

# Implement Hub and Spoke topology

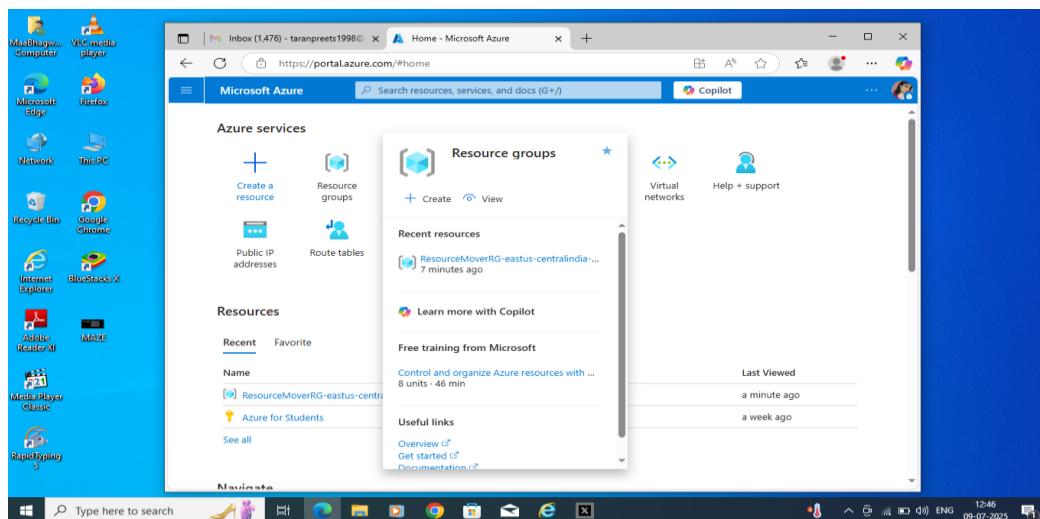
## STEP 1.

### Azure Portal Homepage

1. Open your browser and go to: <https://portal.azure.com>
2. After logging in, on the **Home** screen:

Click on "**Resource groups**" under **Azure services**

Or click "**Create a resource**" → then search and select **Resource group**



## STEP 2

### Create Resource Group – Hub

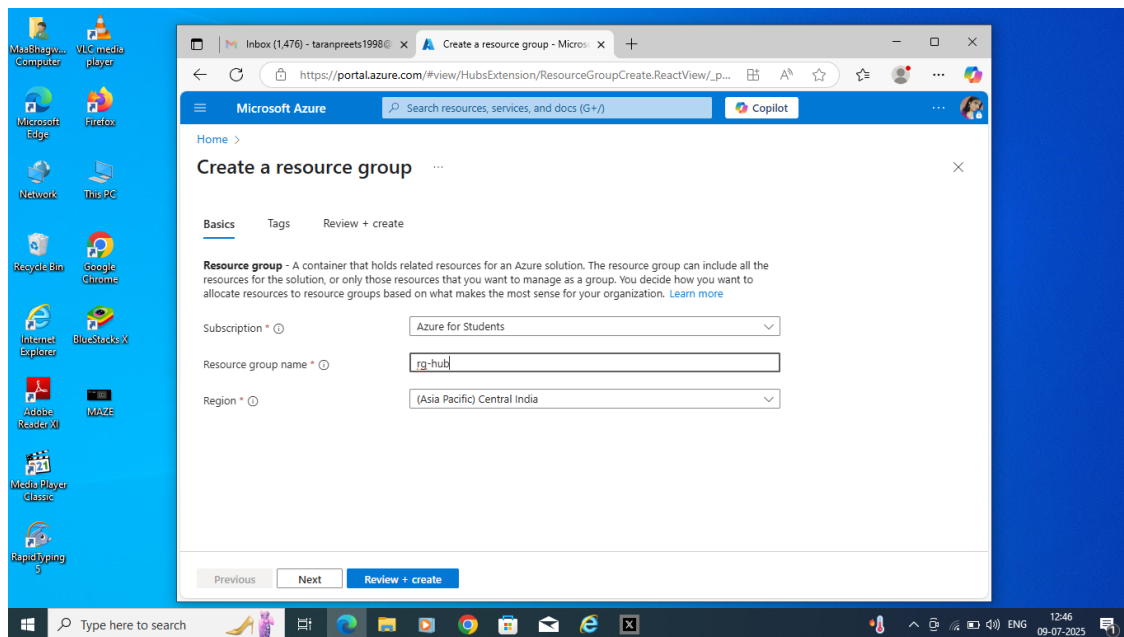
3. On the **Create a resource group** page:

**Subscription:** Select your subscription (e.g., "Azure for Students")

**Resource group name:** Enter rg-hub

**Region:** Select (Asia Pacific) Central India

4. Click **Review + Create** → then click **Create**



## STEP 3

### Create Resource Group - Spoke

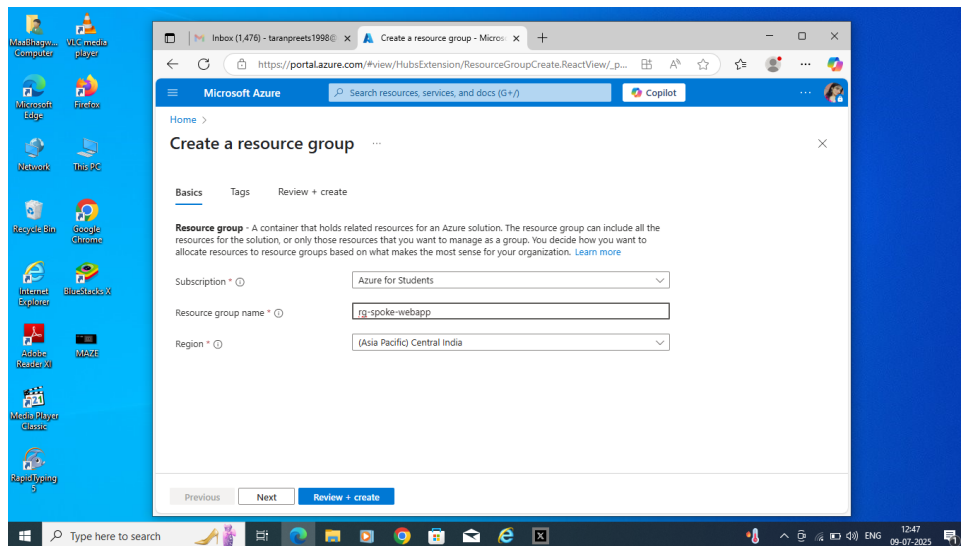
5. Repeat the steps to create a second resource group:

**Resource group name:** rg-spoke-webapp

Keep the same region (Asia Pacific) Central India

6. Again, click **Review + Create** → **Create**

You can do the same for another resource group named rg-spoke-storage if needed



## STEP 4

### Resource Groups List View

7. After creation, navigate to:

**Home → Resource groups**

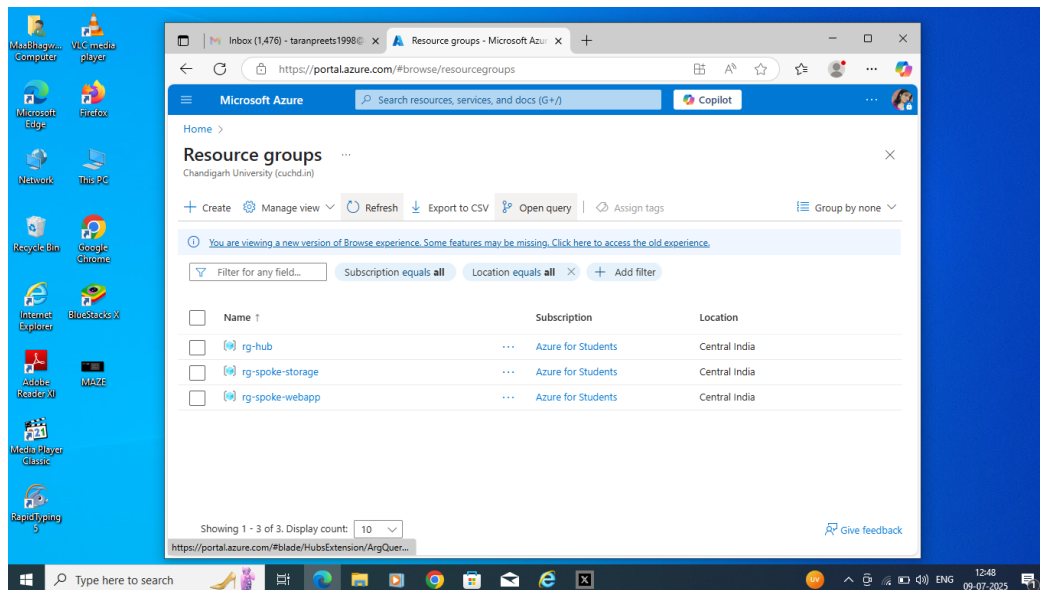
8. You will now see the list:

rg-hub

rg-spoke-webapp

rg-spoke-storage

All under "Azure for Students" subscription and "Central India" region



These resource groups are now ready for you to create:

