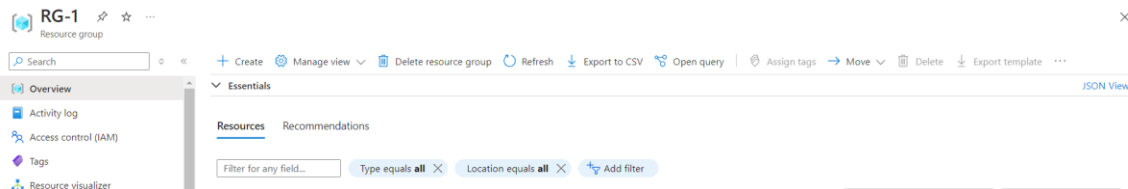


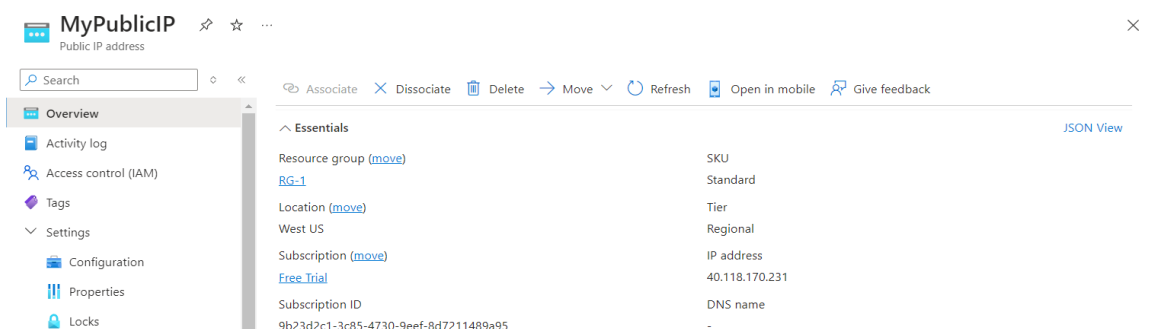
## Step 1: Create a Resource Group

1. Go to the Azure Portal.
2. Search for and select "Resource groups".
3. Click on "Create".
4. Fill in the details:
  - **Resource group name:** RG-1
  - **Region:** Select "West US"
5. Click "Review + Create" and then "Create".



## Step 2: Create a Public IP Address for the Load Balancer

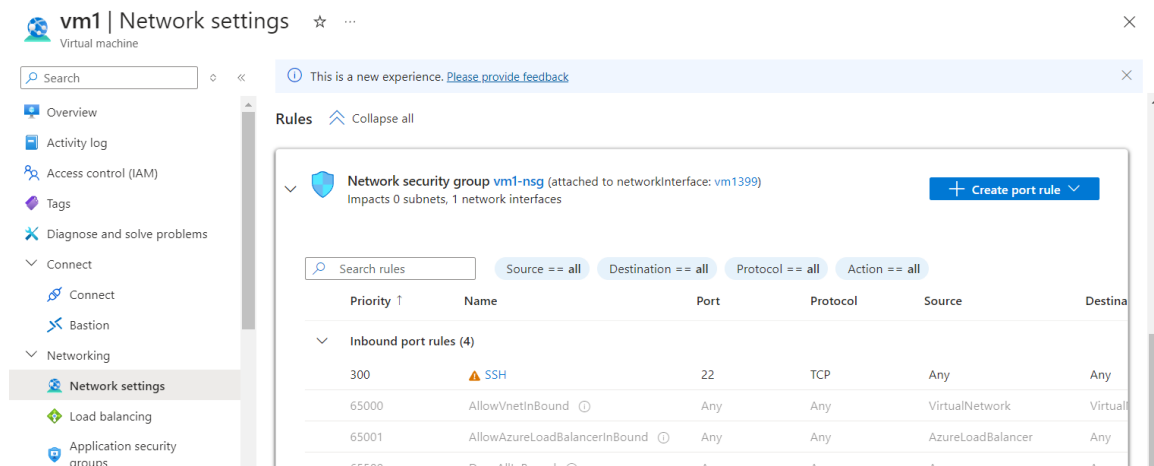
1. Go to the Azure Portal.
2. Search for and select "Public IP addresses".
3. Click on "Create".
4. Fill in the details:
  - **Name:** MyPublicIP
  - **SKU:** Standard
5. Click "Review + Create" and then "Create".



