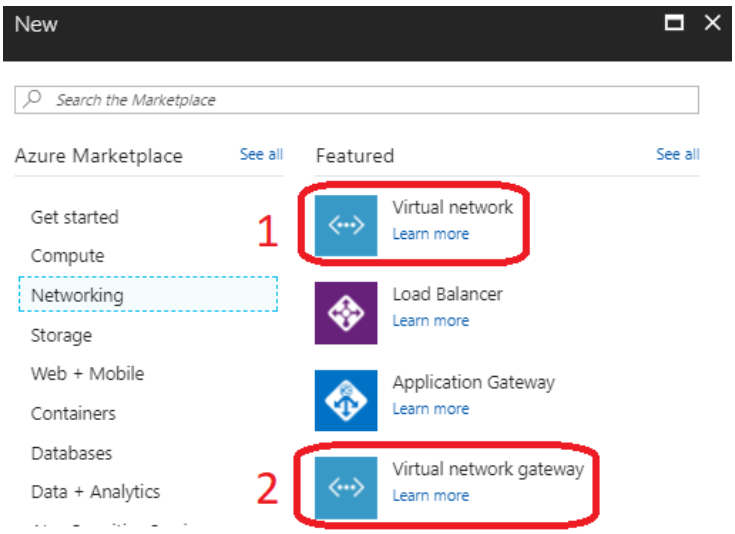
New Assets in West Europe

1. **Virtual Network**
   a. Click New ---> Networking ---> Virtual Network.
      - This will open **Create Virtual Network** *Blade* Please fill in the form.
   b. Virtual Network Name **EUVNet**
   c. Address Space **192.168.10.0/24**
   d. Resource Group **EUVNets**
   e. Location **West Europe**
   f. Subnet **Production**
   g. Address Range **192.168.10.0/25**
   h. Check **Pin to Dashboard**
   i. Click **Create**
   j. **Q-A Why West Europe?**

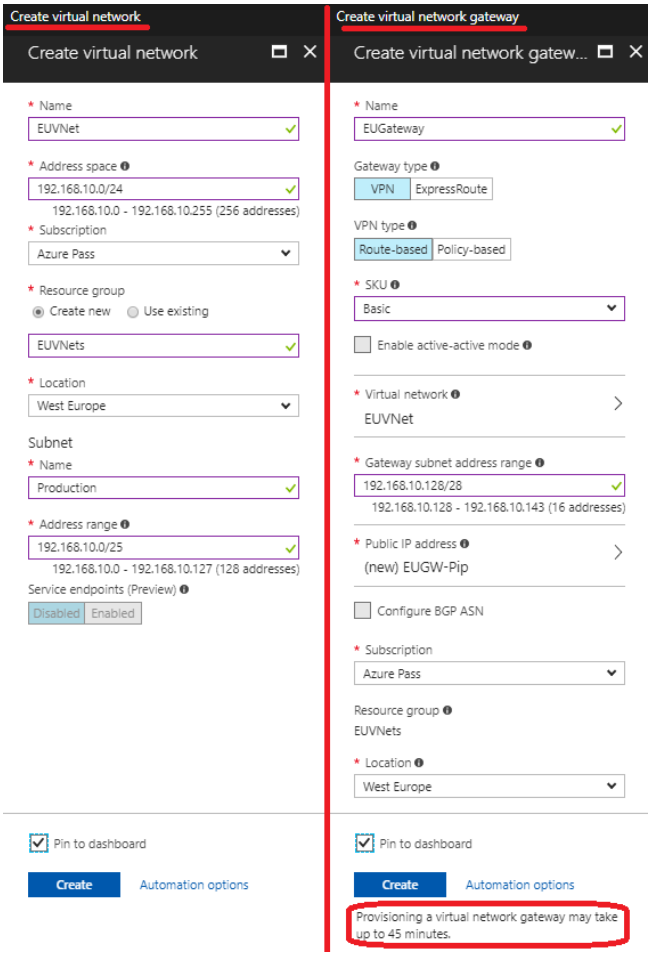
2. **Virtual Network Gateway**
   a. Click New ---> Networking ---> Virtual Network Gateway
   b. Name **EUGateway**
   c. Gateway Type **VPN**
   d. VPN Type **Route-Based**
   e. SKU **Basic SKU** (Stock Keeping Unit)
   f. Choose EUVNet as Virtual Network
   g. Gateway Subnet Address Range will be created automatically
   h. Create a new Public Ip Address with the name **EUGW-Pip**
   i. Check **Pin to Dashboard**
   j. Click **Create** *(this may take time up to 40-45 Minutes)*

