THE LINUX OPERATING SYSTEM (MODULE-5)

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Task-B. Transparent proxy using squid on CentOS 7.

General overview and objective	(2 points)
Configuration of squid	(2 points)
Configuration of iptables	(2 points)
Client configuration	(2 points)

Task-B

❖ Definition

- Transparent proxies are intermediary systems that sit between a user and a content provider. When a user makes a request to a web server, the transparent proxy intercepts the request to perform various actions including caching, redirection and authentication.

❖ Objective

- Transparent proxy also known as an intercepting proxy, inline proxy, or forced proxy, a transparent proxy intercepts normal application layer communication without requiring any special client configuration. Clients need not be aware of the existence of the proxy. We don't need to do any kind of configurations on client machine. But still we can access the website from web server via proxy server.

❖ Overview

- Traditionally, proxies are accessed by configuring the user's application or network settings. With transparent proxying, the proxy intercepts request by intercepting packets directed to the destination, making it seem as though the request is handled by the destination itself. This allows service providers to implement proxying without having to reconfigure the client's computer machine.
- Transparent proxies act as intermediaries between a user and a web service. When a user connects to a service, the transparent proxy intercepts the request before passing it on to the provider. Transparent proxies are considered transparent because the user isn't aware of them. On the other hand, the servers hosting the service recognize that the proxied traffic is coming from a proxy and not directly from the user.
- Squid can be configured to proxy traffic "transparently", such that the network redirects all HTTP traffic to it without the client device being aware that it is there. Firewall was used as a wrapper around ip-tables to perform port blocking and NAT-ing.

Basic Steps To Setup Transparent Proxy

- Step 1 - Basic Proxy Setup. To setup the transparent mode a functional basic proxy setup is required.
- Step 2 – DNS Server (adding records for hostname of website and making zone in named.conf).
- Step 3 – Web Server (restart httpd service).
- Step 4 – Creating Slave On Proxy Server (slave configurations on proxy server)
- Step 5 – Transparent Proxy Configurations (squid.conf)
- Step 6 – Firewall script (iptable rules)
- Step 7 – Client Machine Configurations (adding default gateway and dns ip)

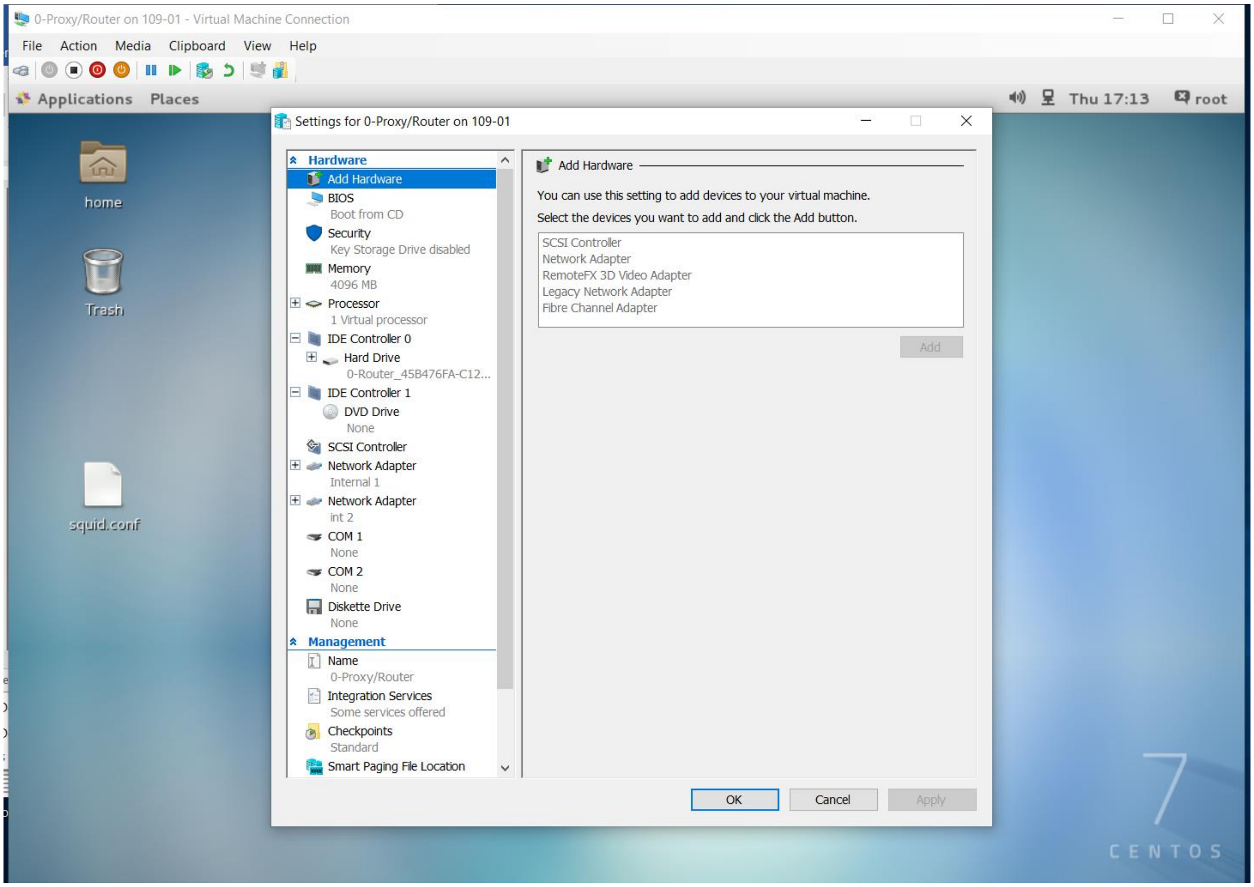
Configurations of Transparent Proxy

- First Of All, In Order To Do Transparent Proxy We Need 4 Machines : 1 Proxy Server, 1 Web Server, 1 DNS server and 1 Windows Machine (Client Machine).
- Here, I Am Configuring IP Addresses: Proxy Server: eth0: 192.168.0.2 and eth1: 192.168.100.2, Web Server: eth0: 192.168.0.251, DNS server: 192.168.0.1 and Windows Client: 192.168.100.20
- Each Machine’s Firewall Should Be Off .
- To Turn Off Firewall, Follow Below Mentioned Commands:

  - Iptables –F

    Or
  - Systemctl Stop Firewalld
  - Systemctl Disable Firewalld

- First of All, On Proxy Server, Add 2 Network Adapters and set 2 different internal switches.
- Here, we can see that, I have added switches internal 1 and int 2



0-Proxy/Router on 109-01 - Virtual Machine Connection

Settings for 0-Proxy/Router on 109-01

Hardware
- Add Hardware
- BIOS: Boot from CD
- Security: Key Storage Drive disabled
- Memory: 4096 MB
- Processor: 1 Virtual processor
- IDE Controller 0
  - Hard Drive: 0-Router_45B476FA-C12...
- IDE Controller 1
  - DVD Drive: None
- SCSI Controller
- Network Adapter: Internal 1
- Network Adapter: int 2
- COM 1: None
- COM 2: None
- Diskette Drive: None

Management
- Name: 0-Proxy/Router
- Integration Services: Some services offered
- Checkpoints: Standard
- Smart Paging File Location

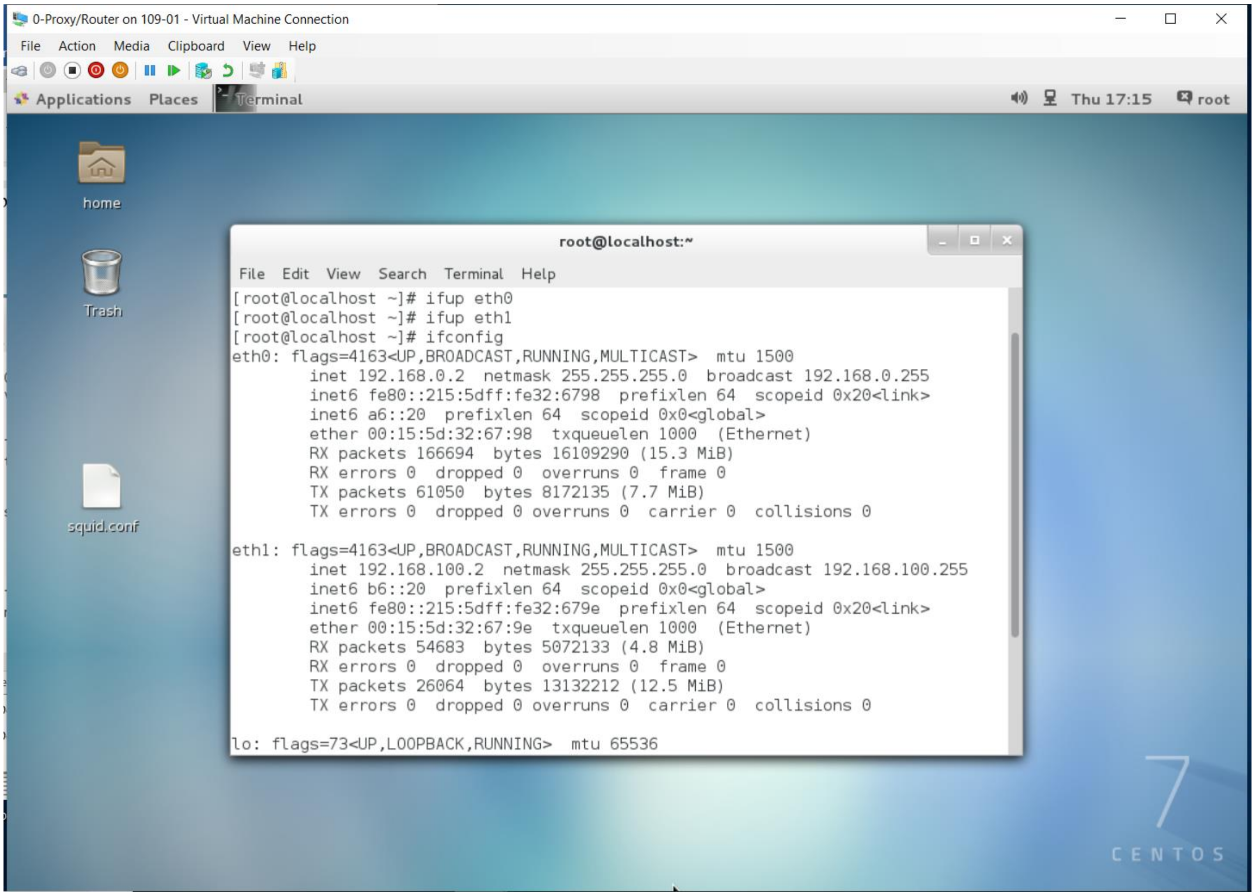
Add Hardware

You can use this setting to add devices to your virtual machine.

Select the devices you want to add and click the Add button.

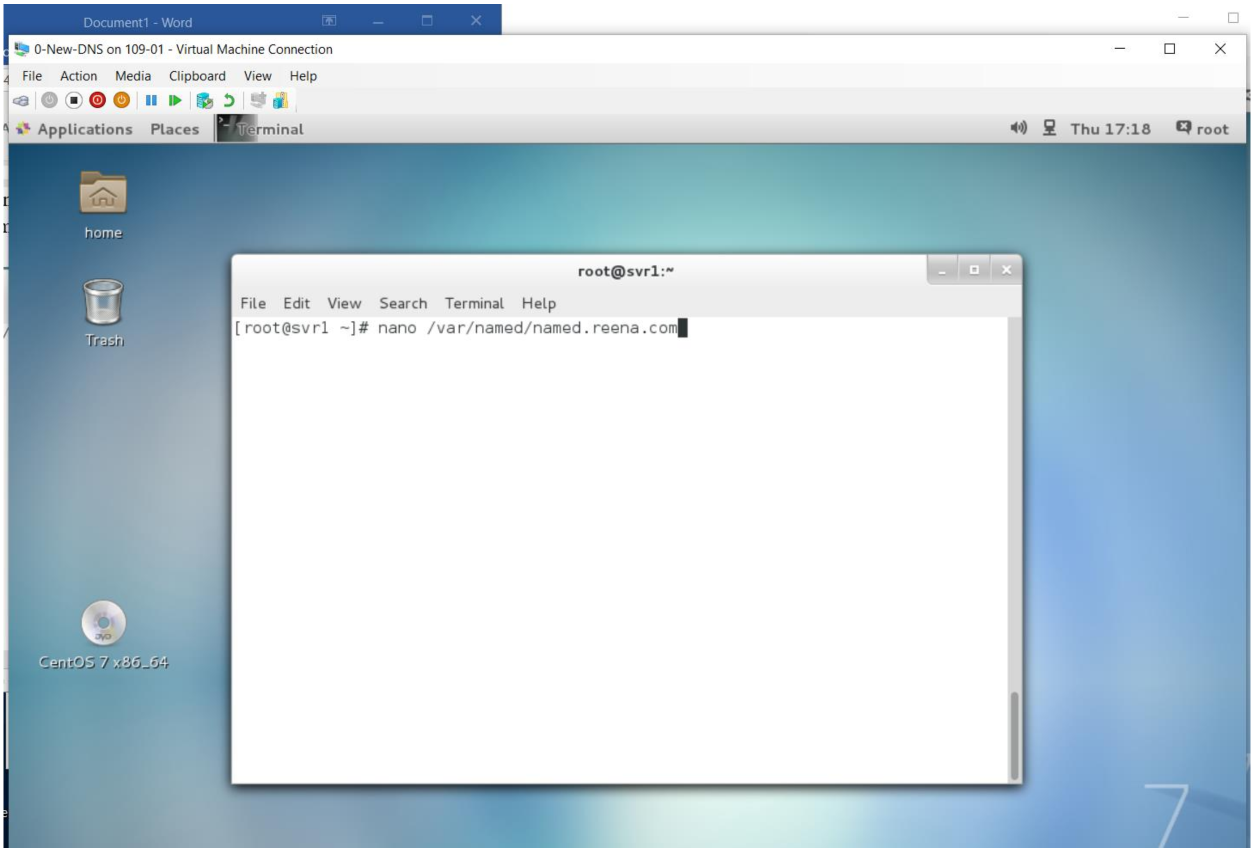
- SCSI Controller
- Network Adapter
- RemoteFX 3D Video Adapter
- Legacy Network Adapter
- Fibre Channel Adapter

- Now, On Proxy Server, I am doing ifconfig in order to check IP addresses that I have given
- Here, we can see that, both IP addresses have different net id
- 1st id will point to web server and 2nd will point to client.


