INFO 2416 S11

Assignment 1 : Configuring a DHCP Server

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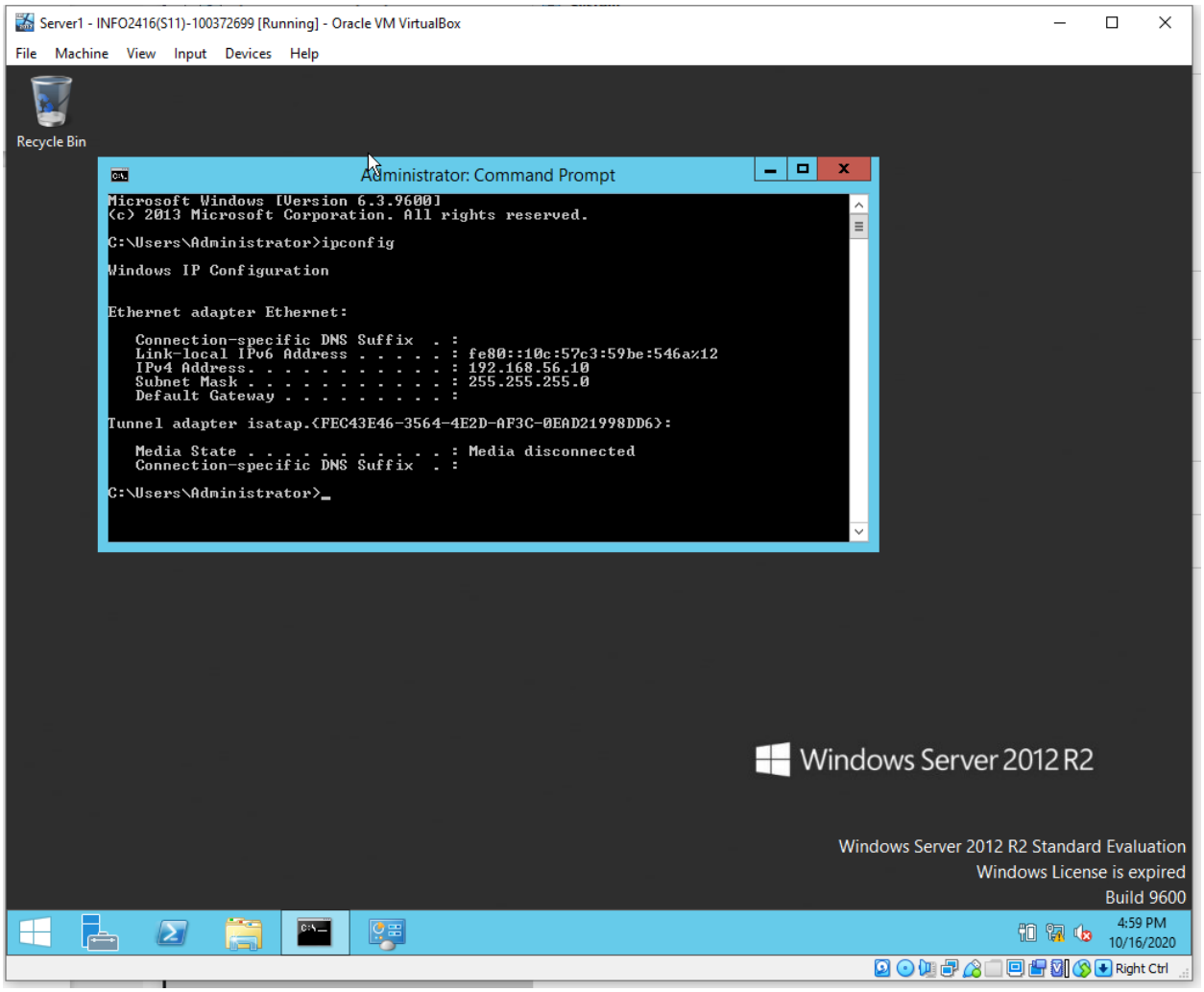
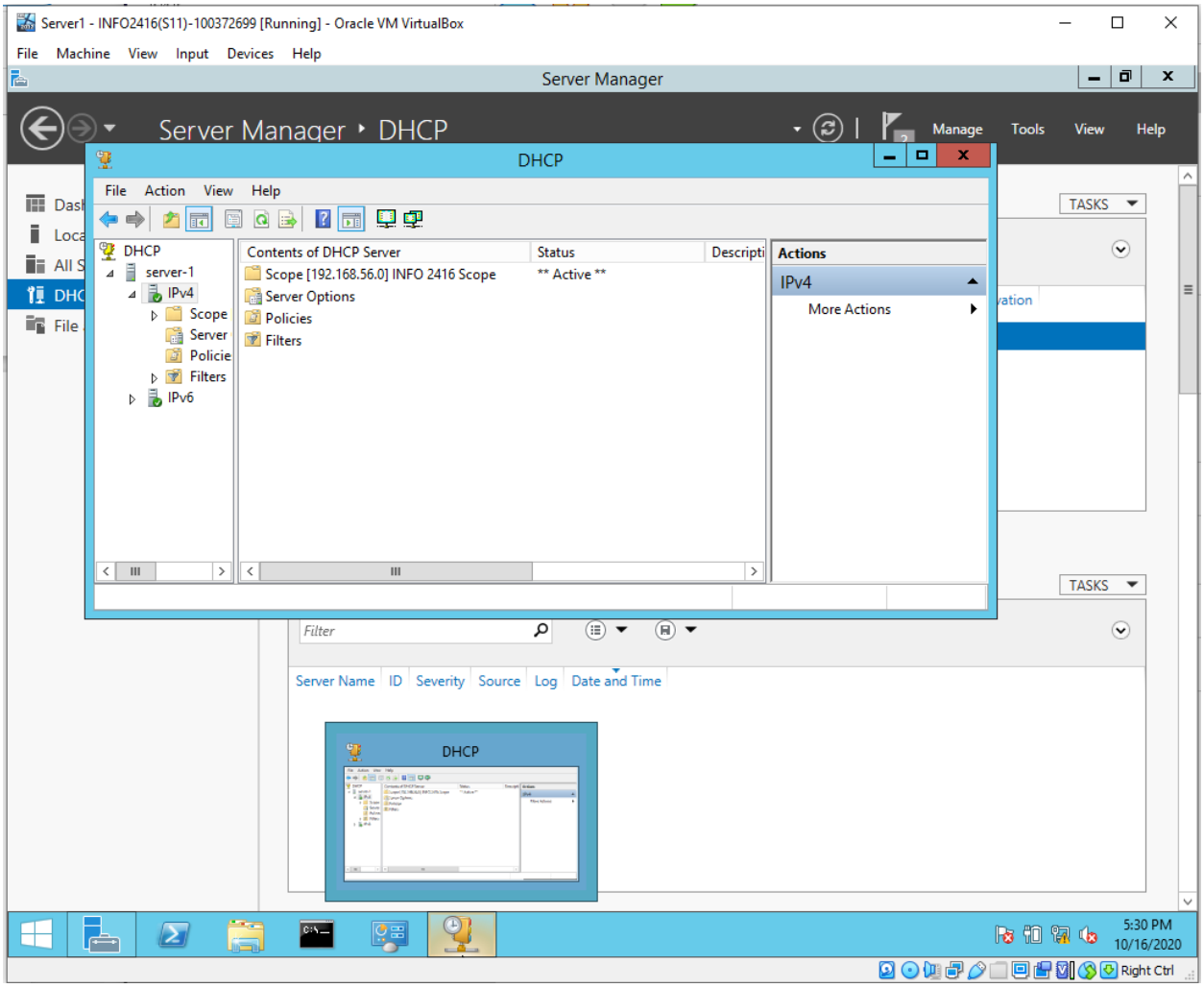
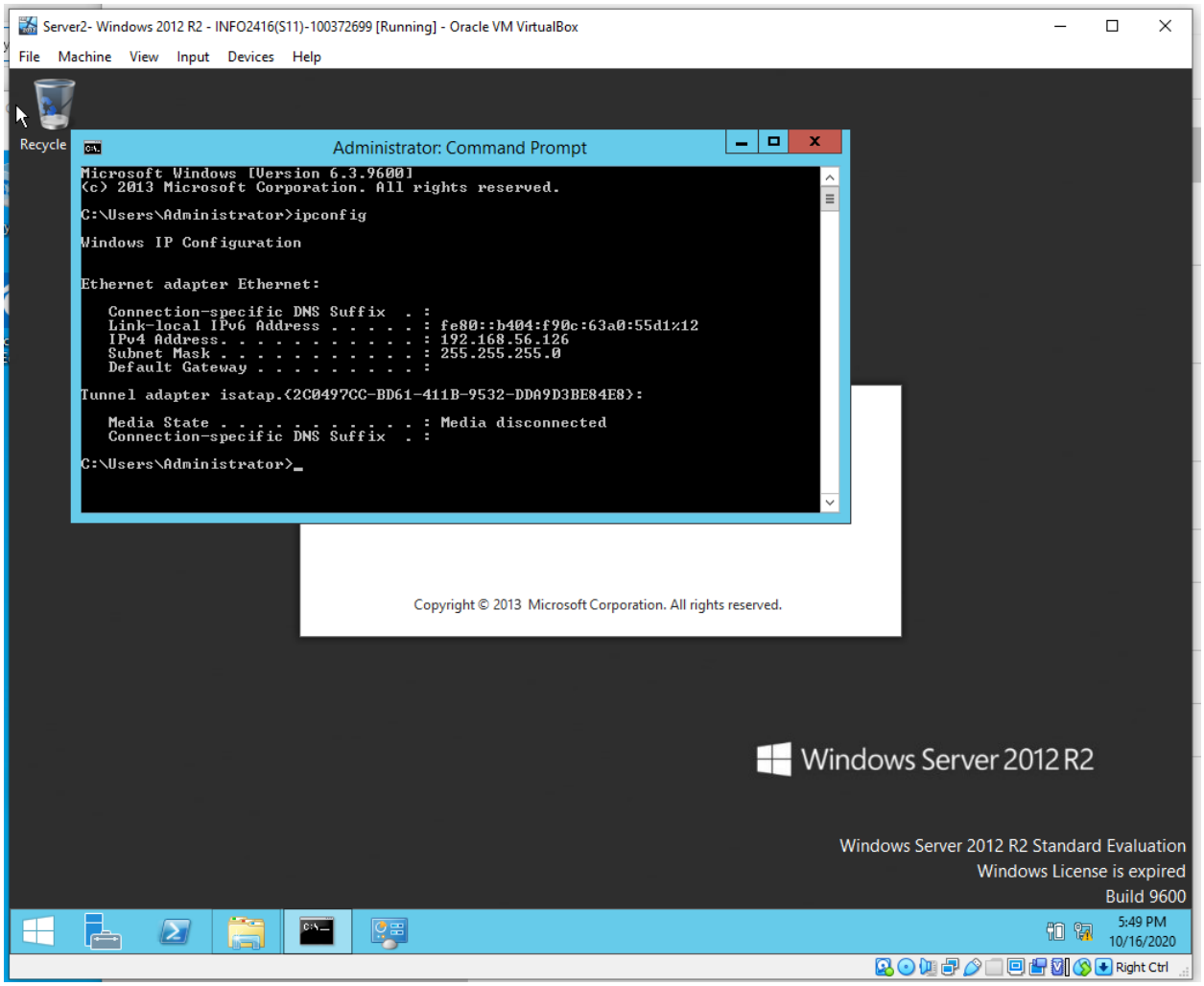
10.a.iii) Show static IP for server VM1



