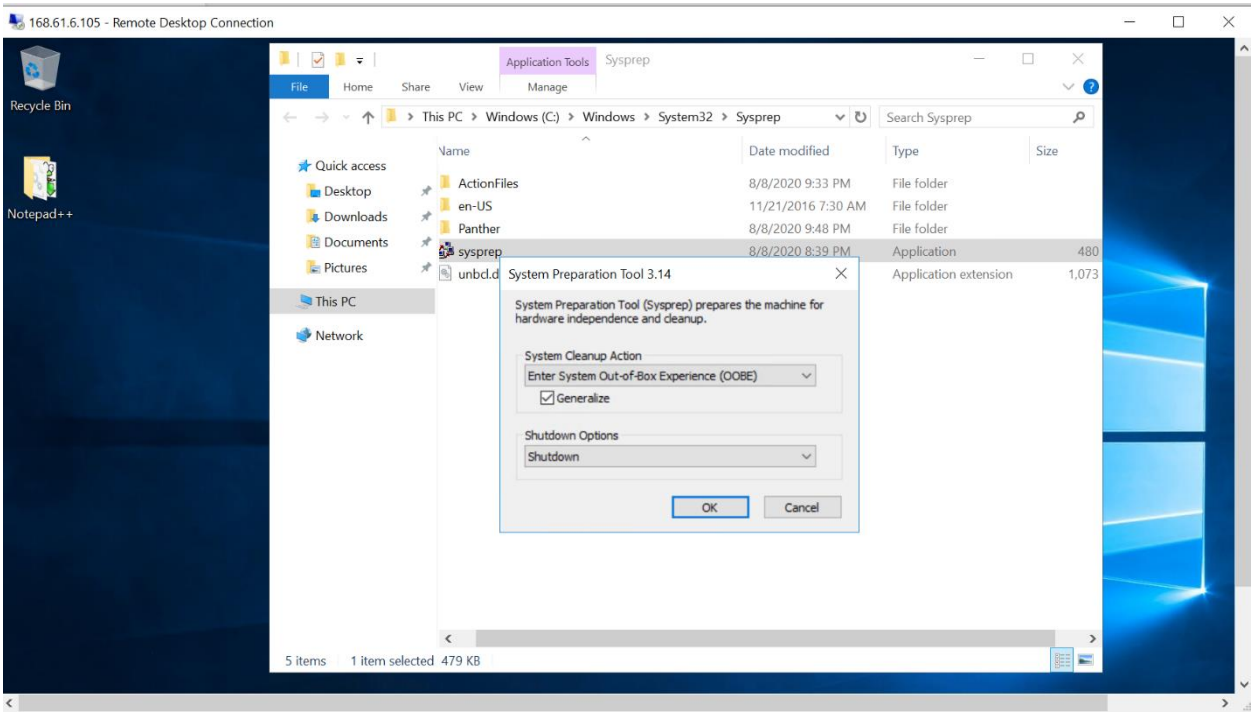
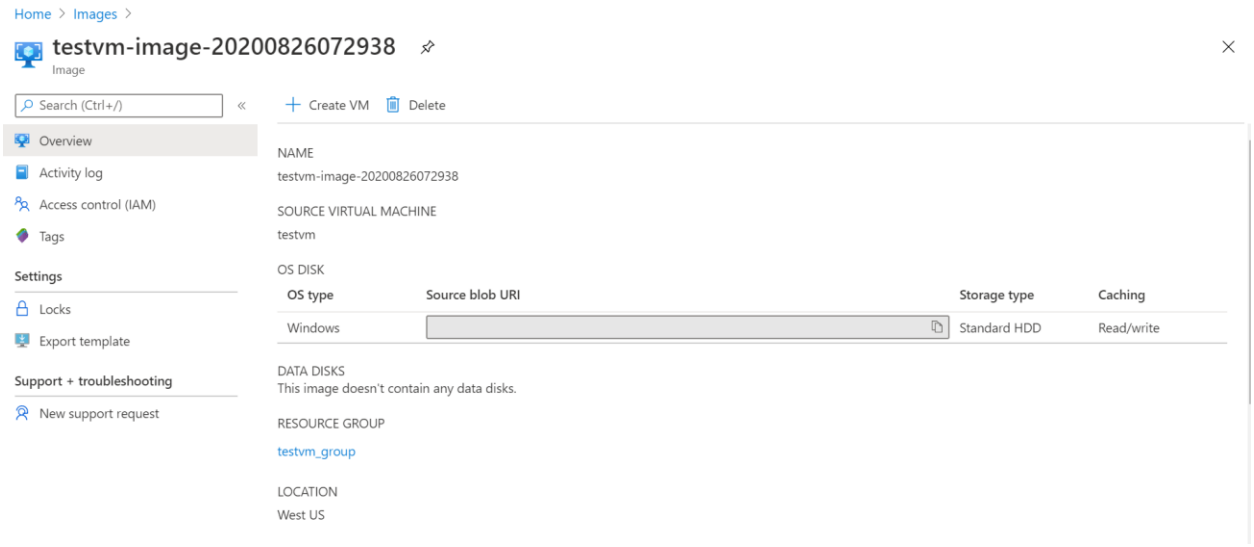
1.Deploy the custom image with any application installed:

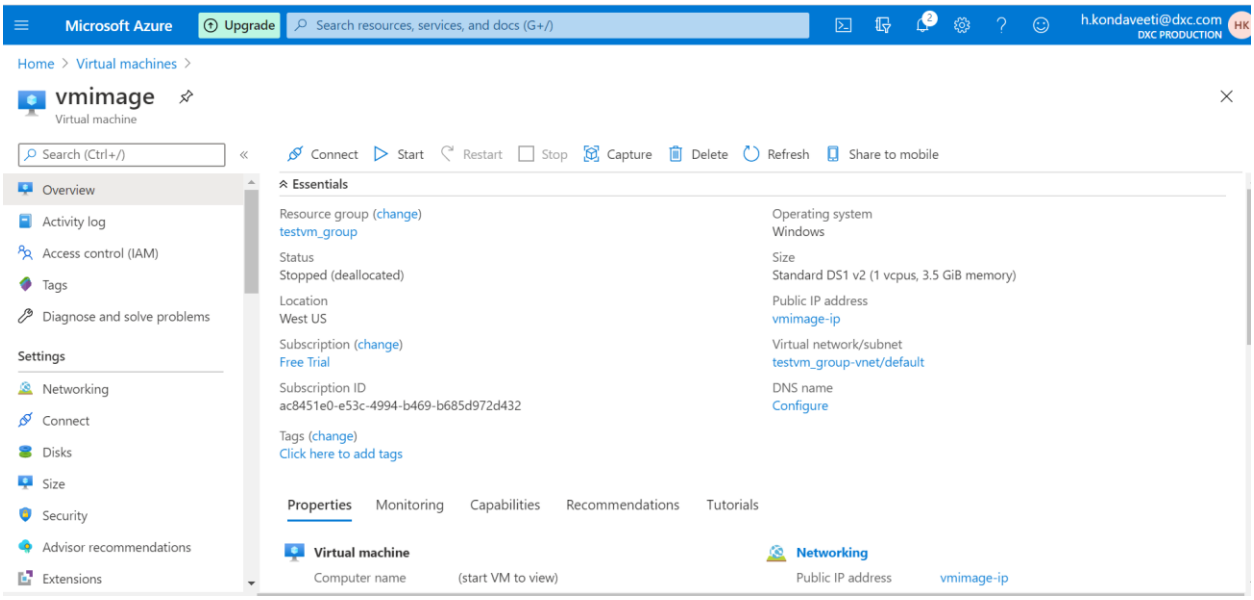
- In the above I have downloaded one application(notepad++) in testvm.