0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:15
root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

```
[root@localhost ~]# ifup eth0
[root@localhost ~]# ifup eth1
[root@localhost ~]# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.0.2  netmask 255.255.255.0  broadcast 192.168.0.255
        inet6 fe80::215:5dff:fe32:6798  prefixlen 64  scopeid 0x20<link>
        inet6 a6::20  prefixlen 64  scopeid 0x0<global>
        ether 00:15:5d:32:67:98  txqueuelen 1000  (Ethernet)
        RX packets 166694  bytes 16109290 (15.3 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 61050  bytes 8172135 (7.7 MiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.100.2  netmask 255.255.255.0  broadcast 192.168.100.255
        inet6 b6::20  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::215:5dff:fe32:679e  prefixlen 64  scopeid 0x20<link>
        ether 00:15:5d:32:67:9e  txqueuelen 1000  (Ethernet)
        RX packets 54683  bytes 5072133 (4.8 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 26064  bytes 13132212 (12.5 MiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
```

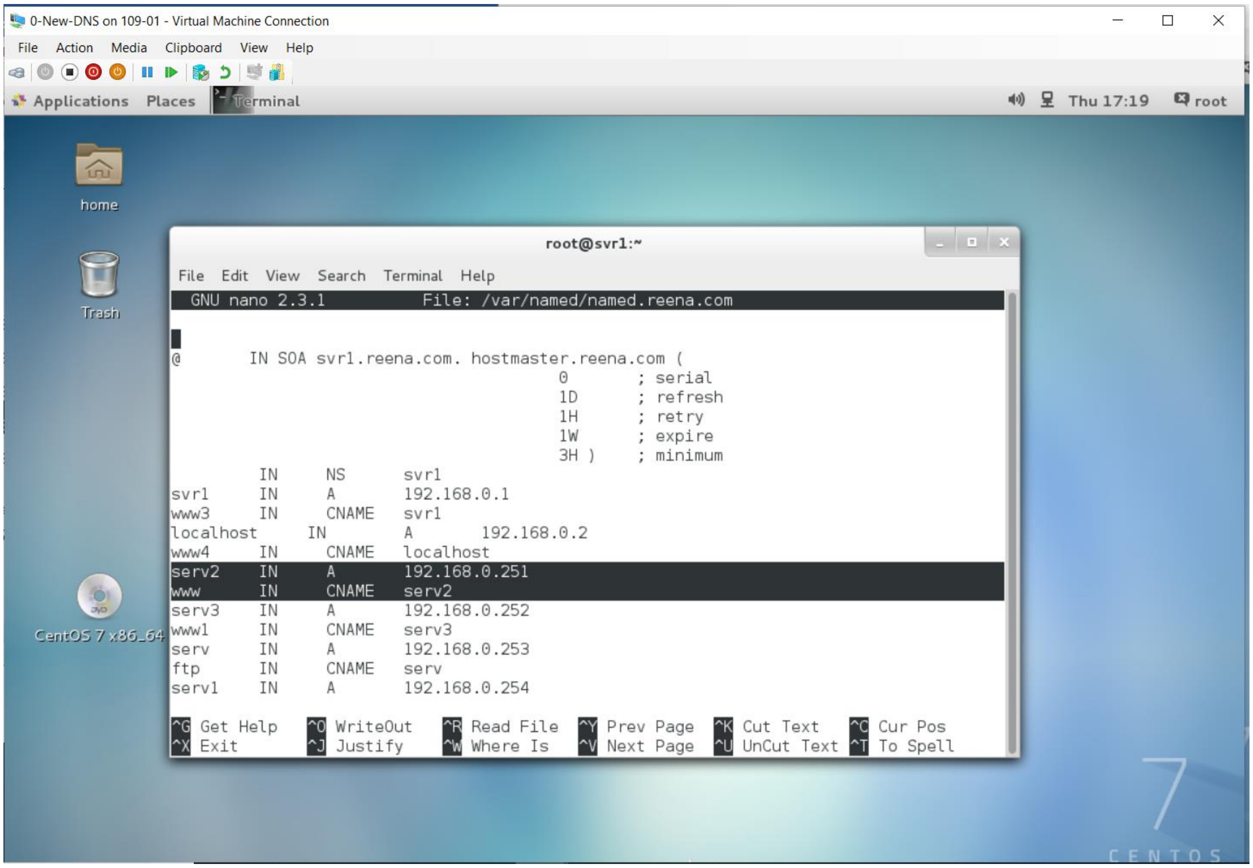
- Now, go to DNS server
- And, open file named.reena.com by using command: nano /var/named/named.reena.com



Document1 - Word
0-New-DNS on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:18 root
home
Trash
CentOS 7 x86_64
root@svr1:~
File Edit View Search Terminal Help

```
[root@svr1 ~]# nano /var/named/named.reena.com
```

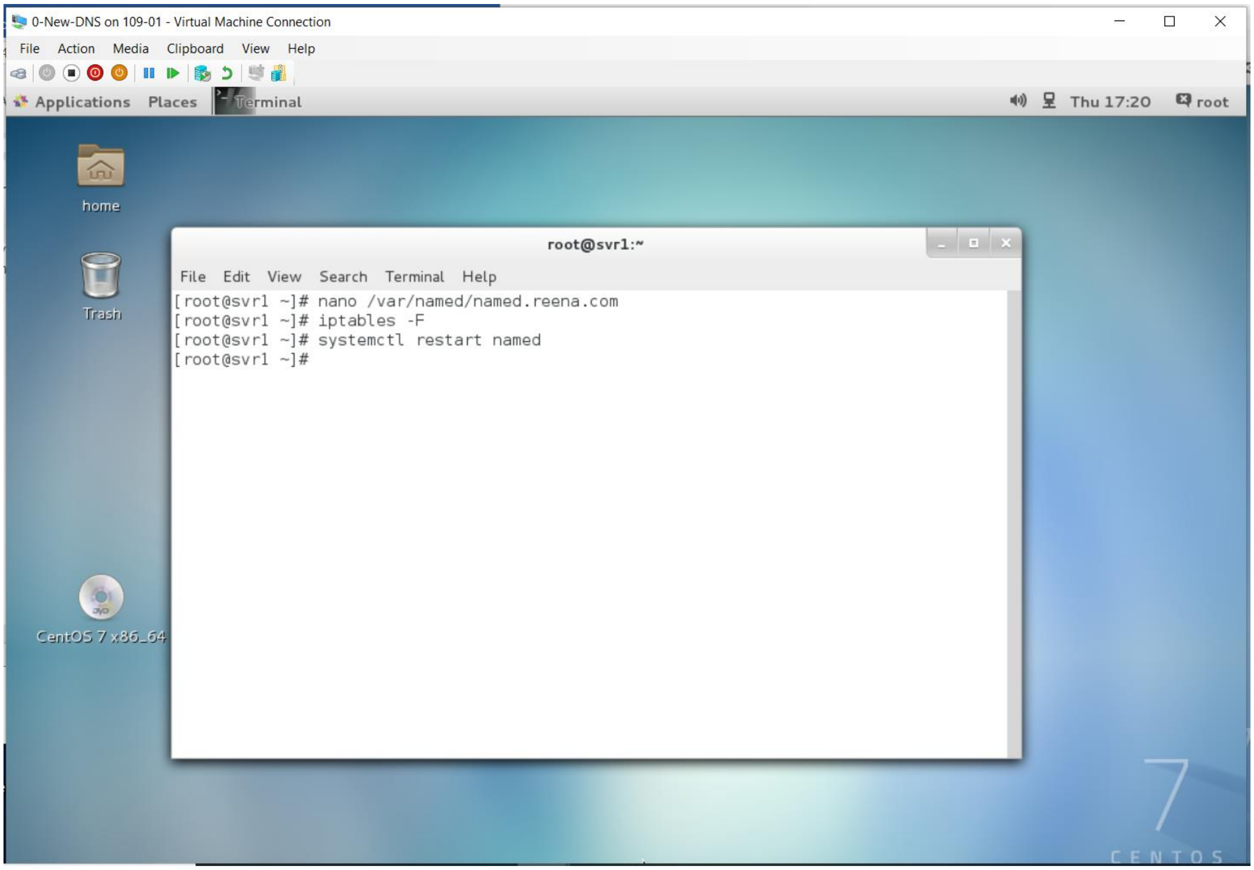
- Here, we can see that I have already added record for web server 192.168.0.251 (www.reena.com)



0-New-DNS on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:19 root
home
Trash
CentOS 7 x86_64
root@svr1:~
File Edit View Search Terminal Help

```
  GNU nano 2.3.1           File: /var/named/named.reena.com

@       IN SOA svrl.reena.com. hostmaster.reena.com (
                                        0       ; serial
                                        1D      ; refresh
                                        1H      ; retry
                                        1W      ; expire
                                        3H )    ; minimum
         IN     NS      svrl
svrl     IN     A       192.168.0.1
www3     IN     CNAME   svrl
localhost     IN        A       192.168.0.2
www4     IN     CNAME   localhost
serv2    IN     A       192.168.0.251
www      IN     CNAME   serv2
serv3    IN     A       192.168.0.252
www1     IN     CNAME   serv3
serv     IN     A       192.168.0.253
ftp      IN     CNAME   serv
serv1    IN     A       192.168.0.254

^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text ^T To Spell
```

- Now, restart the service.



0-New-DNS on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:20 root
home
Trash
CentOS 7 x86_64
root@svr1:~
File Edit View Search Terminal Help
7 CENTOS

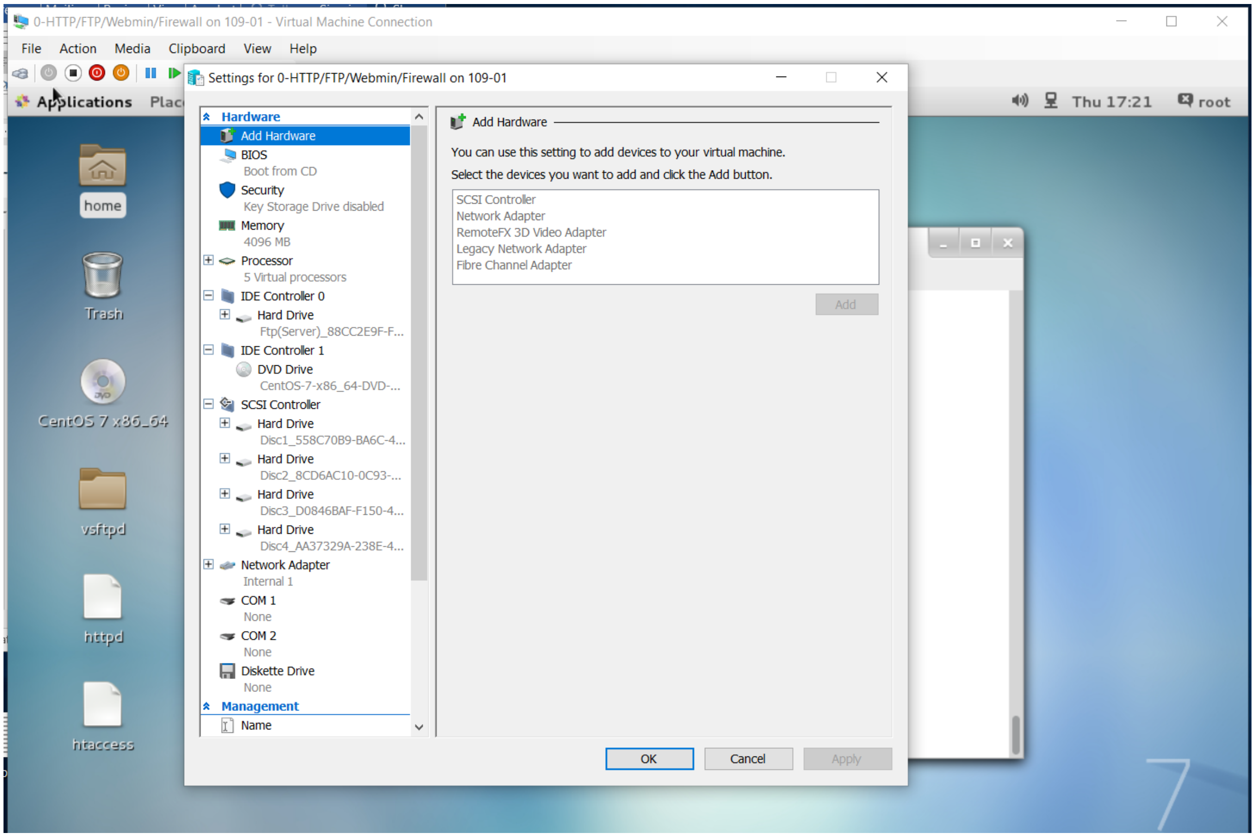
```
[root@svr1 ~]# nano /var/named/named.reena.com
[root@svr1 ~]# iptables -F
[root@svr1 ~]# systemctl restart named
[root@svr1 ~]#
```

- Now, go to named.conf it is in etc so go in etc directory then use nano named.conf command. inside that edit internal zone.

