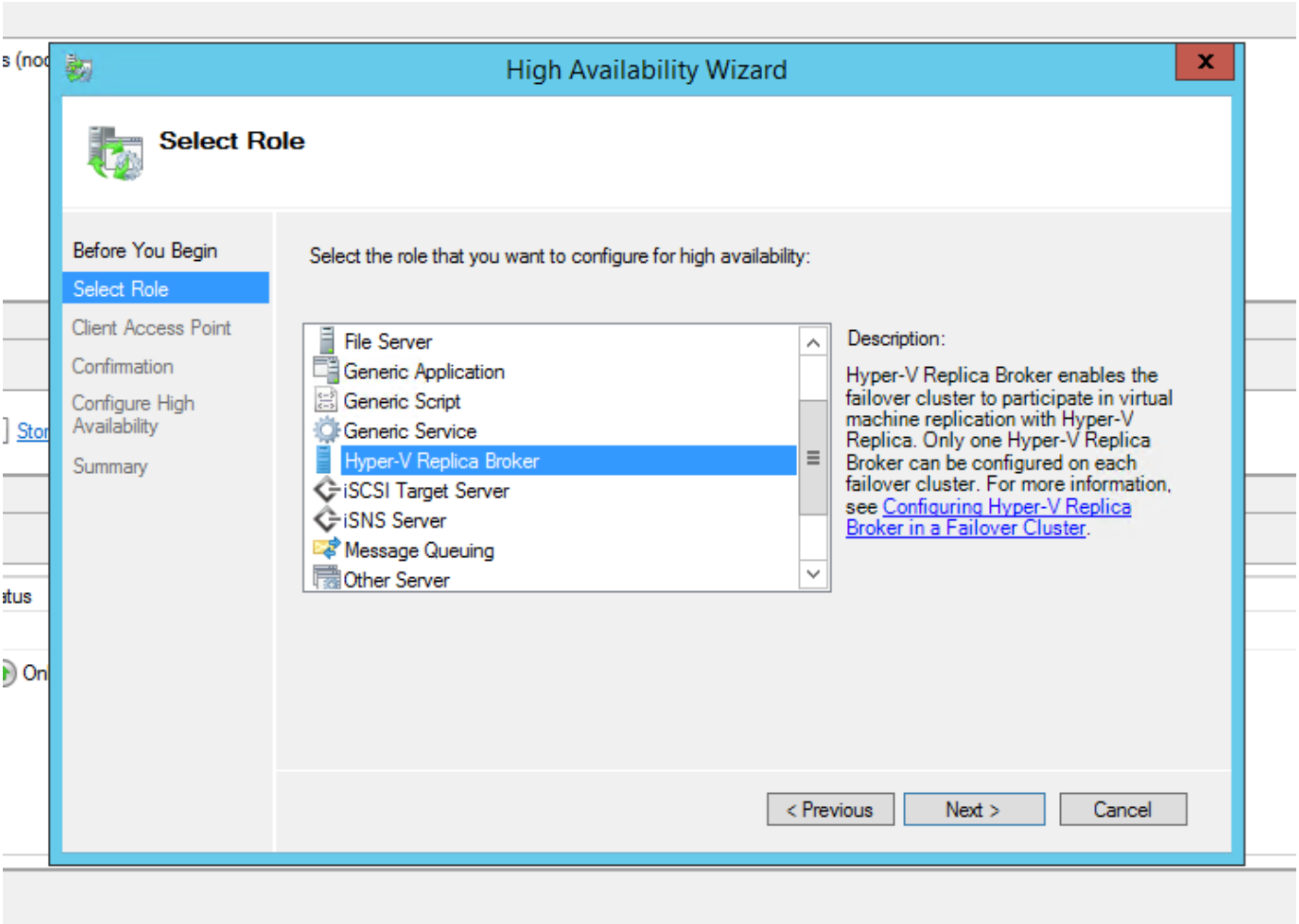
