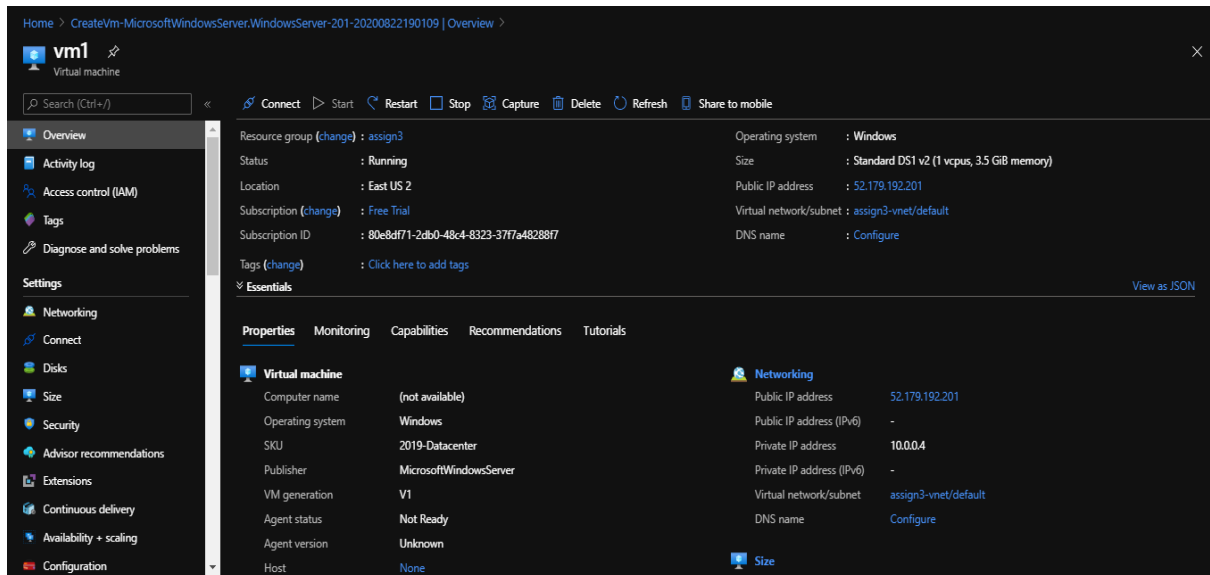
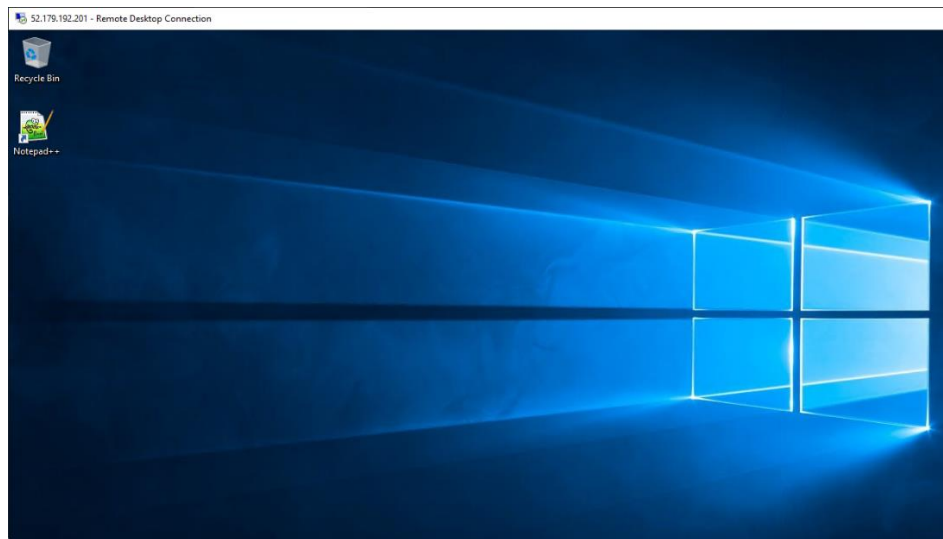


ASSIGNMENT-3

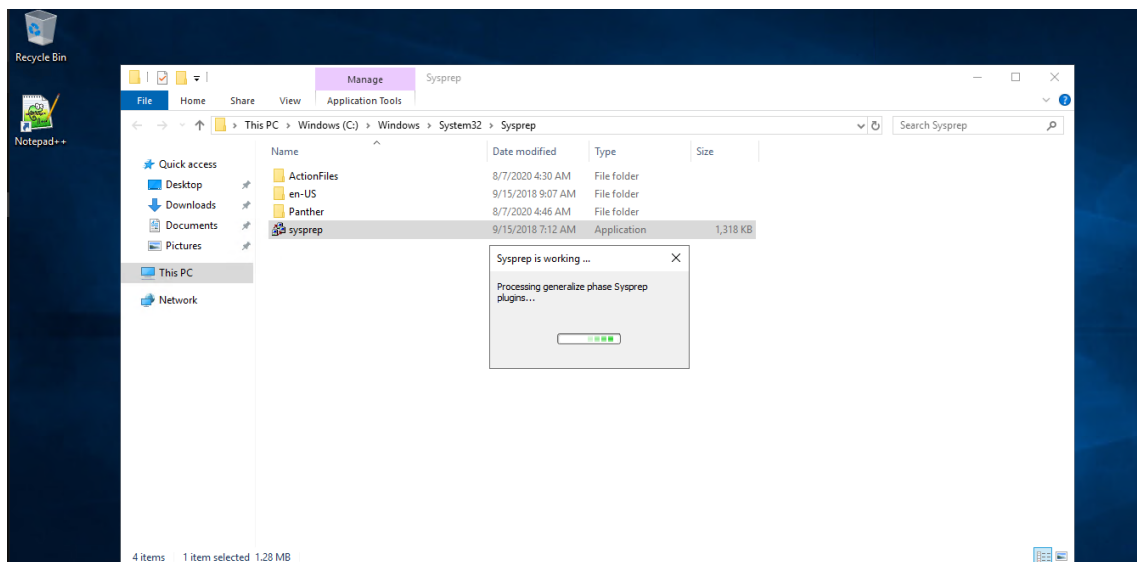
1. Deploy the custom image with any application installed



First, I create a Virtual machine named VM1.




In that VM I installed Notepad++ application.





After that I generalize the VM1 using sysprep. It removes all the security and made the os usable for custom generation.


Home > CreateVm-MicrosoftWindowsServer.WindowsServer-201-20200822190109 | Overview > vm1 >

Create an image

Name 


vm1-image-1 


Resource group 

arsign3 

Create new


Before creating the image, this virtual machine will be deallocated automatically


☐ Automatically delete this virtual machine after creating the image 


Zone resiliency 

On


Off

 Capturing a virtual machine image will make the virtual machine unusable. This action cannot be undone.

Type the virtual machine name 

vm1 

Stopping virtual machine (step 1 of 3)

Validating... 

Now I create a custom image of vm1.

Home > Images >

Images

DXC Production

+ Add

⚙️ Manage view

⋮

Filter by name...

Name ↑

vm1-image-1

vm1-image-1

Image

🔍 Search (Ctrl+/)

+ Create VM

🗑️ Delete

Overview

Activity log

Access control (IAM)

Tags

Settings

Locks

Export template

Support + troubleshooting

New support request

NAME

vm1-image-1

SOURCE VIRTUAL MACHINE

vm1

OS DISK

OS type	Source blob URI	Storage type	Caching
Windows		Standard HDD	Read/write

DATA DISKS

This image doesn't contain any data disks.

RESOURCE GROUP

assign3

LOCATION

East US 2

ZONE RESILIENCY

Disabled

SUBSCRIPTION

Free Trial

vm2

Virtual machine

Search (Ctrl+)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Networking

Connect

Disks

Size

Security

Advisor recommendations

Extensions

Continuous delivery

Availability + scaling

Configuration

Resource group (change)

assign3

Operating system

Windows

Status

Running

Size

Standard D51 v2 (1 vcpu, 3.5 GiB memory)

Location

East US 2

Public IP address

40.75.85.194

Subscription (change)

Free Trial

Virtual network/subnet

assign3-vnet/default

Subscription ID

80e8d7f1-2db0-48c4-8323-377a48286f7

DNS name

Configure

Tags (change)

Click here to add tags

Essentials

View as JSON

Properties

Monitoring

Capabilities

Recommendations

Tutorials

Virtual machine

Computer name

(not available)

Operating system

Windows

SKU

N/A

Publisher

N/A

VM generation

V1

Agent status

Not Ready

Agent version

Unknown

Host

None

Networking

Public IP address

40.75.85.194

Public IP address (IPv6)

-

Private IP address

10.0.0.5

Private IP address (IPv6)

-

Virtual network/subnet

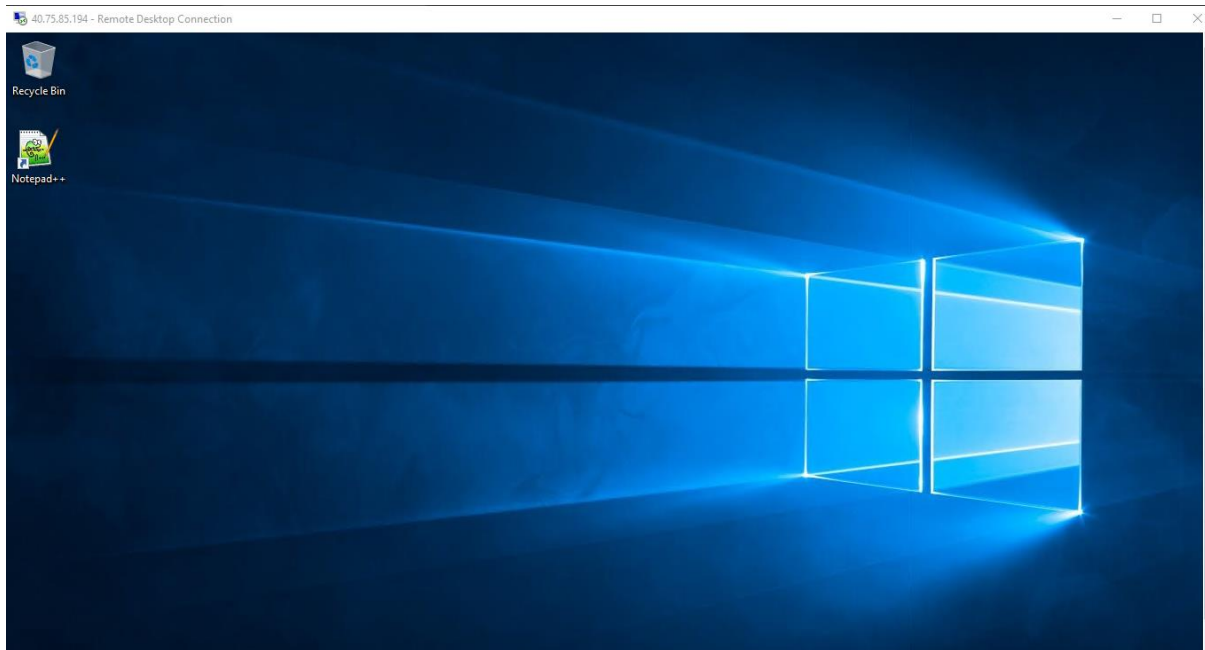
assign3-vnet/default

DNS name

Configure

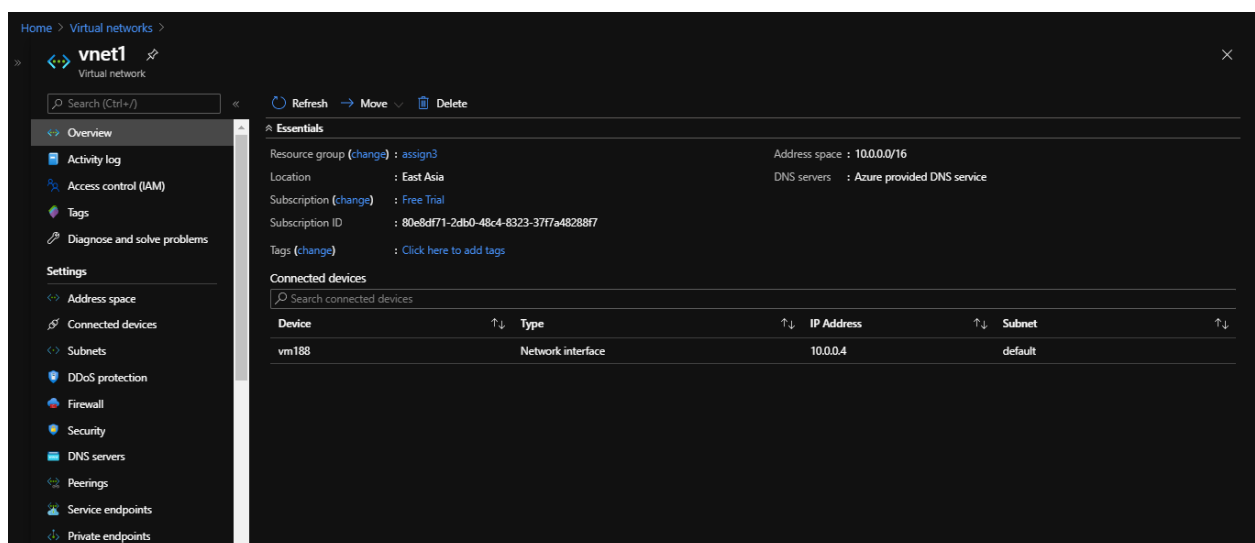
Size

Finally, I create another VM named VM2 using custom image generated from VM1.

