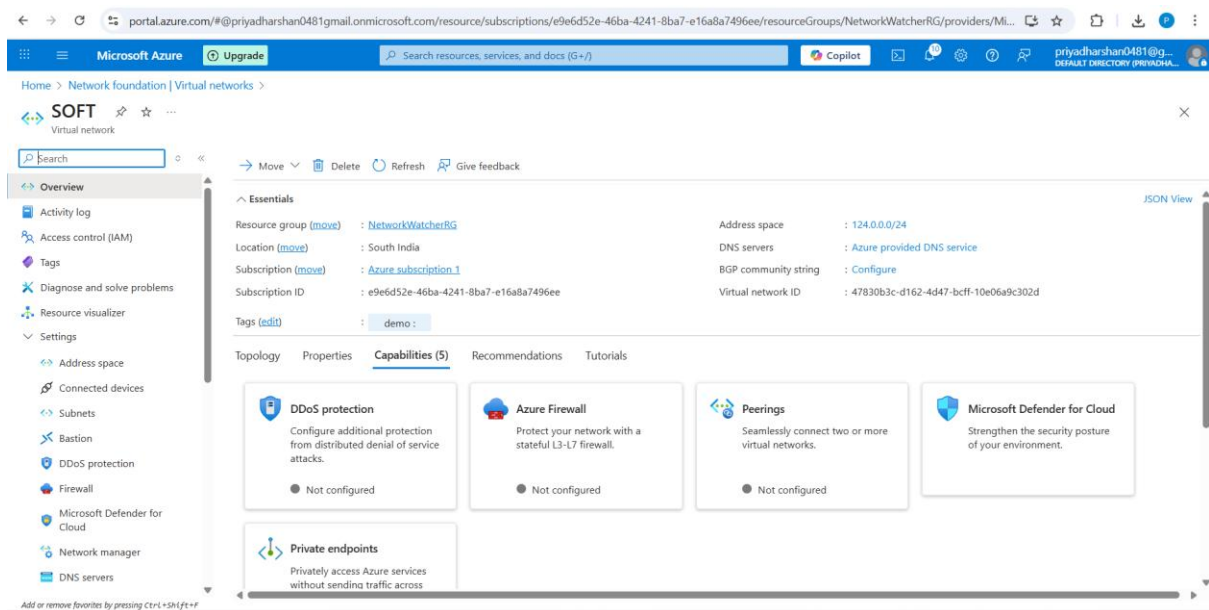


# FILE SHARING BETWEEN A TWO VIRTUAL MACHINES THROUGH A VIRTUAL NETWORK

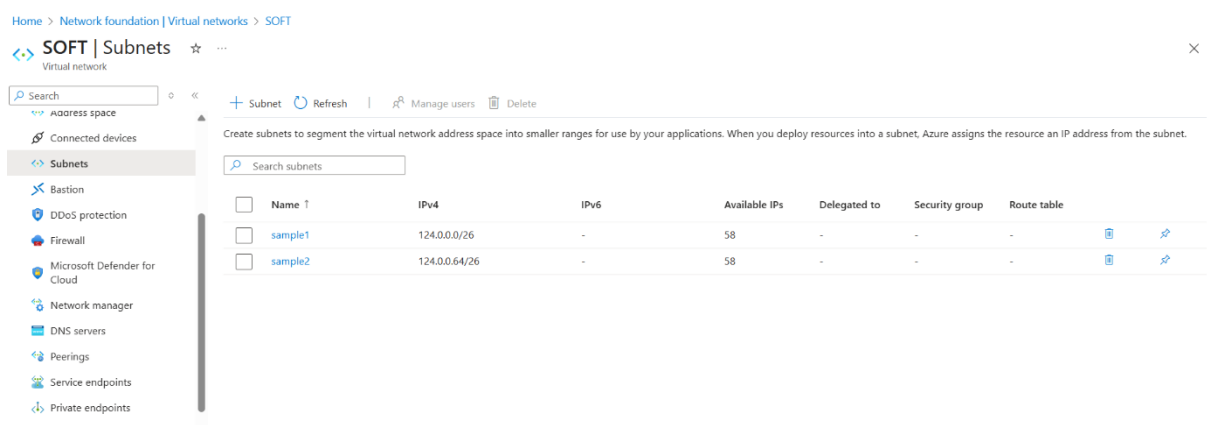
## OBJECTIVE:

To establish secure and efficient file sharing between two virtual machines within the same Azure Virtual Network (VNet), demonstrating internal communication capabilities of Azure IaaS, without exposing services to the internet.