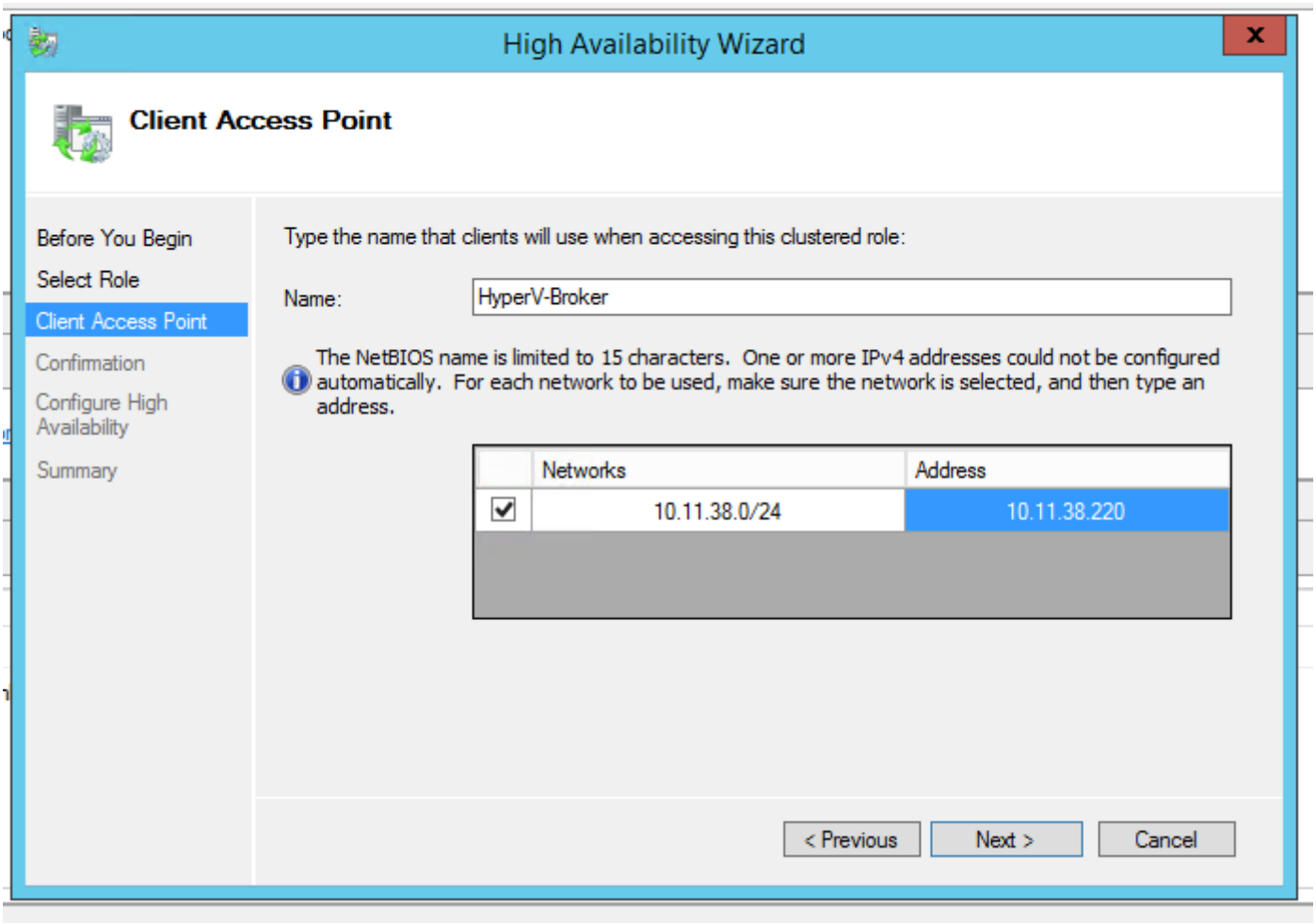
Configuring DR Replica