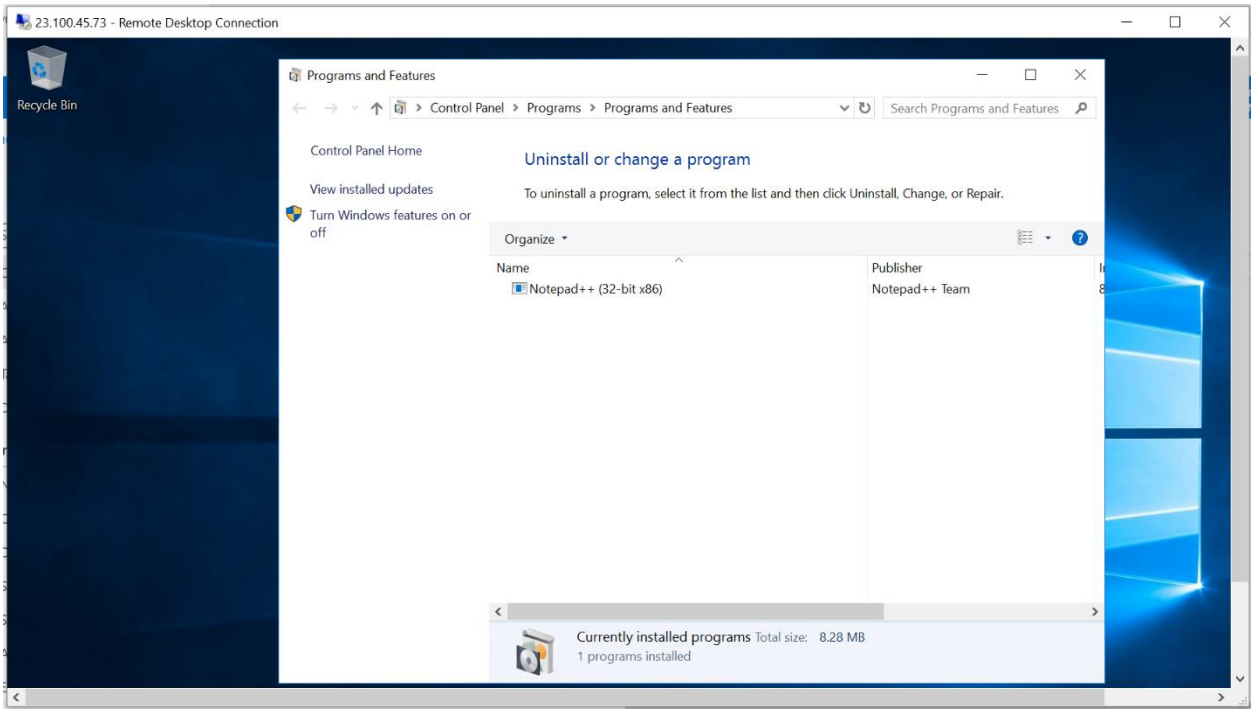
- After that I generalize the vm using sysprep. It removes all the security and made the os usable for custom image generation.



- I am created a custom image of testvm

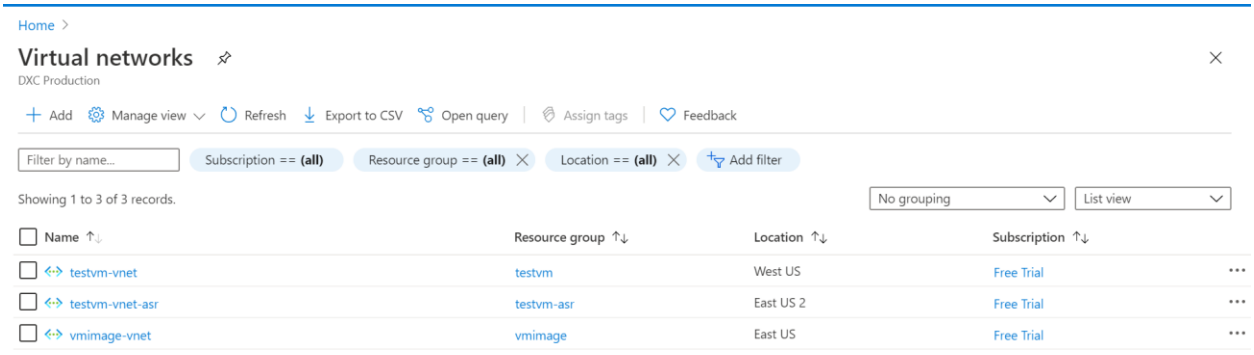


- I have created a another vm vmimage by using custom image testvm.

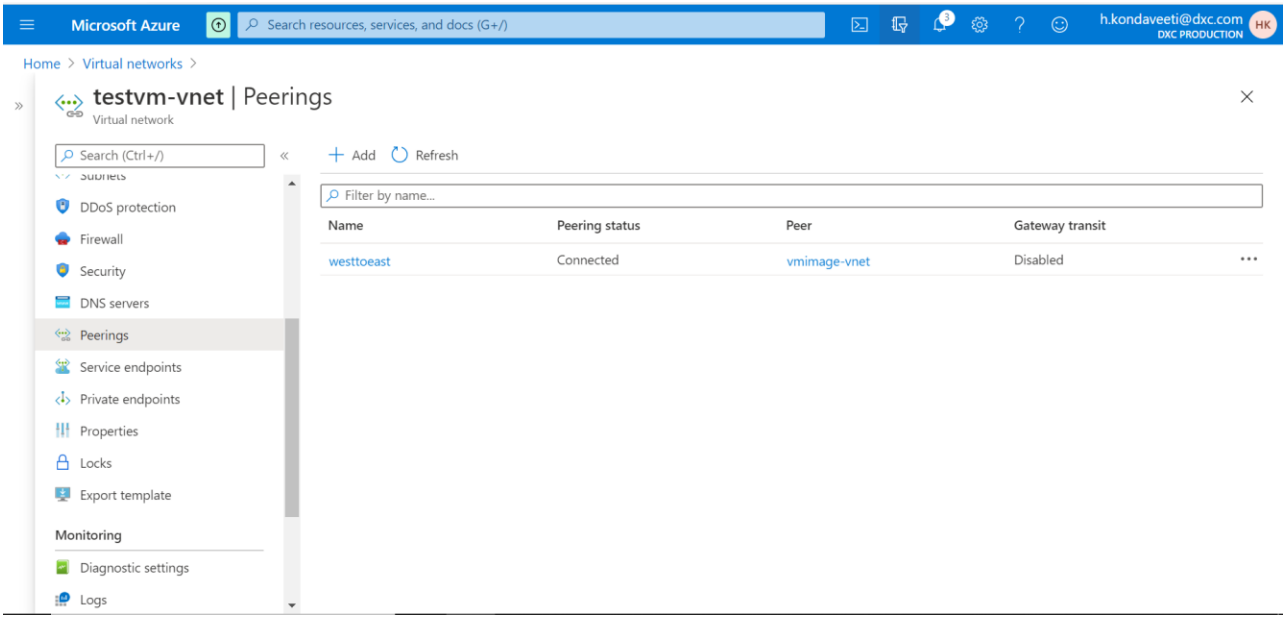


I open the vmimage. Here I check whether the Notepad++ is installed or not. It is installed because this vm is created using custom image from testvm where already Notepad++ is installed before the Custom image creation.

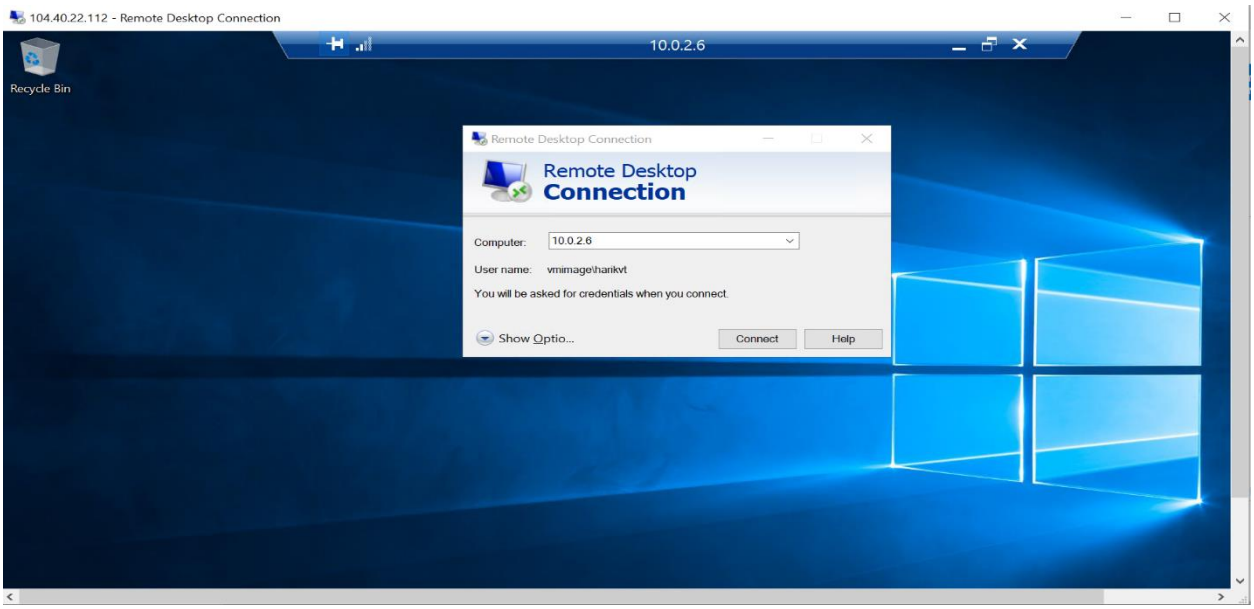
2.Create a two networks in East Asia and west us and peer the network using Network Peering and access the VM using private from one location to other location:



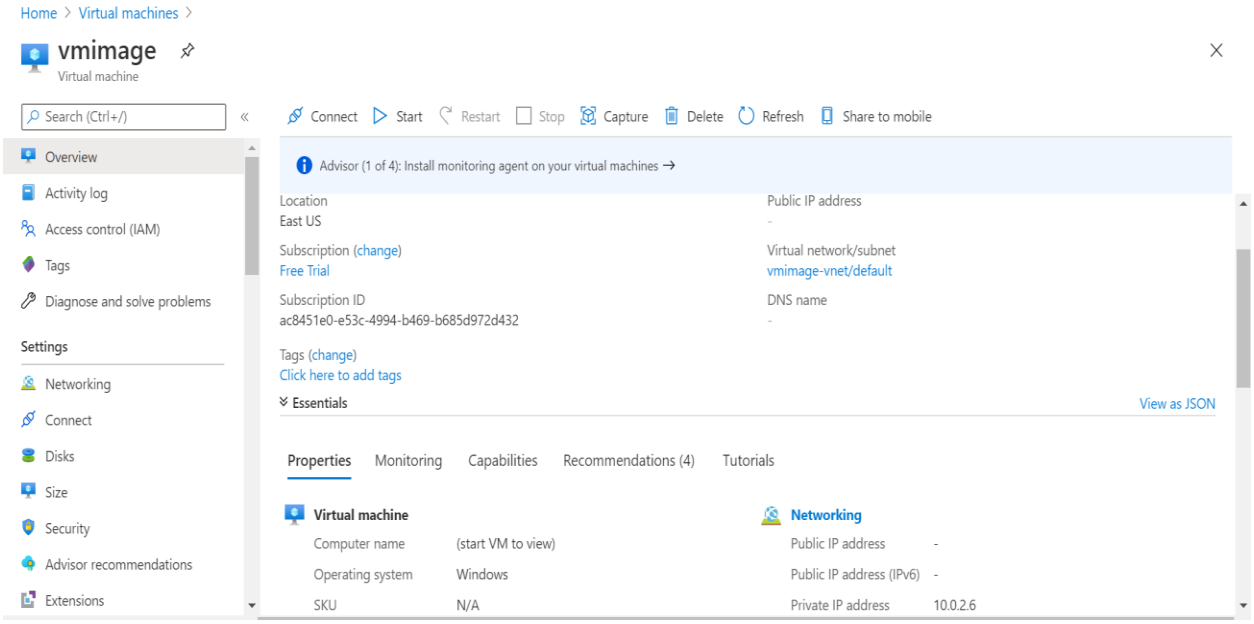
- In the above diagram I have created two virtual networks, one network is in westus location and another one is in eastus location.



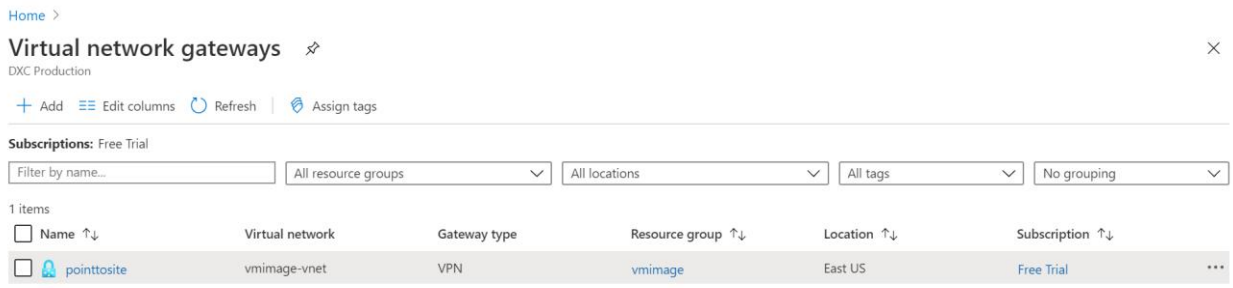
- In the above diagram I have enabled a peering connection between westus to eastus



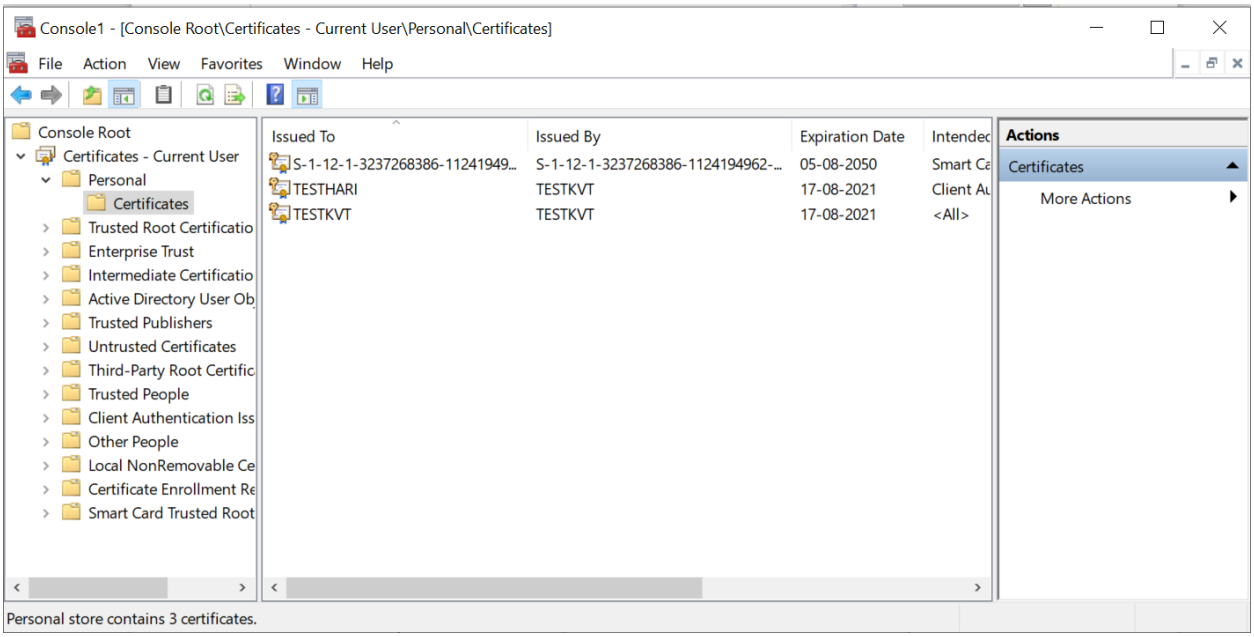
- In the above diagram I am accessing my virtual machine using private ip from westus location. Actually it is in eastus location as shown in below diagram.



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



- I have created a point to site VPN in eastus location



- I have created a root certificate and client certificate using windows powershell.