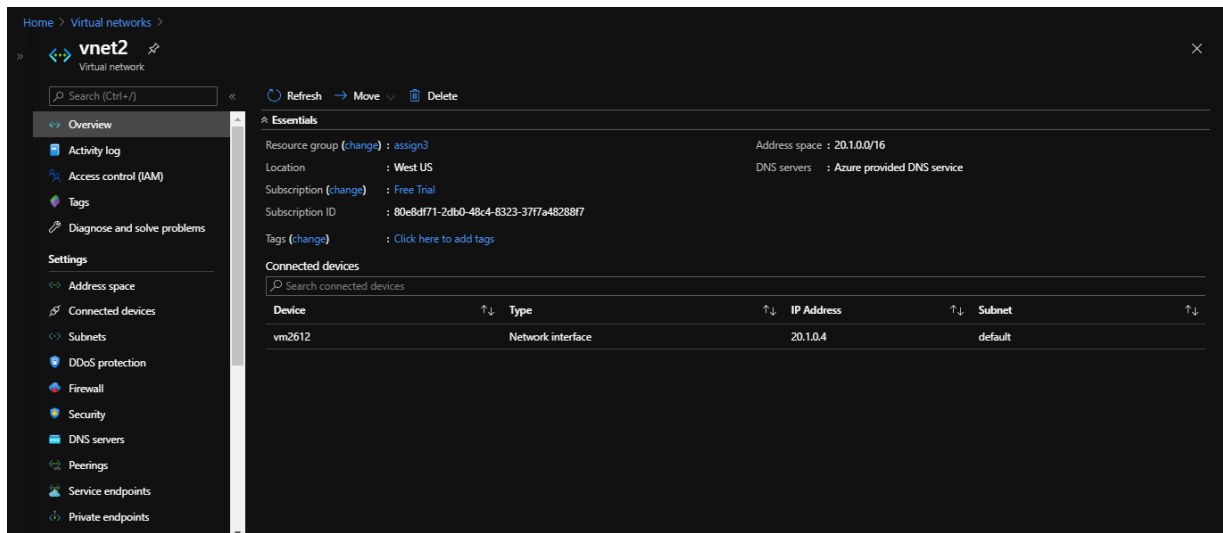


I open the VM2. Here I check whether the Notepad++ is installed or not. It is installed because this vm is created using custom image from vm1 where already Notepad++ is installed before the Custom image creation.

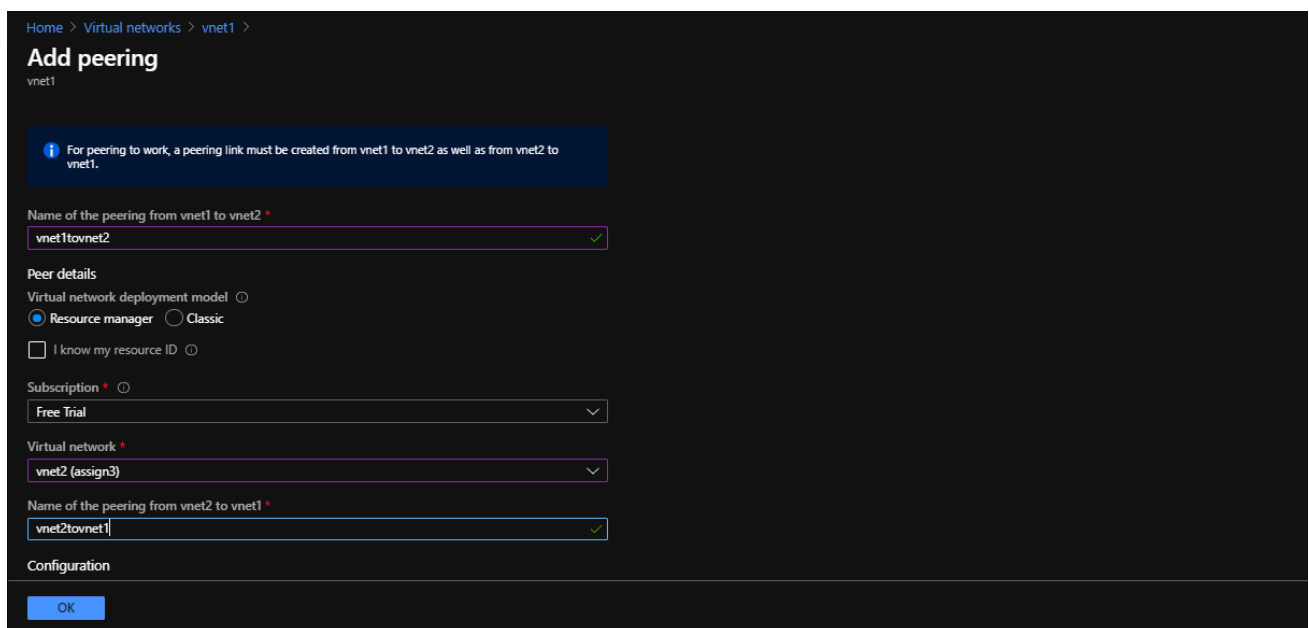
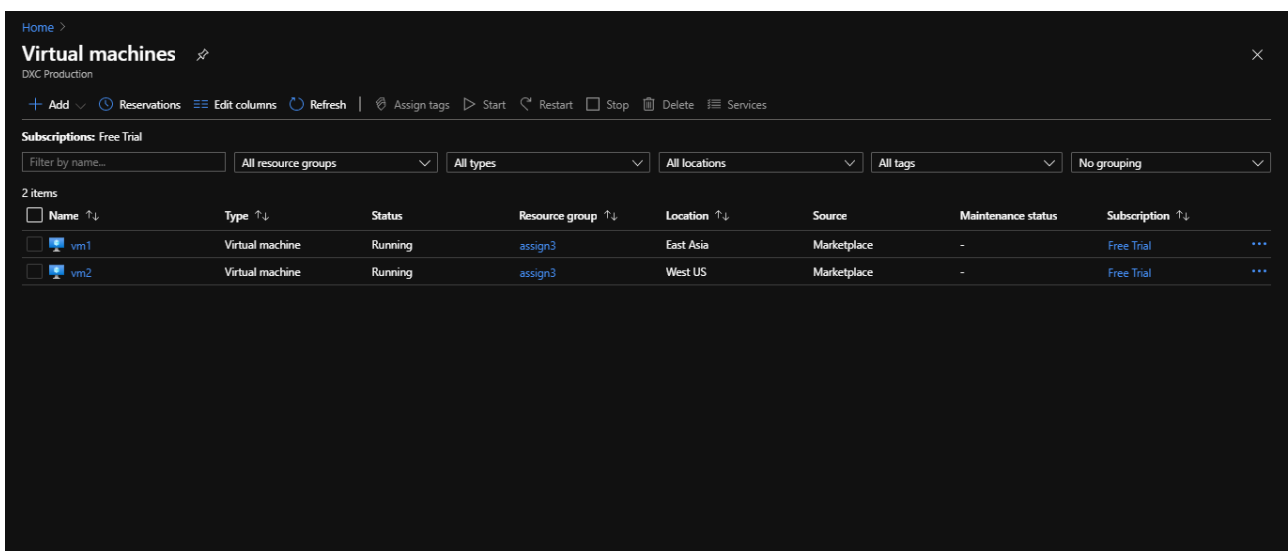
2. Create two networks in East Asia and west us and peer the network using Network Peering and access the VM using private from one location to other location



Here I created Virtual network named vnet1 in East Asia Location.



Here I created another virtual network named vnet2 in West US location.



Now I create peering from vnet1 to vnet2 and vice versa.

Home > Virtual networks > vnet1

Virtual networks

DXC Production

+ Add Manage view

Filter by name...

Name ↑

- vnet1
- vnet2

Page 1 of 1

vnet1 | Peerings

Virtual network

Search (Ctrl+/)

+ Add Refresh

Filter by name...

Name	Peering status	Peer	Gateway transit
vnet1tovnet2	Connected	vnet2	Disabled

Home > Virtual networks > vnet2

Virtual networks

DXC Production

+ Add Manage view

Filter by name...

Name ↑

- vnet1
- vnet2

Page 1 of 1

vnet2 | Peerings

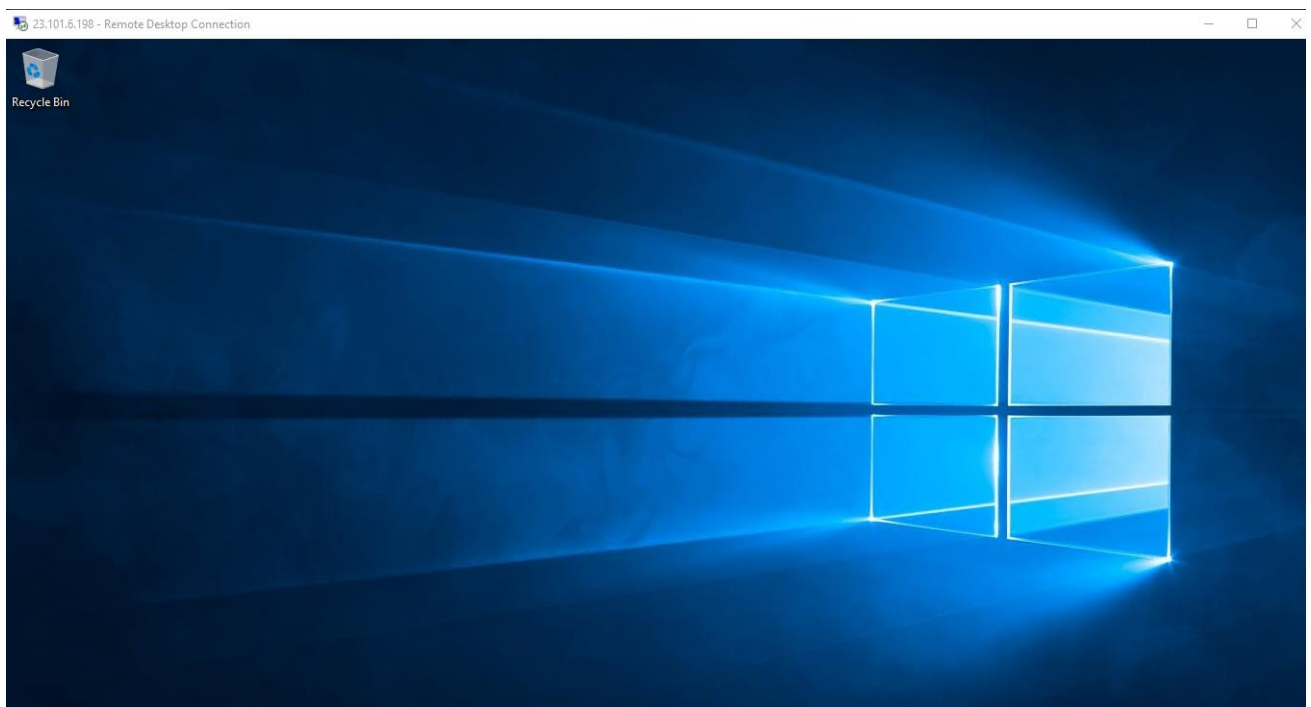
Virtual network

Search (Ctrl+/)