  - #cd /etc
    #nano named.conf
            internal
                    zone “reena.com” {
                    type master;
                    file “named.reena.com” ;
                    allow-transfer { 192.168.0.2; };
                    };

- Then, restart the named service.

- ➢ Now, go to web server
- ➢ As we can see, Here I have added network adapter on internal 1



Hardware
- Add Hardware
- BIOS
  Boot from CD
- Security
  Key Storage Drive disabled
- Memory
  4096 MB
- Processor
  5 Virtual processors
- IDE Controller 0
  - Hard Drive
    Ftp(Server)_88CC2E9F-F...
- IDE Controller 1
  - DVD Drive
    CentOS-7-x86_64-DVD-...
- SCSI Controller
  - Hard Drive
    Disc1_558C70B9-BA6C-4...
  - Hard Drive
    Disc2_8CD6AC10-0C93-...
  - Hard Drive
    Disc3_D0846BAF-F150-4...
  - Hard Drive
    Disc4_AA37329A-238E-4...
- Network Adapter
  Internal 1
- COM 1
  None
- COM 2
  None
- Diskette Drive
  None

Management
- Name

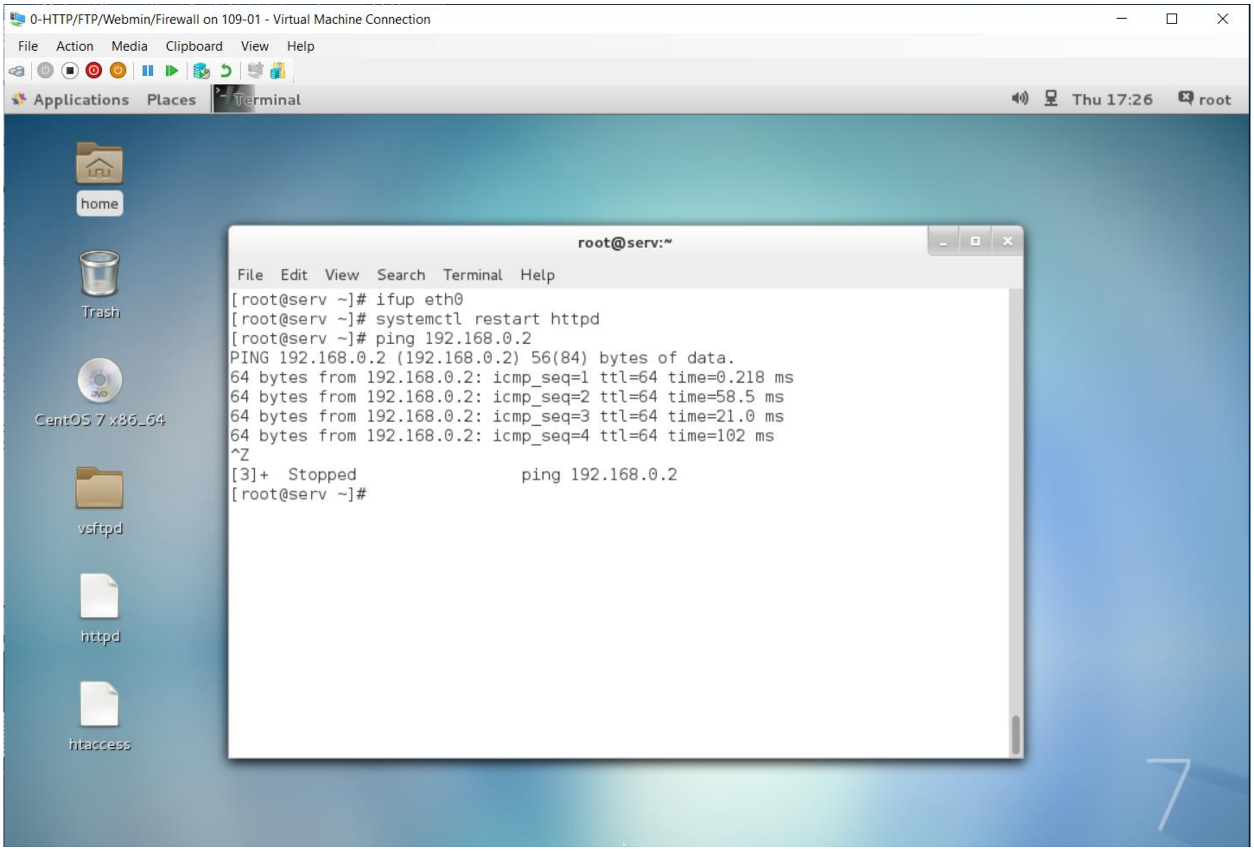
Add Hardware

You can use this setting to add devices to your virtual machine.

Select the devices you want to add and click the Add button.

SCSI Controller
Network Adapter
RemoteFX 3D Video Adapter
Legacy Network Adapter
Fibre Channel Adapter

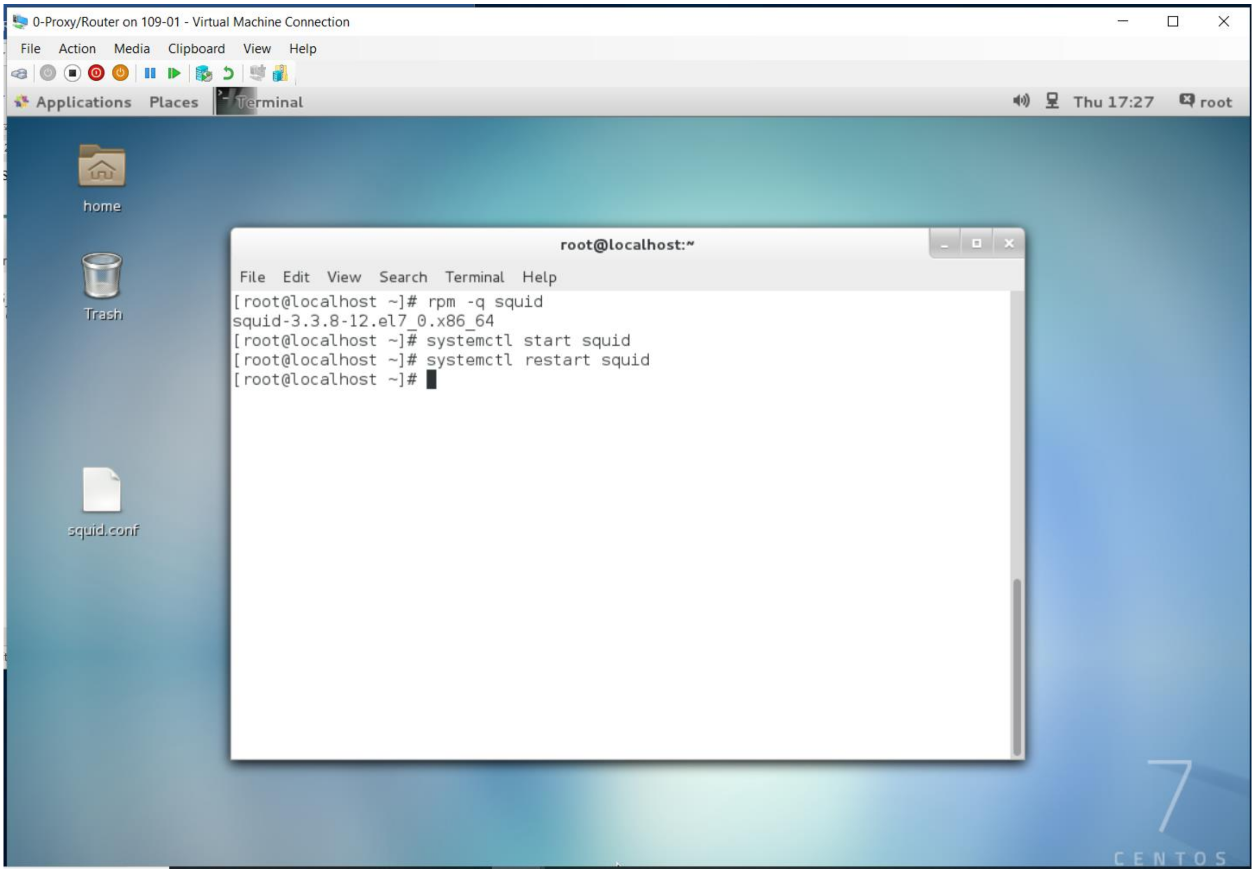
- Now, I need to restart the httpd service
- And I am trying to ping Proxy server
- We can see that I can ping proxy server because both are on same network adapter.



0-HTTP/FTP/Webmin/Firewall on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:26 root
home
Trash
CentOS 7 x86_64
vsftpd
httpd
htaccess
root@serv:~
File Edit View Search Terminal Help

```
[root@serv ~]# ifup eth0
[root@serv ~]# systemctl restart httpd
[root@serv ~]# ping 192.168.0.2
PING 192.168.0.2 (192.168.0.2) 56(84) bytes of data.
64 bytes from 192.168.0.2: icmp_seq=1 ttl=64 time=0.218 ms
64 bytes from 192.168.0.2: icmp_seq=2 ttl=64 time=58.5 ms
64 bytes from 192.168.0.2: icmp_seq=3 ttl=64 time=21.0 ms
64 bytes from 192.168.0.2: icmp_seq=4 ttl=64 time=102 ms
^Z
[3]+  Stopped                 ping 192.168.0.2
[root@serv ~]#
```

- Now, On Proxy Server, we need to check that squid is installed or not if squid is not installed then we have to install it.
- But here we can see that squid is already installed.
- And then start the service