test - Notepad

File Edit Format View Help

```
-----BEGIN CERTIFICATE-----
MIIC3zCCAcegAwIBAgIQF/8SN08MQqxF5HPoKj4zszANBgkqhkiG9w0BAQsFADAS
MRAwDgYDVQQDDAdURVNUS1ZUMB4XDTIwMDgxNzEzNTQyNloXDTIxMDgxNzE0MTQy
NlowEjEQMA4GA1UEAwwHVEVTVEtWVDCCASIwDQYJKoZIhvcNAQEBBQADggEPADCC
AQoCggEBAKlCMwS7Rm99VU07zp2wHekb/kdvH+zCQ7qbPcTIxrpqvHYHFwfUrq+V
opONKtRpY9H7qkoE8jXXTGl/3Omt/Oc41W1zGOcooWP9QBfHX/mmIL6oxk9EmrBI
fXW6fkT5L48lHdUn87p7HoH8OyI71BI7361ixmo0UJcq8dnAjwzNwRe91nVIBg+U
k3RDGDOU//JbTdRR9UBRQ9WCxgl8VGX2FUsOUbbSjDFA+QdxiCUq6PUVbK1PZtiz
eBROvQK81jK4jROspKRAMf4dG+z+vk61WcvC3ykbFf/7bL1YOsZy1Lm2akUhleZJ
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aNz8B8sYnO9R7OQ8CIjc2XW7QfSEq2jq5p/lf2YFH1vMPvQRh1vRIttTlg580SFe
VQ6//FGBEjucySTHbfW/FxJigtK3Sklwl/GheeCsGzoHCpcw+BA8am0tVnA9MT+S
+9LzsUoApbst3yIbb3mKaLAXHq2+sEa+ePn+5USKx49SVYpYJNYIeLkyCnHtpp8q
yYfD8YuLds569U42r5cW4s3gBt0NDzyJcX84oBNrePbSAL8tle9YtMHRs7VHMZj8
Ljob2tWhnYt9z61wXhkI8GIQ2g==
-----END CERTIFICATE-----
```
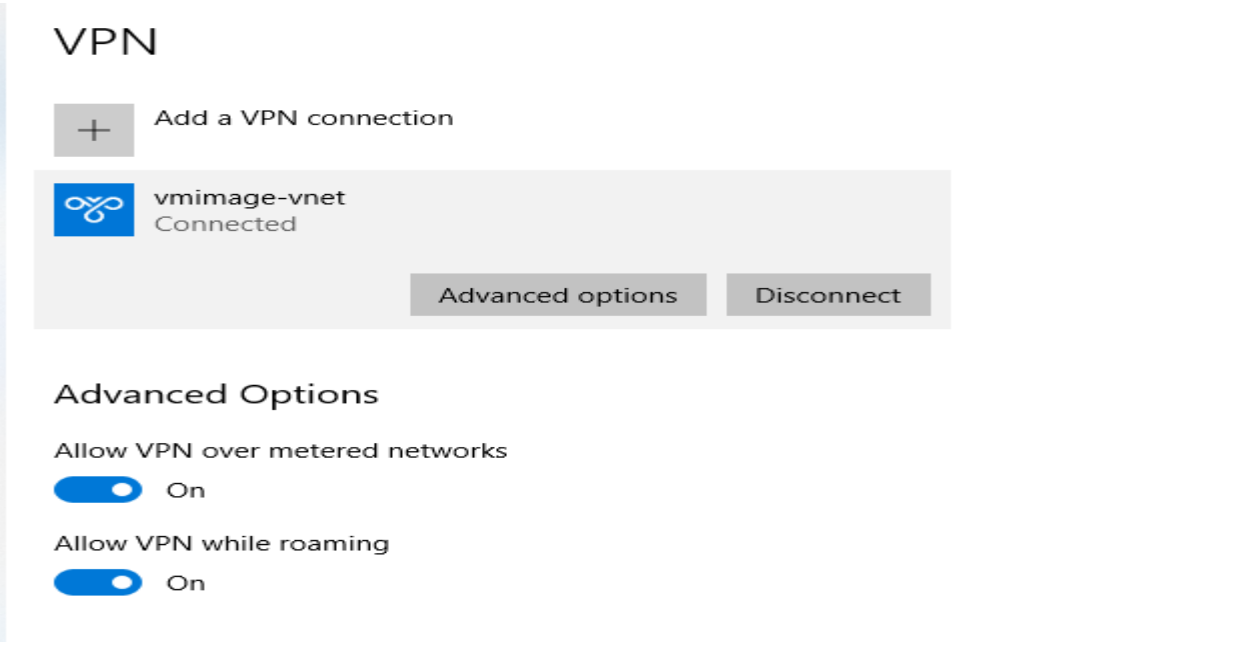
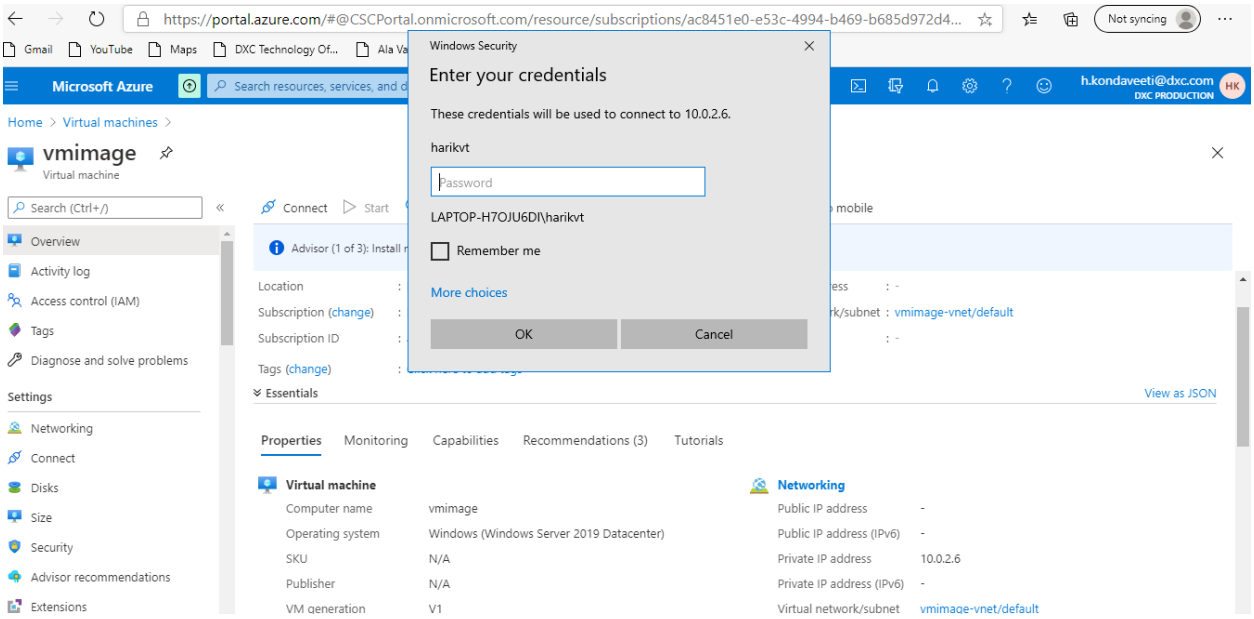

- After that I export the root certificate and copy the key inside the certificate inorder to upload it in azure portal.

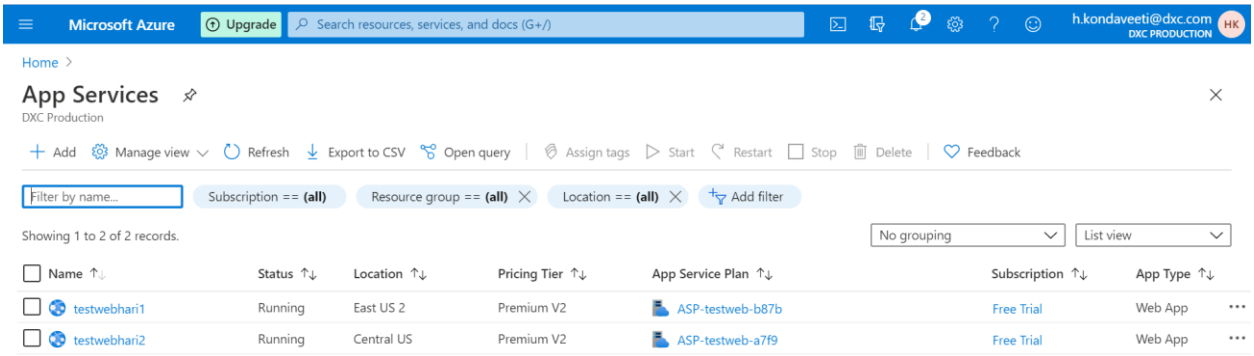


- I am connected VPN to my personal laptop.



- I am trying to connect virtual machine with private IP address within the virtual network connected to my personal laptop.

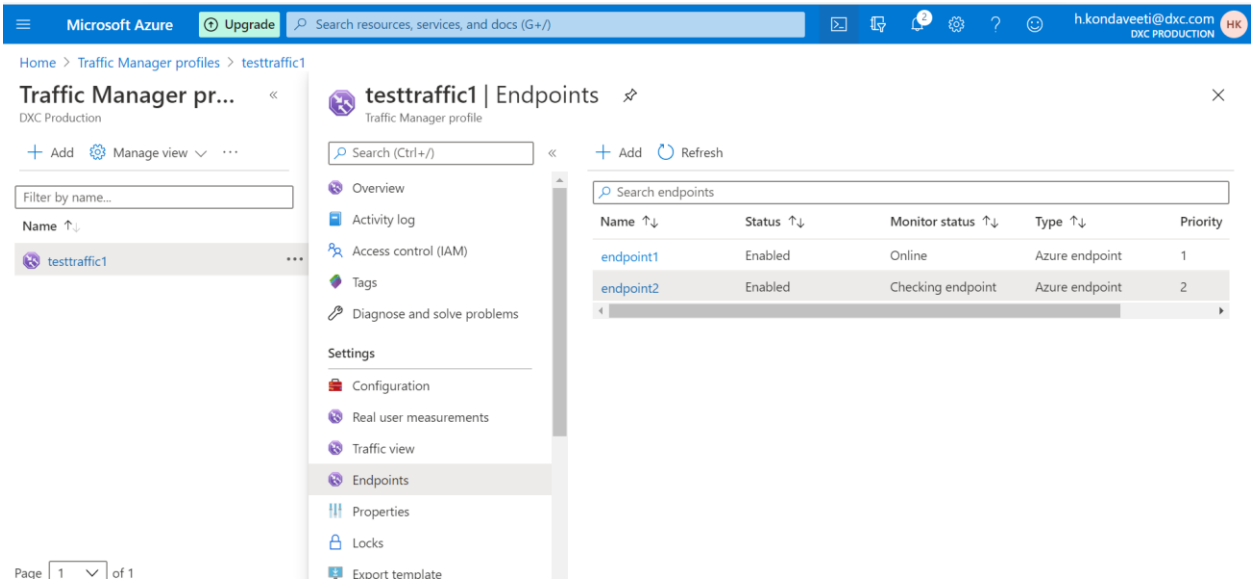
4. Create a two web applications and put the apps under traffic manager with Priority routing method



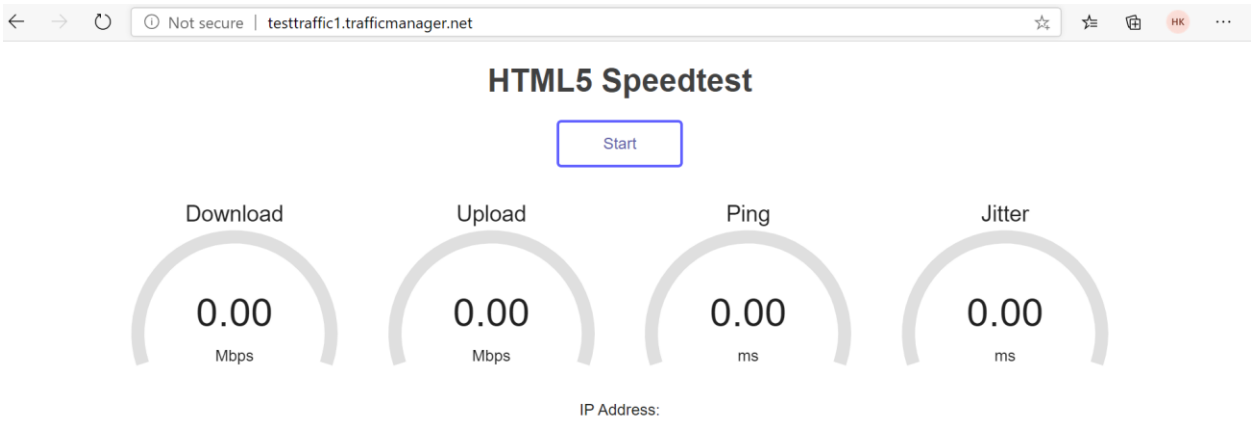
- I have created two web applications.