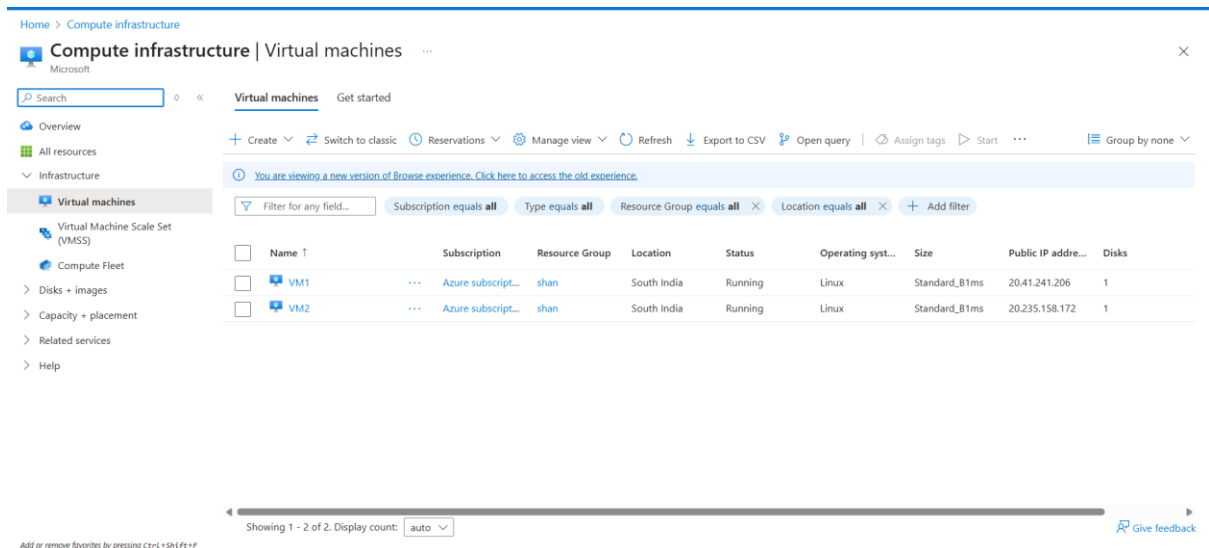
## STEP 1: Created a one virtual network (SOFT) :



## STEP 2: I have configured two separate subnets, named **sample1** and **sample2**, under a single virtual network (VNet) in Azure.



STEP 3: Additionally, two virtual machines have been deployed in the same virtual network.



STEP 4: Using PowerShell, I established an SSH session with VM1. Upon listing the contents of the user's home directory, it was confirmed to be empty.

```
PS C:\Users\ASUS> ssh -i C:\Users\ASUS\Downloads\VM1_Key_0723.pem azureuser@20.41.241.206
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.11.0-1018-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Wed Jul 23 06:36:03 UTC 2025

System load:  0.0          Processes:    111
Usage of /:   5.6% of 28.02GB   Users logged in:  0
Memory usage: 13%          IPv4 address for eth0: 124.0.0.4
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Wed Jul 23 06:31:41 2025 from 27.5.126.155
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@VM1:~$ pwd
/home/azureuser
azureuser@VM1:~$ ls
azureuser@VM1:~$
```