### Step 3: Deploy VM1

1. Go to the Azure Portal.
2. Search for and select "Virtual machines".
3. Click on "Add" and select "Virtual machine".
4. Fill in the details:
  - **VM name:** VM1
  - **Region:** RG-1
  - **Image:** Ubuntu LTS
  - **Admin username:** azureuser
  - **Authentication type:** SSH public key
5. Click on "Review + Create" and then "Create".
6. After VM1 is created, navigate to the "VM1" blade, select "Run command", and then "RunShellScript". Enter the command to install Apache2:

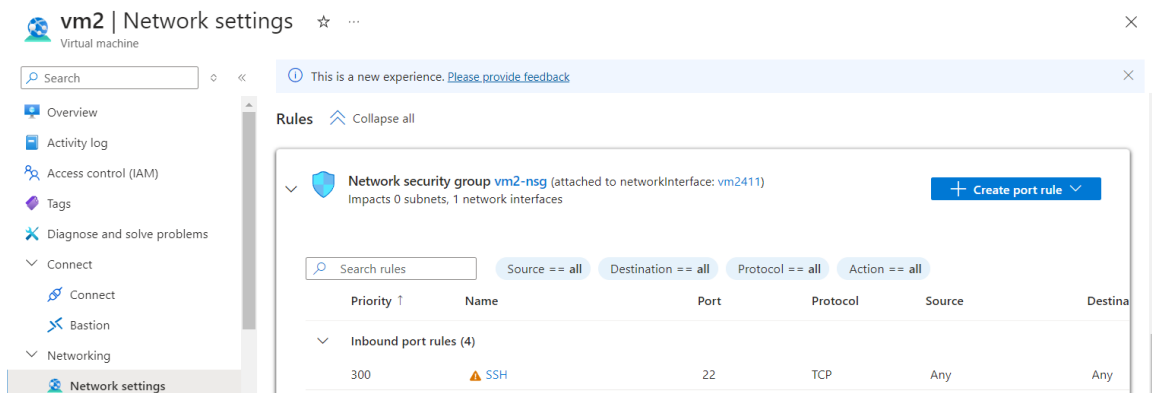
**sudo apt update && sudo apt install -y apache2**



### Step 4: Deploy VM2

1. Go to the Azure Portal.
2. Search for and select "Virtual machines".
3. Click on "Add" and select "Virtual machine".
4. Fill in the details:
  - **VM name:** VM2
  - **Region:** RG-1
  - **Image:** Ubuntu LTS
  - **Admin username:** azureuser
  - **Authentication type:** SSH public key
5. Click on "Review + Create" and then "Create".
6. After VM2 is created, navigate to the "VM2" blade, select "Run command", and then "RunShellScript". Enter the command to install Apache2:

**sudo apt update && sudo apt install -y apache2**



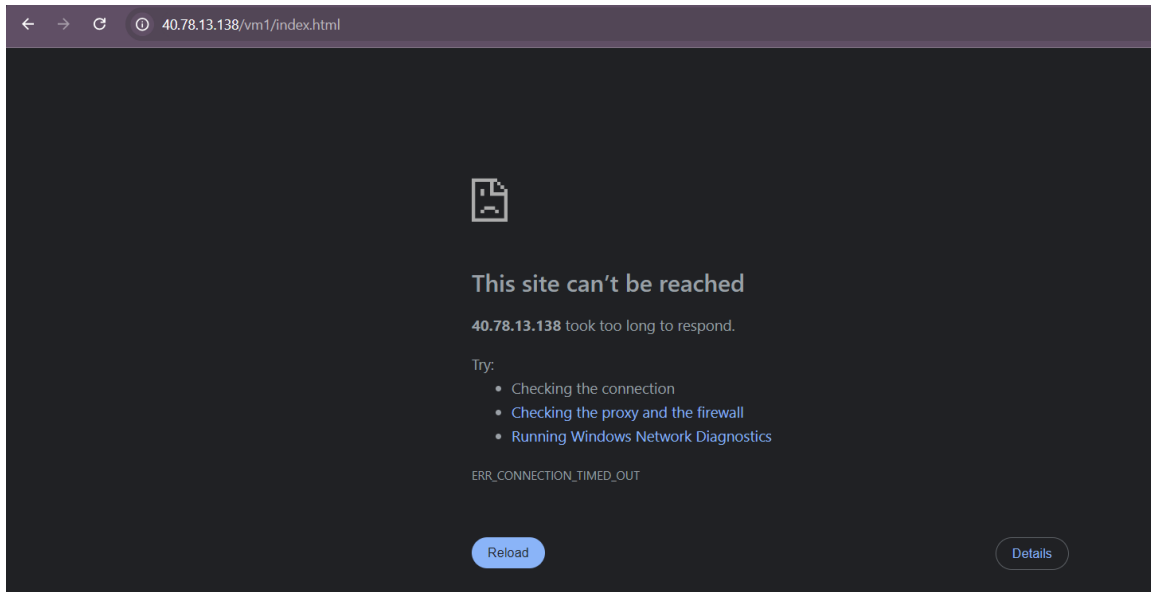
**We do not require to allow port 80 in NSG because we are using App Gateway. It will not be accessible directly.**

#### **Step 5: Update index.html on VM1**

1. SSH into VM1:  
**ssh azureuser@<VM1\_Public\_IP>**
2. Change the index.html file:

**echo "This is VM1" | sudo tee /var/www/html/vm1/index.html**

```
root@Linux-VM:/home/azureuser# echo "This is VM1" | sudo tee /var/www/html/index.html
This is VM1
root@Linux-VM:/home/azureuser# exit
```



## Step 6: Update index.html on VM2

Using Azure CLI:

1. SSH into VM2:

**ssh azureuser@<VM2\_Public\_IP>**

2. Change the index.html file:

**echo "This is VM2" | sudo tee /var/www/html/vm2/index.html**

```
azureuser@vm2:~$ sudo su
root@vm2:/home/azureuser# echo "This is VM2" | sudo tee /var/www/html/index.html
tee: /var/www/html/index.html: No such file or directory
This is VM2
```

## Step 7: Locate Public IPs:

- Inside the resource group, find your two VMs (myVM1 and myVM2).
- For each VM, click on the **Networking** section on the left menu.

- Under **Public IP addresses**, click on the **Public IP** resource linked to each VM.

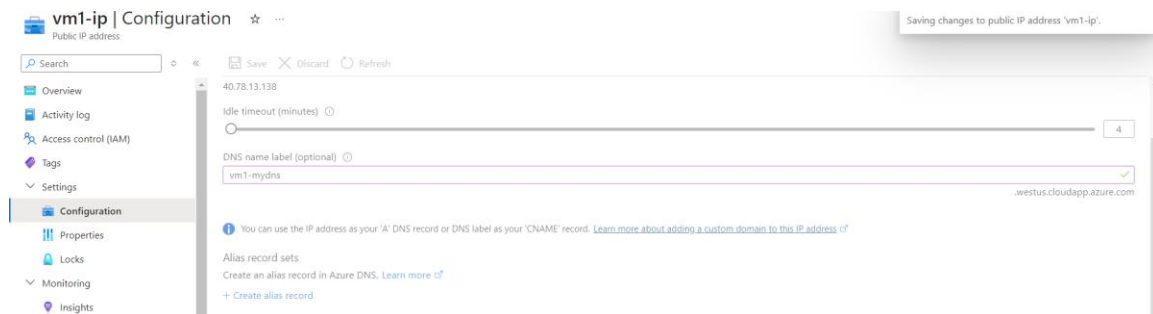
## Step 8: Configure DNS Settings

### 1. Go to the Public IP Configuration:

- Once you're on the Public IP address page, look for the **Configuration** option under the **Settings** section in the left menu.