For Further Reading

https://blogs.msdn.microsoft.com/azureedu/2017/06/23/new-azure-vpn-gateway-skus-provide-much-higher-bandwidth-for-hybrid-workloads/
https://docs.microsoft.com/en-us/azure/search/search-sku-tier
https://azure.microsoft.com/en-gb/blog/new-azure-vpn-gateways-now-6x-faster/



VNet Connections

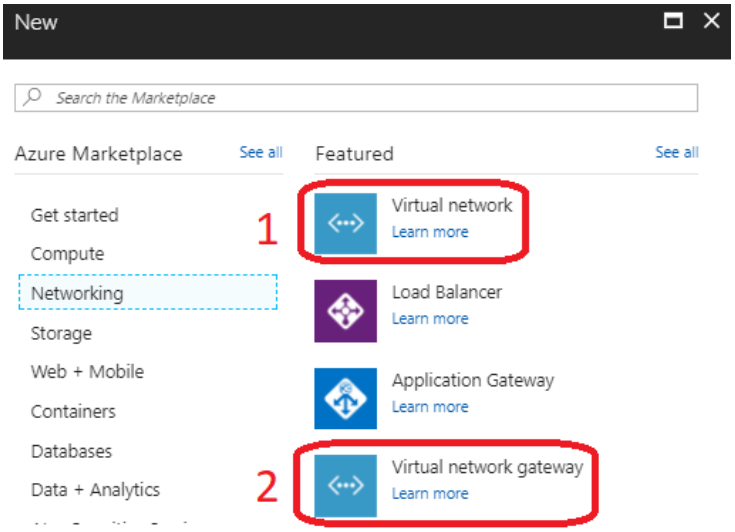


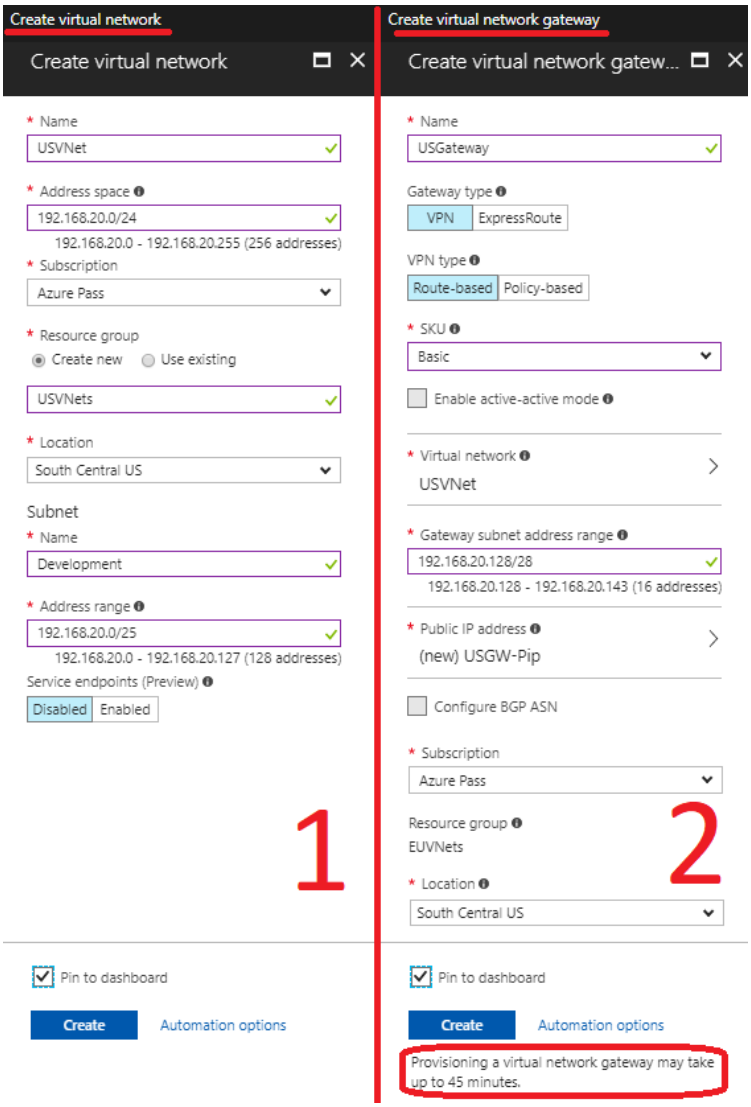
New Assets in South Central US

1. **Virtual Network**
   a. Click New ---> Networking ---> Virtual Network.
      - This will open **Create Virtual Network** *Blade* Please fill in the form.
   b. Virtual Network Name **USVNet**
   c. Address Space **192.168.20.0/24**
   d. Resource Group **USVNets**
   e. Location **South Central US**
   f. Subnet **Development**
   g. Address Range **192.168.20.0/25**
   h. Check **Pin to Dashboard**
   i. Click **Create**

2. **Virtual Network Gateway**
   a. Click New ---> Networking ---> Virtual Network Gateway
   b. Name **USGateway**
   c. Gateway Type **VPN**
   d. VPN Type **Route-Based**
   e. SKU **Basic SKU (Stock Keeping Unit)**
