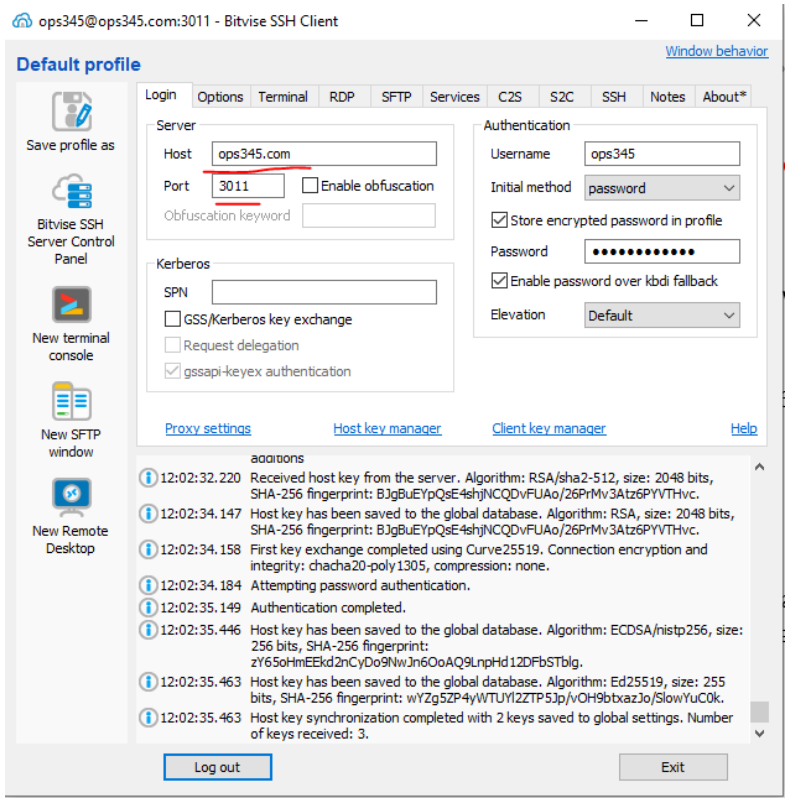
Assignment 01 – 10% of your final grade

You will work on the instructor hosted VMs, assignment will be evaluated based on the **end results**.

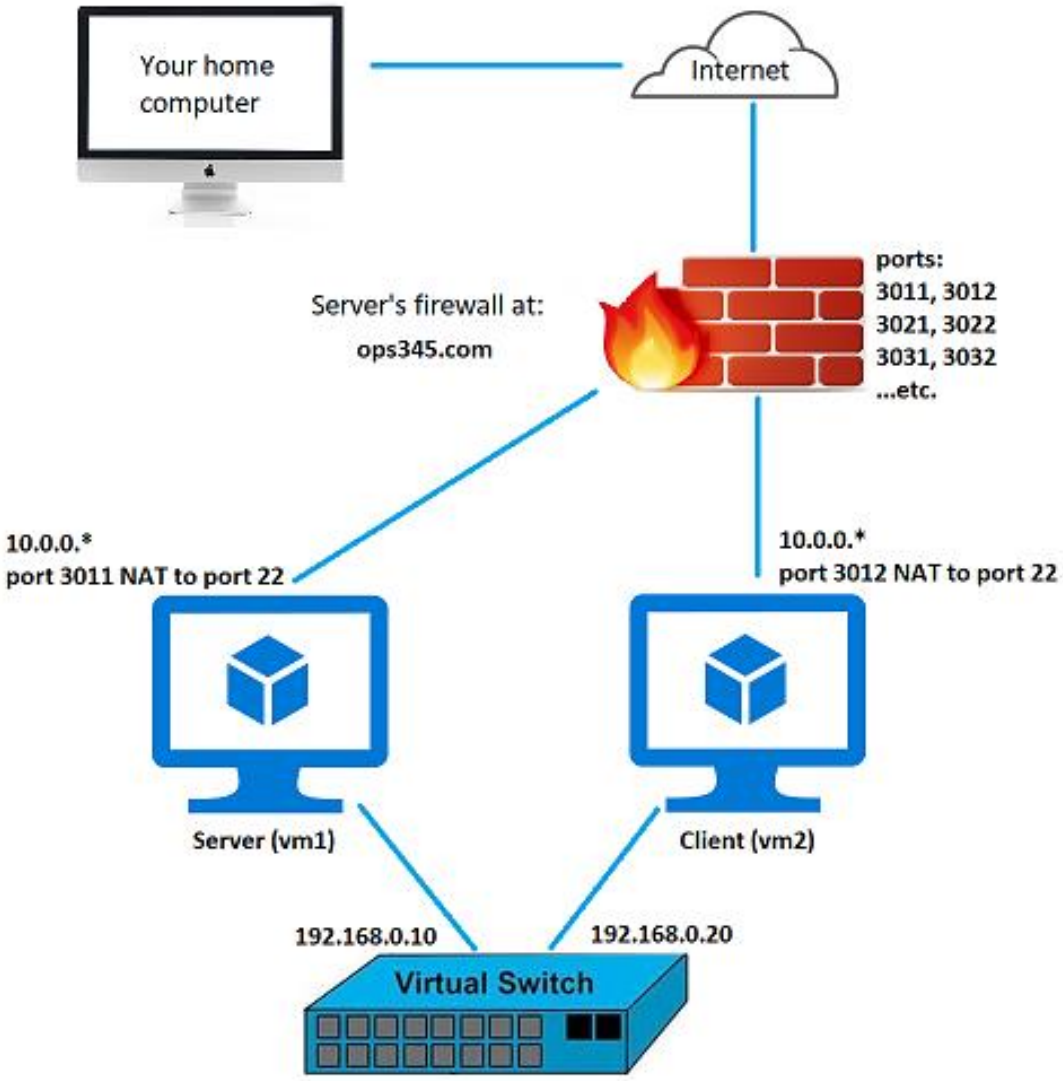
No need to screen or video capture the processes.