Open failover cluster manager
Right click the Cluster -> Select "Configure Role"

Click next -> select Hyper-V Replica Broker



Fill in the information (Choose an available IP from his subnet)



Create SSL cert via Powershell

For this, you will need to download Windows SDK and install

https://msdn.microsoft.com/library/windows/desktop/aa386968.aspx

Create the ROOT certificate

```
& "C:\Program Files\Microsoft SDKs\Windows\v7.1\Bin\x64\makecert.exe" -pe -n
“CN=PrimaryRootCA” -ss root -sr LocalMachine -sky signature -r “PrimaryRootCA.cer”
```

Create SSL with the hostname of DR

```
& "C:\Program Files\Microsoft SDKs\Windows\v7.1\Bin\x64\makecert.exe" -pe -n “CN=dr.domain.com” -ss my -sr LocalMachine -sky exchange -eku "1.3.6.1.5.5.7.3.1,1.3.6.1.5.5.7.3.2" -in “primaryRootCA” -is root -ir LocalMachine -sp “Microsoft RSA SChannel Cryptographic Provider” -sy 12 replicaCert.cer
```

Create SSL with the name of the Hyper-V Replica Broker you created

Note, if you are in an AD, you will need to add the full FQDN of the broker

```
& "C:\Program Files\Microsoft SDKs\Windows\v7.1\Bin\x64\makecert.exe" -pe -n “CN=HyperV-Broker.domain.com” -ss my -sr LocalMachine -sky exchange -eku "1.3.6.1.5.5.7.3.1,1.3.6.1.5.5.7.3.2" -in “primaryRootCA” -is root -ir LocalMachine -sp “Microsoft RSA SChannel Cryptographic Provider” -sy 12 primaryCert.cer
```

On all hosts (nodes and DR) disable SSL revocation

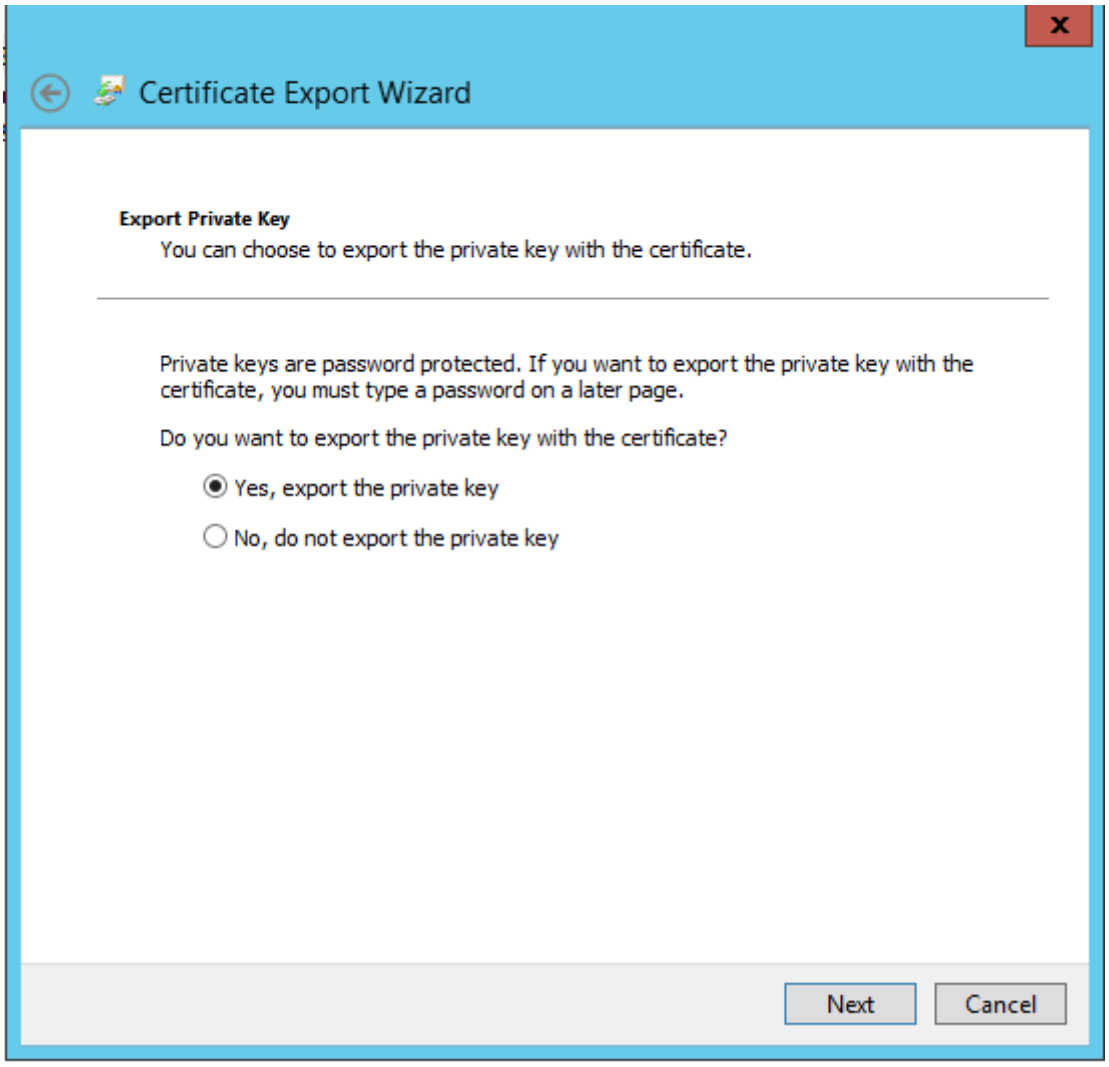
```
reg add "HKLM\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Virtualization\Replication" /v DisableCertRevocationCheck /d 1 /t REG_DWORD /f
```