- First I created a webapp named testwebhari1

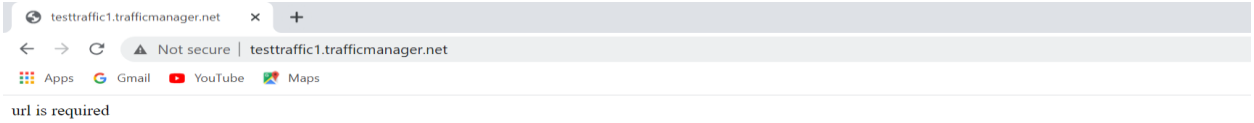
- Second I created a webapp named testwebhari2



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

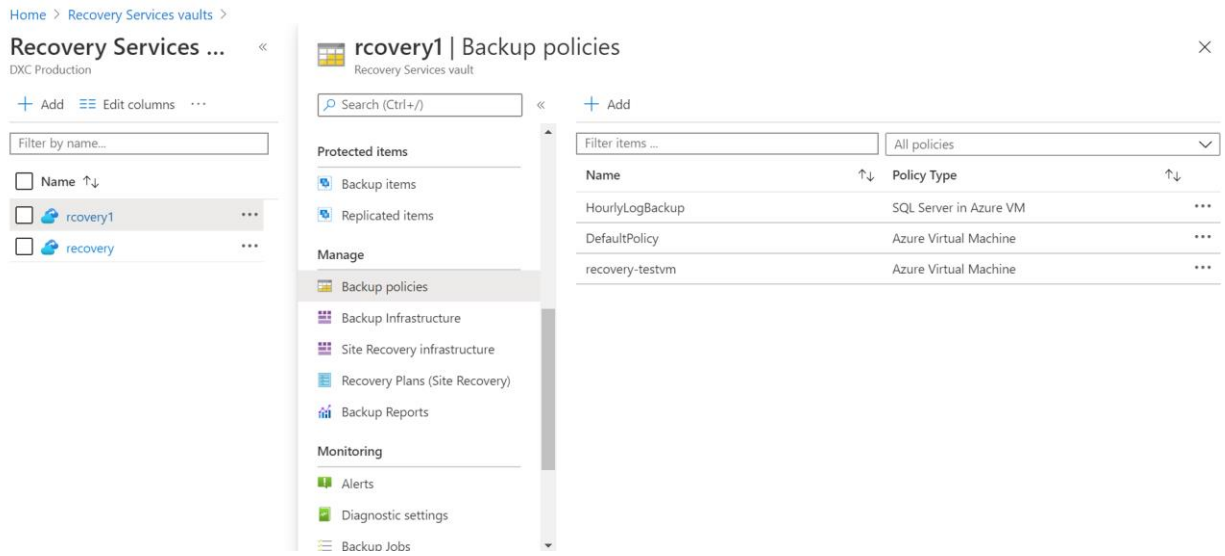


- After connecting to traffic manager profile I try to access the web apps using traffic manager url and it shows the testwebhari1 web app. Because it has priority 1

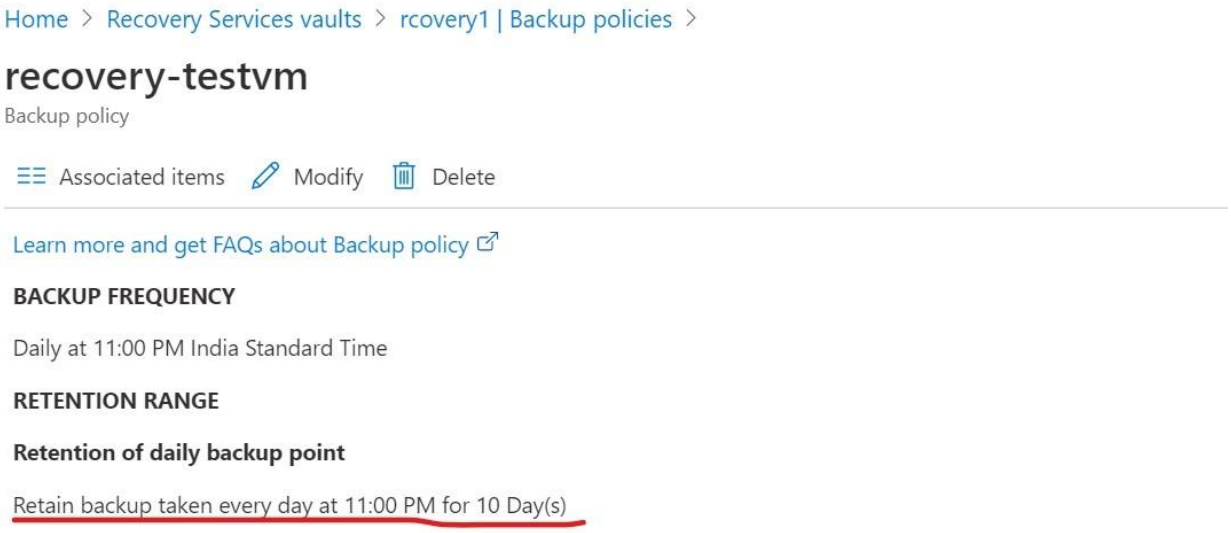


- Next I disable the 1 st webapp and try to access the same url. Now it shows testwebhari2 webapp because the 1st webapp which has priority 1 is disabled and 2nd app has priority 2 so it opened

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

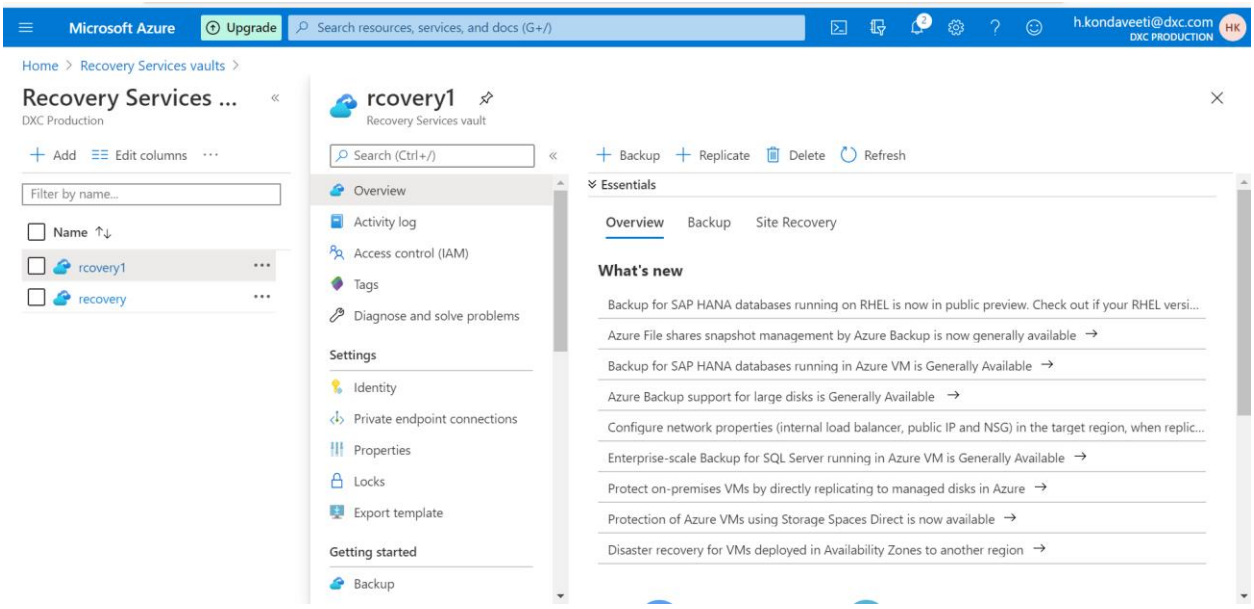


- In the above diagram first I have created a recovery1 by using recovery service vault then I have created a backup policy for test-vm virtual machine