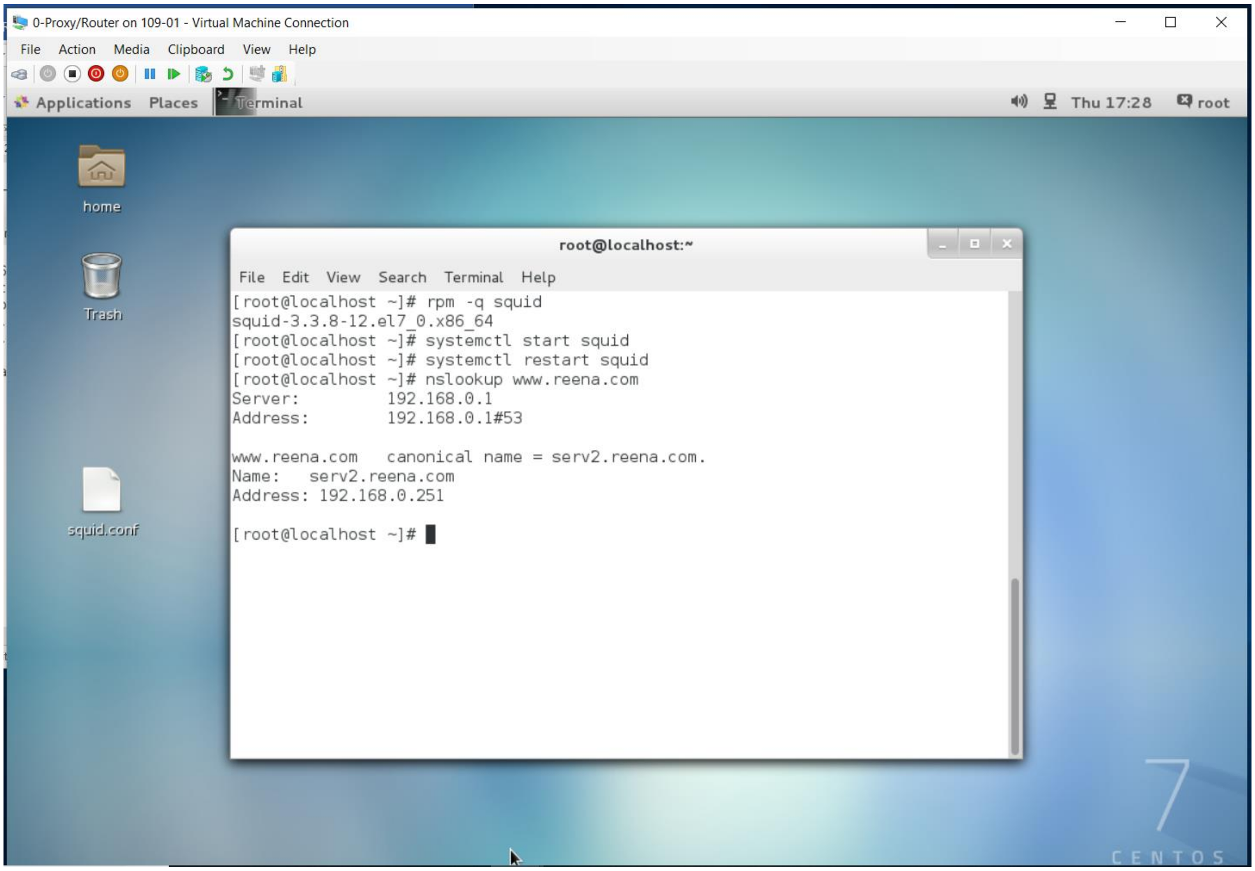


0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:27
root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

```
[root@localhost ~]# rpm -q squid
squid-3.3.8-12.el7_0.x86_64
[root@localhost ~]# systemctl start squid
[root@localhost ~]# systemctl restart squid
[root@localhost ~]# 
```

- Here, on proxy server we also need to add ip address of DNS in resolv.conf file by using command: nano /etc/resolv.conf so, we can access the web site from web server.

- Now, I am doing nslookup in order to check the connection between proxy and web server.

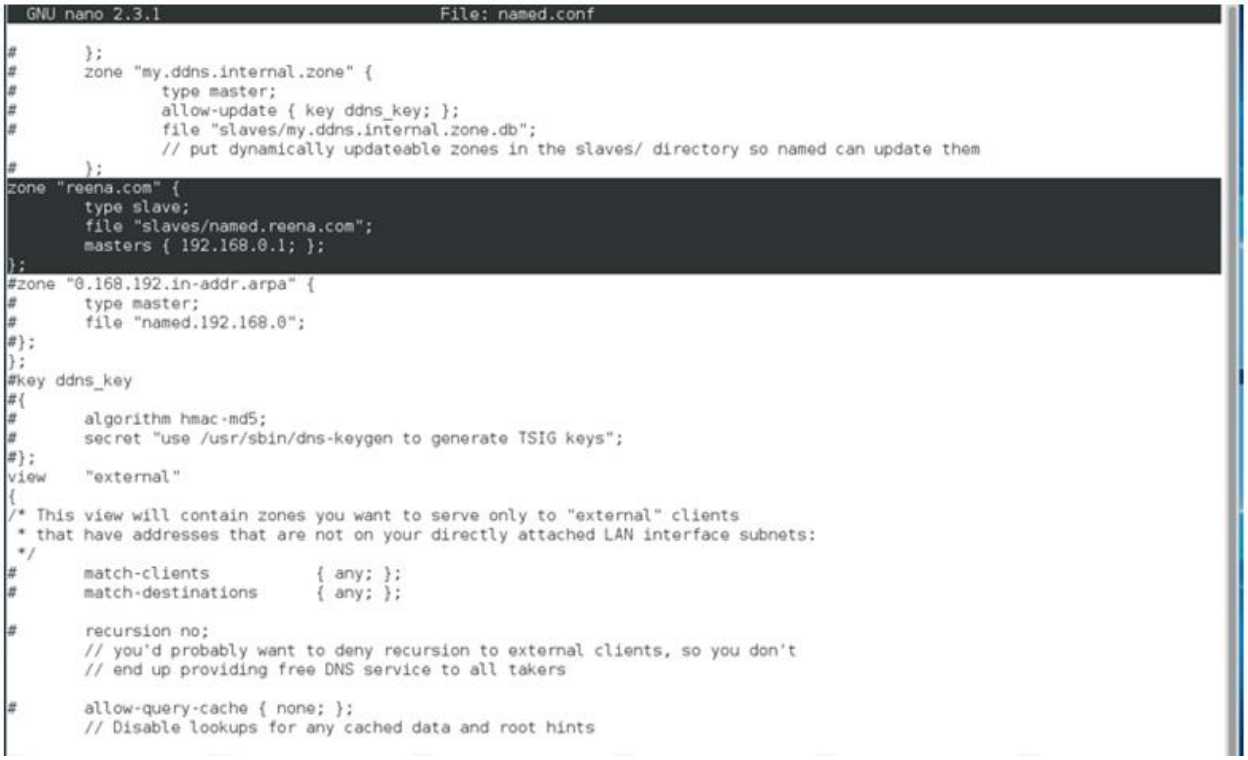


0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:28 root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

```
[root@localhost ~]# rpm -q squid
squid-3.3.8-12.el7_0.x86_64
[root@localhost ~]# systemctl start squid
[root@localhost ~]# systemctl restart squid
[root@localhost ~]# nslookup www.reena.com
Server:         192.168.0.1
Address:        192.168.0.1#53

www.reena.com   canonical name = serv2.reena.com.
Name:   serv2.reena.com
Address: 192.168.0.251

[root@localhost ~]# 
```

- Now, in order to access website by hostname on client machine, we need to make proxy server, a slave server for that, I have to do some configurations to make it slave of dns server on proxy server.
- Here on proxy server, go to named.conf it is in etc so go in etc directory then use nano named.conf command. inside that edit internal zone as shown below → then, restart named service (systemctl restart named)

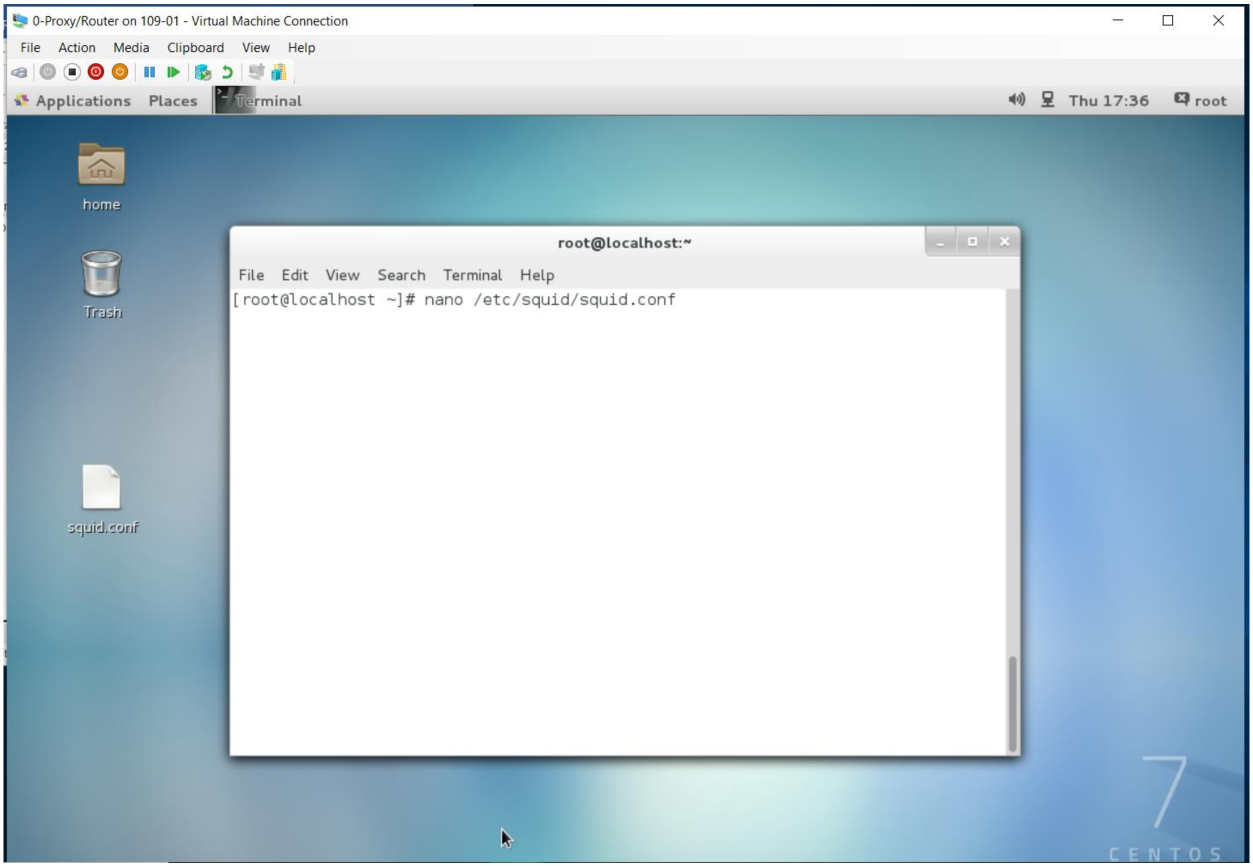
```
#cd /etc
#nano named.conf
        internal
                zone “reena.com” {
                type slave;
                file “slaves/named.reena.com” ;
                masters  {  192.168.0.1; }; };
```



```
  GNU nano 2.3.1                        File: named.conf

#       };
#       zone "my.ddns.internal.zone" {
#               type master;
#               allow-update { key ddns_key; };
#               file "slaves/my.ddns.internal.zone.db";
                // put dynamically updateable zones in the slaves/ directory so named can update them
#       };
zone "reena.com" {
        type slave;
        file "slaves/named.reena.com";
        masters { 192.168.0.1; };
};
#zone "0.168.192.in-addr.arpa" {
#       type master;
#       file "named.192.168.0";
#};
};
#key ddns_key
#{
#       algorithm hmac-md5;
#       secret "use /usr/sbin/dns-keygen to generate TSIG keys";
#};
view    "external"
{
/* This view will contain zones you want to serve only to "external" clients
 * that have addresses that are not on your directly attached LAN interface subnets:
 */
#       match-clients           { any; };
#       match-destinations      { any; };

#       recursion no;
        // you'd probably want to deny recursion to external clients, so you don't
        // end up providing free DNS service to all takers

#       allow-query-cache { none; };
        // Disable lookups for any cached data and root hints
```

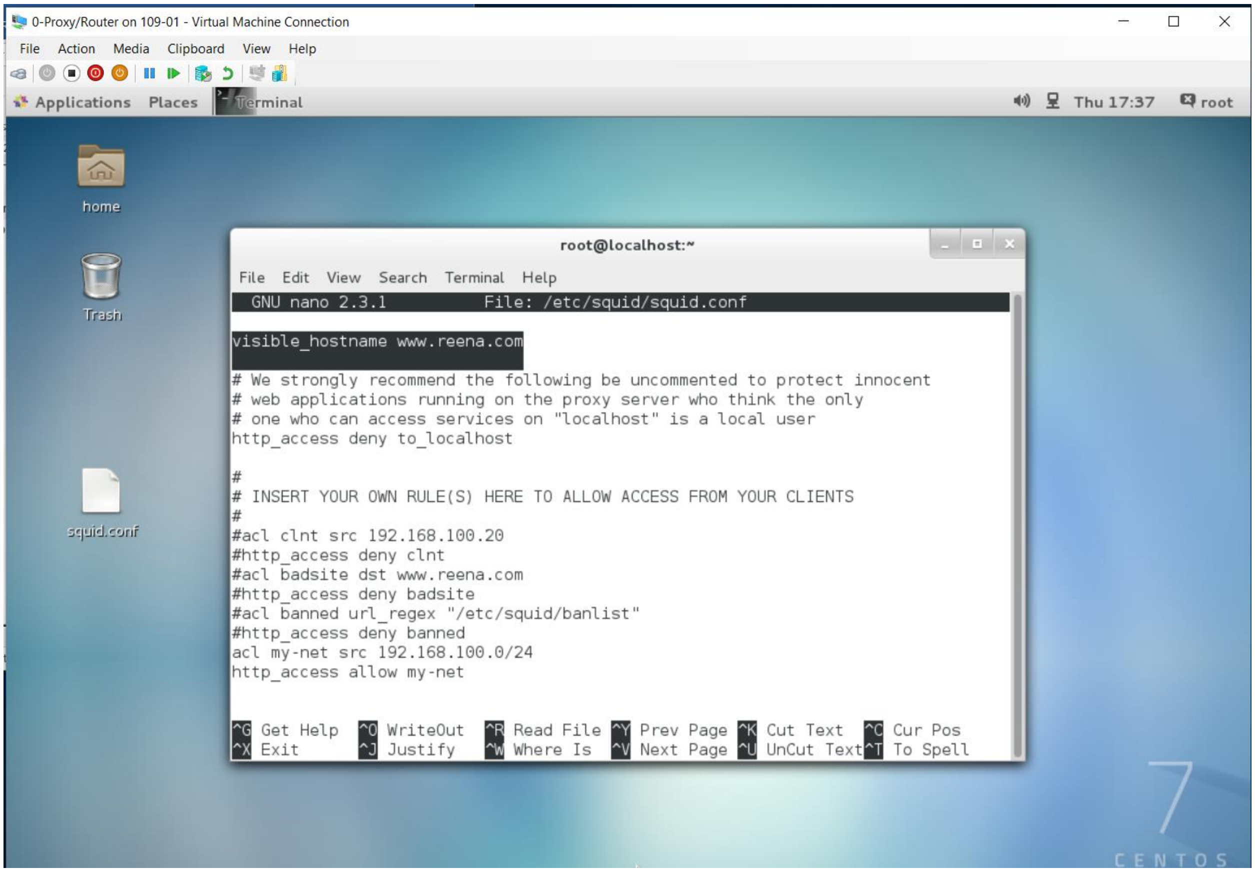
- Now, Go To Cd /Var/Named/Slaves
- Then do ls –l
- Here We will able to See Named.Reena.Com in Slaves