Hub VNet and central components in rg-hub

Web App in rg-spoke-webapp

storage Account in rg-spoke-storage

**THEN    NEXT**

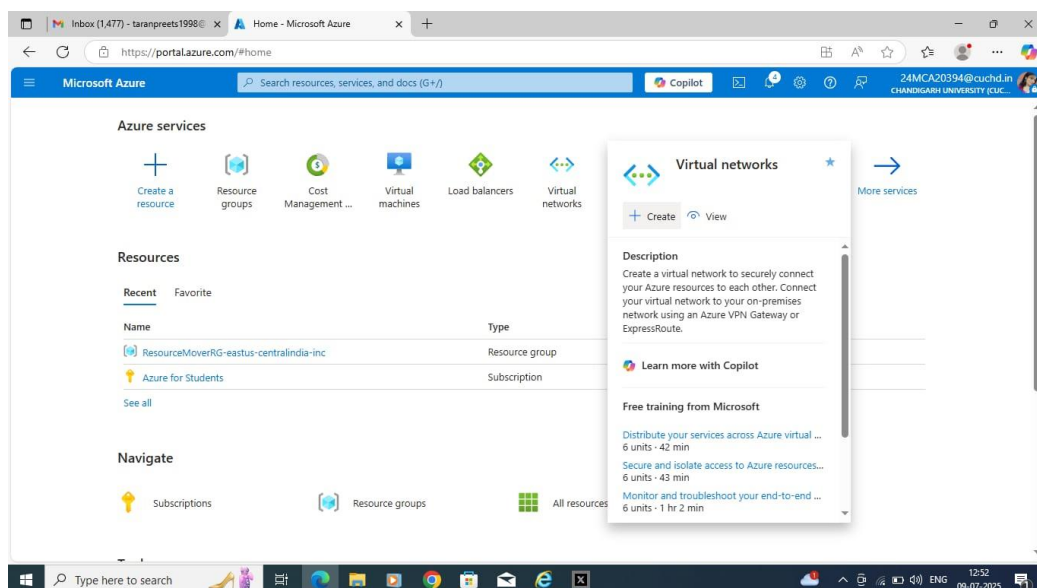
## Steps to Create Virtual Networks (VNETs) in Azure

### Navigate to Virtual Networks

1. Go to <https://portal.azure.com>
2. On the Azure Home page:

Click on **Virtual networks** under **Azure services**

Then click **+ Create** to start creating a new virtual network



## Create Virtual Network – Hub VNet

3. In the **Create virtual network** form:

**Subscription:** Select Azure for Students

**Resource group:** Select rg-hub

**Virtual network name:** Enter vnet-hub

**Region:** Select (Asia Pacific) Central India

4. Click **Review + create**, then click **Create**

The screenshot shows the 'Create virtual network' form in the Microsoft Azure portal. The form is titled 'Create virtual network' and has tabs for 'Basics', 'Security', 'IP addresses', 'Tags', and 'Review + create'. The 'Basics' tab is selected. The form contains the following fields:

- Subscription \***: A dropdown menu with 'Azure for Students' selected.
- Resource group \***: A dropdown menu with 'rg-hub' selected. Below the dropdown is a link that says 'Create new'.
- Instance details**:
  - Virtual network name \***: A text input field with 'Vnet-Hub' entered.
  - Region \***: A dropdown menu with '(Asia Pacific) Central India' selected. Below the dropdown is a link that says 'Deploy to an Azure Extended Zone'.

At the bottom of the form, there are three buttons: 'Previous', 'Next', and 'Review + create'. The 'Review + create' button is highlighted in blue. In the top right corner of the form, there is a 'Give feedback' link.

## Create Virtual Network – Spoke1 VNet

5. Repeat the same steps:

**Subscription:** Azure for Students

**Resource group:** rg-spoke-webapp

**Virtual network name:** vnet-spoke1

**Region:** Central India

6. Click **Review + create**, then **Create**

The screenshot shows the Microsoft Azure portal interface for creating a virtual network. The browser address bar displays <https://portal.azure.com/#create/Microsoft.VirtualNetwork>. The page title is "Create virtual network". The "Basics" tab is active, showing the following configuration:

- Subscription \***: Azure for Students
- Resource group \***: rg-spoke-webapp (with a "Create new" link below it)
- Instance details**
  - Virtual network name \***: rg-spoke1
  - Region \***: (Asia Pacific) Central India (with a "Deploy to an Azure Extended Zone" link below it)

At the bottom of the form, there are three buttons: "Previous", "Next", and "Review + create" (which is highlighted in blue). A "Give feedback" link is also present in the bottom right corner.