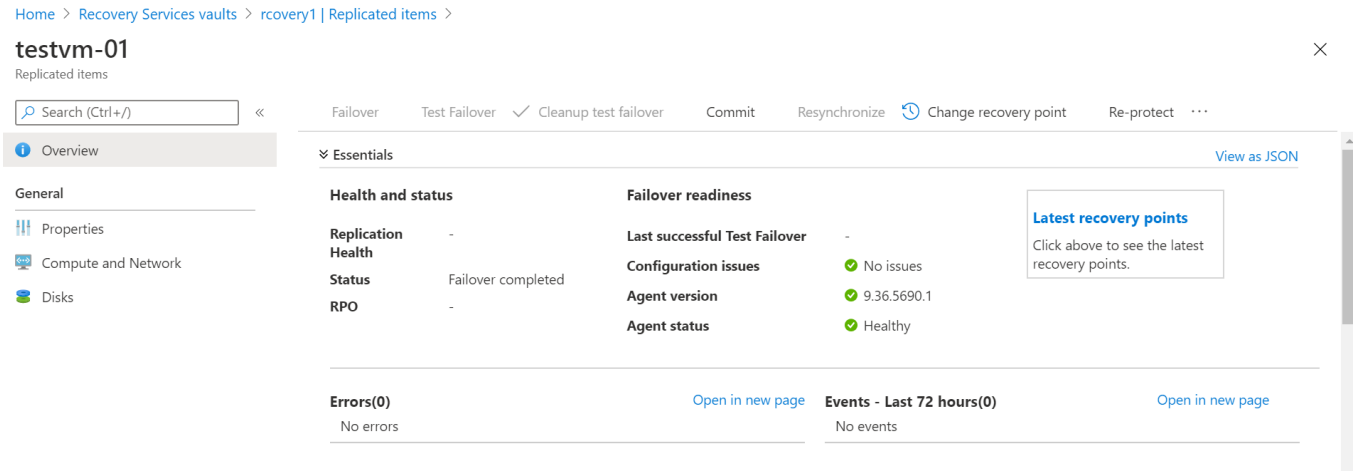


- In the above diagram I have created a backup policy for the VM and assigned a daily policy to the VM with 10 days retention period.

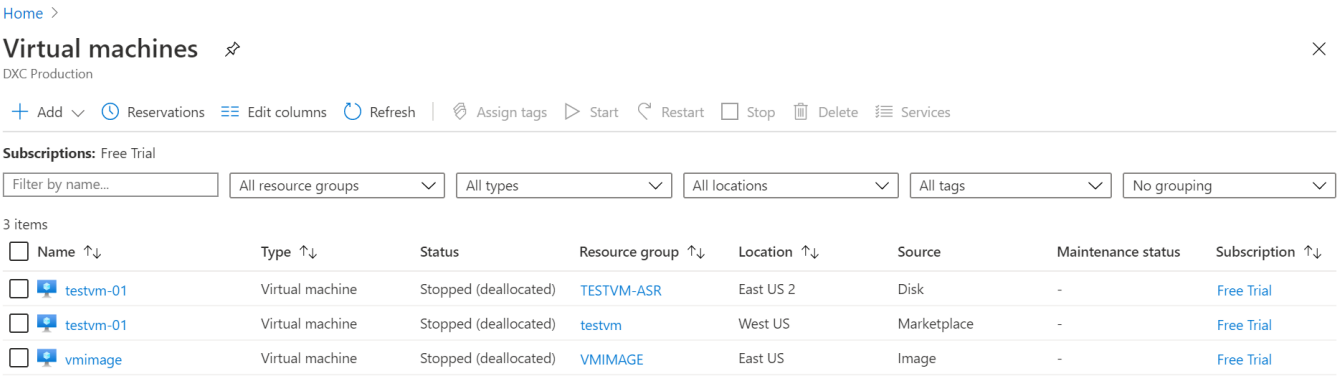
6.Replicate the VM form west us to any location using failover:



- Here also first I have created azure recovery service vault named recovery1.

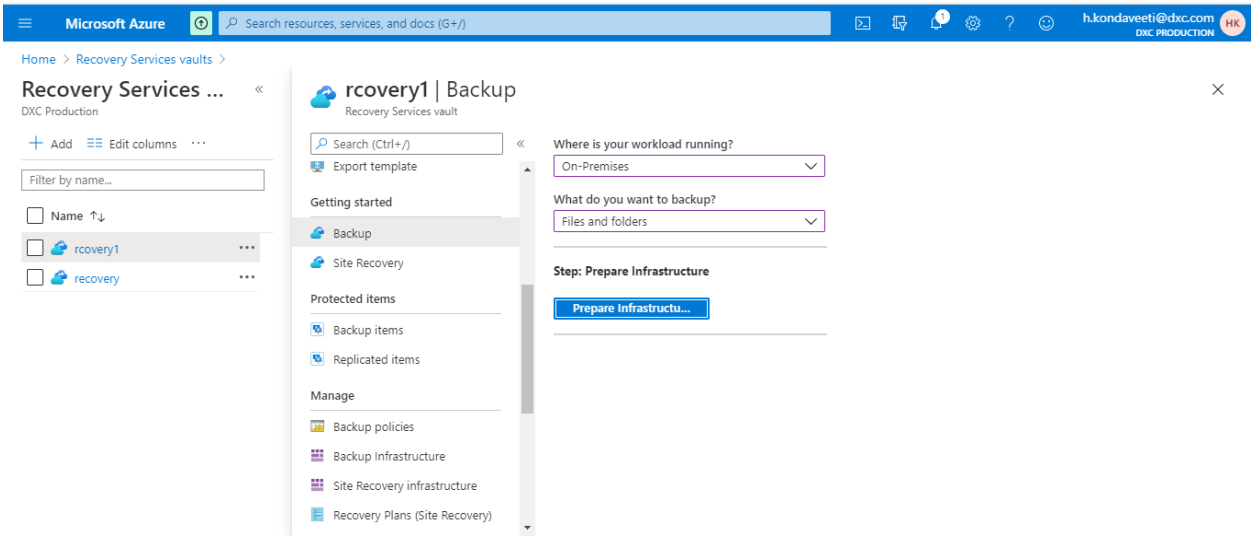


- I did a failover by using recovery service vault for test-vm which is in westus.