Exporting the SSL

Open Certificate MMC console (simply search for certificate and click on "Manage Computer Certificates")

Under personal, click certificates

Right click ethe DR certificate -> all task -> export



Click Next -> Select "Yes, export the private key"

Click Next -> Select "Password" and enter any password

Click Next -> Select where to save the certificate

Import the SSL ceritificate

The following steps have to be performed on the DR

Open Certificate MMC console with the snap-in to manage certs

Right click "Personal" -> Select "All Task" -> Select "Import"

Click Next (Local Machine) -> Browse the Certificate and import

Enter the password used during the export

Click Next -> Select "Place all certificates in the following store"

Click Next -> Click Finish

Once done, move the Root Certificate under "Certificates" of "Trusted Root Certificate Authorities"

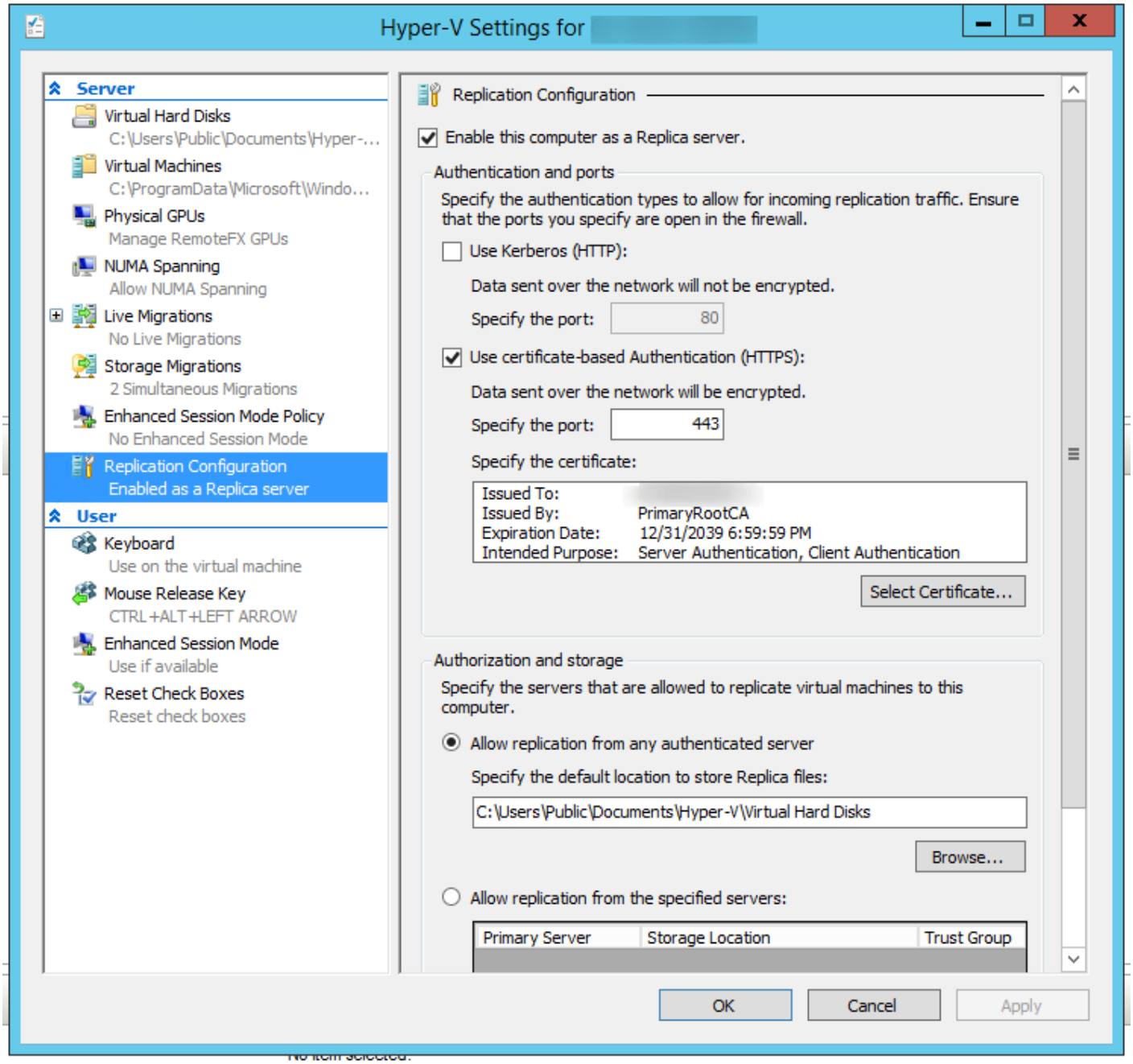
Configure the Replication Role in Hyper-V

In Hyper-V, right click the server -> Click on "Hyper-V Settings"