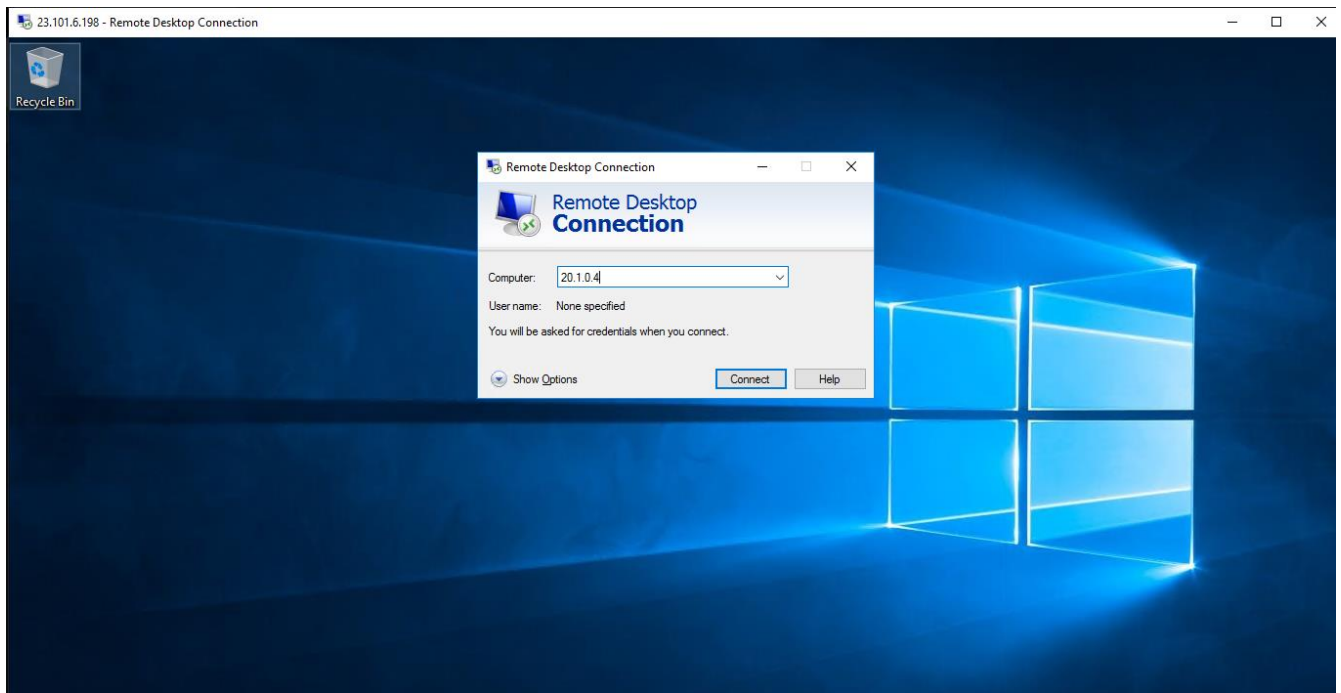
+ Add Refresh

Filter by name...

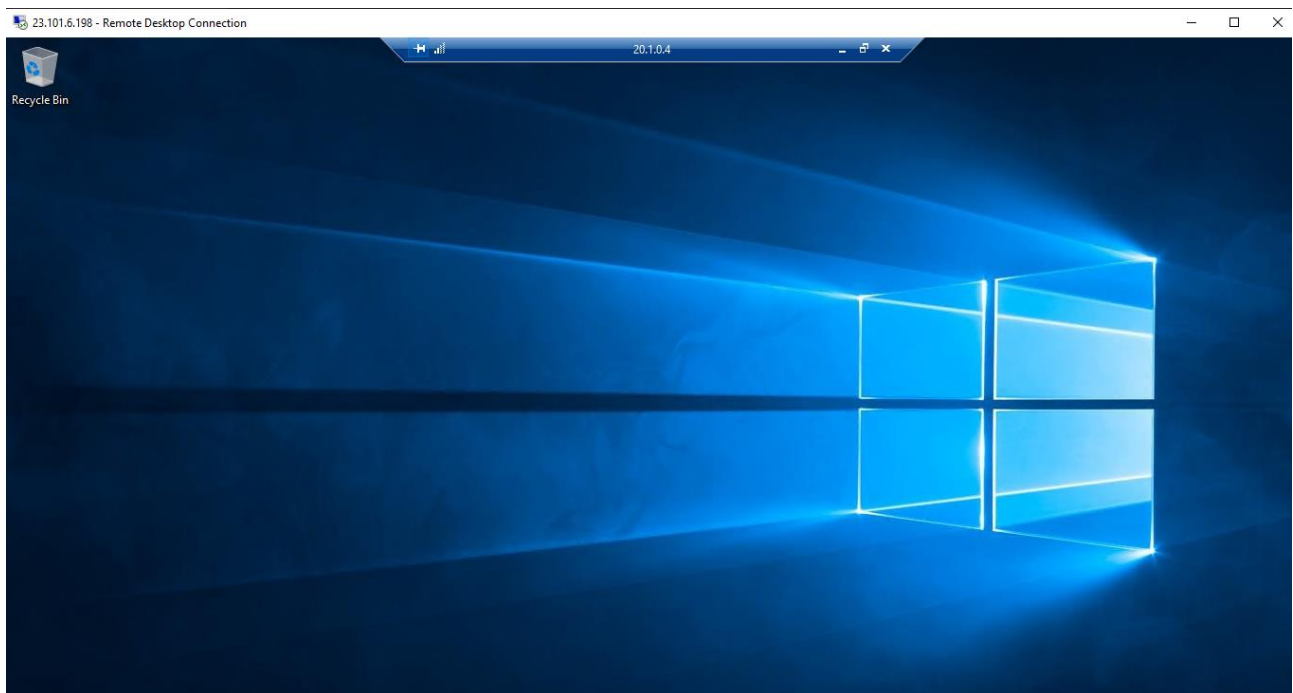
Name	Peering status	Peer	Gateway transit
vnet2tovnet1	Connected	vnet1	Disabled



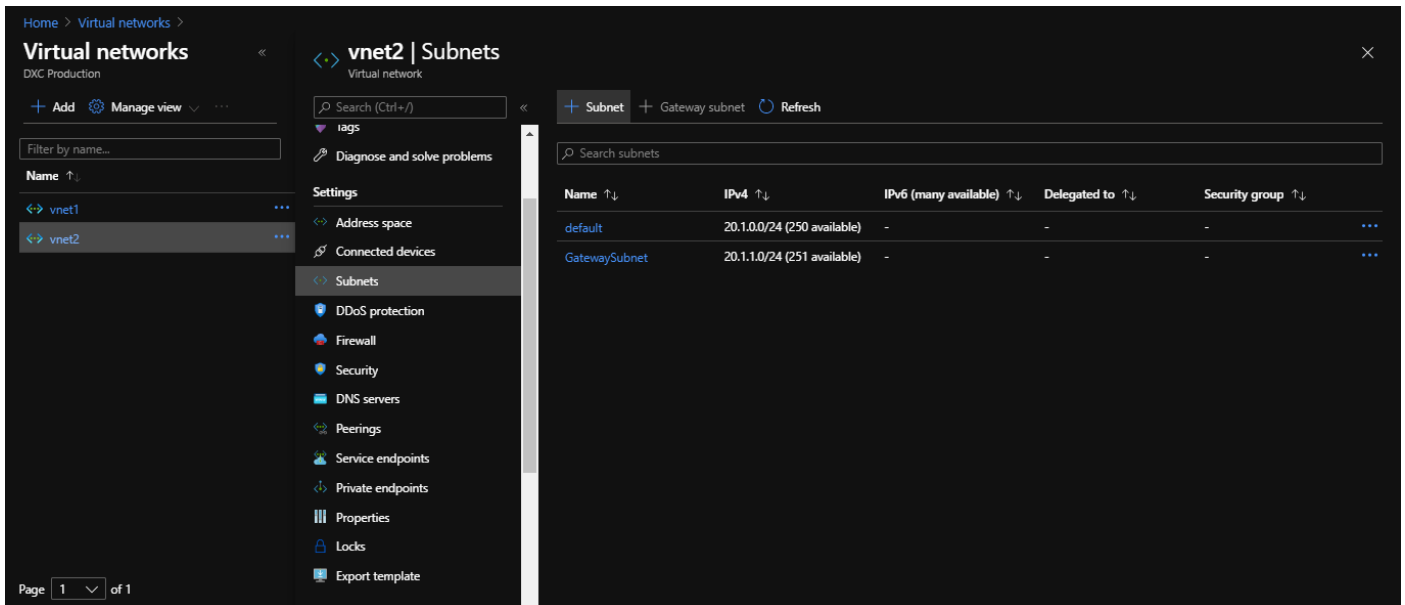
After that I open the VM connected to vnet1 using public ip.



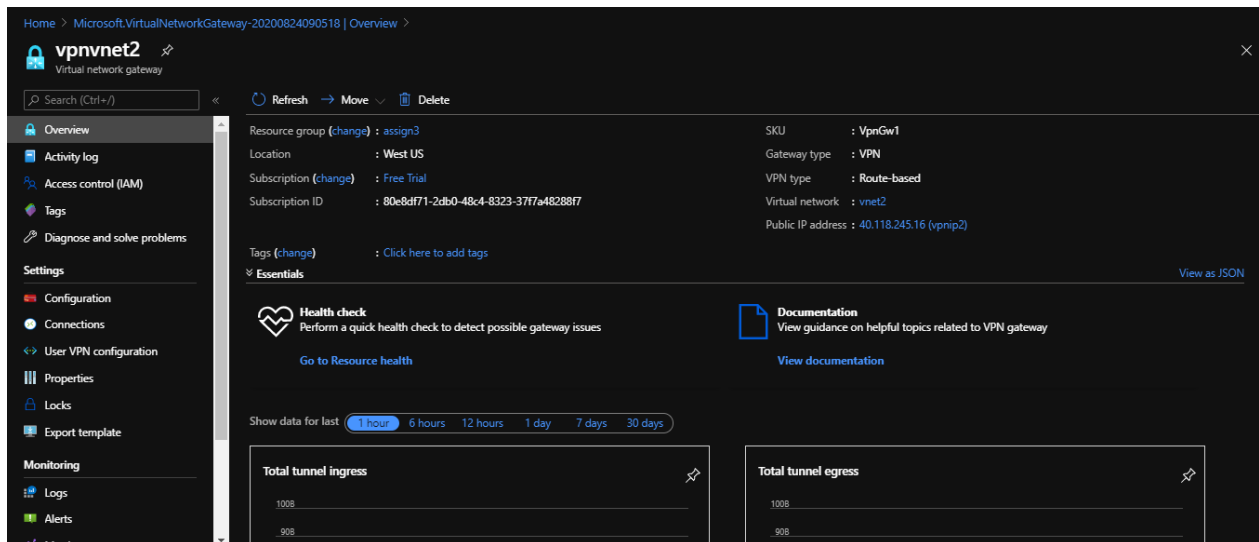
From that vm I try to connect the vm in vnet2 using private ip. It opened.