- Now, open squid.conf by using command: nano /etc/squid/squid.conf


0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:36 root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

```
[root@localhost ~]# nano /etc/squid/squid.conf
```

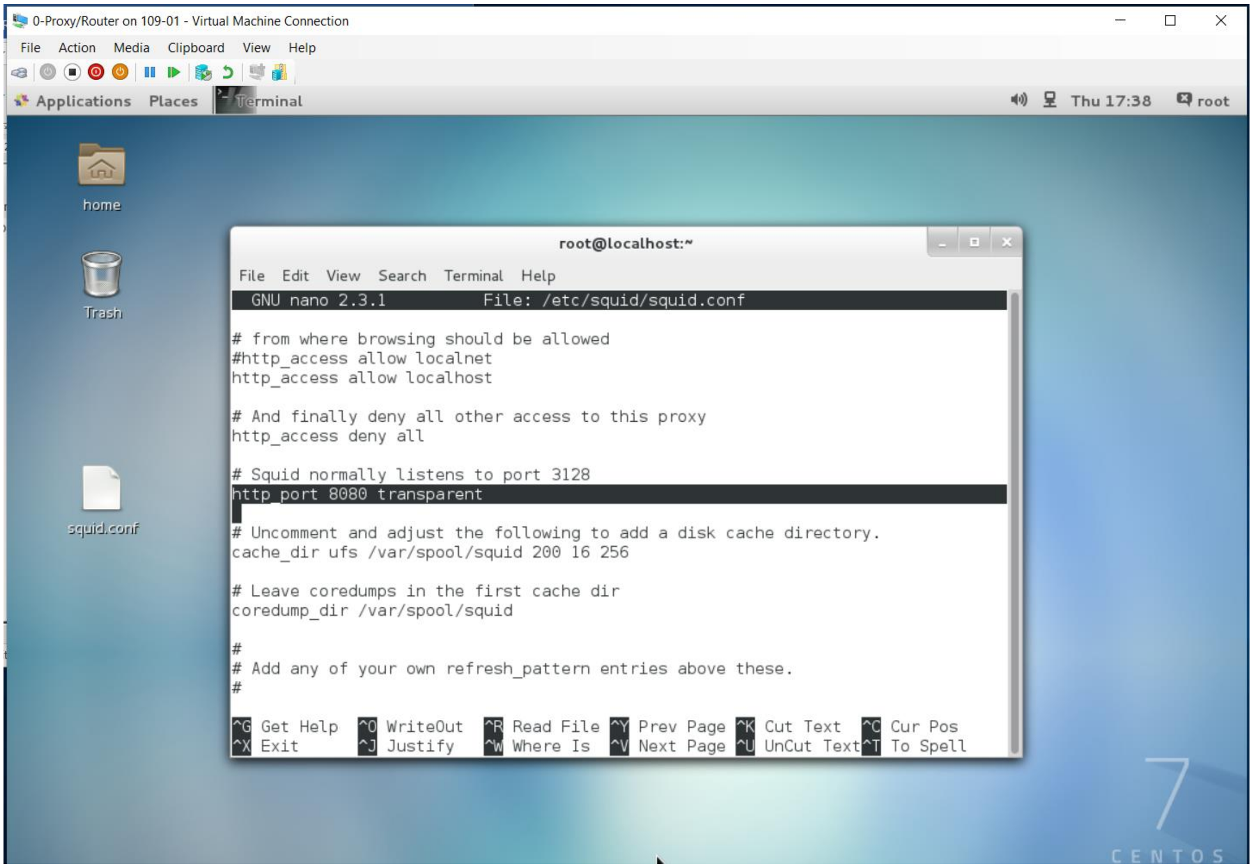
- Here we need to edit squid.conf file and also need to do some configurations.
- Here I am adding hostname of web server (www.reena.com)



0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:37 root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

```
  GNU nano 2.3.1            File: /etc/squid/squid.conf

visible_hostname www.reena.com

# We strongly recommend the following be uncommented to protect innocent
# web applications running on the proxy server who think the only
# one who can access services on "localhost" is a local user
http_access deny to_localhost

#
# INSERT YOUR OWN RULE(S) HERE TO ALLOW ACCESS FROM YOUR CLIENTS
#
#acl clnt src 192.168.100.20
#http_access deny clnt
#acl badsite dst www.reena.com
#http_access deny badsite
#acl banned url_regex "/etc/squid/banlist"
#http_access deny banned
acl my-net src 192.168.100.0/24
http_access allow my-net


^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text^T To Spell
```

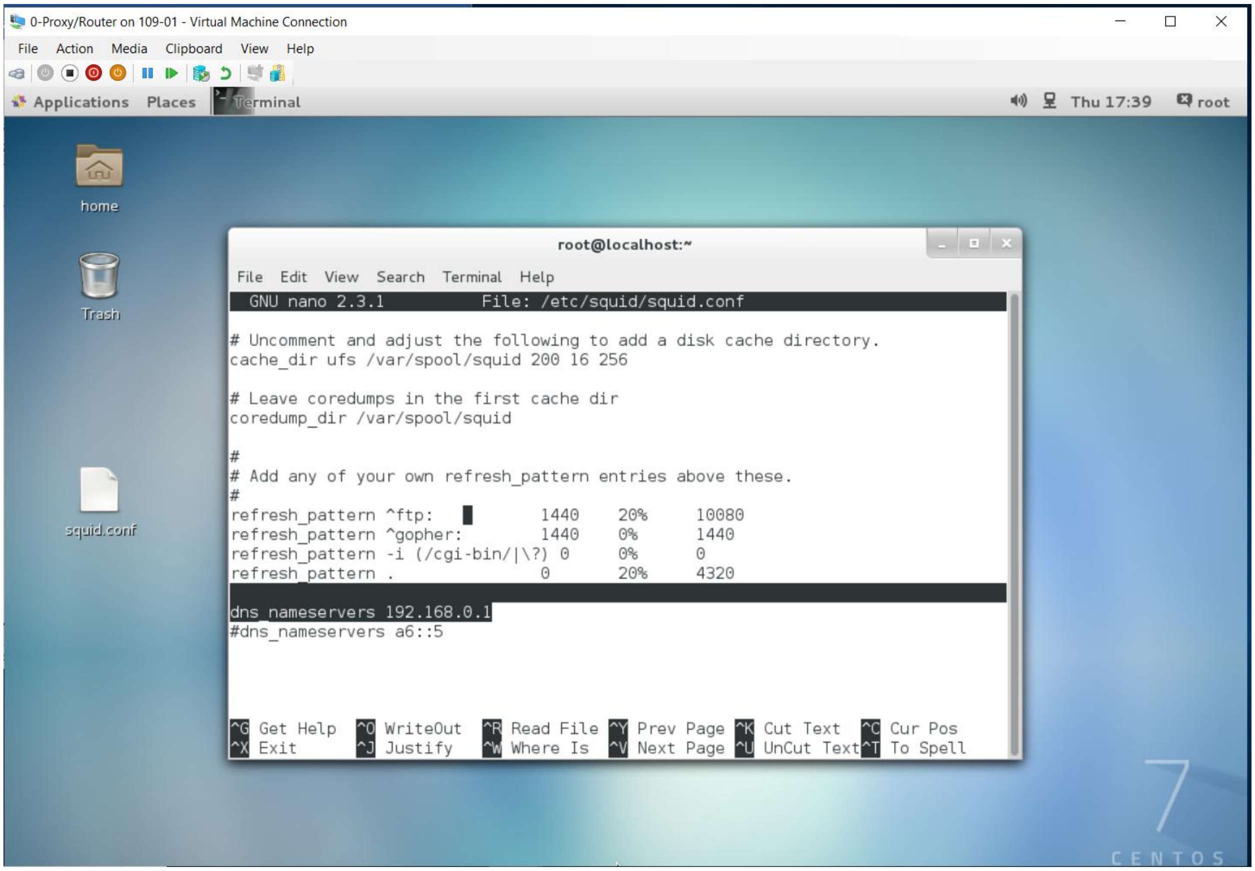
- Here I am adding port number of transparent proxy



0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:38 root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

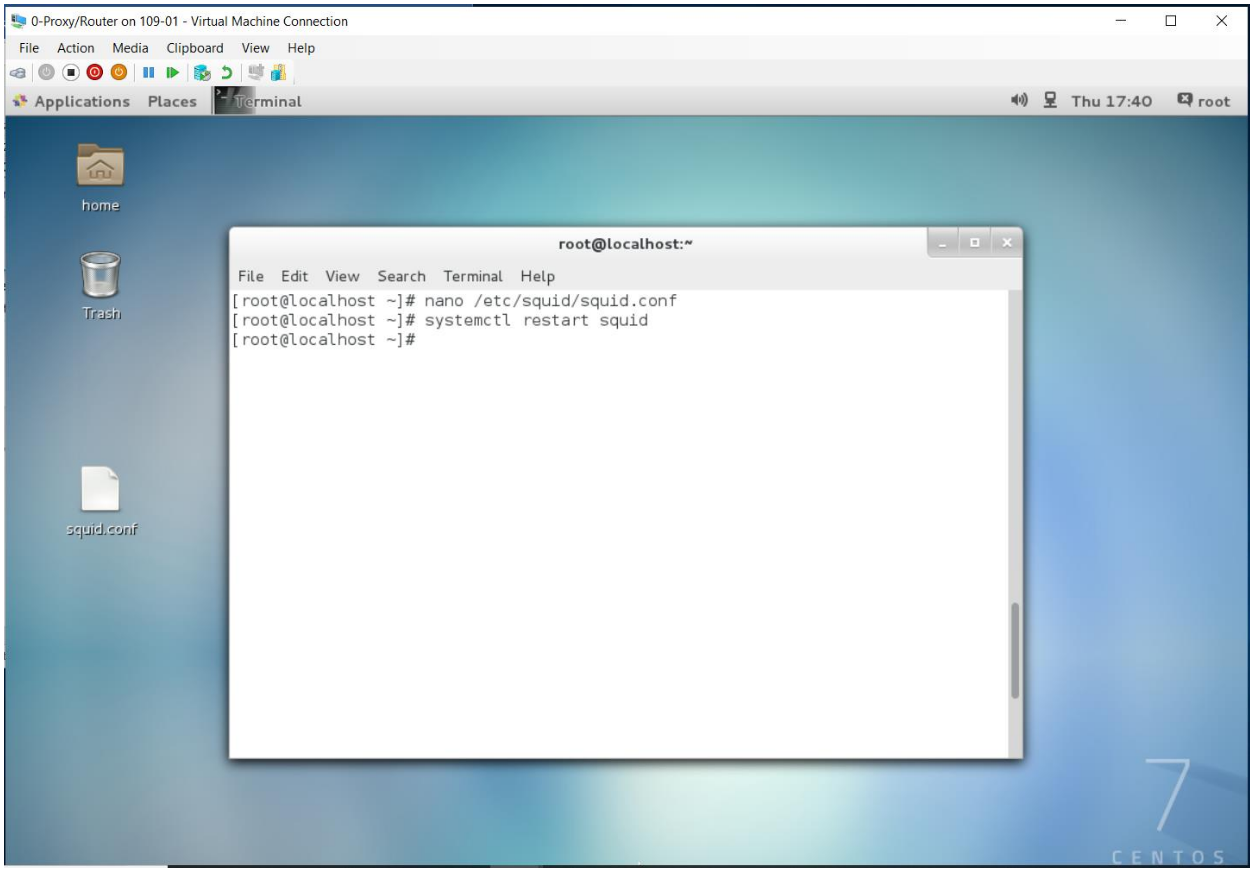
```
  GNU nano 2.3.1            File: /etc/squid/squid.conf

# from where browsing should be allowed
#http_access allow localnet
http_access allow localhost

# And finally deny all other access to this proxy
http_access deny all

# Squid normally listens to port 3128
http_port 8080 transparent

# Uncomment and adjust the following to add a disk cache directory.
cache_dir ufs /var/spool/squid 200 16 256

# Leave coredumps in the first cache dir
coredump_dir /var/spool/squid

#
# Add any of your own refresh_pattern entries above these.
#

^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text^T To Spell
```