Select the "Replication Configuration" tab

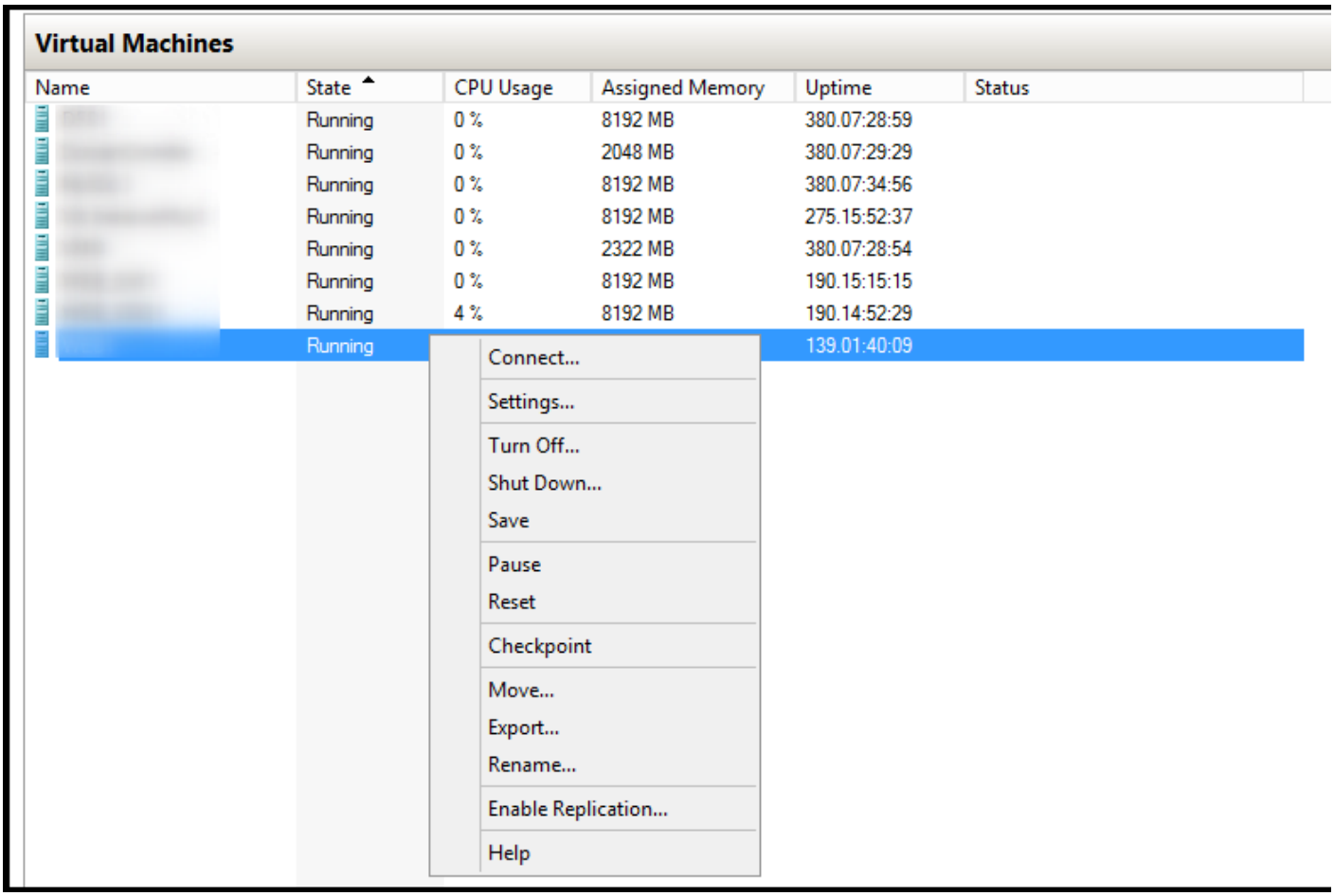
Click "Enable this computer as Replica Server" -> Click "Use certificate-based authentication (HTTPS)" -> Select the Certificate

Under "Authorization and storage" -> Select "Allow replication from any authenticated server" with default value (C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks)



Enabling Replication for VM

Right click on the VM and select "Enable Replication"



Click Next -> Enter the hostname (that we put in the host file earlier)

Once it loads (can take a minute or 2), same thing as with the DR, select "Use certificate-based authentication (HTTPS)" and

select the certificate (make sure "Compress the data that is transmitted over the network"

Keep clicking next a select the options you want for the replication

Server 2016

Server 2016 is the same concept but you will need to create a cert for all nodes

Create root CA

```
New-SelfSignedCertificate `
-DnsName “HyperVReplicationRootCA” `
-CertStoreLocation Cert:\LocalMachine\My `
-KeyLength “4096" `
-Hash SHA256 `
-KeyFriendlyName “HyperVReplicationRootCA” `
```

```
-FriendlyName “HyperVReplicationRootCA” `
-NotAfter “2030-12-31 23:59:59” `
-NotBefore “2018-10-10 00:00:00" `
-KeyUsage CertSign,CRLSign,DigitalSignature
```

Create node cert (1 cert per node)

```
New-SelfSignedCertificate `
-DnsName Myfqdn.domain.com `
-CertStoreLocation Cert:\LocalMachine\My `
-KeyLength “4096" `
-Hash SHA256 `
-KeyFriendlyName hostname `
-FriendlyName hostname `
-NotBefore “2017-01-01 00:00:00" `
-NotAfter “2030-12-31 23:59:59” `
-Signer ( Get-ChildItem Cert:\LocalMachine\My | Where -Prop Subject -eq
"CN=HyperVReplicationRootCA" )
```

Use same command for broker cert and export / import cert on all nodes / dr server as explained above

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Revision #3
Created 12 August 2018 00:50:18 by Dave
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