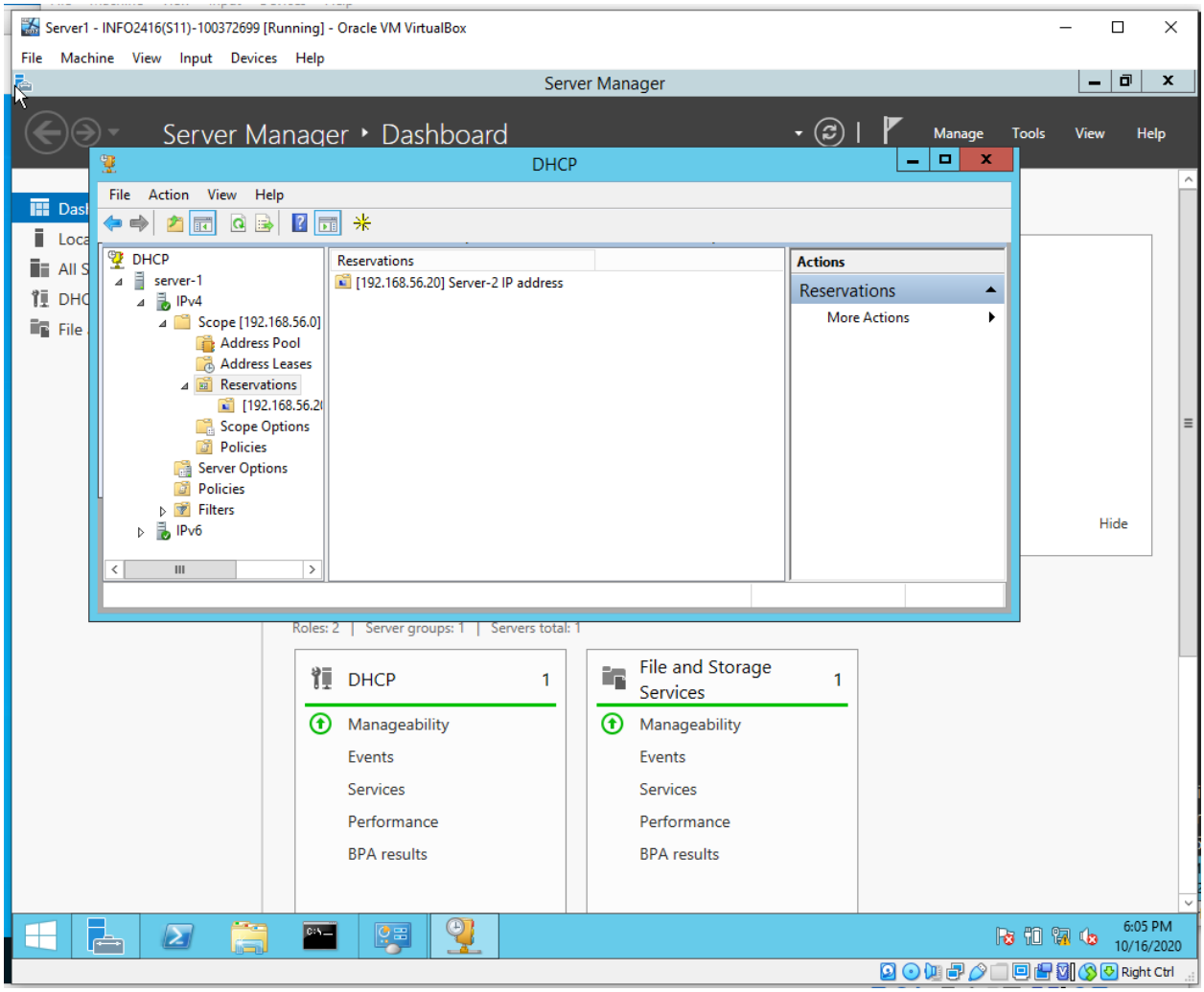
10.c.xiv) DHCP console with newly added scope