- Here I am adding Ip address of DNS (dns_nameservers 192.168.0.1)


0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:39
root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

```
  GNU nano 2.3.1             File: /etc/squid/squid.conf

# Uncomment and adjust the following to add a disk cache directory.
cache_dir ufs /var/spool/squid 200 16 256

# Leave coredumps in the first cache dir
coredump_dir /var/spool/squid

#
# Add any of your own refresh_pattern entries above these.
#
refresh_pattern ^ftp:           1440    20%     10080
refresh_pattern ^gopher:        1440    0%      1440
refresh_pattern -i (/cgi-bin/|\?) 0     0%      0
refresh_pattern .               0       20%     4320

dns_nameservers 192.168.0.1
#dns_nameservers a6::5



^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text^T To Spell
```

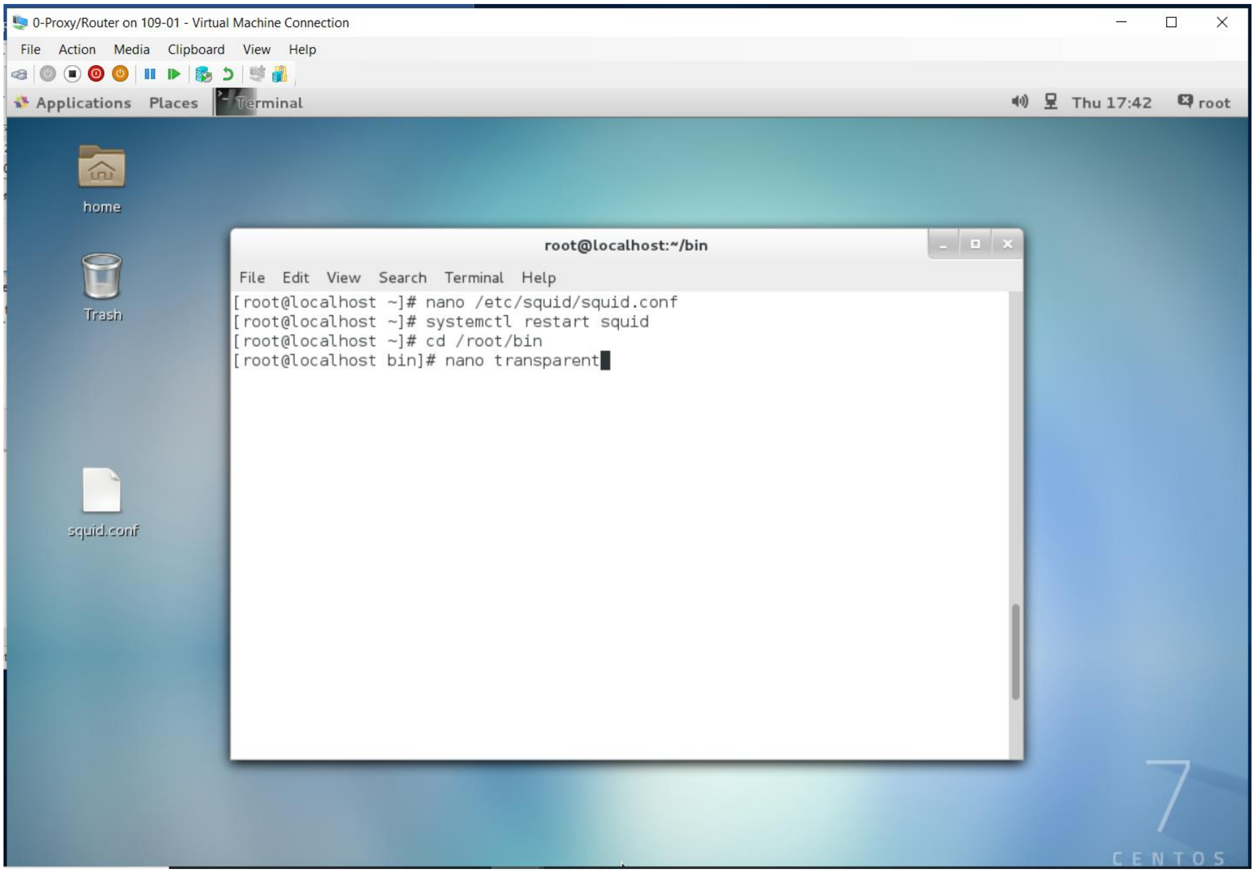
- Then save it and restart the service by using command: systemctl restart squid



0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:40
root
home
Trash
squid.conf
root@localhost:~
File Edit View Search Terminal Help
7
CENTOS

```
[root@localhost ~]# nano /etc/squid/squid.conf
[root@localhost ~]# systemctl restart squid
[root@localhost ~]#
```

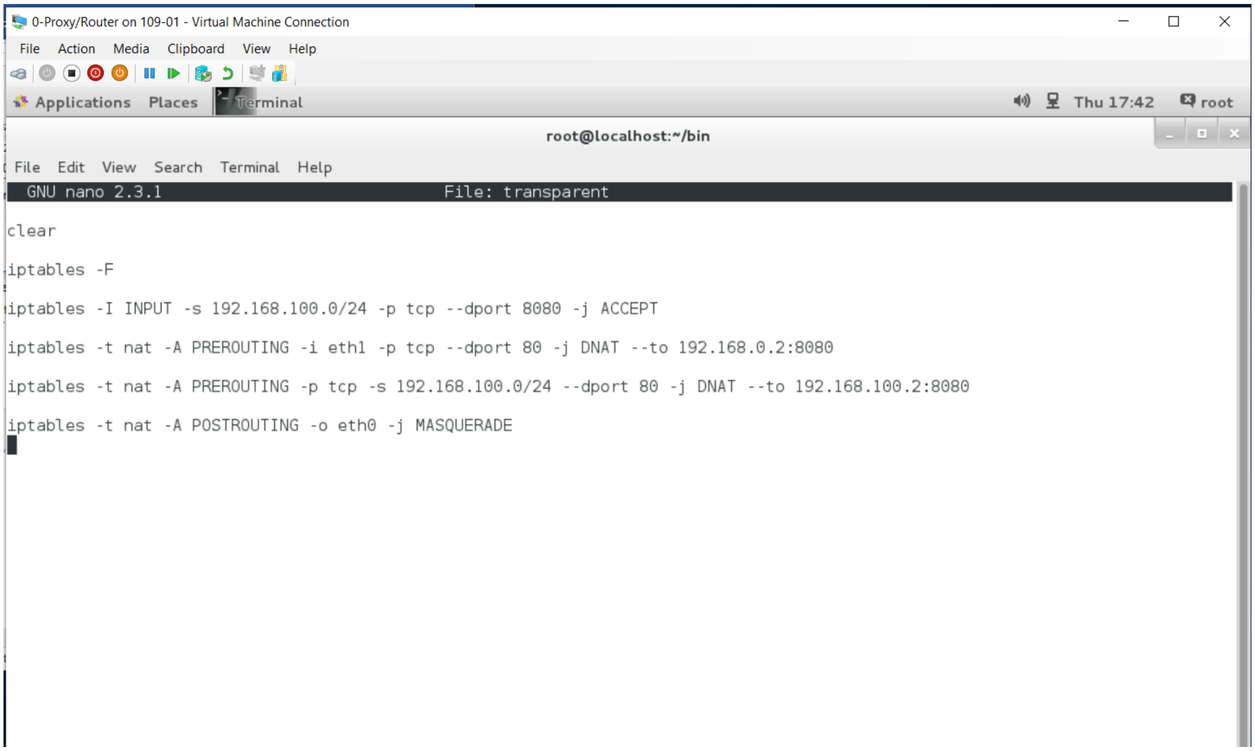
- Now, I am going to cd /root/bin and creating firewall script such as: nano transparent



0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:42 root
home
Trash
squid.conf
root@localhost:~/bin
File Edit View Search Terminal Help
7
CENTOS

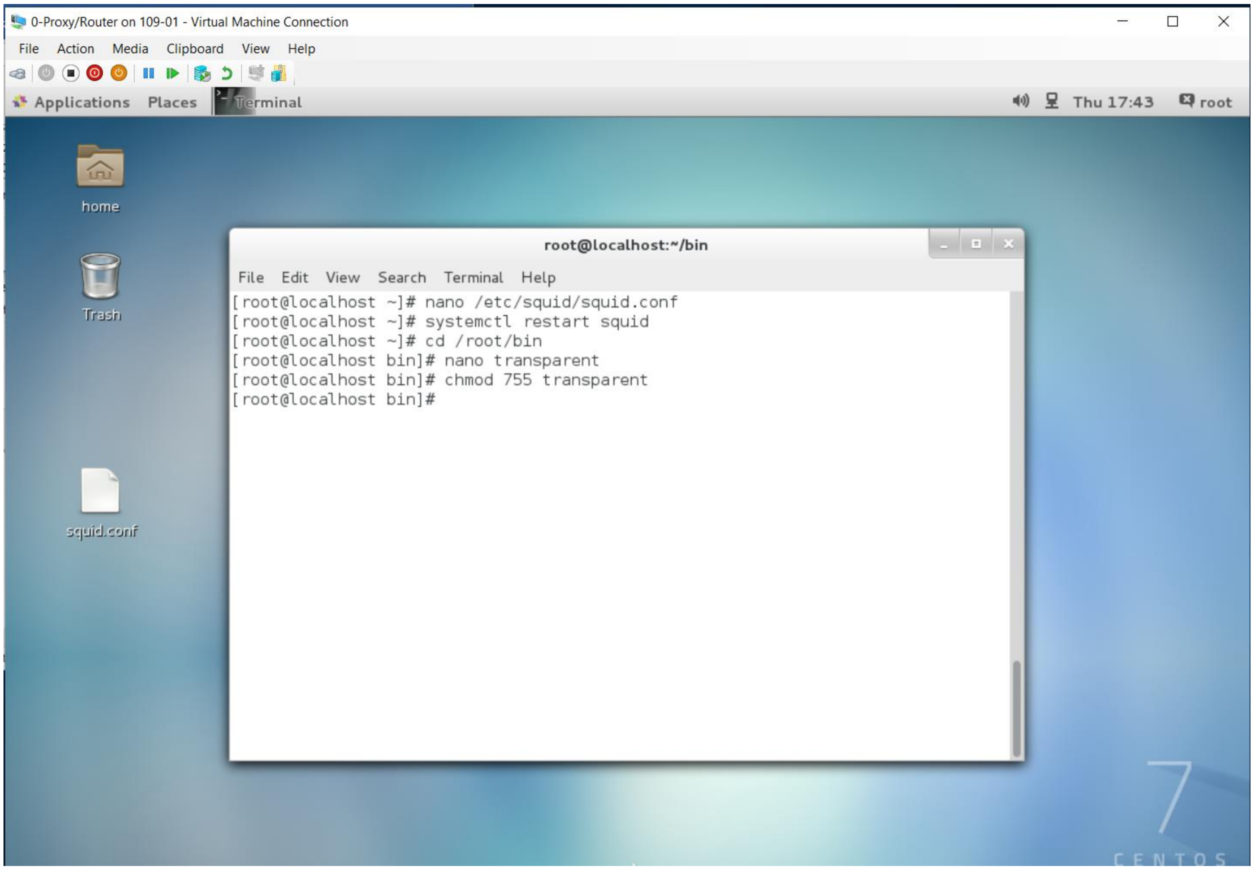
```
[root@localhost ~]# nano /etc/squid/squid.conf
[root@localhost ~]# systemctl restart squid
[root@localhost ~]# cd /root/bin
[root@localhost bin]# nano transparent
```

- As per below mentioned image, I am creating firewall script


0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:42
root
root@localhost:~/bin
File Edit View Search Terminal Help

```
  GNU nano 2.3.1                    File: transparent

clear

iptables -F

iptables -I INPUT -s 192.168.100.0/24 -p tcp --dport 8080 -j ACCEPT

iptables -t nat -A PREROUTING -i eth1 -p tcp --dport 80 -j DNAT --to 192.168.0.2:8080

iptables -t nat -A PREROUTING -p tcp -s 192.168.100.0/24 --dport 80 -j DNAT --to 192.168.100.2:8080

iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE
```