### 2. Set the DNS Name Label:

- In the **Configuration** page, you'll find a section for **DNS name label**.
- Enter a unique DNS name for each VM:
  - For VM1, you might use something like **vm1-mydns**(which would create the DNS name **vm1-mydns.westus.cloudapp.azure.com**).



- For VM2, you might use **vm2-mydns** (which would create the DNS name **vm2-mydns.westus.cloudapp.azure.com**).

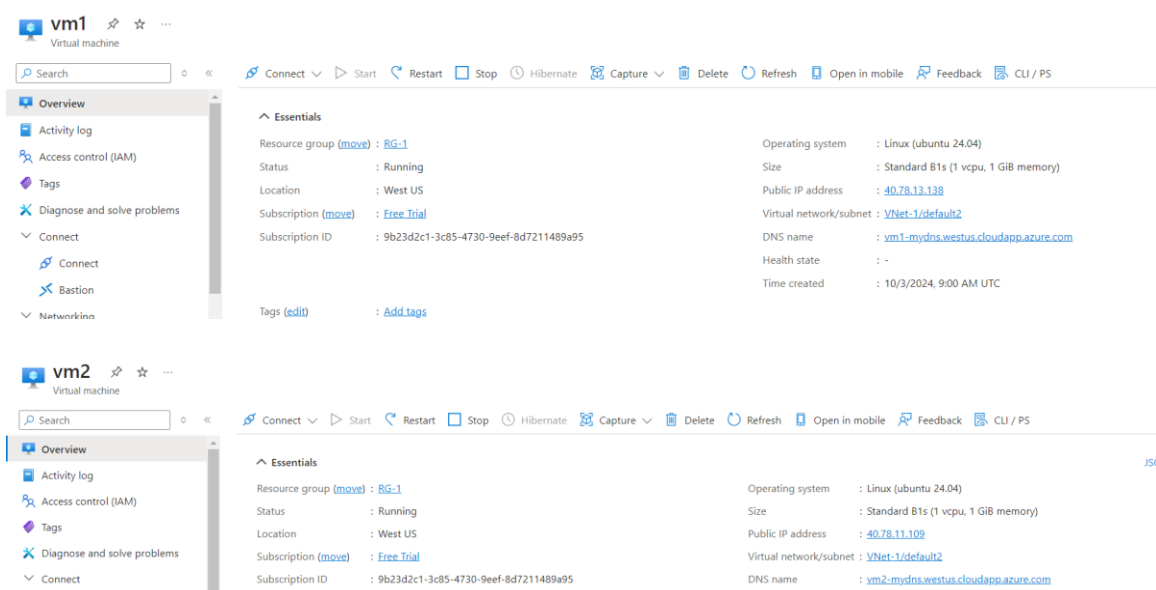
### 3. Save the Configuration:

- Click on the **Save** button at the top to apply the DNS name settings.

## Step 9: Verify the DNS Configuration

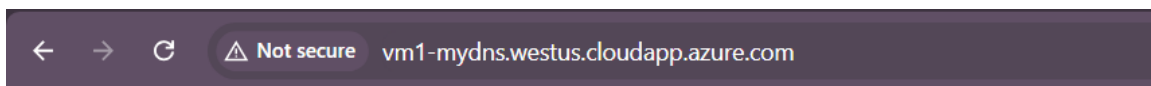
### 1. Check the Public DNS Names:

- After saving, navigate back to the Public IP address overview page.
- You should see the new DNS name under **DNS Name**.