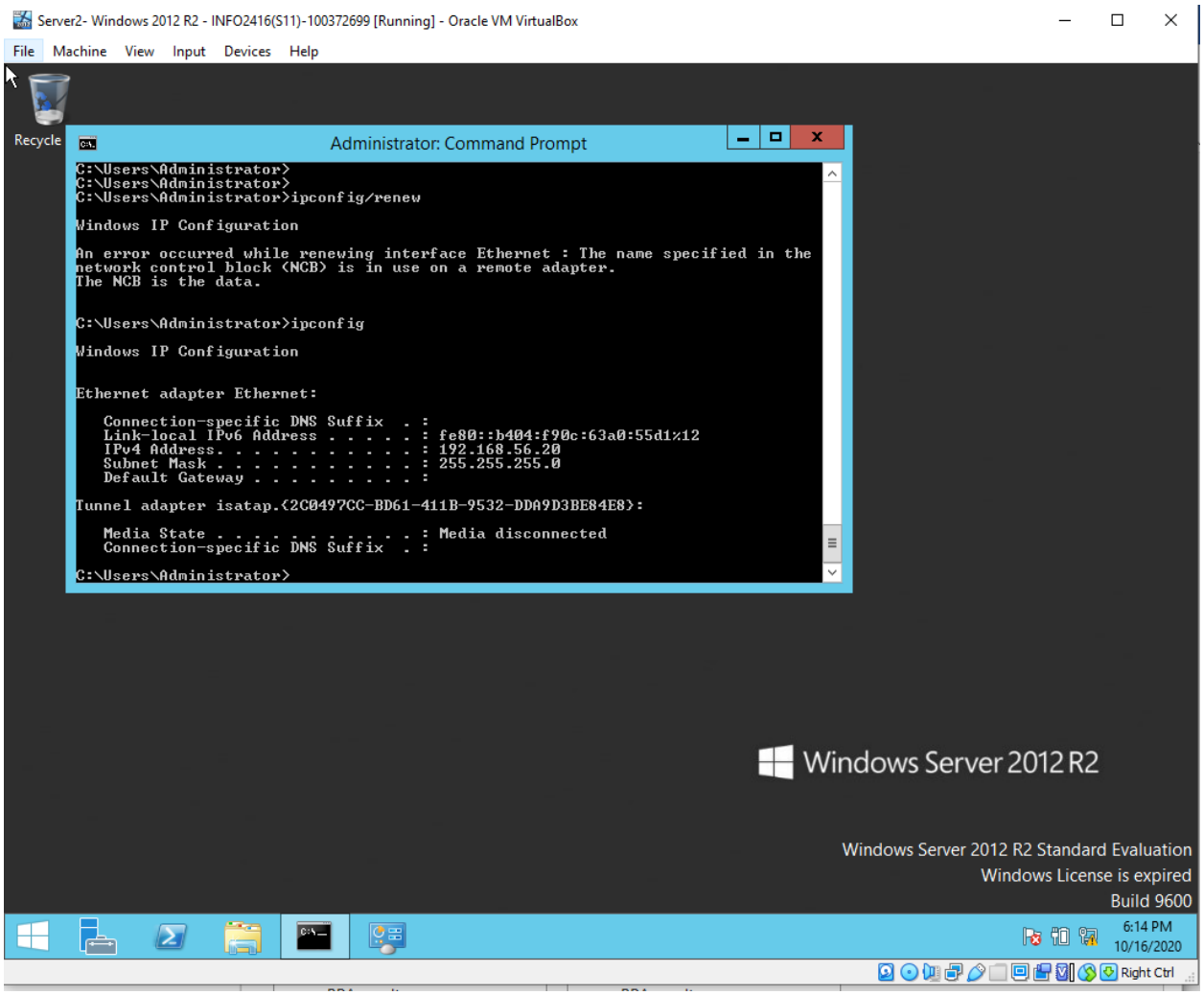
12.c) Command prompt of Server VM 2 with new IP address