   f. Choose **USVNet** as Virtual Network
   g. Gateway Subnet Address Range will be created automatically
   h. Create a new Public Ip Address with the name **USGW-Pip**
   i. Check **Pin to Dashboard**
   j. Click **Create** *(this may take time up to 40-45 Minutes)*

VNet Connections



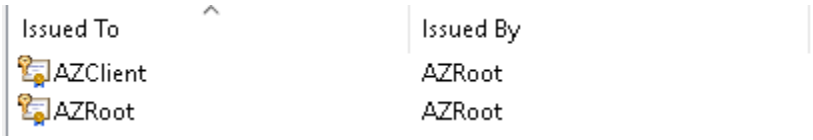


Create VPN Connection (QA Point to West Europe Site)

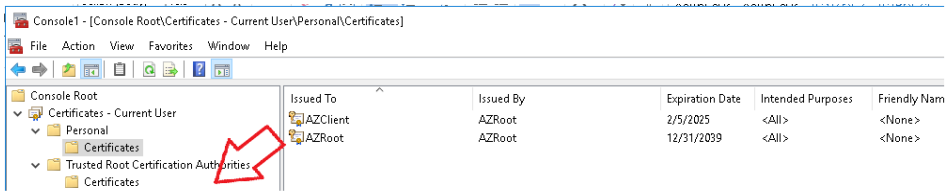
Step 1 Certificate Creation

We will create a connection to the azure site from client computer.

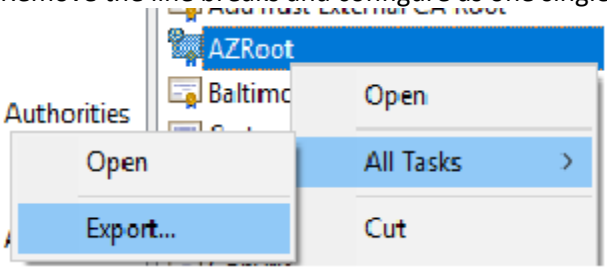
1. Copy the file makecert.exe file to system32 folder from C:\azure\makecert folder.
   copy C:\CemVarol-Azure\makecert\makecert.exe C:\Windows\System32
2. run these commands or run the **AZCerts.bat** file
   makecert.exe -sky exchange -r -n "CN=AZRoot" -pe -a sha1 -len 2048 -ss My "AZRoot.cer"
   makecert.exe -n "CN=AZClient" -pe -sky exchange -m 96 -ss My -in "AZRoot" -is my -a sha1
3. Open an mmc console and access to certificates for the *My User Account*
4. Check that you have two certificates