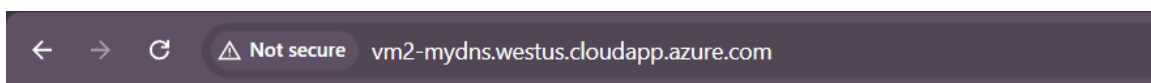
## 2. Test the DNS Configuration:

- Open a web browser and enter the following URLs:
  - For myVM1: **vm1-mydns.westus.cloudapp.azure.com**



This is VM1

- For myVM2: **vm2-mydns.westus.cloudapp.azure.com**



This is VM2

## Step10: Set Up Azure Traffic Manager


### 1. Create a Traffic Manager Profile:

- In the Azure Portal, search for **Traffic Manager profiles** and click **Create**.
- Fill in the required details:

- **Name:** Give your Traffic Manager profile a name (e.g., TrafficManagerProfile199578).
  - **Routing Method:** Select **Geographic** for geographic load balancing.
  - **Resource Group:** Choose the same resource group as your VMs or create a new one.
  - **Resource Group:** Select the desired location.
- Click **Review + Create**, then click **Create**.

## 2. Add Endpoints to the Traffic Manager:

- After creating the Traffic Manager profile, navigate to it.
- Click on **Endpoints > Add**.
- For the first endpoint (VM1):
  - **Type:** Select **External endpoint**.
  - **Name:** Enter a name (india).
  - **URL:** Enter the public IP address
  - **Region** as Asia and country as **india**
  - Click **Add**.



### Add endpoint

TrafficManagerProfile199578

✕

Type \* ⓘ

Azure endpoint

Name \*

india

Enable Endpoint

☒

Target resource type

Public IP address

Public IP address \*

vm1-ip (40.78.13.138)

Geo-mapping

You may choose to distribute traffic based on specific geographic locations. The same location can't be specified in two endpoints.

Regional grouping	Country/Region	State/Province
Asia	India	Choose a State/P...
Choose a region...	Choose a Countr...	Choose a State/P...




Custom Header settings ⓘ

- Repeat the above steps to add VM2:
  - **Type:** Select **External endpoint**.
  - **Name:** Enter a name US.
  - **URL:** Enter the public IP address
  - **Region** as All World
  - Click **Add**.

[Home](#) > [Load balancing | Traffic Manager](#) > [TrafficManagerProfile199578 | Endpoints](#) >

US ...

TrafficManagerProfile199578

 Save  Discard  Delete

Status

Enabled 

Monitor status

Checking endpoint

Type

Azure endpoint

Target resource type ⓘ


Public IP address 

Target resource \*

vm2-ip (West US) 

Geo-mapping

You may choose to distribute traffic based on specific geographic locations. The same location can't be specified in two endpoints.

All (World) 

[+ Add geo-mapping](#)

Custom Header settings ⓘ

## Step 11: Test the Configuration

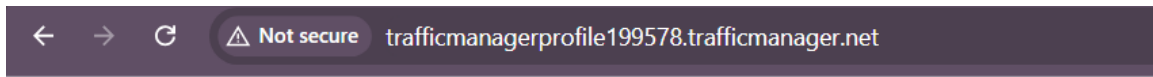
### 1. Obtain the Traffic Manager DNS Name:

- After the configuration is complete, you will get a DNS name for your Traffic Manager profile  
(<http://trafficmanagerprofile199578.trafficmanager.net>).

### 2. Test the Traffic Manager:

- Open a web browser and navigate to the Traffic Manager DNS name  
(<http://trafficmanagerprofile199578.trafficmanager.net>).








This is VM1

Now I changed India endpoint as North America

**india** ...

TrafficManagerProfile199578

 Save  Discard  Delete

Online

Type

Azure endpoint

Target resource type ⓘ

Public IP address 

Target resource \*

vm1-ip (West US) 

Geo-mapping

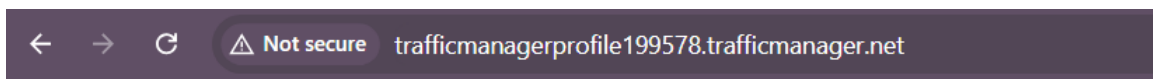
You may choose to distribute traffic based on specific geographic locations. The same location can't be specified in two endpoints.

North America / Central America / Caribbean ➡ United States



[+ Add geo-mapping](#)

so I am getting response from VM2 because in vm2 Geo-mapping is all world



This is VM2