14.e) DHCP console newly added Reservation



15.c) Command prompt showing new ip address of server VM2



Questions

1a) Describe the differences: Hot standby mode and Load balance mode.

In a host stand by mode one server operates and manages al Ip addresses and configurations for each client in a scope. This is the server constantly active. Where as the server configured to be on hot standby is activated if the main server fails to be active or suddenly becomes unavailable. The second standby server is responsible for dealing with all configurations until the main server is reset and running up once again.

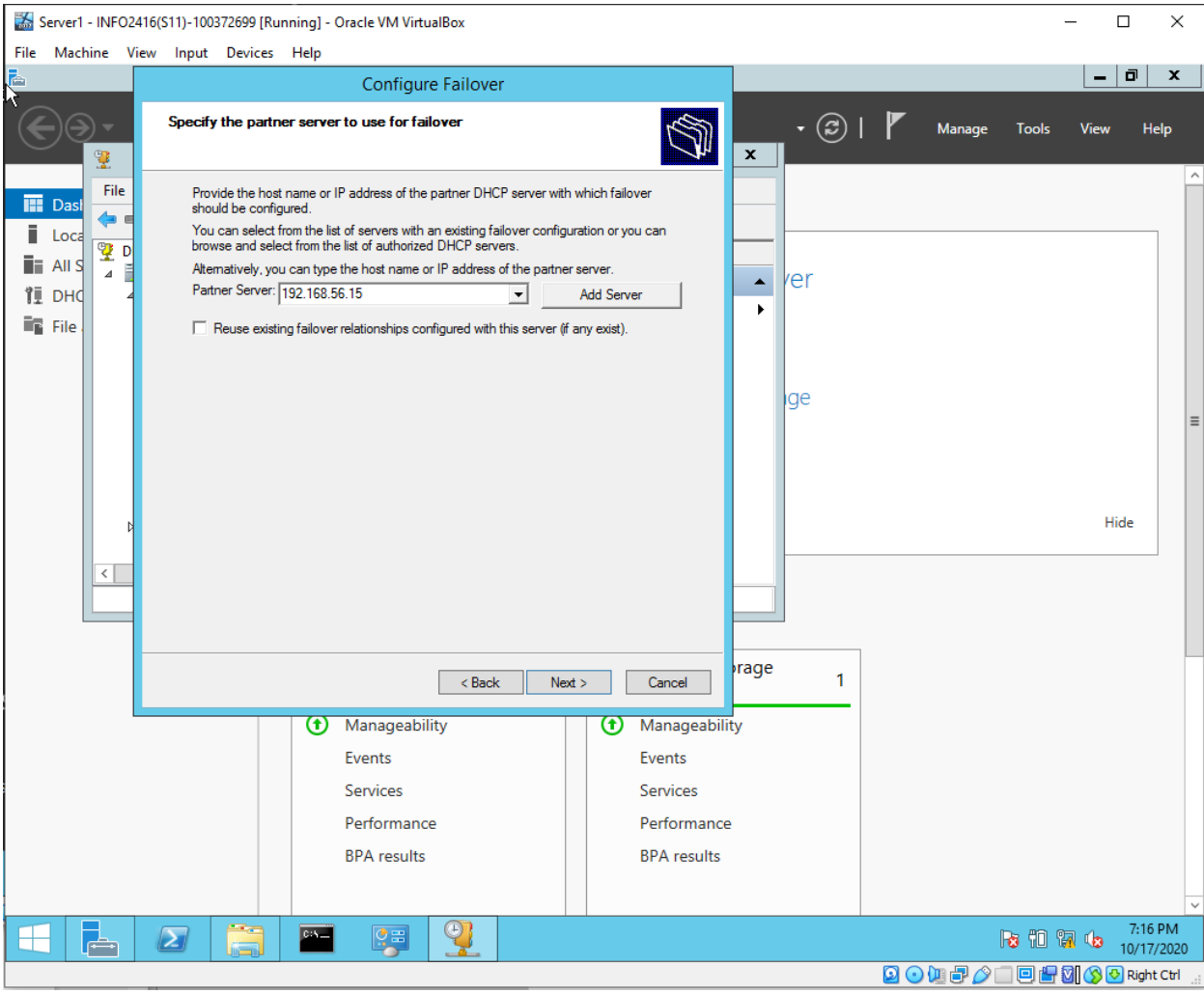
The difference with Load balance mode is that two DHCP servers are active both configuring IP addresses to clients on a scope with a certain amount of work load. What this means is that the servers can be configured to give off different ratio loads, for example the default of the two load balance servers is 50 however you can configure one server's load to be 20% and the other server acting with a 80% load. If any of the two servers lose connections with one another the servers will think to take all 100% configurations needed until connections with each server is back up.