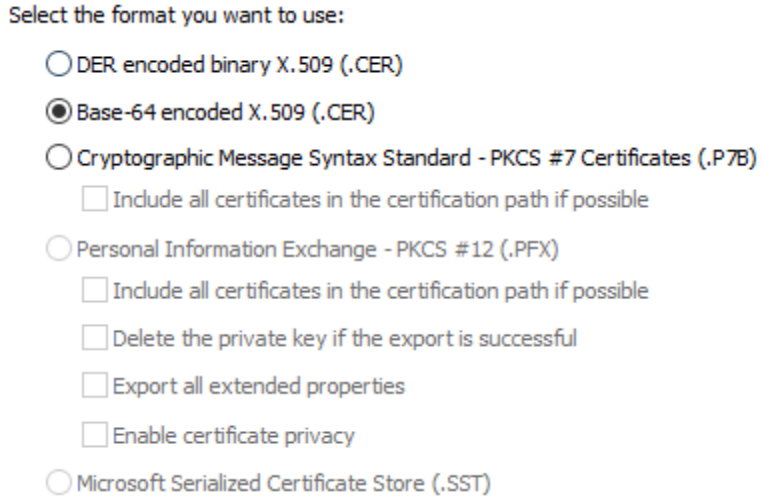


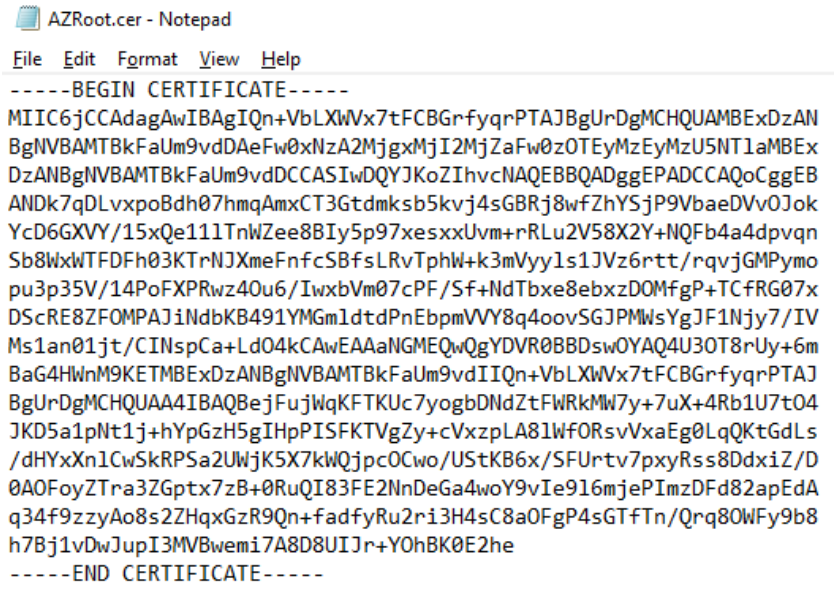
5. Drag the certificate AZRoot and drop into **Trusted Root Certification Authorities**. Then your certificate will be OK.

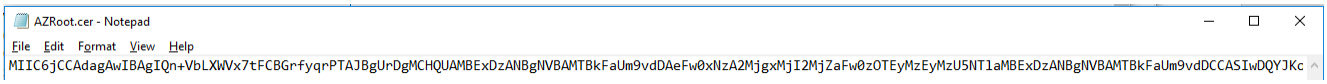


6. Export the AZRoot Certificate, *without* the private key, as **Base-64**
7. Open the exported certificate with notepad.
8. Copy the text within the ----- parts (without begin and end certificate)
9. Remove the line breaks and configure as one single line. **(Uncheck the “word wrap”)**