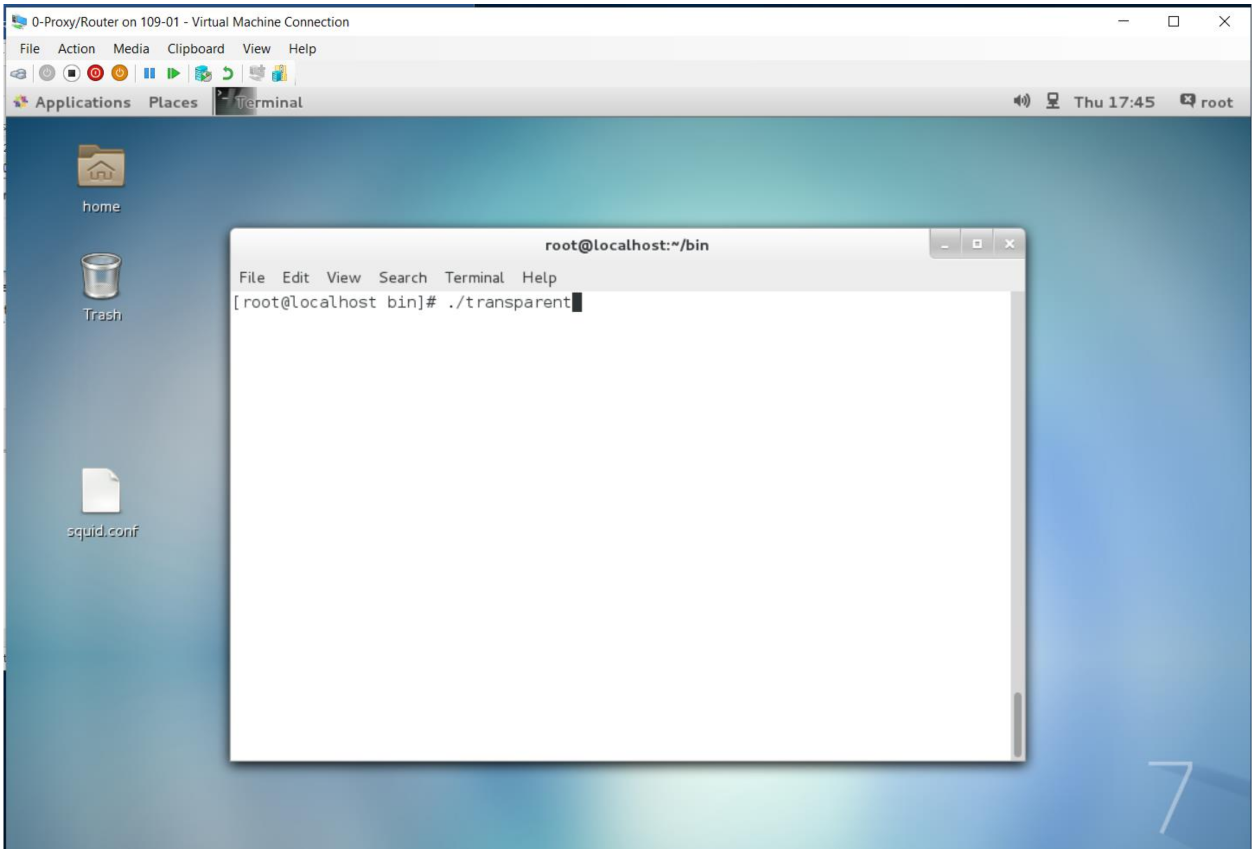
- Now, I am giving permission to transparent script: chmod 755 transparent



0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:43 root
home
Trash
squid.conf
root@localhost:~/bin
File Edit View Search Terminal Help
7
CENTOS

```
[root@localhost ~]# nano /etc/squid/squid.conf
[root@localhost ~]# systemctl restart squid
[root@localhost ~]# cd /root/bin
[root@localhost bin]# nano transparent
[root@localhost bin]# chmod 755 transparent
[root@localhost bin]#
```

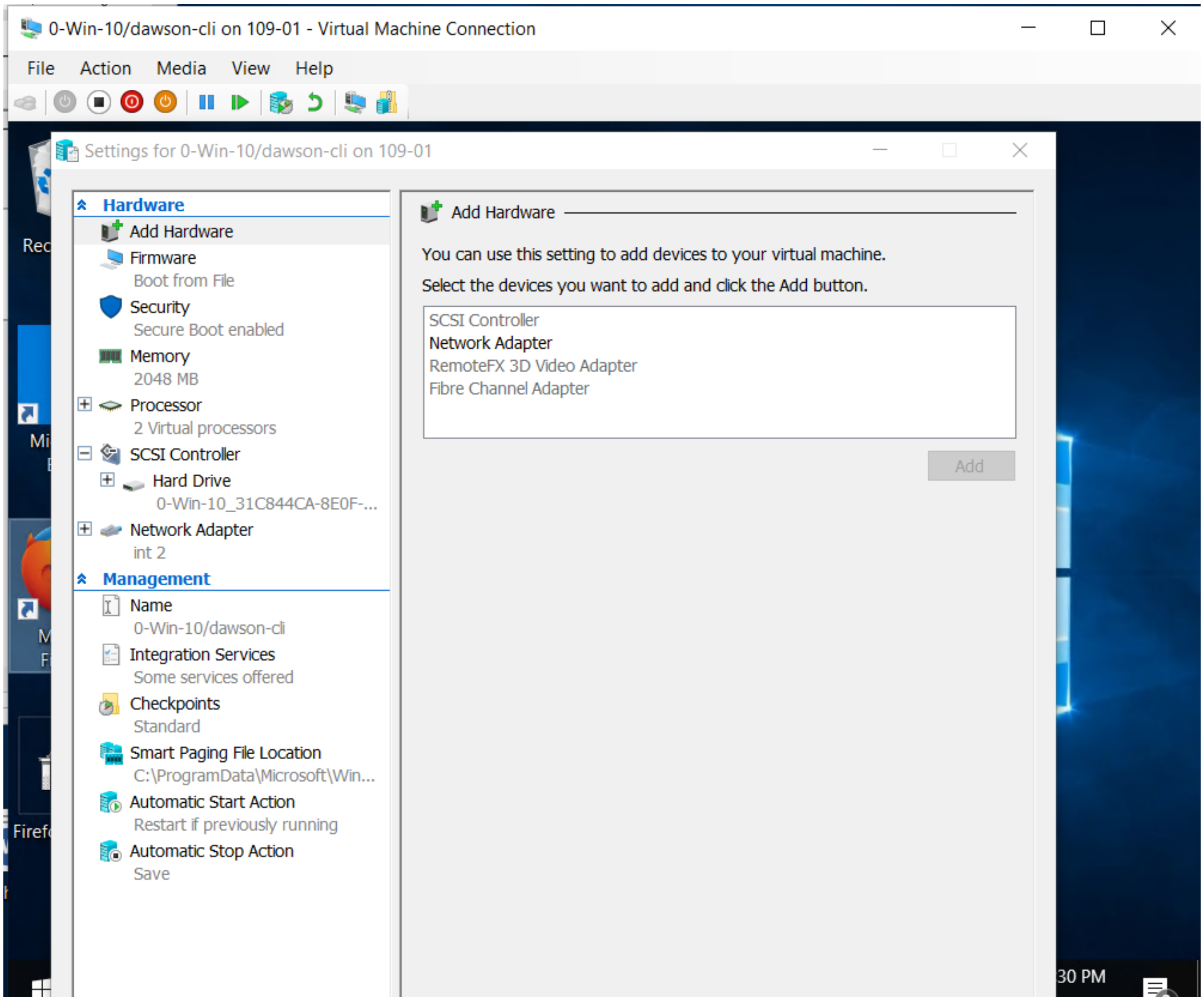
- Then, it's time to run the script



0-Proxy/Router on 109-01 - Virtual Machine Connection
File Action Media Clipboard View Help
Applications Places Terminal
Thu 17:45
root
home
Trash
squid.conf
root@localhost:~/bin
File Edit View Search Terminal Help

```
[root@localhost bin]# ./transparent
```

- Now, go to client machine
- Here, we can see that I have set network adapter on int 2



0-Win-10/dawson-cli on 109-01 - Virtual Machine Connection
File
Action
Media
View
Help
Settings for 0-Win-10/dawson-cli on 109-01

Hardware
- Add Hardware
- Firmware
  Boot from File
- Security
  Secure Boot enabled
- Memory
  2048 MB
- Processor
  2 Virtual processors
- SCSI Controller
  - Hard Drive
    0-Win-10_31C844CA-8E0F-...
- Network Adapter
  int 2

Management
- Name
  0-Win-10/dawson-cli
- Integration Services
  Some services offered
- Checkpoints
  Standard
- Smart Paging File Location
  C:\ProgramData\Microsoft\Win...
- Automatic Start Action
  Restart if previously running
- Automatic Stop Action
  Save

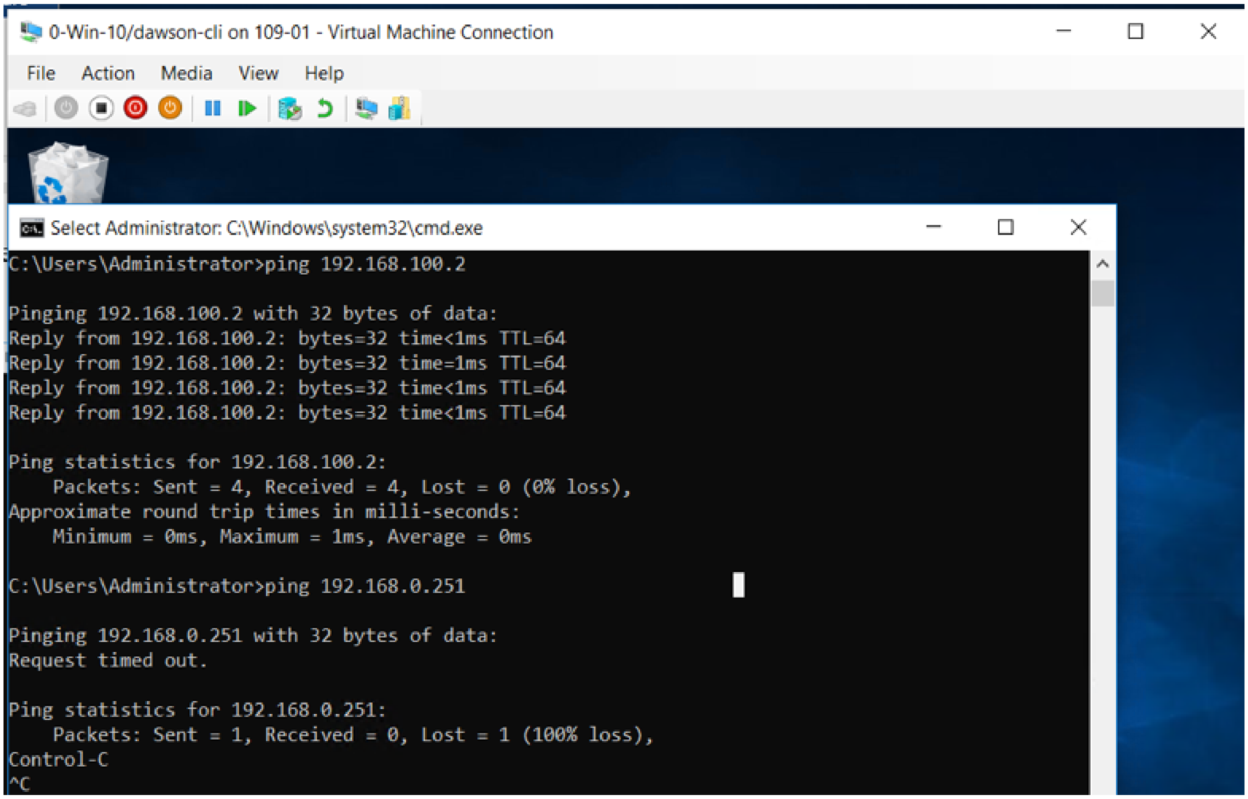
Add Hardware

You can use this setting to add devices to your virtual machine.

Select the devices you want to add and click the Add button.