2 a) Configure Server VM1 and Server VM2 with DHCP Failover using Hot standby, Server-1 as active, Server-2 as standby

1. To make Server 2 a DHCP server:
    a. open up Sever manager, underneath 'Welcome to server manager' click 'Add roles and features'
    b. Click next on Before you begin, and next on every page until you get to *Server Roles.*
    c. Check box DHCP and click next until you are able to click instal.
    d. After installing Click 'Complete DHCP configuration' which will open up a new window 'DHCP Post-Install configuration wizard, and press commit. Once finished close the windows.

2. To configure the failover settings on server 1:
    a. open up Server Manager, and on the top left corner click tools, click DHCP to open up the DHCP console.
    b. Click on server-1.
    c. Right click on ipv4 and find and click 'Configure Failover.' This will open up a configure failover wizard, It will ask you which scope to use, by default it will have the scope previously made already checked, click next

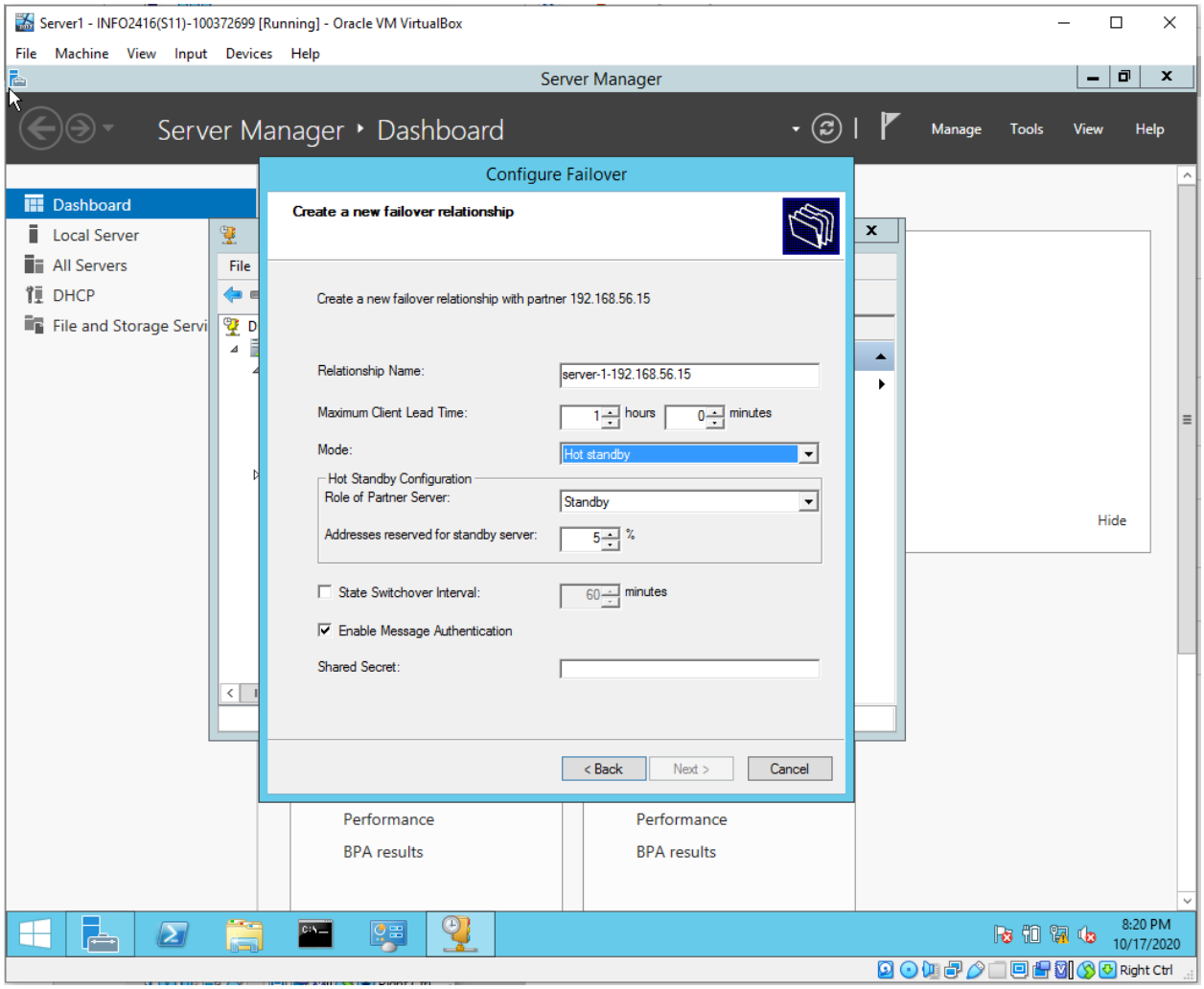
d. For the Partner server enter the ip address which was used to be reserved for server VM2 which is IP 192.168.56.15, enter the IP, then click next.