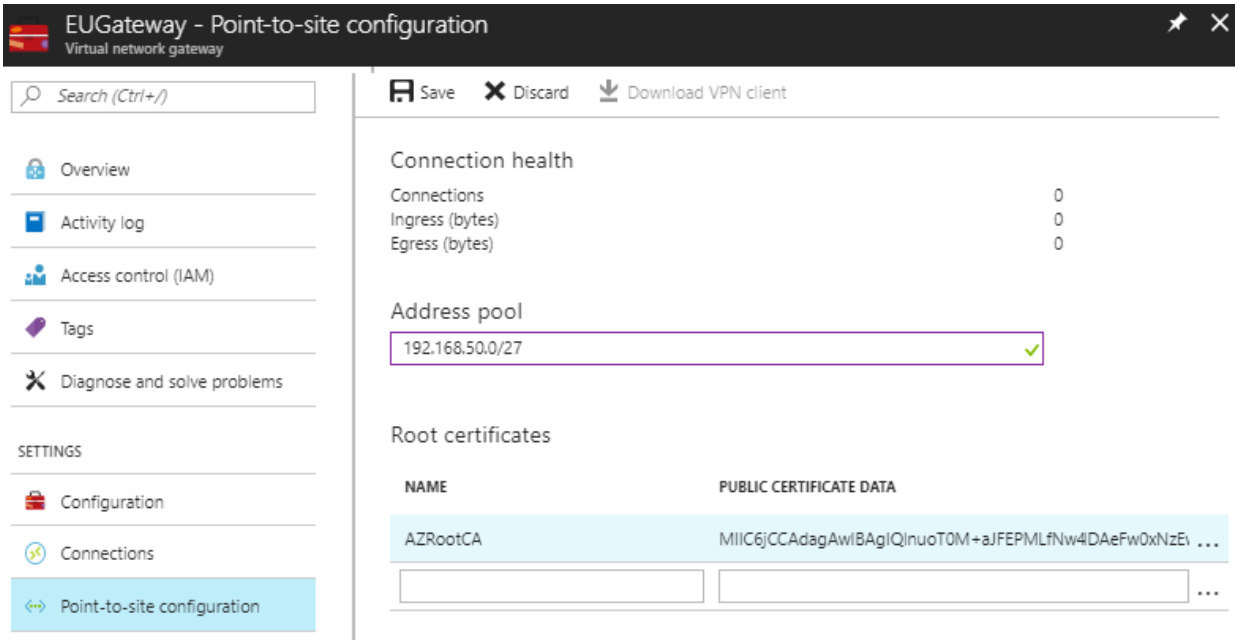


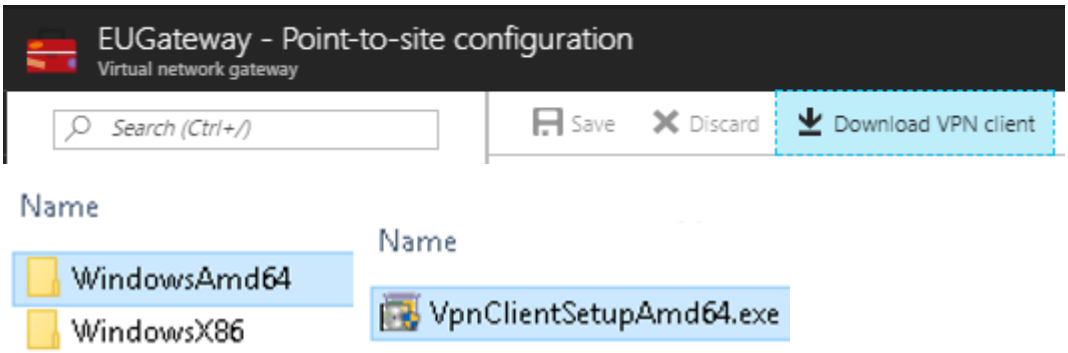


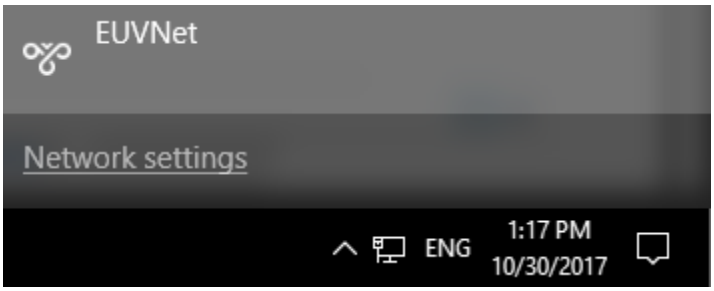
Step 2 Configuring Point to Site Connection

1. Under your Dashboard, click **EUGateway**
2. Under **EUGateway** provide the VPN Address pool information as **192.168.50.0/27**
3. Paste the certificate there, under the P2S Configuration
    a. Certificate Name **AZRootCA**
4. Click **SAVE**
5. Once Created, **Download VPN Client** file, extract and install the 64 Bit Client to your Computer.
6. Connect to that EUVNet VPN Network.
7. Check ip addresses, you will see a new ip address with 192.168.50.X with 32-bit subnet mask

After this step, we completed creating a VPN service from QA Point to EUVNet Site