## STEP5:

I am using the command is: `scp -i C:\Users\ASUS\Downloads\VM1_Key_0723.pem -r azureuser@20.41.241.206:/home/azureuser/task C:\Users\ASUS\Downloads\` to copy the task directory from my Azure virtual machine to the Downloads folder on my local Windows machine

```
Windows PowerShell
* Support: https://ubuntu.com/pro

System information as of Wed Jul 23 06:36:03 UTC 2025

System load: 0.0      Processes:    111
Usage of /:  5.6% of 28.02GB   Users logged in: 0
Memory usage: 13%      IPv4 address for eth0: 124.0.0.4
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

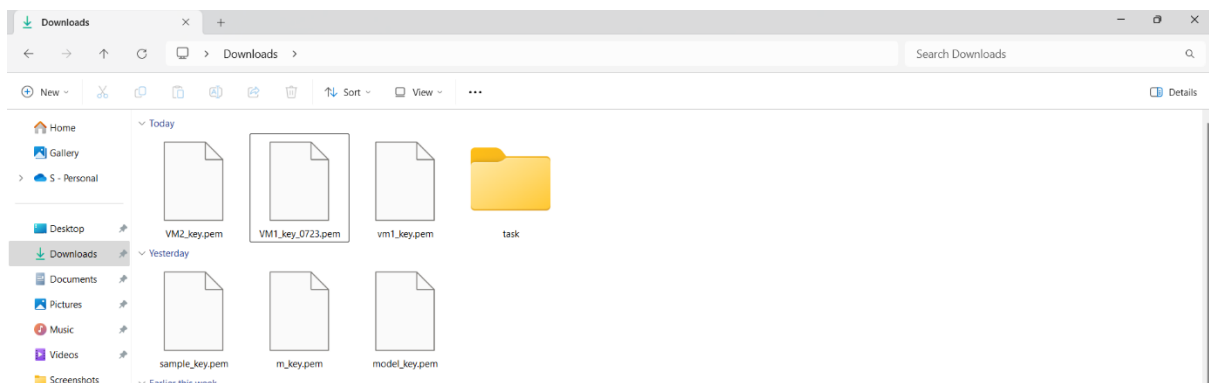
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Wed Jul 23 06:31:41 2025 from 27.5.126.155
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@VM1:~$ pwd
/home/azureuser
azureuser@VM1:~$ ls
azureuser@VM1:~$ mkdir task
azureuser@VM1:~$ ls
task
azureuser@VM1:~$ scp -i C:\Users\ASUS\Downloads\VM1_Key_0723.pem -r azureuser@20.41.241.206:/home/azureuser/project C:\Users\ASUS\Downloads\
Warning: Identity file C:\Users\ASUS\Downloads\VM1_Key_0723.pem not accessible: No such file or directory.
ssh: Could not resolve hostname c: Temporary failure in name resolution
scp: Connection closed
azureuser@VM1:~$ exit
logout
Connection to 20.41.241.206 closed.
PS C:\Users\ASUS> scp -i C:\Users\ASUS\Downloads\VM1_Key_0723.pem -r azureuser@20.41.241.206:/home/azureuser/task C:\Users\ASUS\Downloads\
PS C:\Users\ASUS>
```

## STEP 6: It Will Created a One Directory From Local Machine Downloads Path



## STEP 7:

I am using the command is: "`scp -i C:\Users\ASUS\Downloads\VM2_Key.pem -r C:\Users\ASUS\Downloads\Task azureuser@20.235.158.172:/home/azureuser/`" to transfer the task folder from the Downloads directory on my local machine to the /home/azureuser/ directory on another Azure virtual machine

```
Windows PowerShell
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@VM2:~$ ls
azureuser@VM2:~$ exit
logout
Connection to 20.235.158.172 closed.
PS C:\Users\ASUS> scp -i C:\Users\ASUS\Downloads\VM2_Key.pem -r C:\Users\ASUS\Downloads\task azureuser@20.235.158.172:/home/azureuser/
PS C:\Users\ASUS> ssh -i C:\Users\ASUS\Downloads\VM2_Key.pem azureuser@20.235.158.172
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.11.0-1018-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Wed Jul 23 06:41:36 UTC 2025

System load:  0.0          Processes:    112
Usage of /:   5.6% of 28.02GB Users logged in: 0
Memory usage: 13%         IPv4 address for eth0: 124.0.0.68
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.
```

## STEP 8:

The task directory was copied from the Downloads folder on my local machine to the second virtual machine (VM2) using the SCP command.

```
Windows PowerShell
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@VM2:~$ ls
azureuser@VM2:~$ exit
logout
Connection to 20.235.158.172 closed.
PS C:\Users\ASUS> scp -i C:\Users\ASUS\Downloads\VM2_Key.pem -r C:\Users\ASUS\Downloads\task azureuser@20.235.158.172:/home/azureuser/
PS C:\Users\ASUS> ssh -i C:\Users\ASUS\Downloads\VM2_Key.pem azureuser@20.235.158.172
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.11.0-1018-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Wed Jul 23 06:41:36 UTC 2025

System load:  0.0          Processes:    112
Usage of /:   5.6% of 28.02GB Users logged in: 0
Memory usage: 13%         IPv4 address for eth0: 124.0.0.68
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Wed Jul 23 06:41:37 2025 from 27.5.126.155
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@VM2:~$ ls
task
azureuser@VM2:~$ |
```