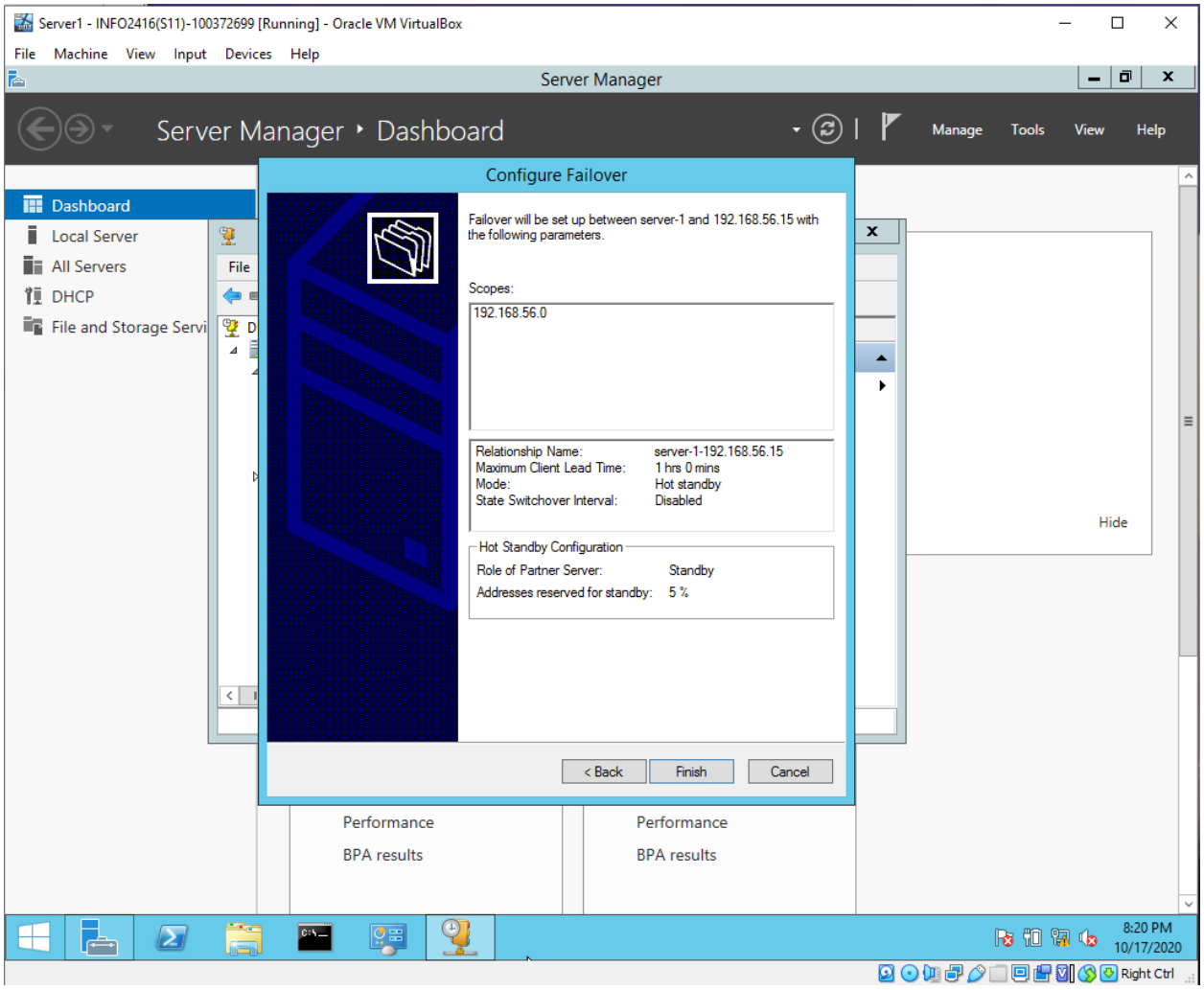

e. To create the hot standby. Go to where it says: ‘Mode’ click the drop-down menu and select hot Standby

f) disable message  authentication by unchecking the box ‘Enable Message Authentication’