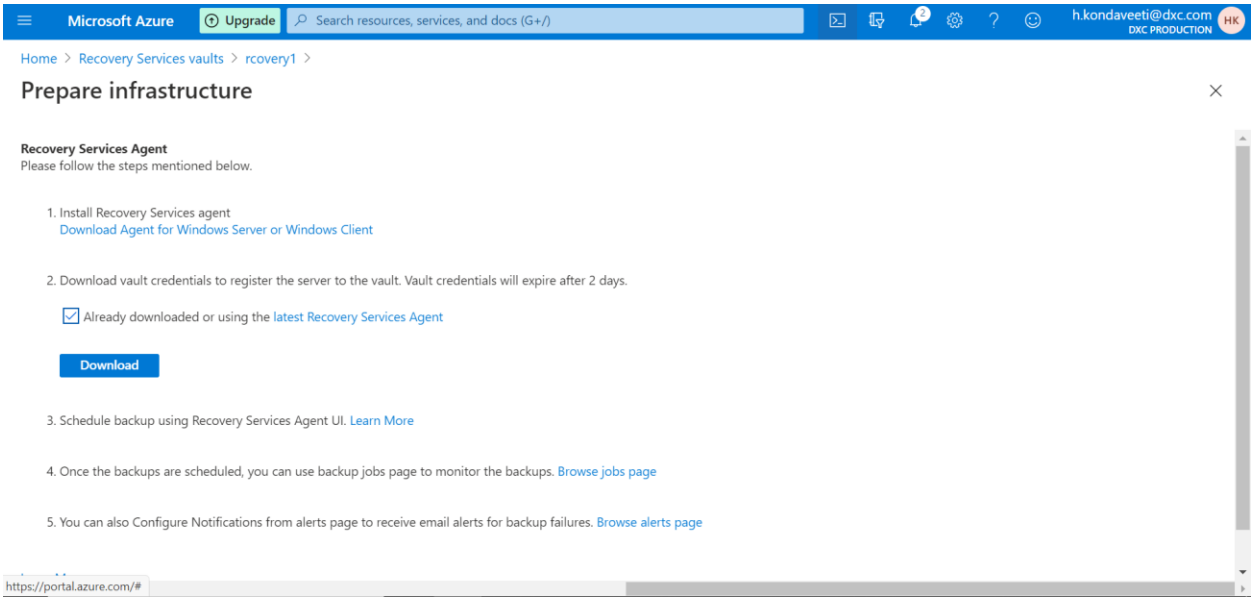


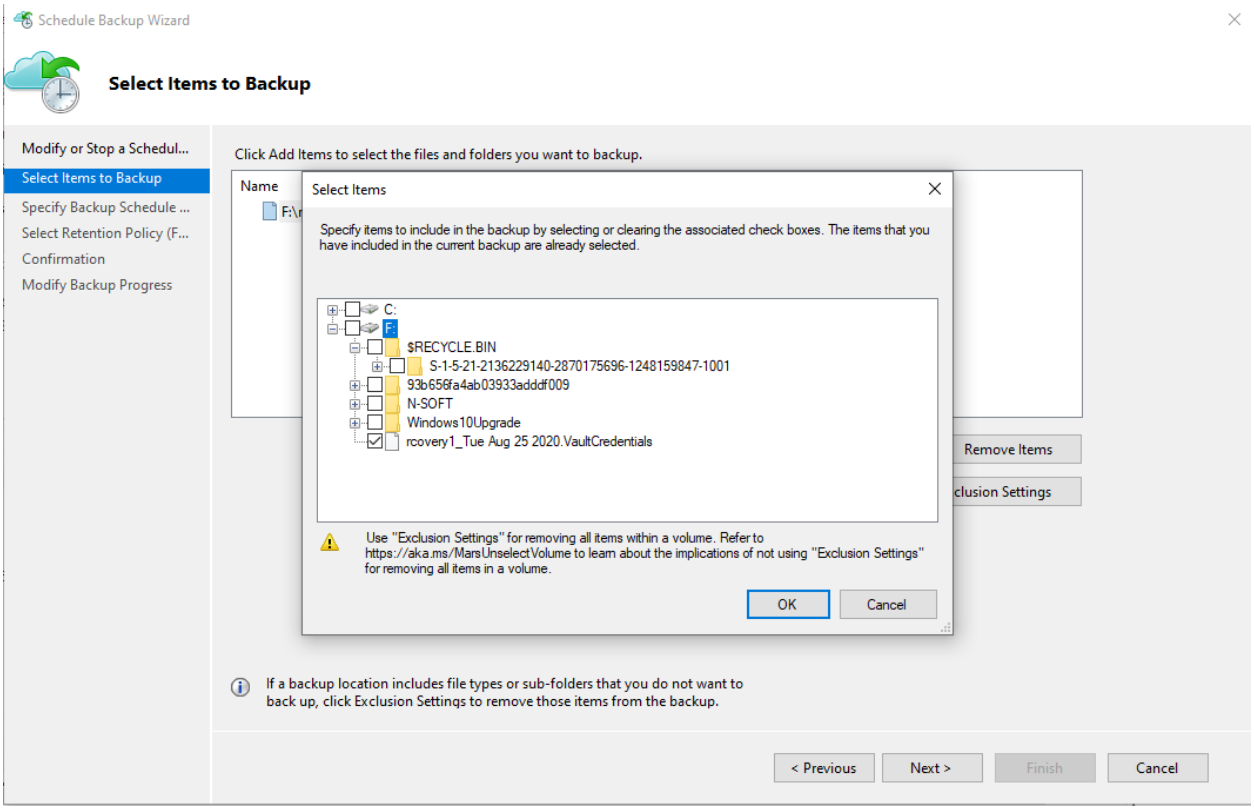
- After completion of failover it is replicated from westus location to eastus location.

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

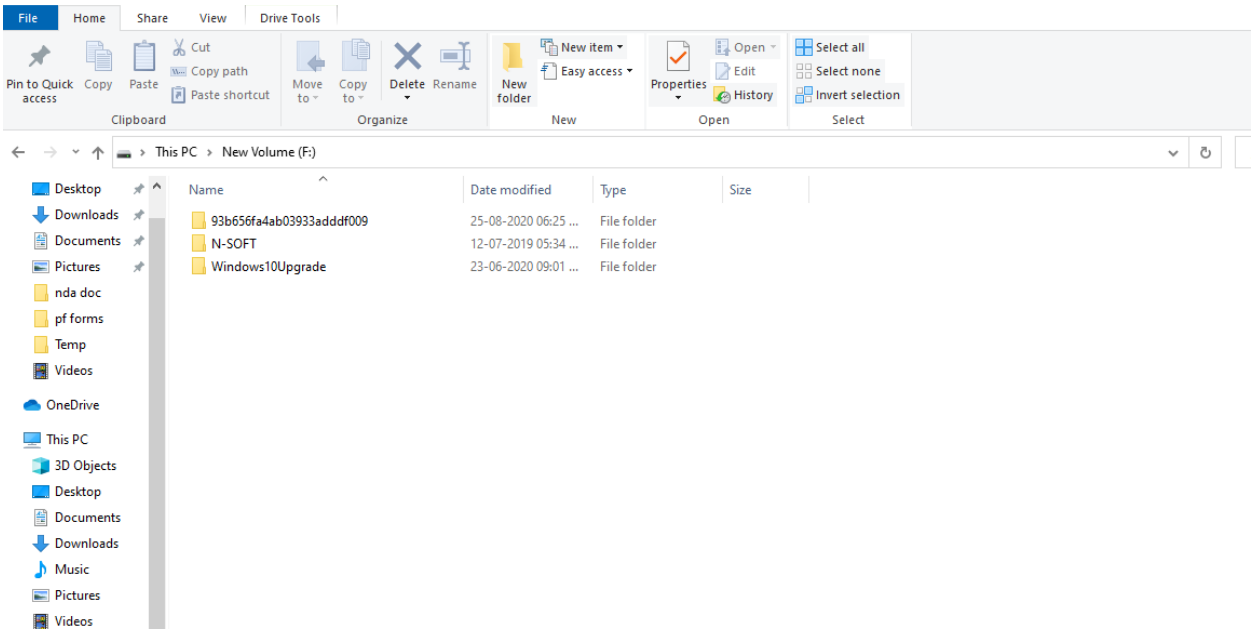


- I have taken a on-premises backup.