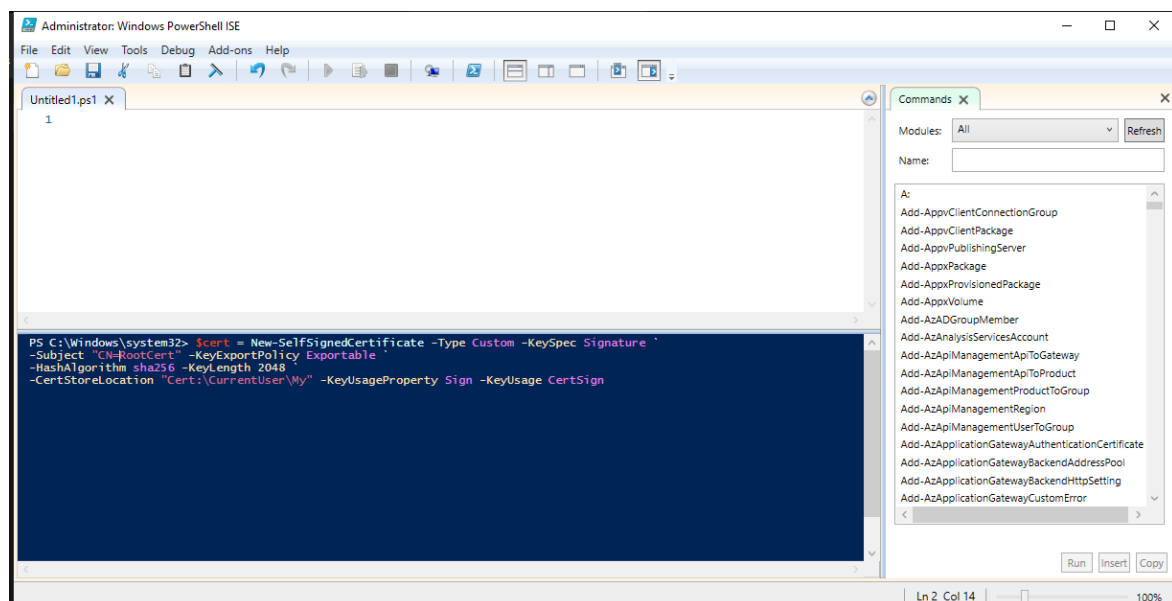
3. Create a Point to site VPN in west us location and try connect from your location laptop to Azure data center

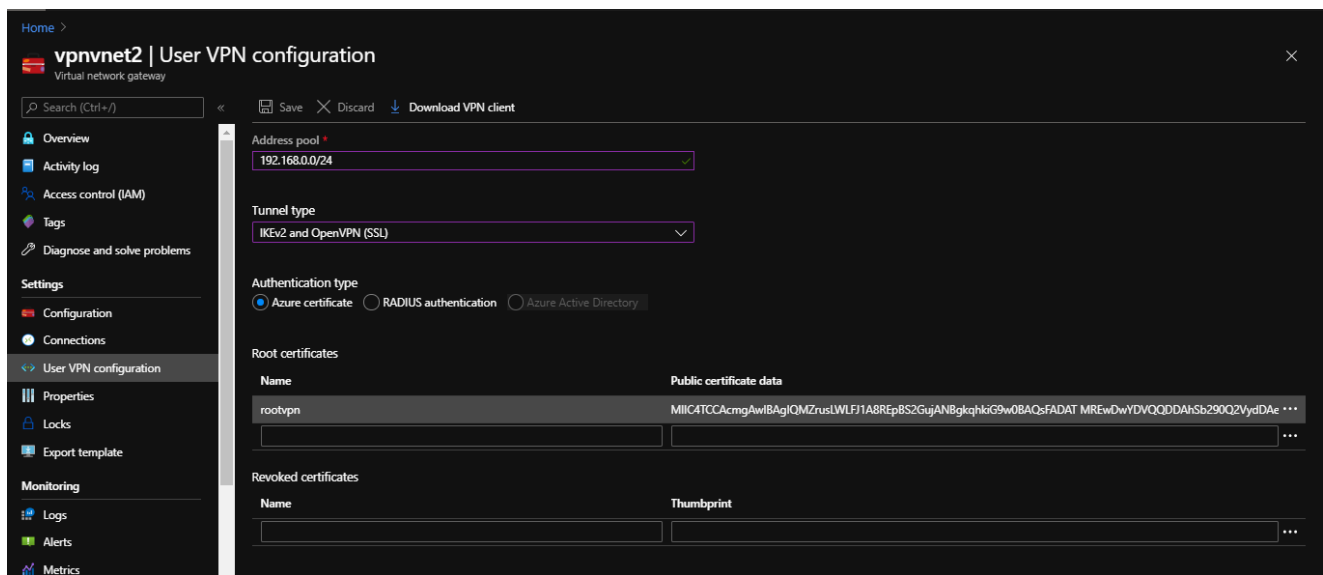


I want to create a point to site vpn for vnet2 which is located in West US. Before creating the vpn gateway I first create a gateway subnet in vnet2.

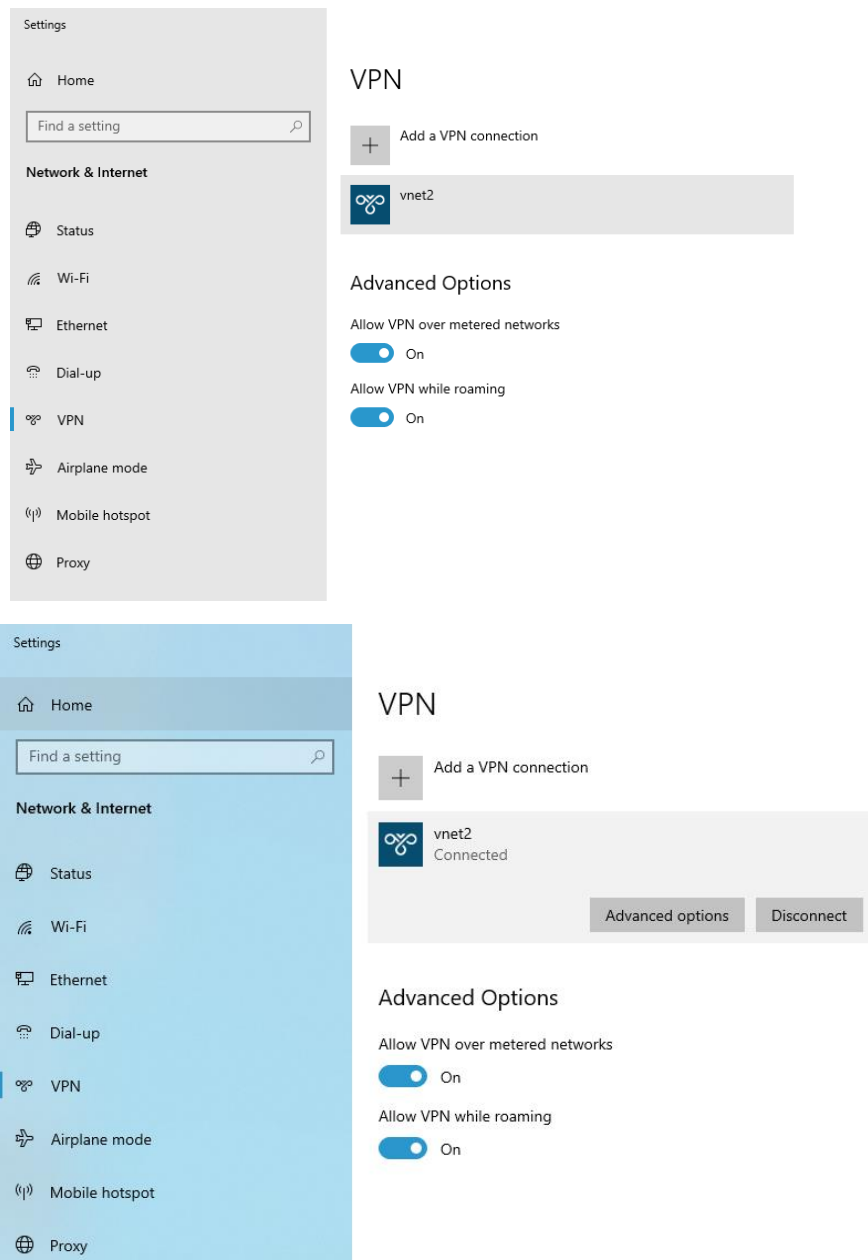


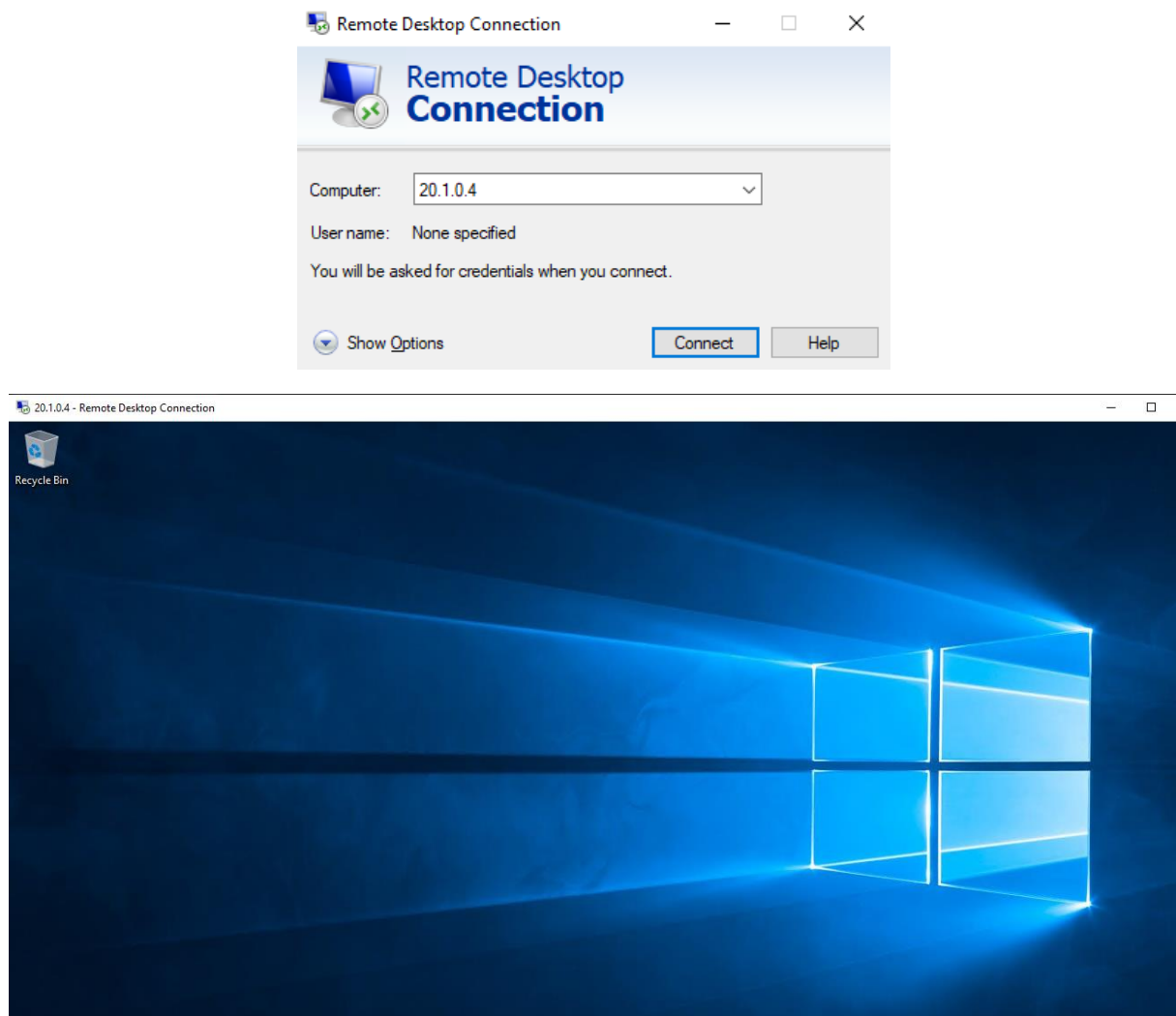
After that I create a VPN in West US location using vnet2 virtual network.