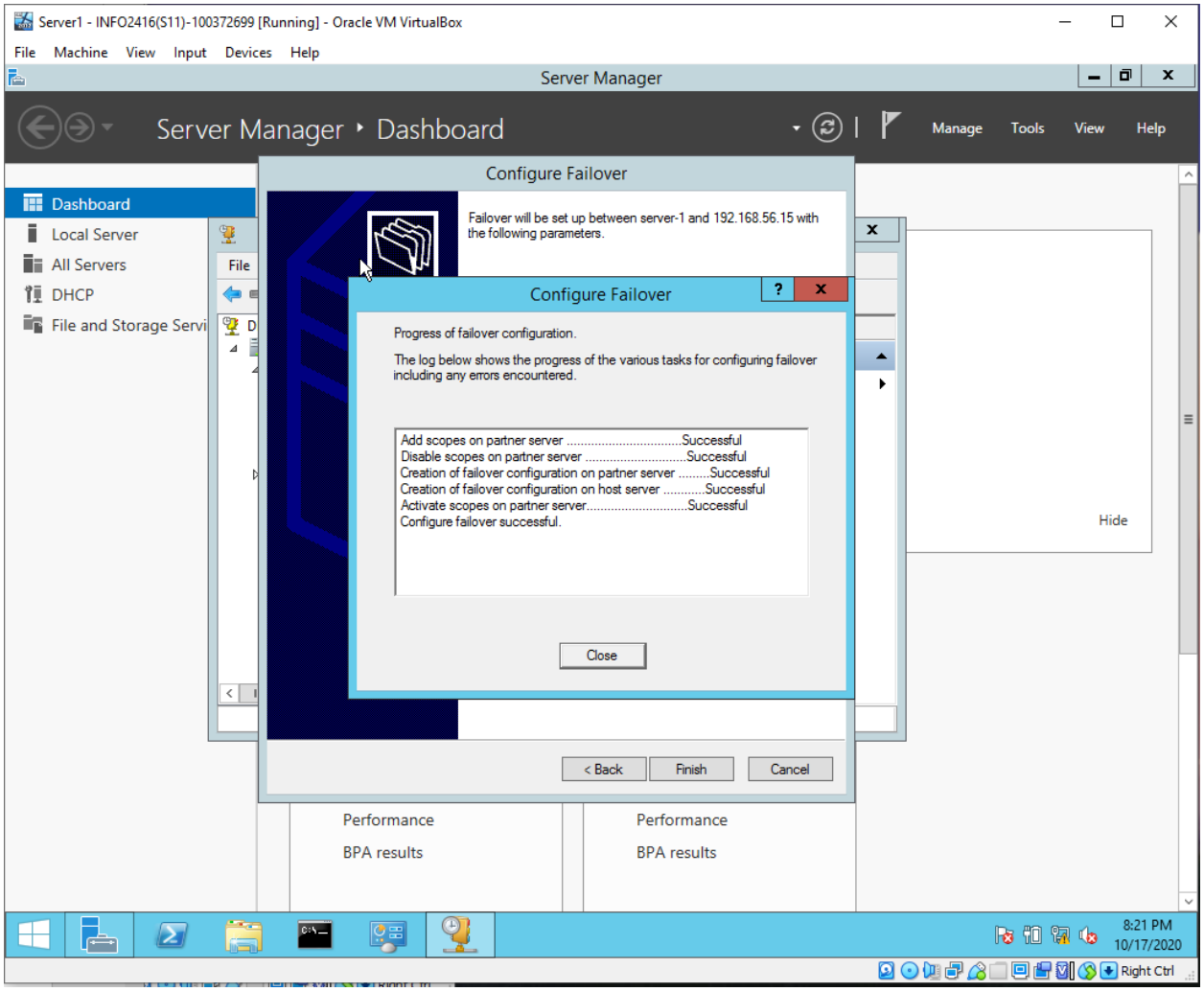
g) click next once finished




h) The configure fail over window will display the settings we just configured, hit finish

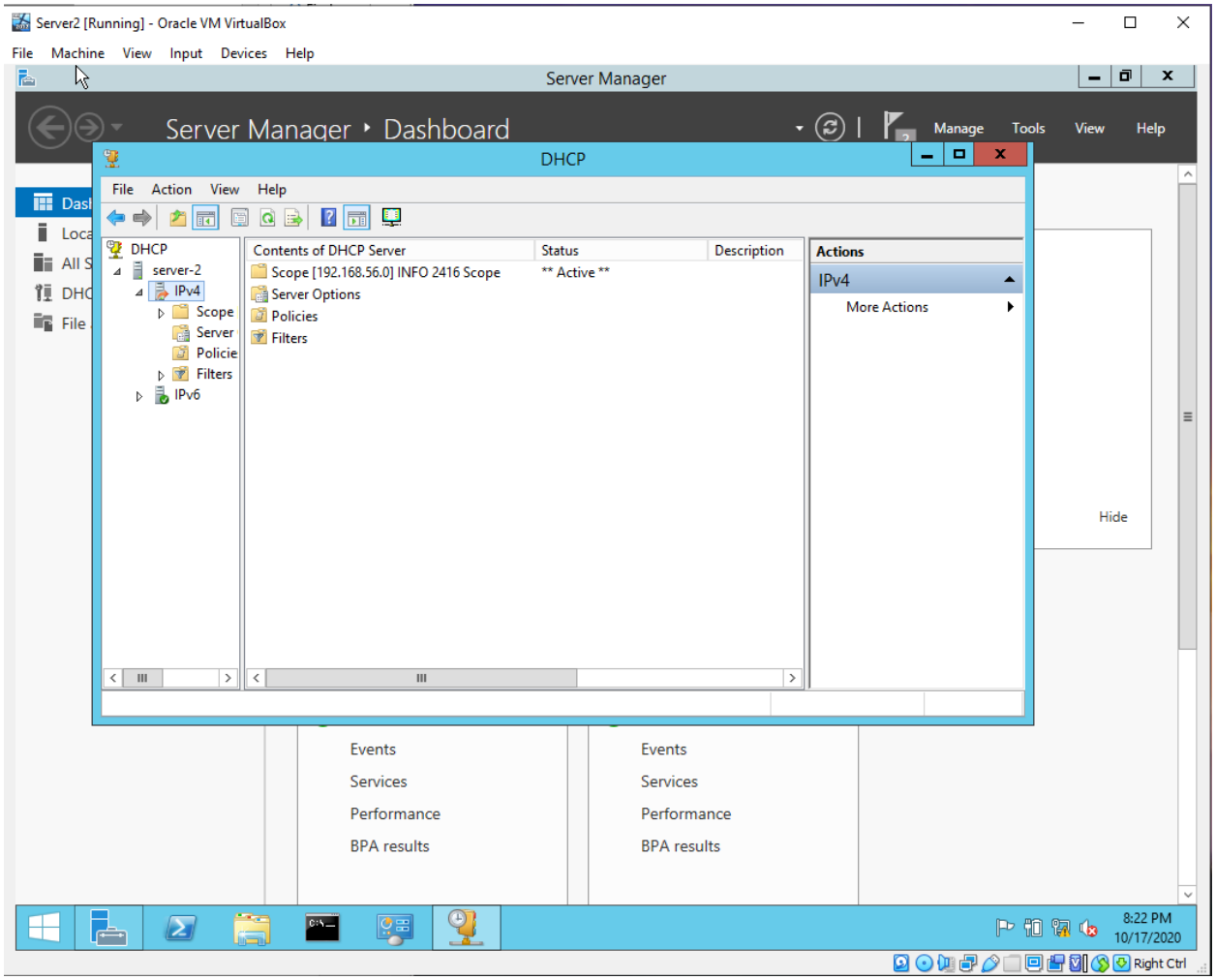



i) Progress of failover configuration window will pop up and show that Sever 2 is being configured to inherit the scopes from server one. Once all Successful hit close

