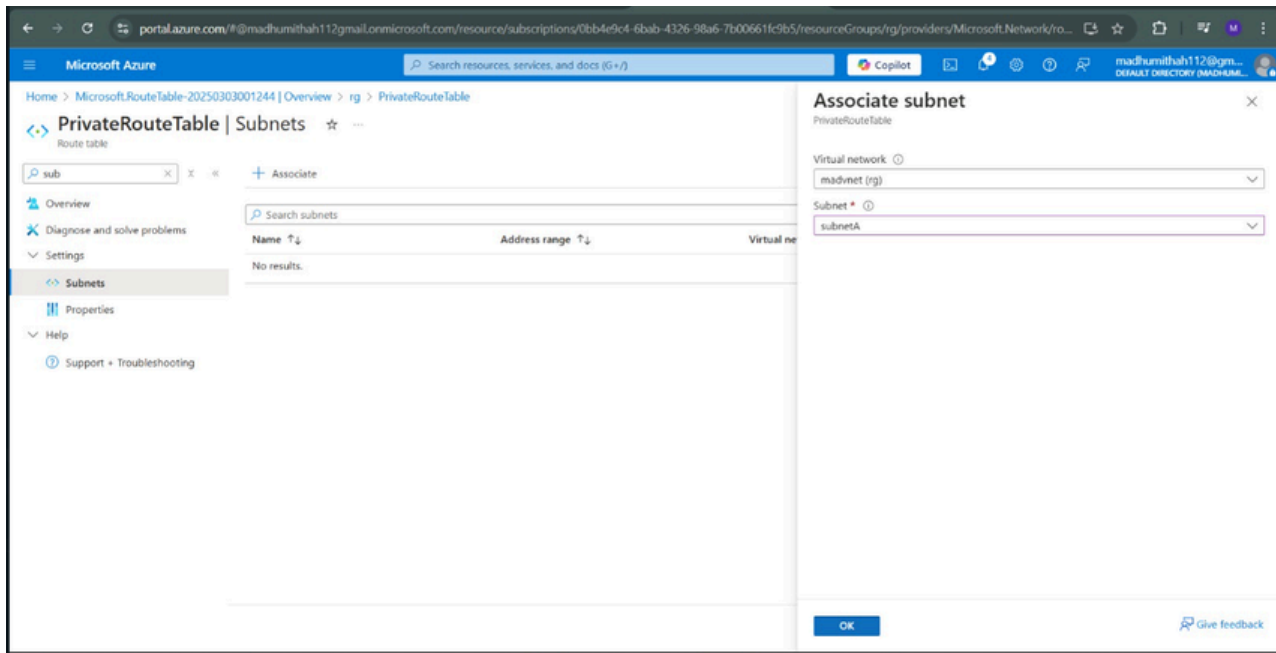
Click Subnets in the left panel.

Click + Associate.

Select your Virtual Network (MyPrivateVNet).

Choose SubnetA and click OK.

Repeat the process to associate SubnetB.



## Step 4: Deploy Virtual Machines in the Subnets

Go to Azure Portal, search for Virtual Machines, and click Create.

Choose the Resource Group and select a Region (same as VNet).

Set up VM configurations (name, image, size).

Under Networking, select:

Virtual Network: MyPrivateVNet

Subnet: SubnetA (for first VM)

Disable Public IP (for private network access only).

Click Review + Create and then Create.

Repeat the steps to create another VM in SubnetB.