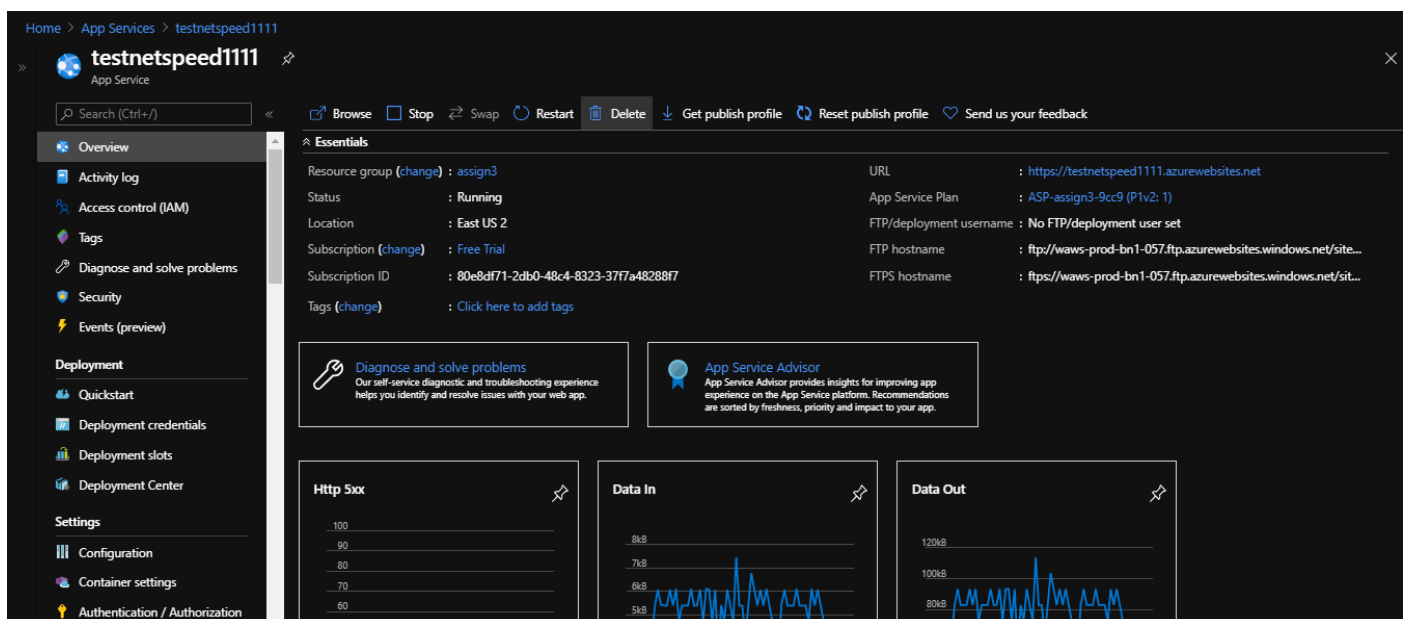
Here I created the User VPN configuration and upload the root certificate. After that I download the VPN client into my local system and try to connect.

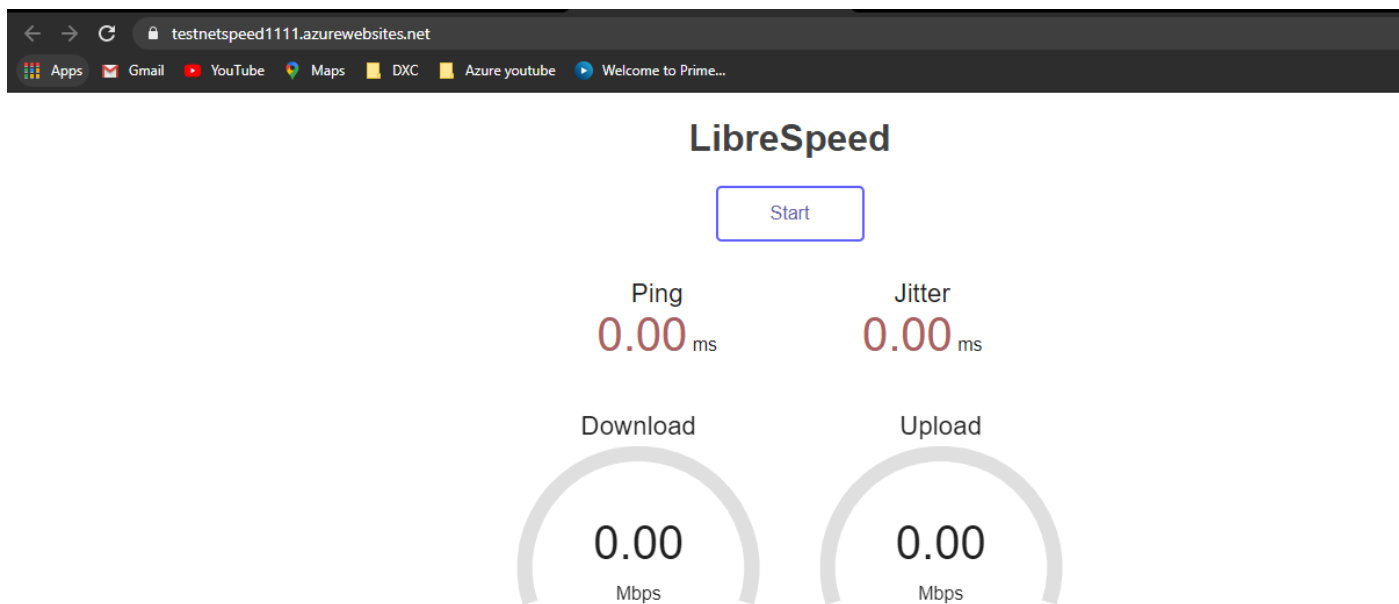




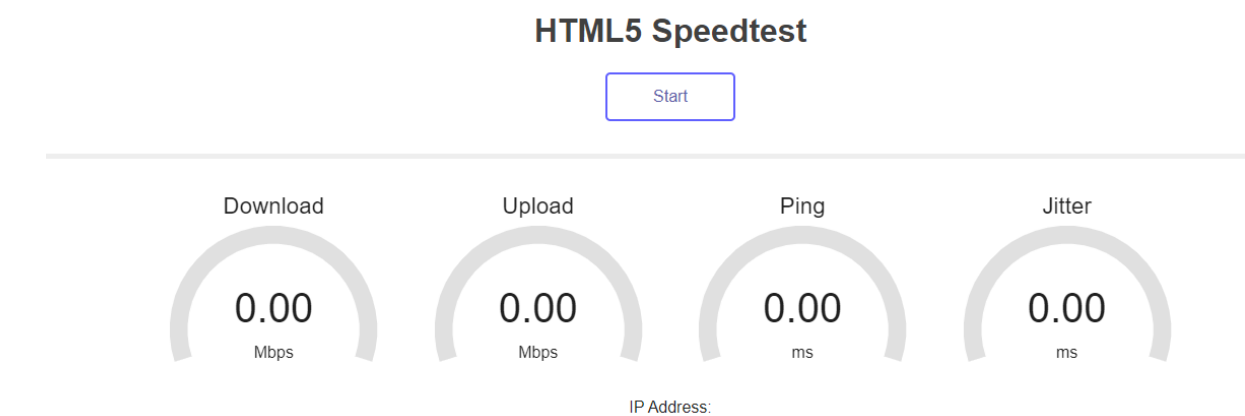
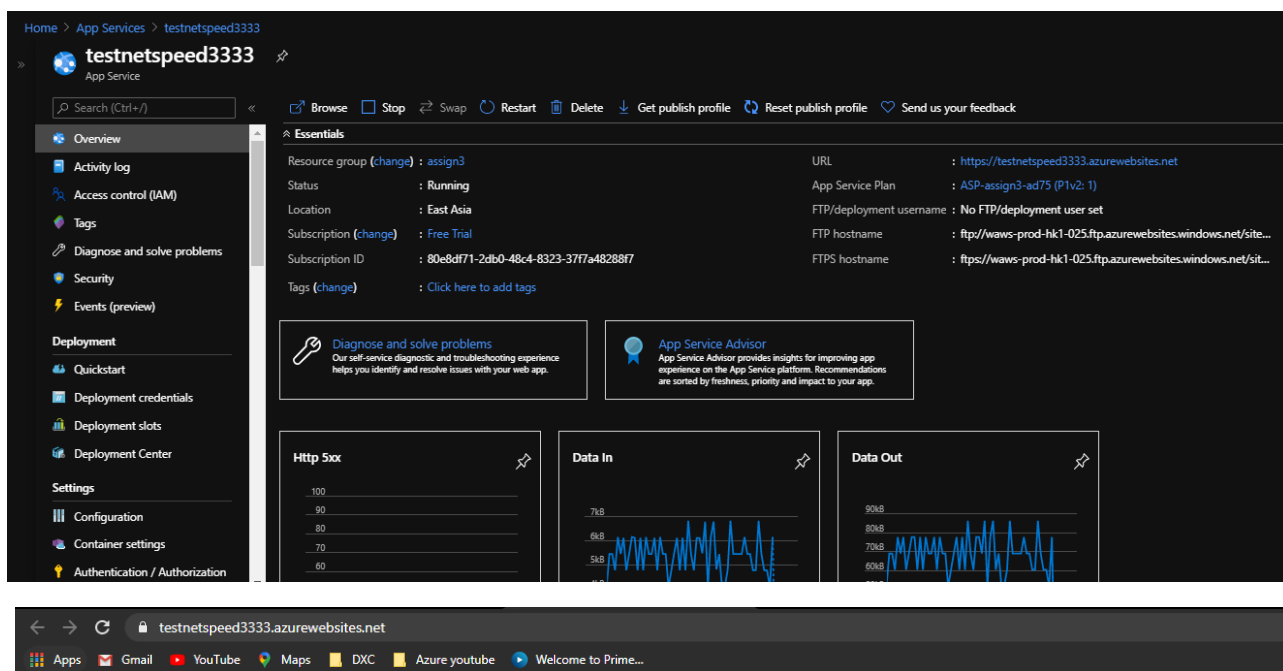
After connected to vpn I try to connect the vm s in vnet2 using private ip. It worked without any blockers.

4. Create two web applications and put the apps under traffic manager with Priority routing method





First I create a webapp named testnetspeed1111 using docker container.



Here I create another webapp named testnetspeed3333 using another docker container.

Home > Traffic Manager profiles >

testnetspeed
Traffic Manager profile

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Configuration

Real user measurements

Traffic view

Endpoints

Properties

Locks

Export template

Monitoring

Alerts

Metrics

Enable profile Disable profile Refresh Move Delete profile

Essentials

Resource group (change) : assign3 DNS name : http://testnetspeed.trafficmanager.net

Status : Enabled Monitor status : Online

Subscription (change) : Free Trial Routing method : Priority

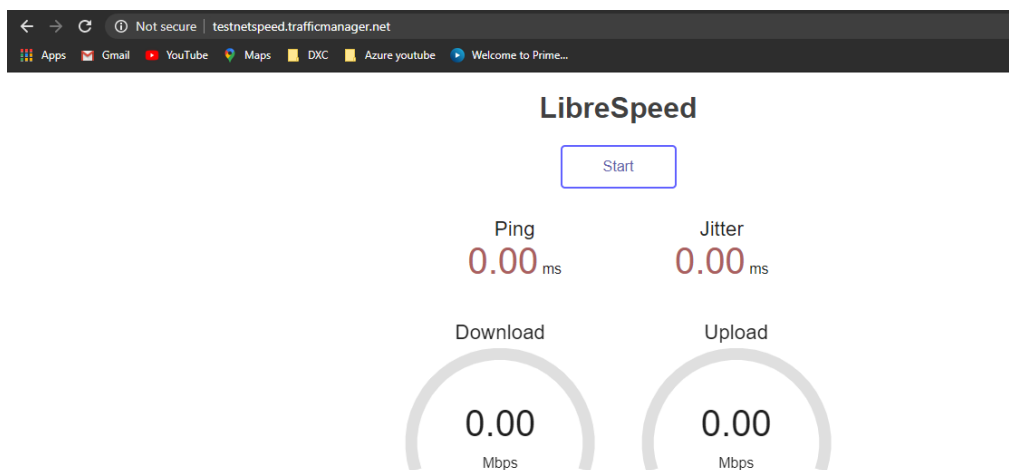
Subscription ID : 80e8df71-2db0-48c4-8323-37f7a48288f7

Tags (change) : Click here to add tags

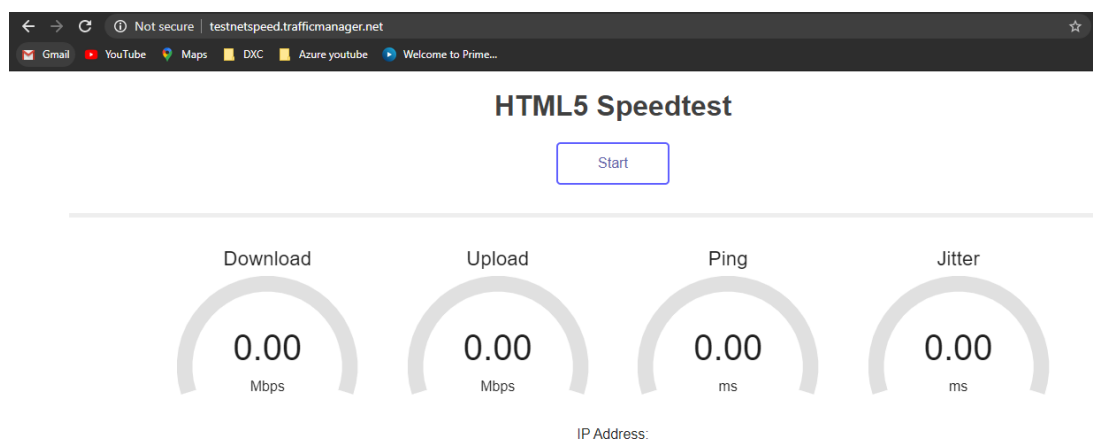
Search endpoints

Name	Status	Monitor status	Type	Priority
testendpoint1	Enabled	Online	Azure endpoint	1
testendpoint2	Enabled	Online	Azure endpoint	2

After that I create a traffic manager profile using priority routing method and connect the end points of two webapps which I create earlier.