## View All Created VNets

7. After creation, go to:

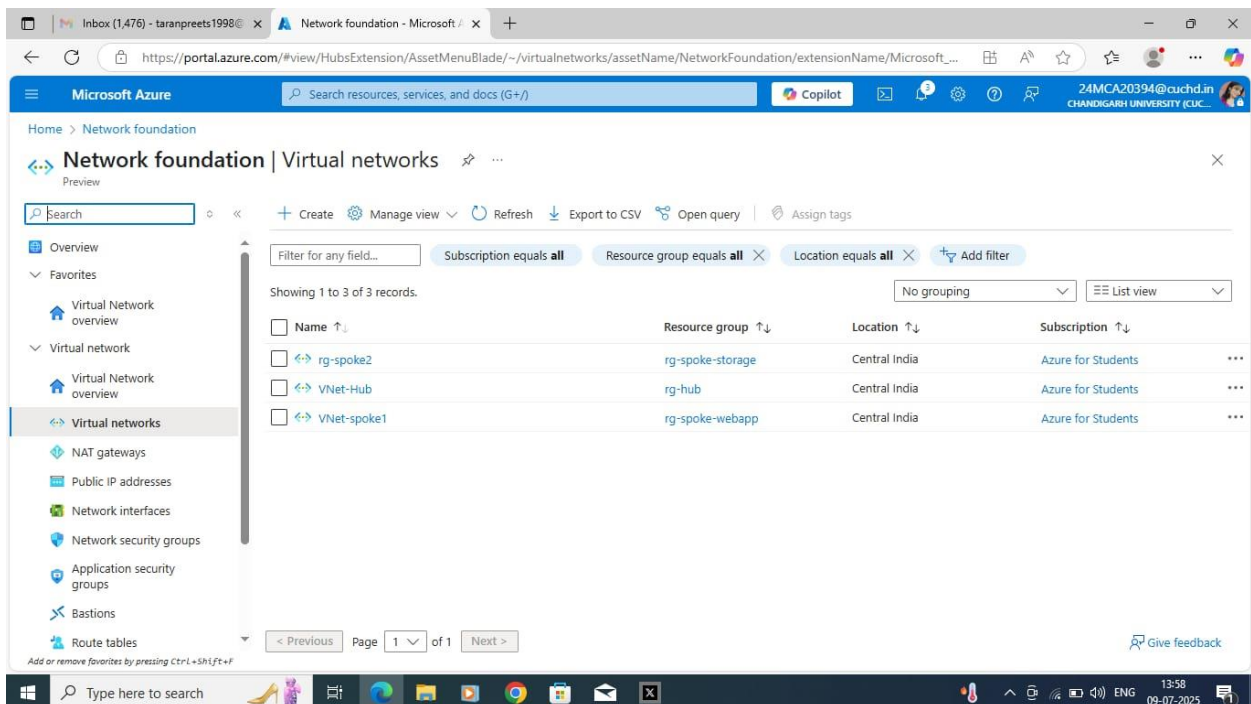
**Virtual networks** from the left menu or Home page

We will now see:

vnet-hub under rg-hub

vnet-spoke1 under rg-spoke-webapp

vnet-spoke2 under rg-spoke-storage (created separately)



The screenshot shows the Microsoft Azure portal interface. The left sidebar contains the navigation menu with 'Virtual networks' selected. The main content area displays a table of virtual networks. The table has columns for Name, Resource group, Location, and Subscription. There are 3 records listed: vnet-spoke2, vnet-hub, and vnet-spoke1. The table is filtered by 'Subscription equals all', 'Resource group equals all', and 'Location equals all'. The page shows 1 to 3 of 3 records.

Name	Resource group	Location	Subscription
vnet-spoke2	rg-spoke-storage	Central India	Azure for Students
vnet-hub	rg-hub	Central India	Azure for Students
vnet-spoke1	rg-spoke-webapp	Central India	Azure for Students



## VNet Overview (Spoke2)

8. Select vnet-spoke2 to view its **details**:

Resource Group: rg-spoke-storage

Region: Central India

Address Space: 10.2.0.0/16

we can configure:

**Subnets**

**Peerings**

**Firewall**

**DNS settings**

