**Revert Snapshots**

**Introduction**  
On a network with one Windows Server 2008 server and two Windows 7 clients, you will:  
Install Network Policy and Access Services Sever role on the Windows Server 2008 server virtual machine that has two network adapters  
Install and configure Routing and Remote Access Role Service  
  
Note:  
 one Windows 7 client is on the net17216150 network and the other is on the net1010150 network   
on r1, one adapter is named net17216150 and the other net1010150



w7b

net17216150

net1010150

r1

w7a

Figure 1: Network

**IP Settings**  
On r1 network net17216150, configure the IP address and subnet mask  
172.16.150.10 255.255.255.0

On r1 network net1010150, configure the IP address and subnet mask  
10.10.150.10 255.255.255.0   
  
On w7a configure the IP address and subnet mask  
172.16.150.15 255.255.255.0  
  
 On w7b configure the IP address and subnet mask  
10.10.150.25 255.255.255.0

**Ping**  
Turn on File Sharing on all machines  
Verify that w7a can ping 172.16.150.10   
Verify that w7b can ping 10.10.150.10  
verify the r1 can ping w7a and w7b

**Install Network Policy and Access Services Sever Role**   
On r1, if Network Policy and Access Services Sever Role and Routing and Remote Access Service are installed, go to Enable Routing below.

On r1, from Server Manager,   
Install Network Policy and Access Services Sever Role, Next, Next  
On the Select Role Service, select Routing and Remote Access Service; doing so will select Remote Access Service, Next, Install  
When this completes, close Server Manager

**Enable Routing**  
On r1, go to Administrative Tools

Click Routing and Remote Access  
On the left you will see a red arrow pointing down if Routing and Remote Access is not enabled; otherwise, it will be green; if it is green disable it by  
Right click the router, MachineName(local)  
Click Disable Routing and Remote Access  
When prompted, click Yes  
The green arrow changes to red

Now enable Routing and Remote Access  
On r1, go to Administrative Tools

Click Routing and Remote Access  
On the left you will see a red arrow pointing down  
Right click the router  
Click Configure and Enable Routing and Remote Access  
On the Routing and Remote Access Setup Wizard Welcome page, click Next   
On the Routing and On the Remote Access Setup Wizard Configure page, select Custom Configuration, Next On Custom Configuration page, Select LAN routing, Next, Finish  
When prompted, select Start Service  
After the service starts, the red arrow will change to a green up arrow

How Static Routes Work



w7b

r1

w7a

172.16.150.15/24

172.16.150.10/24

10.10.150.10/24

10.150.10.25/24

Figure 2:

Assume you are at w7a console and you want to send a packet to w7b. Tracing the path from w7a to w7b, the packet would traverse r1 using the interface 172.16.150.10 across the router to network 10.10.150.0, where r1 delivers the packet to w7b. Also notice the mask for this network is 255.255.255.0.  
  
 Assume you are at w7b console and you want to send a packet to w7a. Tracing the path from w7b to w7a, the packet would traverse r1 using the interface 10.10.150.10 across the router to network 172.16.150.0, where r1 delivers the packet to w7a. Also notice the mask for this network is 255.255.255.0.

Configure Static Routing  
On the Routing and Remote Access page, click the plus next to IPv4, you will see General and Static Routes  
Click Static Routes, you will notice there are no static routes  
Right click Static Routes, Show routing Table. Please take a screenshot of it   
Right click Static Routes, New Static Route…  
Click Interface:  
You will see both network cards, as shown in Figure 2, on the net17216150 and net1010150 networks

Assume you want the configure the path from w7b to w7a  
If the card on net1010150 is not selected, select it  
As discussed above, if you are on the net1010150, the destination network is net17216150; as a result, enter 172.16.150.0 in Destination  
The Destination Network mask: 255.255.255.0  
Gateway: is the closest port to you on r1 10.10.150.10

Test your network  
Before testing your network with ping, what results do you expect?  
ping each client  
what is the result?  
  
Assume you want the configure the path from w7a to w7b  
If the card on net17216150 is not selected, select it  
As discussed above, if you are on the net17216150, the destination network is net1010150; as a result, enter 10.10.150.0 in Destination  
The Destination Network mask: 255.255.255.0  
Gateway: is the closest port to you on r1 172.16.150.10

Test your network  
Before testing your network with ping, what results do you expect?  
ping each client  
what is the result?  
  
What is missing?   
Hint: Look at the IP configuration on the clients to see what is missing; make the change and try it again; this time, if you made the correct changes, you will get the desired results. Be sure your responses are coming from the opposite client.  
  
Display the routing table and take a screenshot and compare it with the 1st one and note your findings