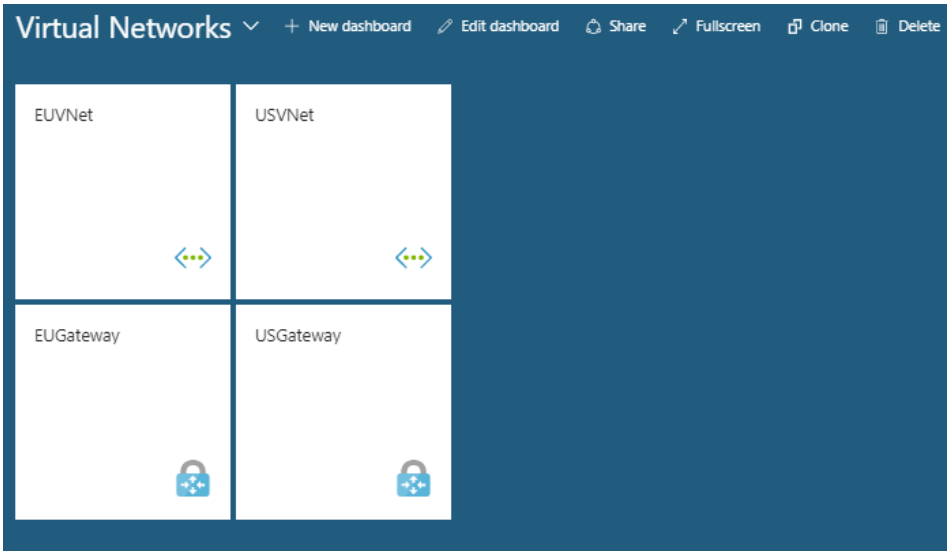



```
PPP adapter EUVNet:
  Connection-specific DNS Suffix  . :
  IPv4 Address. . . . . . . . . . . : 192.168.50.2
  Subnet Mask . . . . . . . . . . . : 255.255.255.255
  Default Gateway . . . . . . . . . :
```