After connecting to traffic manager profile I try to access the web apps using traffic manager url and it shows the testnetspeed1111 web app. Because it has priority 1.



Next I disable the 1st webapp and try to access the same url. Now it shows testnetspeed3333 webapp because the 1st webapp which has priority 1 is disabled and 2nd app has priority 2 so it opened.

5. Create a Backup solution for the Vm and assign a daily policy to the VM with 10 days retention period

The screenshot shows the 'Backup policy' configuration window in the Azure portal. The policy is named 'backuppolicy'. The backup schedule is set to 'Daily' at '10:30 PM' in the '(UTC+05:30) Chennai, Kolkata, ...' timezone. The 'Instant Restore' section shows 'Retain instant recovery snapshot(s) for 2 Day(s)'. The 'Retention range' section is checked for 'Retention of daily backup point' and set to 'At 10:30 PM' for '10 Day(s)'. An 'OK' button is at the bottom right.

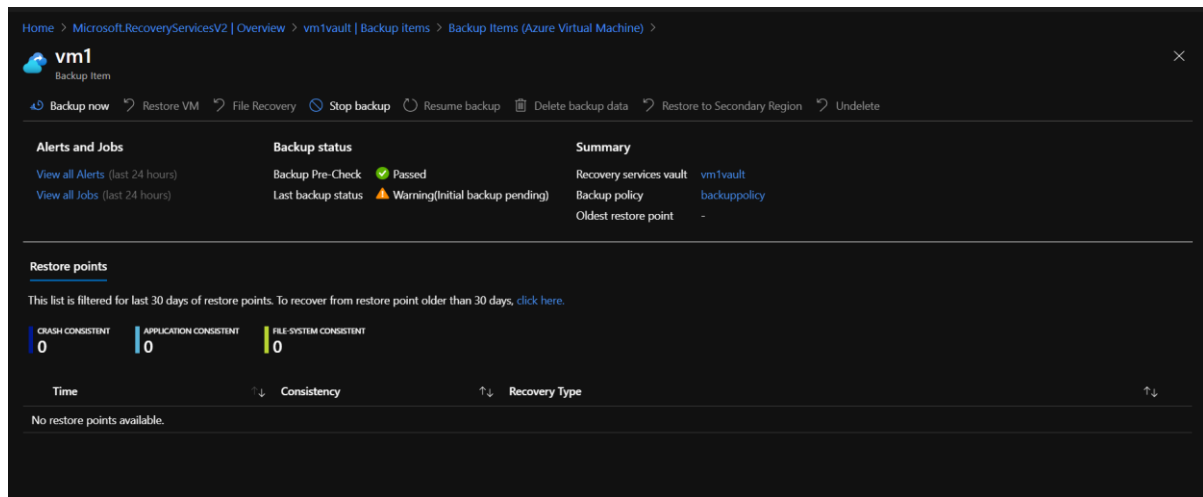
Here first I create a Azure recovery service vault named vm1vault and take azure vm backup with customized backup policy of retention period 10days.

The screenshot shows the 'Backup policy' configuration window with the summary of the policy. The policy is named '(new) backuppolicy'. The backup frequency is 'Daily at 10:30 PM India Standard Time'. The 'Instant Restore' section shows 'Retain instant recovery snapshot(s) for 2 day(s)'. The 'Retention range' section is checked for 'Retention of daily backup point' and set to 'Retain backup taken every day at 10:30 PM for 10 Day(s)'. An 'Enable Backup' button is at the bottom left.

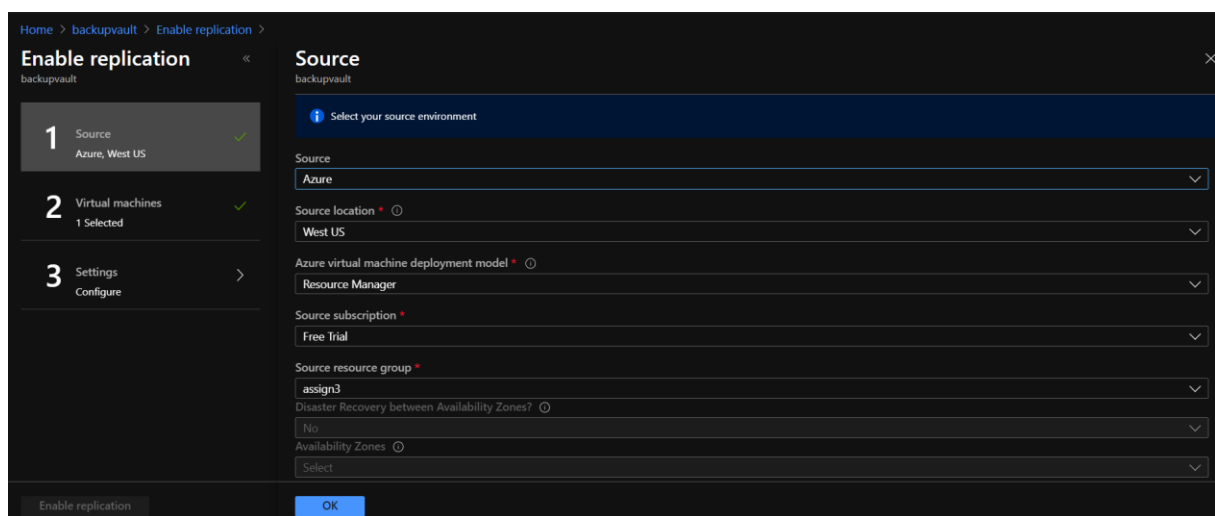
The screenshot shows the 'Backup Items (Azure Virtual Machine)' table in the Azure portal. The table has columns for Name, Resource Group, Backup Pre-Check, Last Backup Status, Latest restore point, and an ellipsis menu. The table contains one row for 'vm1' in the 'assign3' resource group, with a 'Passed' backup pre-check and a 'Warning(initial backup pending)' last backup status.

Name	Resource Group	Backup Pre-Check	Last Backup Status	Latest restore point	
vm1	assign3	Passed	Warning(initial backup pending)		...

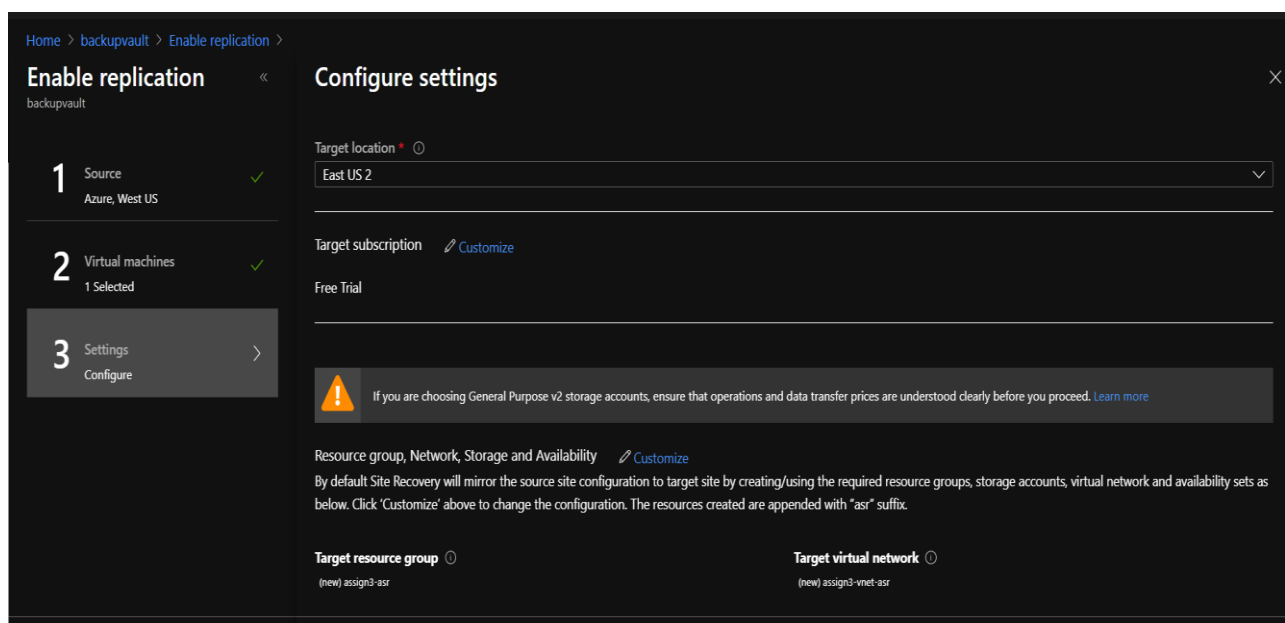
I enable backup for vm1.



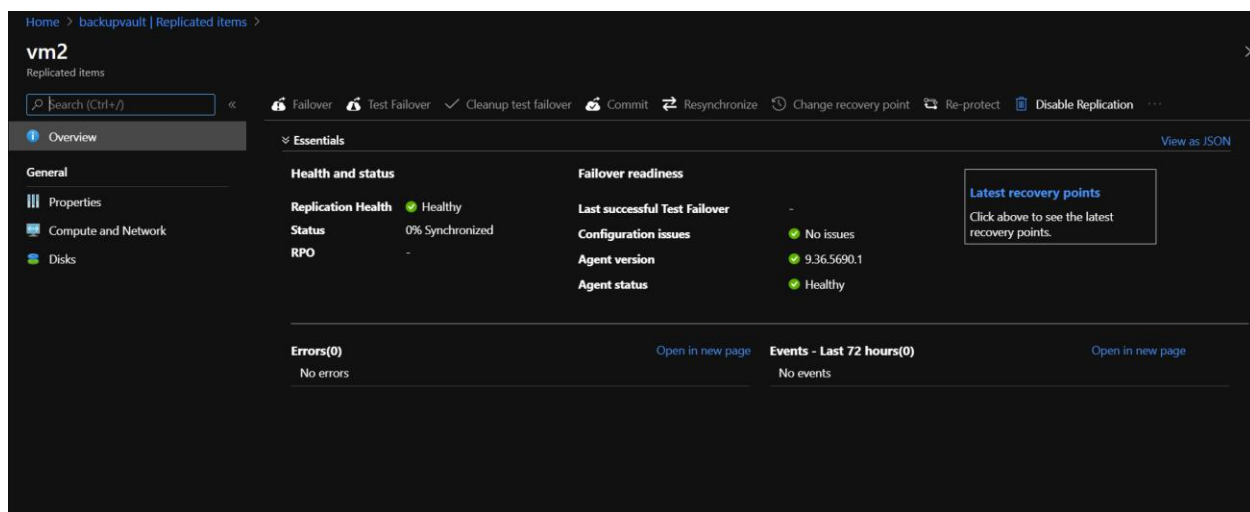
6. Replicate the VM from west us to any location using failover