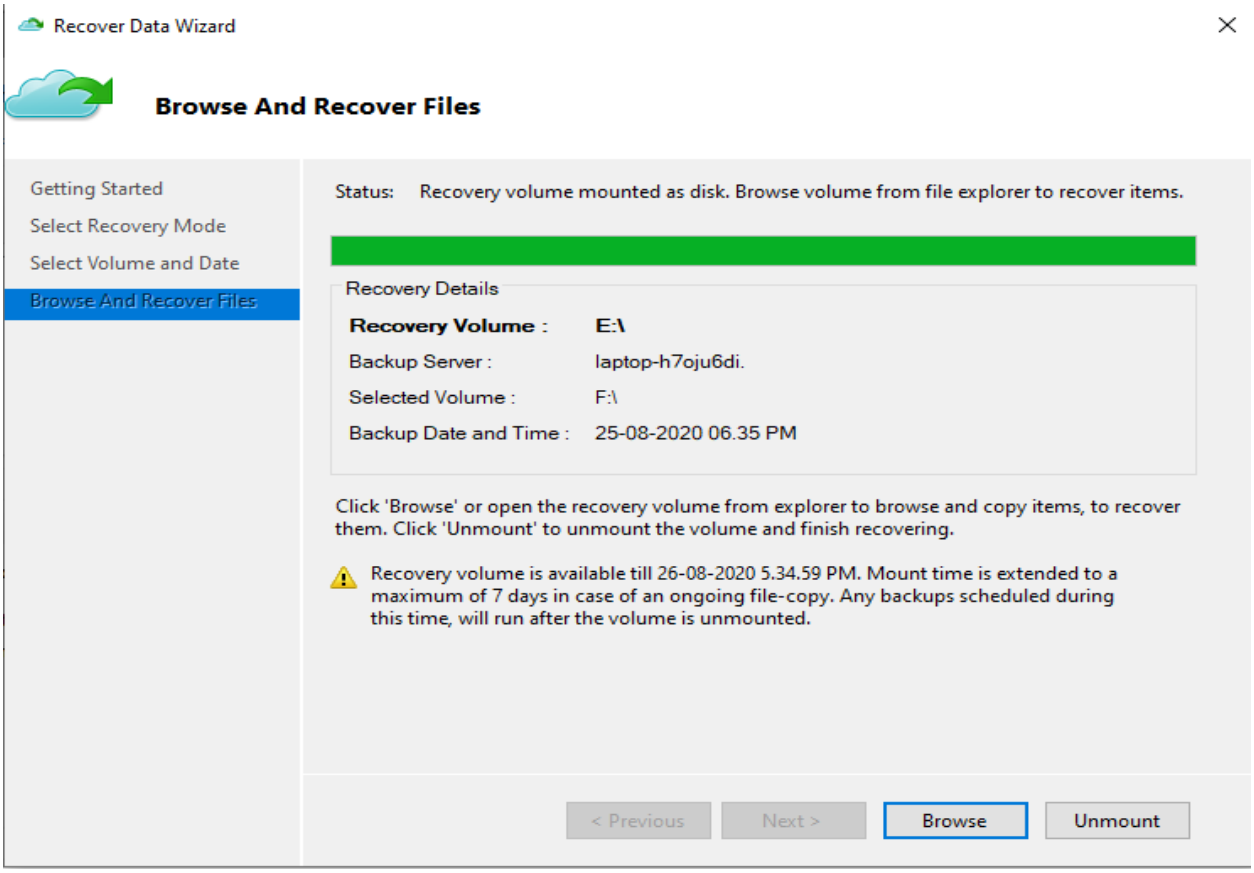




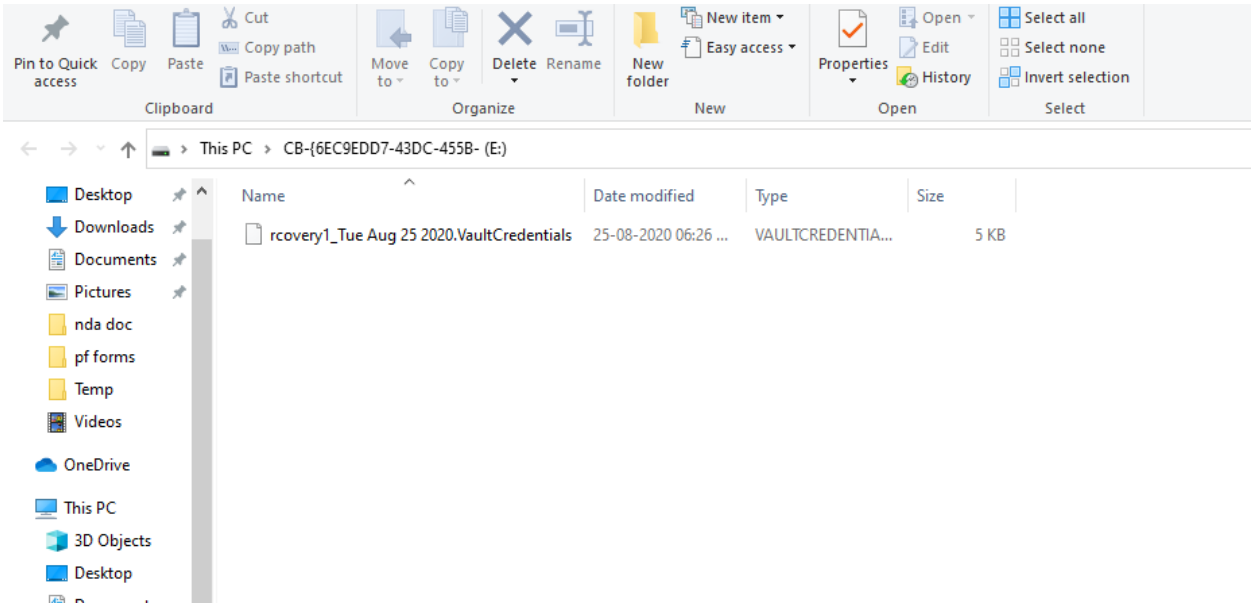
- In this I am using F-drive for backup and I scheduled a backup.



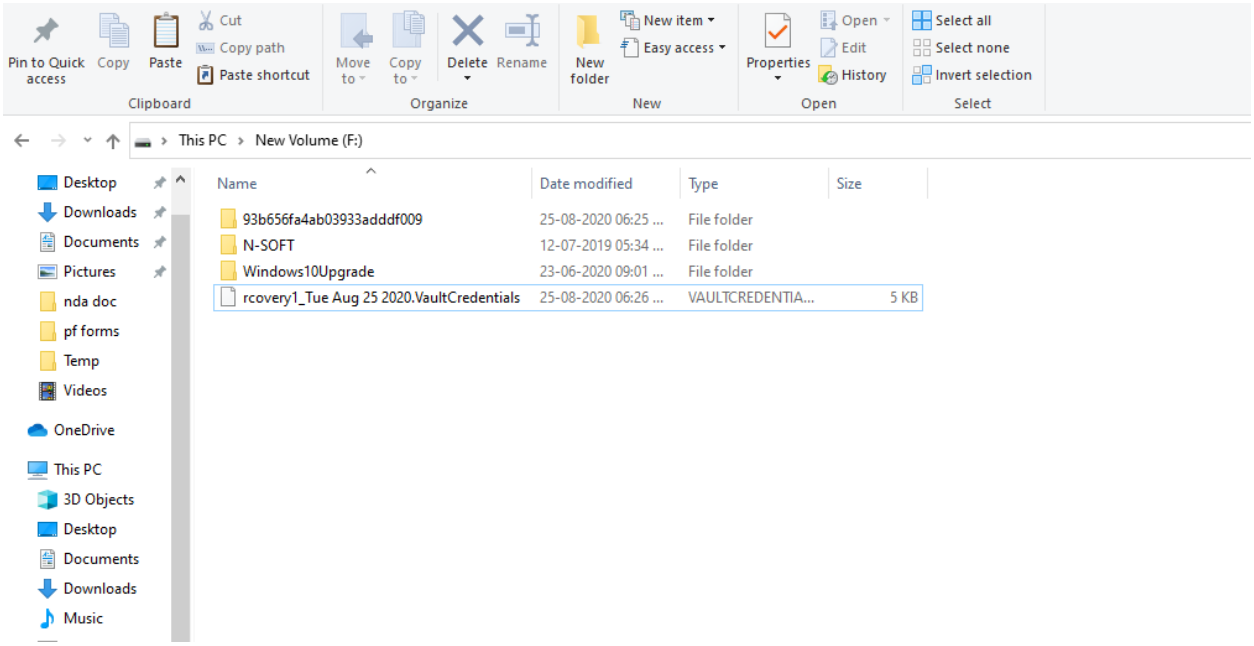
- I have deleted a file in f-drive trying to recover data.



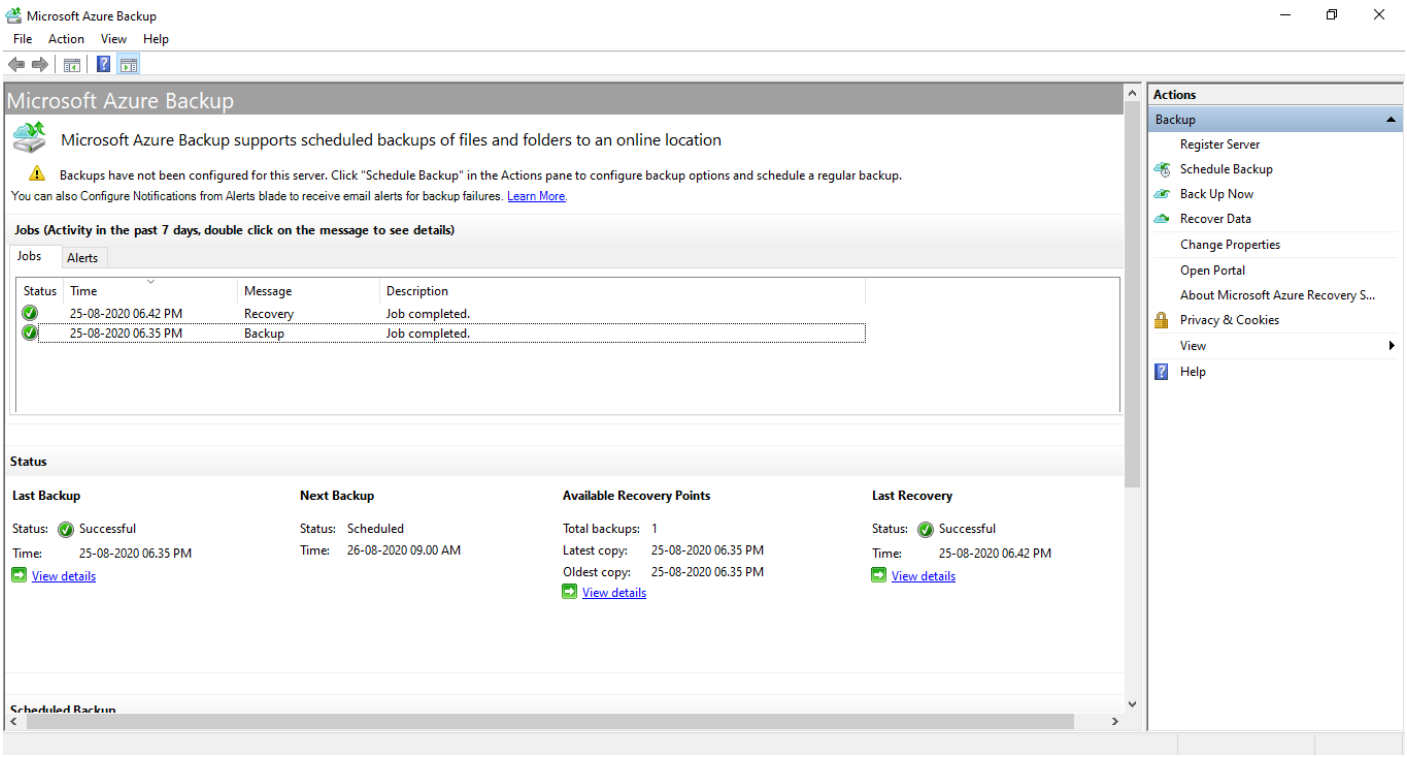
- Data recovered in a new volume E.



- I copied data from E-volume to F-volume.



- I pasted data in F-volume and unmount the data.



- I have scheduled backup and recovered data successfully in on-premises.