Refer to previous labs if you have issues to configure networks, iptables, DNS…etc.

1. With any ssh client of your choice, connect to **ops345.com** with the port number found in your Grade.
   a. The port is a 4 digits number start with "3". E.g. 3011, 3012…etc. Green color is your Sequence number found from your Blackboard, pink color means vm1 or vm2.
   b. Default password is "Password1234". Please change it to your own password.



2. On the VMs, you should have the 10.0.*.0/24 subnet for Internet facing and 192.168.0.0/24 subnet for Internal network.



3. Setup Master Name Server (on Server vm1) (refer to Lab 04 if you have any issue)
4. Setup Slave Name Server (on Client vm2) (refer to the end of Lecture 5)

Evaluation:

1. You need to make sure the "named" service running successfully on both master and slave DNS servers.
2. You need to have the following records in the zone file. It is at your own discretion to name the zone or zone files.

Server	IN	A	192.168.0.10
Client	IN	A	192.168.0.20
ops345	IN	A	192.168.0.33
assign	IN	A	192.168.0.123
yourname	IN	A	192.168.0.254

3. Reverse lookup should have the same value as above.
4. You must make sure the zone file(s) are able to synchronize from Master DNS to Slave DNS.
   a. Make a change on the Master DNS record and see if you can resolve from Client VM.
   b. You may want to check iptables rules if it is not sync.
   c. You can force a zone update with "rndc retransfer yoursenecaid.ops"
5. You are able to resolve names and IPs from the other VM. Select few names and IPs to resolve.
   a. Note: Azure may reset your DNS server pointing to Microsoft default.
   b. From Server VM, query DNS Record from Client VM. (both forward and reverse lookup)
   c. From Client VM, query DNS Record from Server VM. (both forward and reverse lookup)
6. **Fix any error message you encountered.**
7. **Save a copy of your /etc/named.conf and your zone file(s), upload the files to the Blackboard\MyTasks\Assignment01.**

Troubleshooting items if not working.

Iptables:

iptables -I INPUT -p tcp --dport=53 -j ACCEPT

iptables -I INPUT -p udp --dport=53 -j ACCEPT

Hostname of VM:

vi /etc/hostname

systemctl restart systemd-hostnamed

DNS server:

Are you able to do: nslookup server.yoursenecaid.ops 192.168.0.10

Is the first DNS as 192.168.0.10? vi /etc/resolv.conf

rndc retransfer yoursenecaid.ops

named-checkconf

named-checkzone

Are all the required elements installed?

yum install bind*