From Europe to US, VNet to VNet

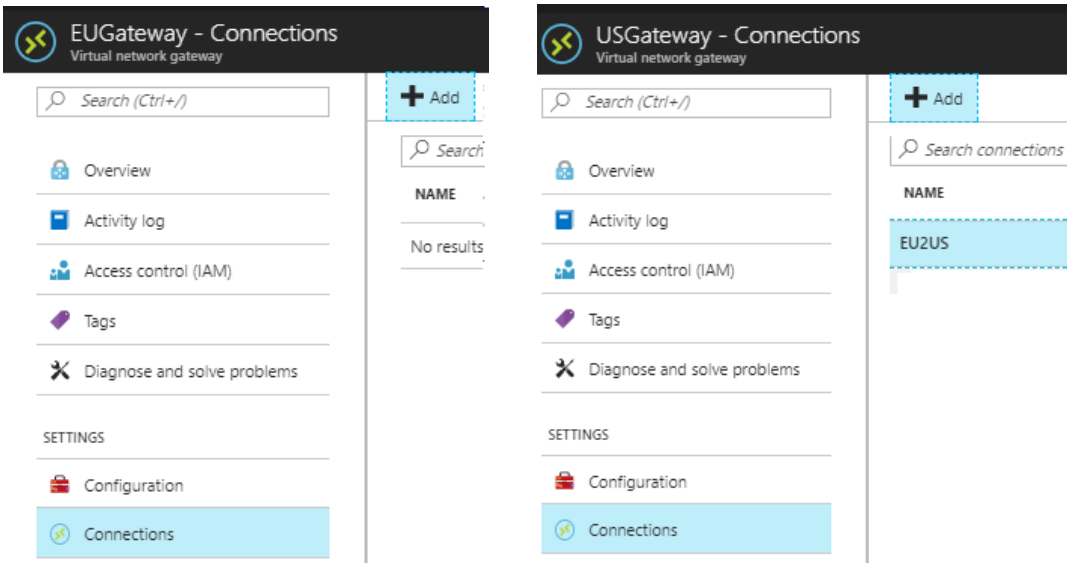
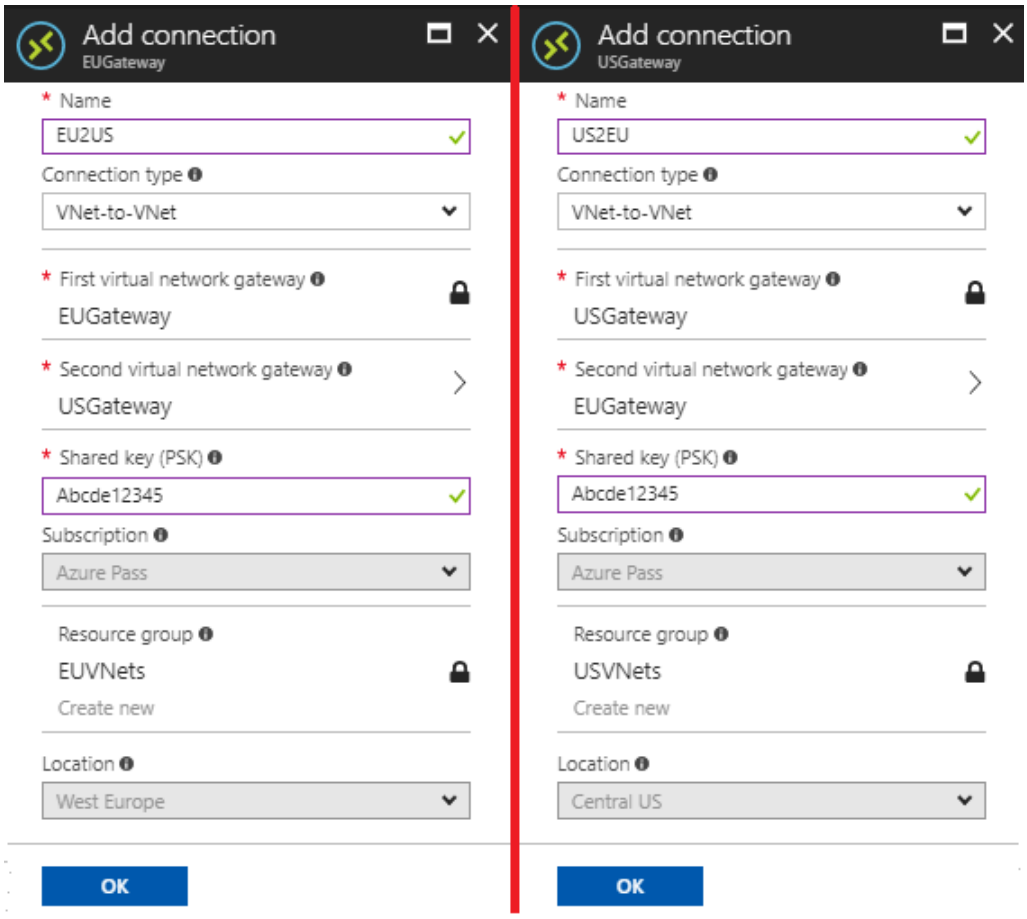
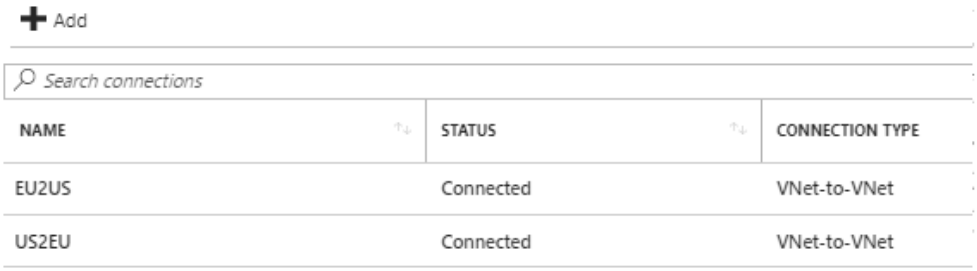
Your Dashboard now has 4 assets,

- 2 Virtual Networks and
  - EUVNet
  - USVNet
- 2 Virtual Network Gateways
  - EUGateway
  - USGateway



Create Connection between Europe and US.

1. From Europe to US
   a. On your Dashboard Click EUGateway
   b. Click **Connections**
      - Click **Add,** this will open a new *Blade*
   c. Name **EU2US**
   d. Connection Type VNet-to-VNet
   e. First virtual network gateway will be selected as source **EUGateway**
   f. Second virtual network gateway **USGateway**
   g. Shared Key (PSK) Abcde12345

2. From US to Europe
   a. On your Dashboard Click USGateway
   b. Click **Connections,** you will see *EU2US* here.
      - Click **Add,** this will open a new *Blade*
   c. Name **US2EU**
   d. Connection Type VNet-to-VNet
   e. First virtual network gateway will be selected as source **USGateway**
   f. Second virtual network gateway **EUGateway**
   g. Shared Key (PSK) Abcde12345
      - This key must be the same with the other network, to complete authentication.

VNet Connections