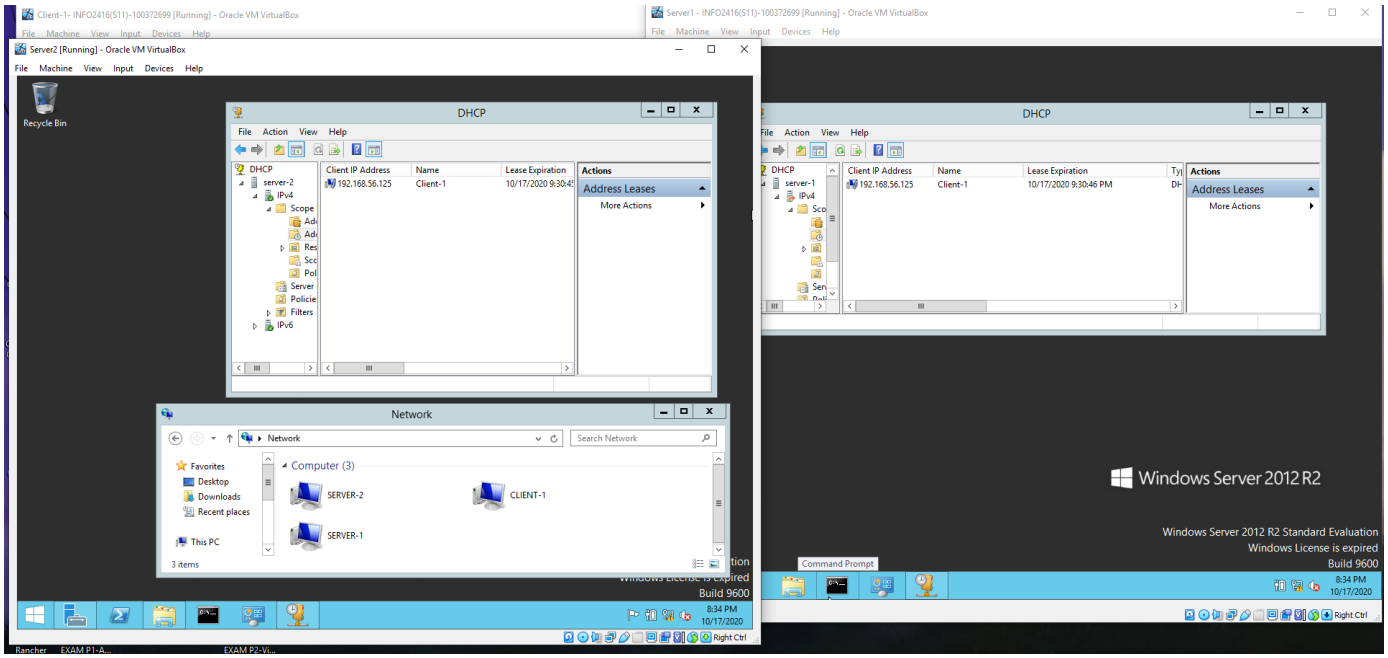

Server1 - INFO2416(S11)-100372699 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Server Manager
Server Manager ▸ Dashboard
Manage Tools View Help
Dashboard
Local Server
All Servers
DHCP
File and Storage Servi
Configure Failover
Failover will be set up between server-1 and 192.168.56.15 with the following parameters.
Configure Failover
Progress of failover configuration.
The log below shows the progress of the various tasks for configuring failover including any errors encountered.
Add scopes on partner server .....Successful
Disable scopes on partner server .....Successful
Creation of failover configuration on partner server .....Successful
Creation of failover configuration on host server .....Successful
Activate scopes on partner server.....Successful
Configure failover successful.
Close
< Back
Finish
Cancel
Performance
BPA results
Performance
BPA results
Hide
8:21 PM
10/17/2020
Right Ctrl

**2b) screenshots of the VM's with Hot Standby mode**

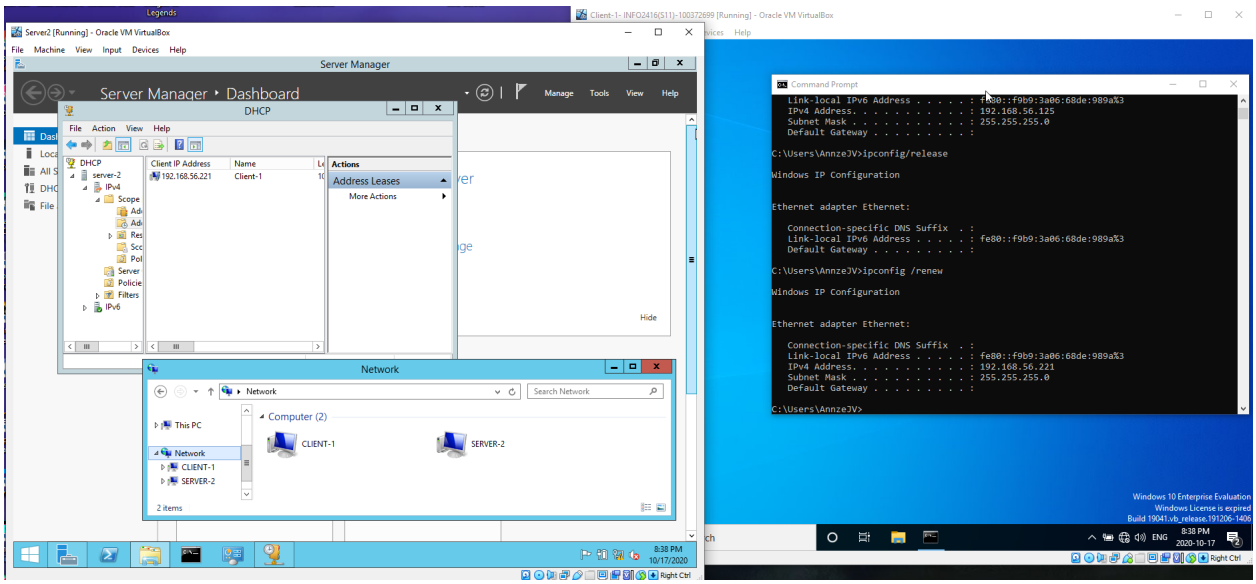
I) DHCP console on server 2 synchronized and inherited the scopes from Server 1



ii) DHCP console on Server 2 is synchronized with the IP address lease on Server 1 with an IP address for Client 1




iii & iv) ipconfig of client1, Server 1 powered down and Server 2 Hot Standby DHCP providing the IP address for Client 1



V) Server VM 1 back on and is synchronized with Server 2 with the IP address server 2 had released for the client 1