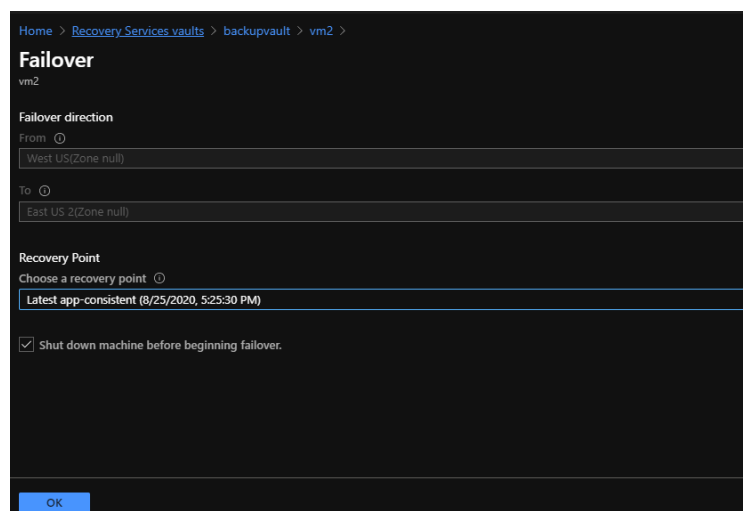
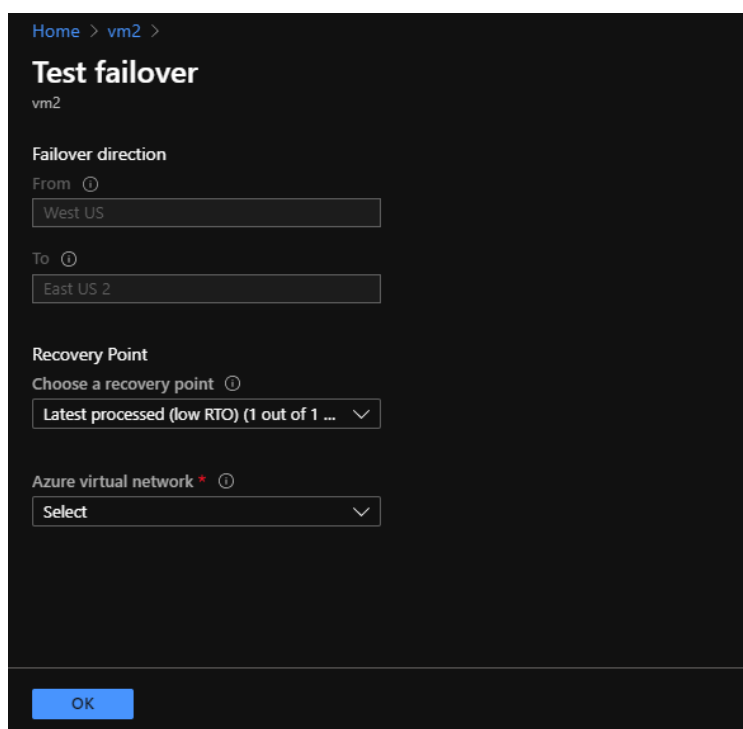
Here also first I created a Azure recovery service vault named backupvault and replicate the vm2 from West US to East US 2.



After configure settings click enable replication.



After replication and 100% synchronization I run the Test Failover and cleaned it up.



After test failover I create failover of vm2 which is created in East US 2 location as shown below.

Home > Virtual machines DXC Production

+ Add Reservations Edit columns Refresh Assign tags Start Restart Stop Delete Services

Subscriptions: Free Trial

Filter by name... All resource groups All types All locations All tags No grouping

2 items

Name	Type	Status	Resource group	Location	Source	Maintenance status	Subscription
vm2	Virtual machine	Running	assign3-asr	East US 2	Disk	-	Free Trial
vm2	Virtual machine	Stopped (deallocated)	assign3	West US	Marketplace	-	Free Trial

7. Take a on-premises backup using backup agent and exclude test folder from any drive

Microsoft Azure Search resources, services, and docs (G+/)

Home > Recovery Services vaults > backupvault

Prepare infrastructure

Recovery Services Agent
Please follow the steps mentioned below.

1. Install Recovery Services agent
[Download Agent for Windows Server or Windows Client](#)
2. Download vault credentials to register the server to the vault. Vault credentials will expire after 2 days.
☒ Already downloaded or using the latest Recovery Services Agent
[Download](#)
3. Schedule backup using Recovery Services Agent UI. [Learn More](#)
4. Once the backups are scheduled, you can use backup jobs page to monitor the backups. [Browse jobs page](#)
5. You can also Configure Notifications from alerts page to receive email alerts for backup failures. [Browse alerts page](#)

[Learn More](#)

In the service vault named backupvault I created a backup for on-premises server for files and folders. After that I download and install Recovery services agent in the local server and configure it using azure vault credentials.

File Action View Help

Microsoft Azure Backup

Microsoft Azure Backup supports scheduled backups of files and folders to an online location

⚠ Backups have not been configured for this server. Click "Schedule Backup" in the Actions pane to configure backup options and schedule a regular backup. You can also Configure Notifications from Alerts blade to receive email alerts for backup failures. [Learn More](#)

Jobs (Activity in the past 7 days, double click on the message to see details)

Jobs Alerts

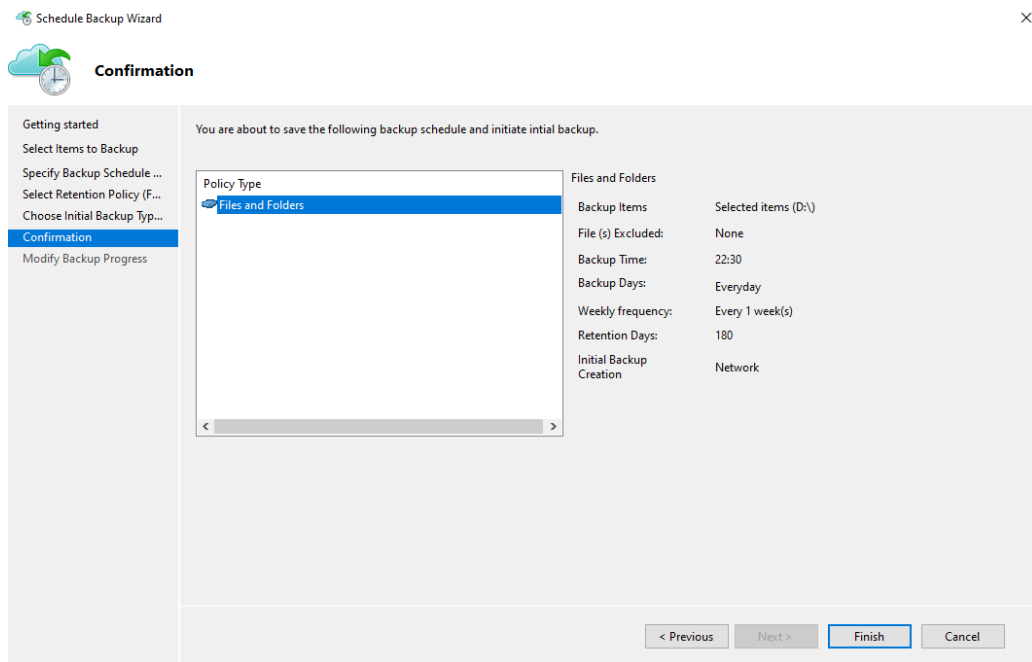
Status	Time	Message	Description
--------	------	---------	-------------

Status

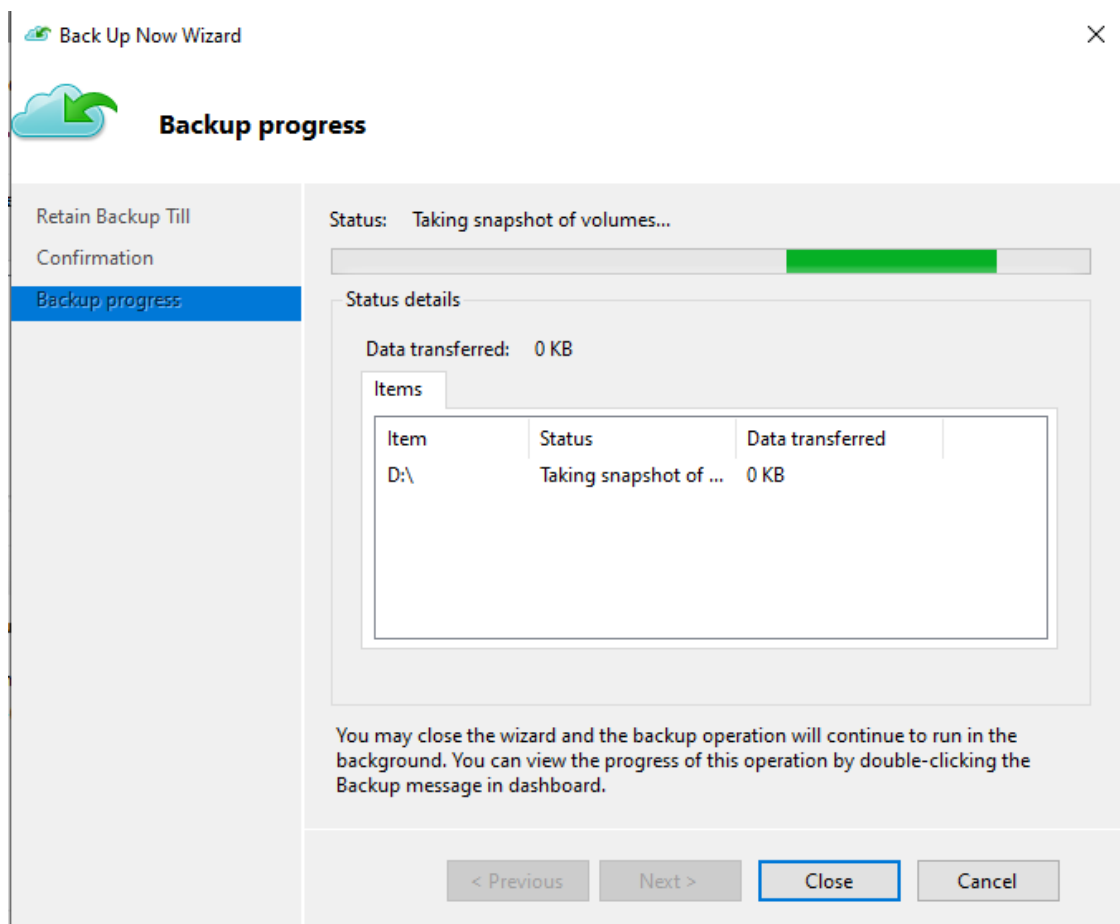
Last Backup	Next Backup	Available Recovery Points	Last Recovery
Status: - Time: - View details	Status: Not Scheduled Time: -	Total backups: None Latest copy: - Oldest copy: - View details	Status: - Time: - View details

Actions

- Backup
- Register Server
- Schedule Backup
- Recover Data
- Change Properties
- Open Portal
- About Microsoft Azure Recovery S...
- Privacy & Cookies
- View
- Help



Here I configure schedule backup with 180 days retention period. I select a folder named **backup** in D drive for Backup. After that I select the Backup now option.



**Backup progress**

Retain Backup Till
Confirmation
Backup progress

Status: Backup is successfully completed.

Status details

Data transferred: 16.29 MB (compressed and includes meta-data)

Items

Item	Status	Data transferred
D:\	Job completed.	16.29 MB

< Previous Next > **Close** Cancel

Here the Backup is finished.

Microsoft Azure Backup

File Action View Help

Microsoft Azure Backup supports scheduled backups of files and folders to an online location

⚠ Backups have not been configured for this server. Click "Schedule Backup" in the Actions pane to configure backup options and schedule a regular backup.

Jobs (Activity in the past 7 days, double click on the message to see details)

Jobs Alerts

Status	Time	Message	Description
✓	25-08-2020 19:25	Backup	Job completed.

