Steps

Same subnet 10.4.1.0/24

1. Created VMs with ip, dns and changed the dynamic ip to static
2. Registered the DC ip with DNS

(I added the nodes’ IPs to DC DNS and created). The Ip of the DC is in DC’s DNS (I could be wrong.)

1. Used powershell command to create cluster

New-Cluster -Name oltpprod -Node FCINODE1, FCINODE2 -StaticAddress 10.4.1.9 -NoStorage -AdministrativeAccessPoint ActiveDirectoryAndDns -ManagementPointNetworkType Singleton

1. Added shared disks in the portal
2. **Initialize** disks with GPT – from one node is enough

A screenshot of a computer

Description automatically generated

1. Added the disks to the cluster

A screen shot of a computer

Description automatically generated

1. Label/format the disks (go back to nodes and “new simple volume” and give Letter)

Before you do this put the cluster disk (shown above) “Under maintenance” otherwise it will throw error (not formatted error). Turn maintenance mode off after finishing formatting.

A screenshot of a computer

Description automatically generated A screenshot of a computer

Description automatically generated

1. Create quorem

Add the disk that is assigned as a witness diskA screenshot of a computer

Description automatically generated

1. Create ILB
2. Install sql

In network name I gave “SQLFCIVNN”

A screenshot of a computer

Description automatically generated

Default

A screenshot of a computer

Description automatically generated

Since I added disk2 as witness quorem

A screenshot of a computer

Description automatically generated

Uncheck DHCP, check ipv4 and provide IP

A screenshot of a computer

Description automatically generated

The right permission

A screenshot of a computer

Description automatically generated

Directories

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Finish the set up and ADD NODE on the second HA node.

Check dependencies

1. Testing

After configuring the listener, I tested without applying the VNN load balancer listner. It failed to work.

But after running the VNN listener creating script, it worked and I can connect from other nodes. Information ($ClusterNetworkName, $IPResourceName and $ILBIP) to be included in the listener PowerShell script can be found from the pictures below. [int]$ProbePort can be found from the load balancer.

Get-ClusterResource $IPResourceName | Get-ClusterParameter --to get cluster info

[Configure an Azure load balancer for an AG VNN listener - SQL Server on Azure VMs | Microsoft Learn](https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/availability-group-vnn-azure-load-balancer-configure?view=azuresql&tabs=ilb)

$ClusterNetworkName = "Cluster Network 1"

$IPResourceName = "SQL IP Address 1 (SQLFCIVNN)"

$ILBIP = "10.4.1.25"

[int]$ProbePort = 59999

Import-Module FailoverClusters

Get-ClusterResource $IPResourceName | Set-ClusterParameter -Multiple @{"Address"="$ILBIP";"ProbePort"=$ProbePort;"SubnetMask"="255.255.255.255";"Network"="$ClusterNetworkName";"EnableDhcp"=0}

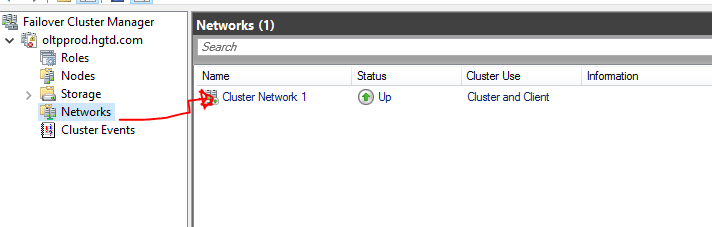
* After you run the command take the listener (SQLFCIVNN) “offline” then online and make sure everything is online.

Get the information from cluster see below.

SQLFCIVNN.hgtd.com

A screenshot of a computer

Description automatically generated



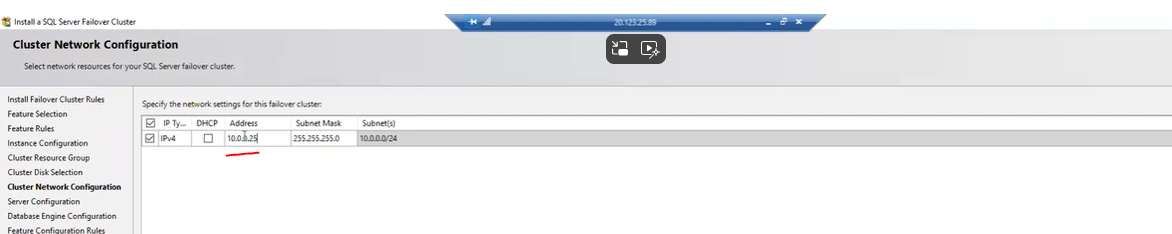
Run select @@servername to check

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated



For latest version (2019) window , DNN works for FCI

A screenshot of a computer

Description automatically generated

Check dependencies A screenshot of a computer

Description automatically generated