Status

Last Backup
Status: ✓ Successful
Time: 25-08-2020 19:25
[View details](#)

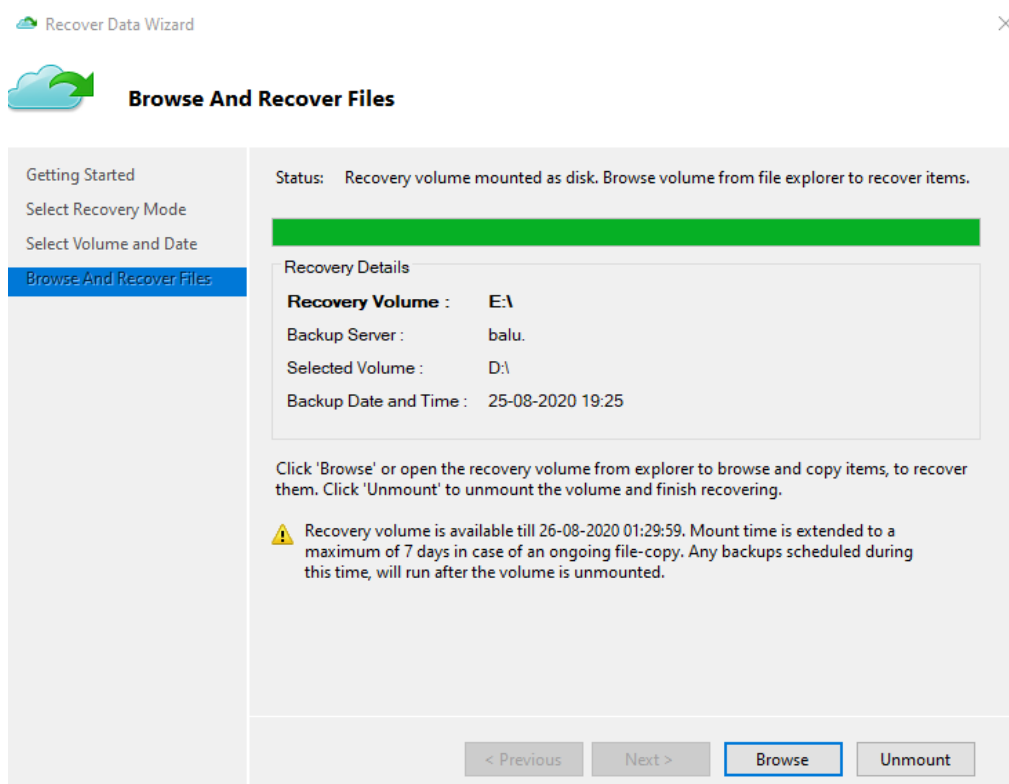
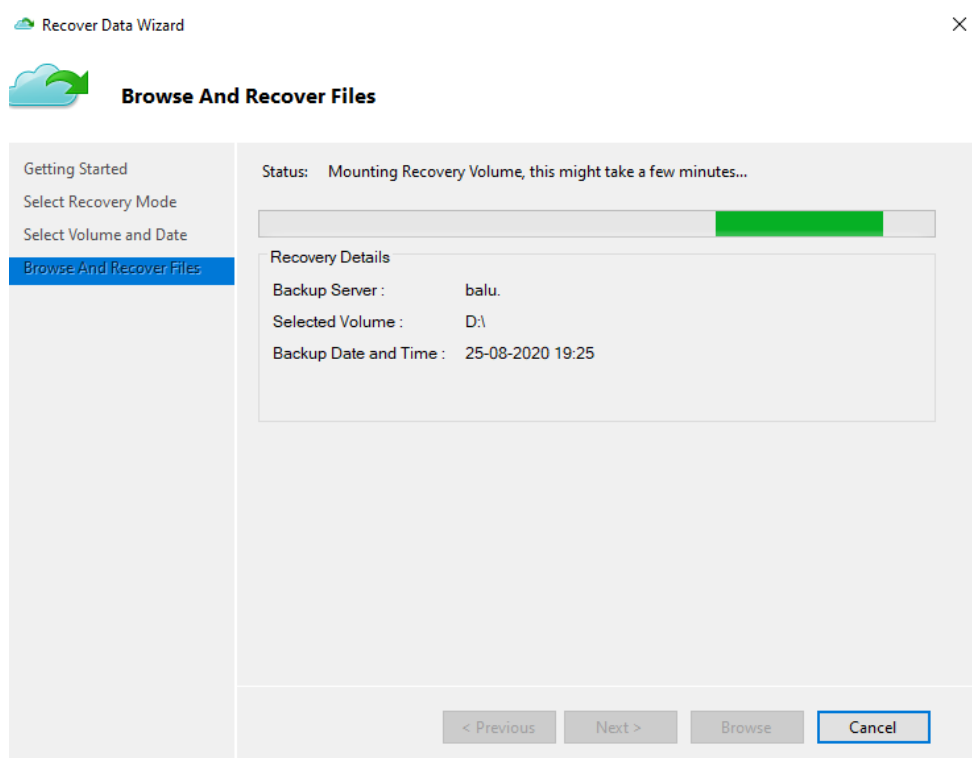
Next Backup
Status: Scheduled
Time: 25-08-2020 22:30

Available Recovery Points
Total backups: 1
Latest copy: 25-08-2020 19:25
Oldest copy: 25-08-2020 19:25
[View details](#)

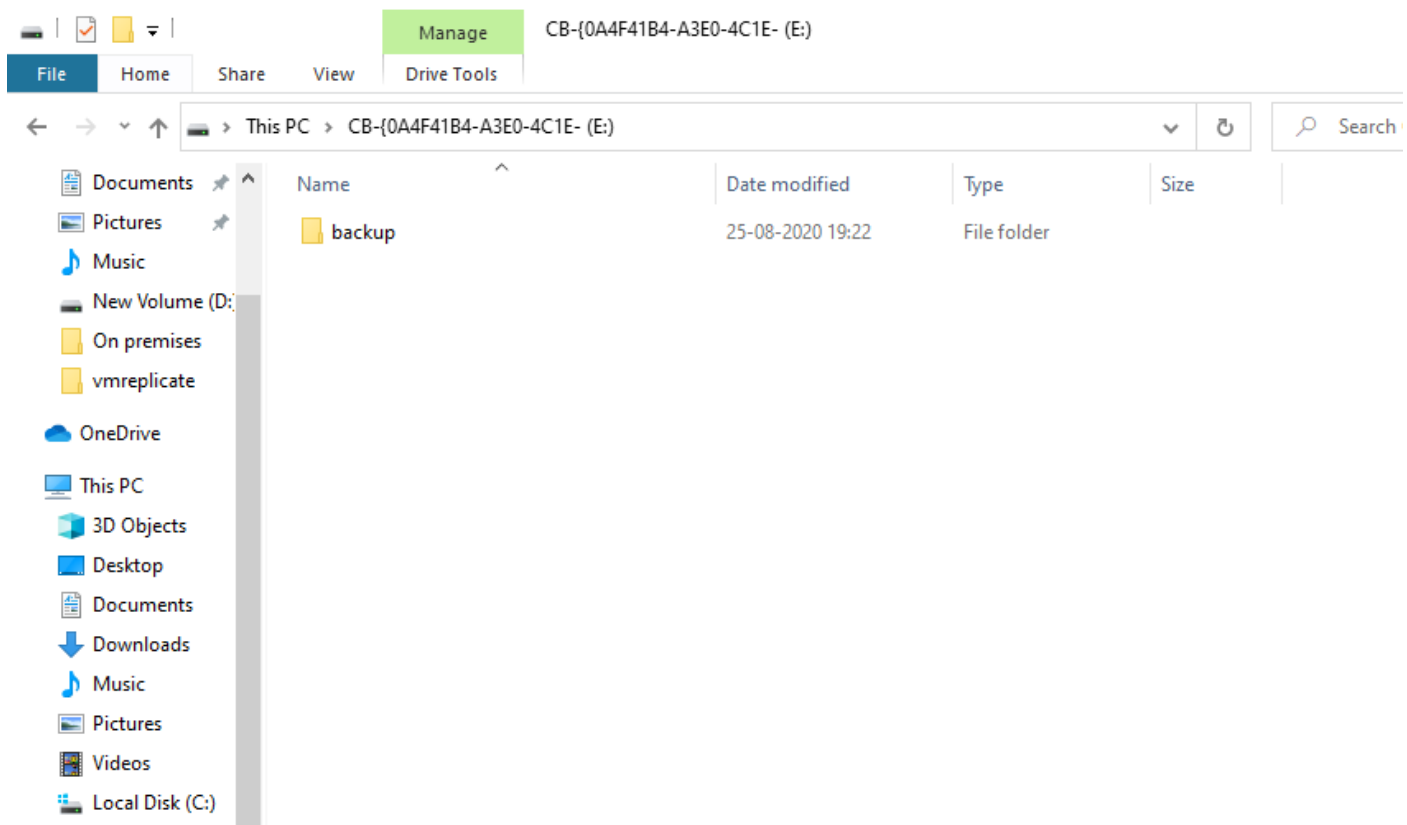
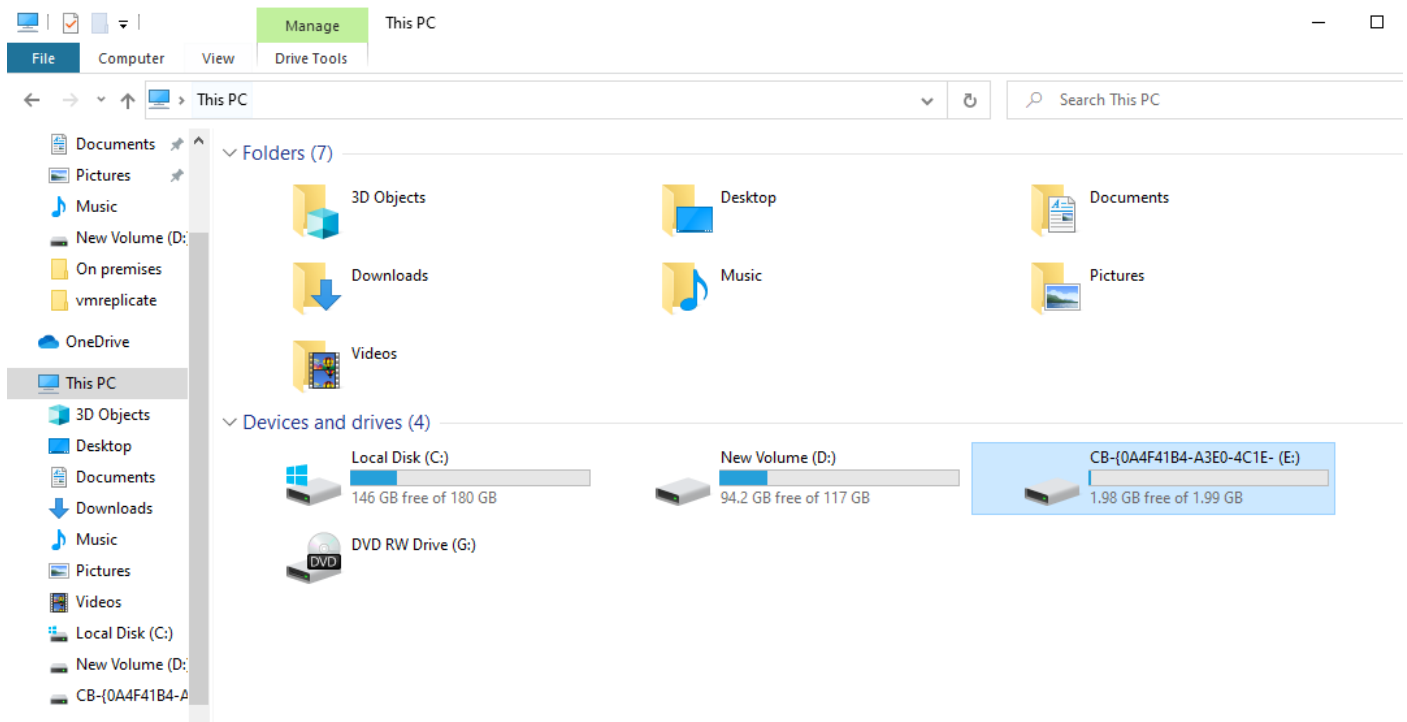
Last Recovery
Status: -
Time: -
[View details](#)

Scheduled Backup
A regular scheduled backup is configured for this server. Destination usaaoc reflects how the backups from this server are stored in the cloud storage. Space allocation data is

Actions
Backup
Register Server
Schedule Backup
Back Up Now
Recover Data
Change Properties
Open Portal
About Microsoft Azure Recovery S...
Privacy & Cookies
View
Help



Now I delete that backup folder and try to recover it. After completing the recovery process it shows like below.



In the separate mounted disk the recover files are shown so I can copy that folder to original location.