SCSI Controller
Network Adapter
RemoteFX 3D Video Adapter
Fibre Channel Adapter

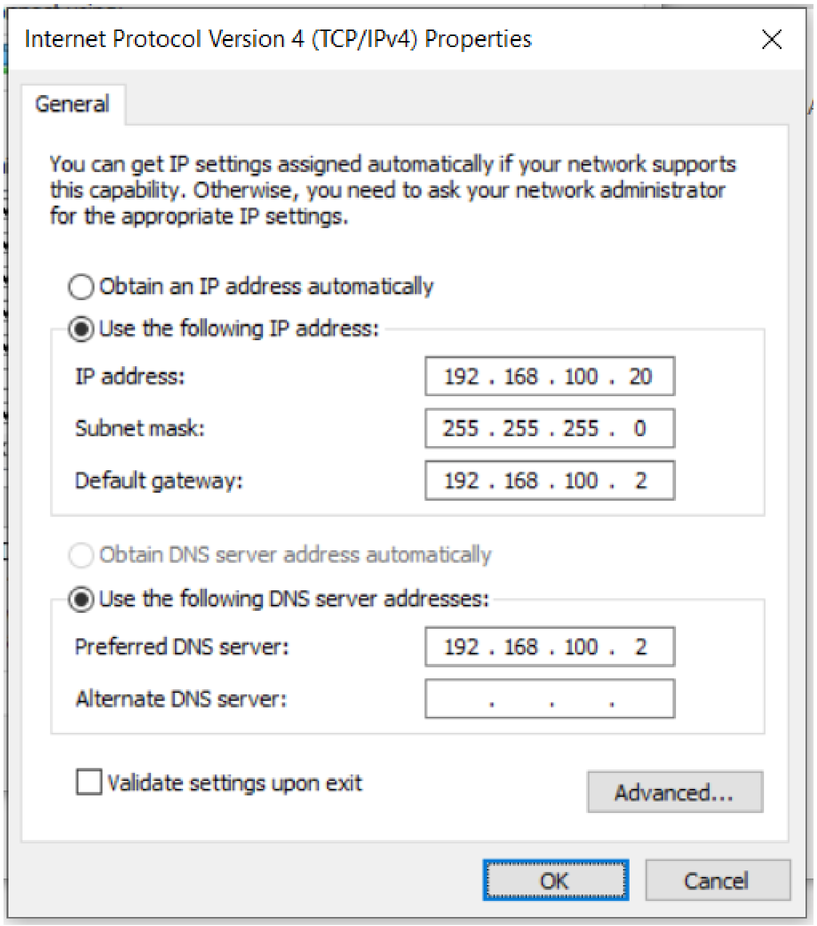
- Here on client, I am trying to ping proxy server
- We can see that client can ping proxy server successfully because both are on same network adapter.
- But it cannot ping web server



0-Win-10/dawson-cli on 109-01 - Virtual Machine Connection
File
Action
Media
View
Help
Select Administrator: C:\Windows\system32\cmd.exe

```
C:\Users\Administrator>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:
Reply from 192.168.100.2: bytes=32 time<1ms TTL=64
Reply from 192.168.100.2: bytes=32 time=1ms TTL=64
Reply from 192.168.100.2: bytes=32 time<1ms TTL=64
Reply from 192.168.100.2: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\Administrator>ping 192.168.0.251

Pinging 192.168.0.251 with 32 bytes of data:
Request timed out.

Ping statistics for 192.168.0.251:
    Packets: Sent = 1, Received = 0, Lost = 1 (100% loss),
Control-C
^C
```

- Here, we can see the configurations of client machine.



Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically

● Use the following IP address:

IP address: 192 . 168 . 100 . 20

Subnet mask: 255 . 255 . 255 . 0

Default gateway: 192 . 168 . 100 . 2

○ Obtain DNS server address automatically

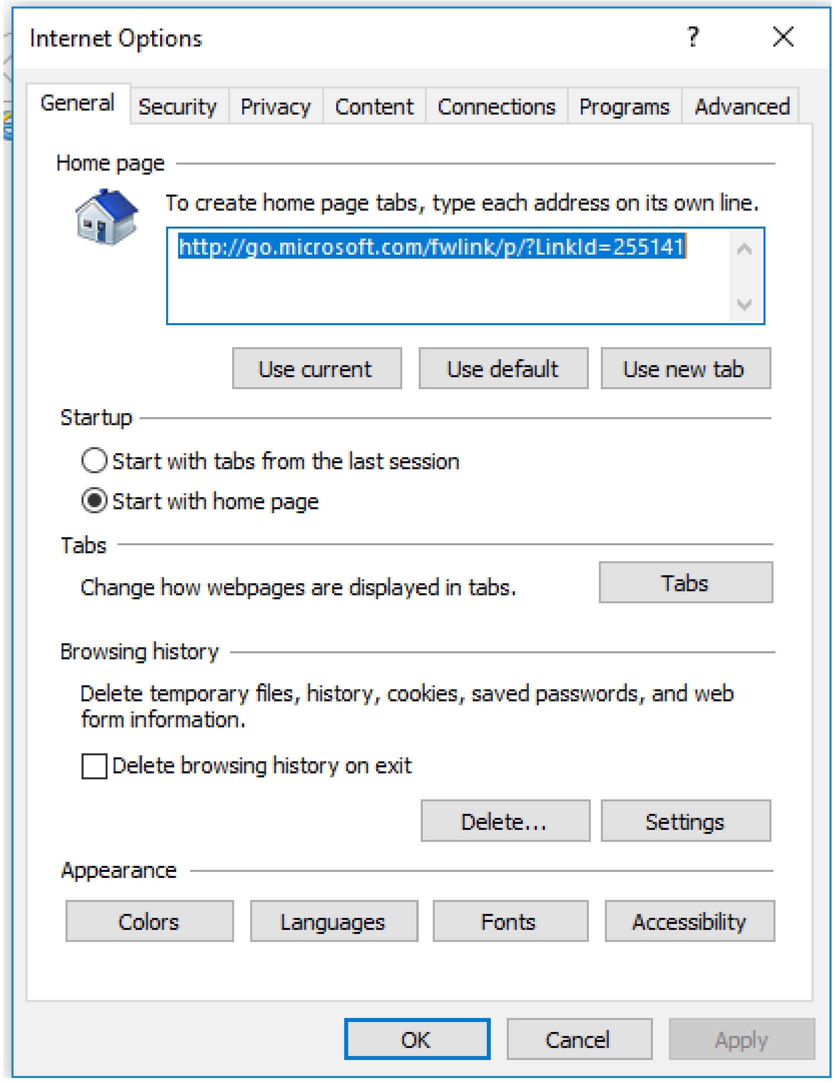
● Use the following DNS server addresses:

Preferred DNS server: 192 . 168 . 100 . 2

Alternate DNS server: . . .

□ Validate settings upon exit

- Open internet explorer and clear the cache
- For that go to Tools → Internet Options → General → Delete.



Home page

To create home page tabs, type each address on its own line.

http://go.microsoft.com/fwlink/p/?LinkId=255141

Startup

○ Start with tabs from the last session

● Start with home page

Tabs

Change how webpages are displayed in tabs.

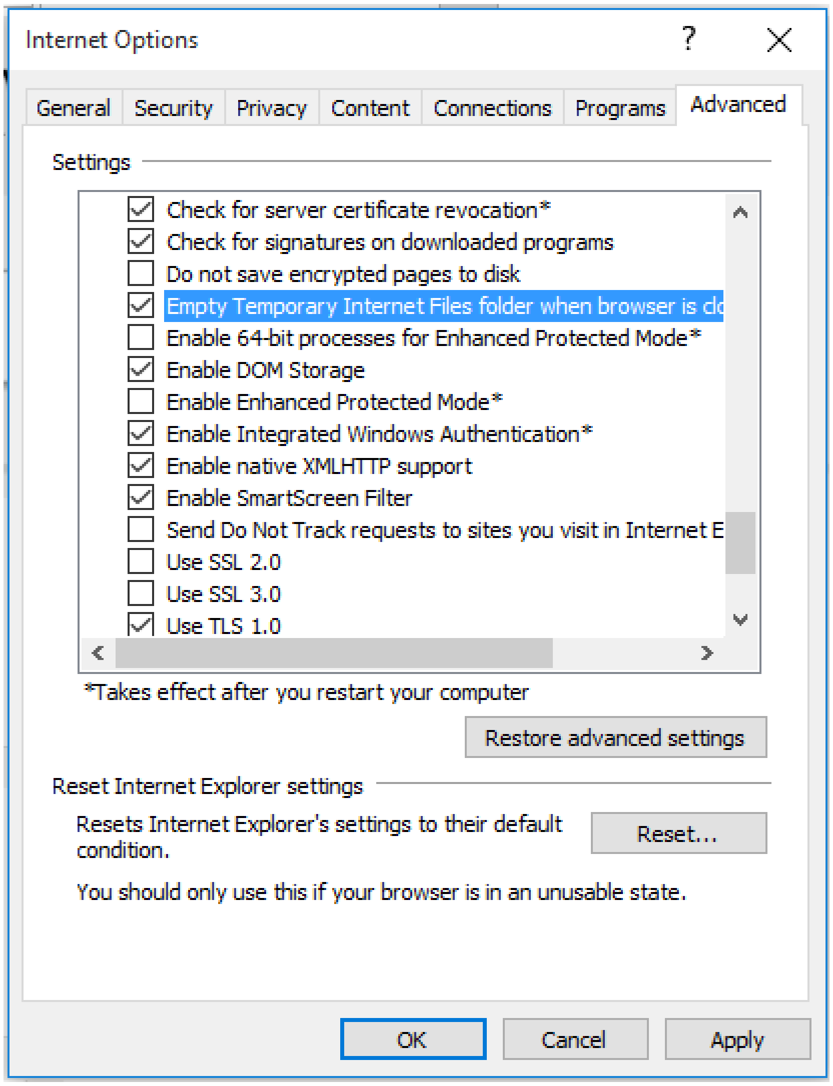
Browsing history

Delete temporary files, history, cookies, saved passwords, and web form information.

□ Delete browsing history on exit

Appearance

- Or, go to Advance Tab → Mark On Empty Temporary Internet Files Folder When browser is closed → Apply → Ok.



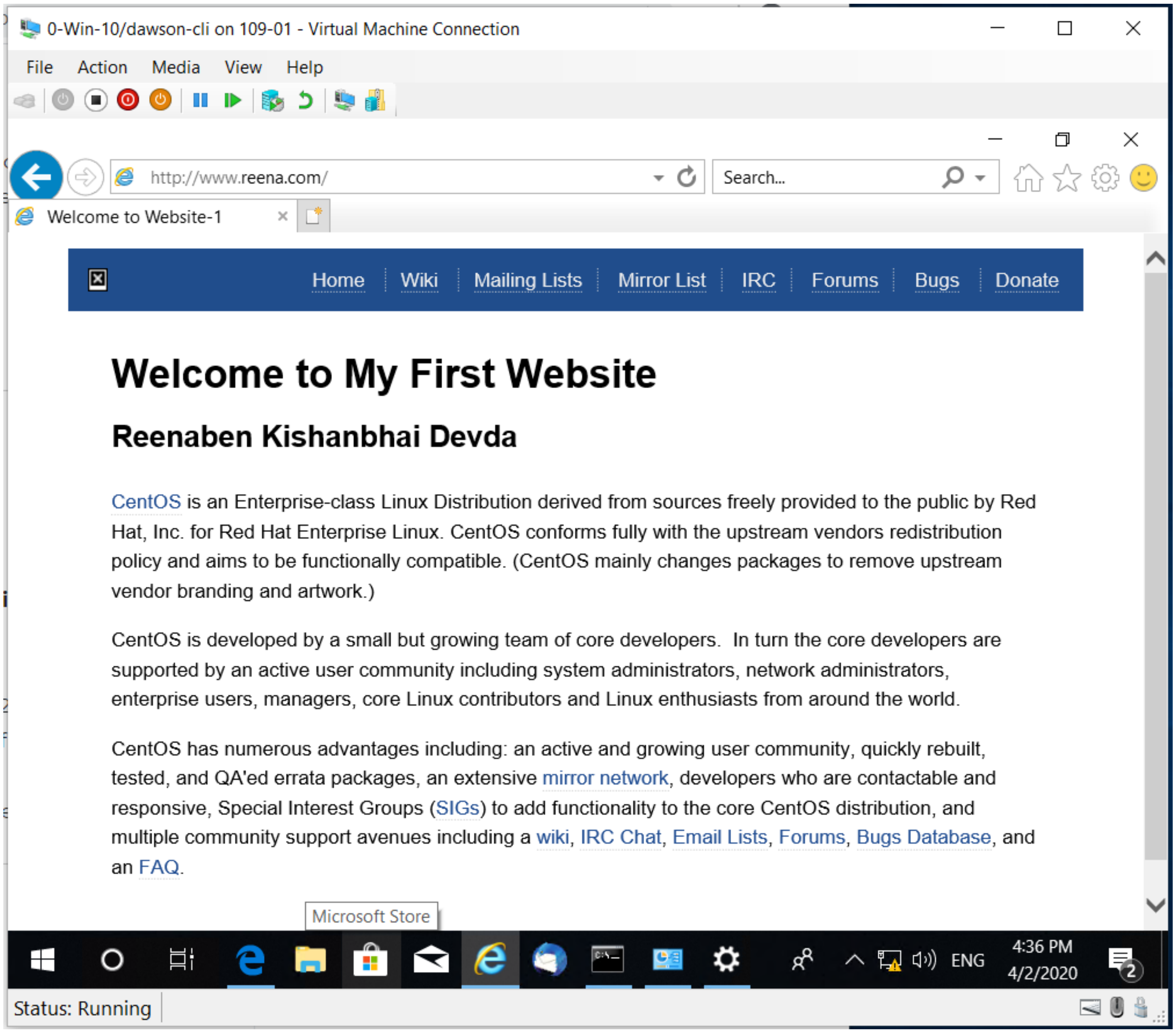
☑ Check for server certificate revocation*
☑ Check for signatures on downloaded programs
□ Do not save encrypted pages to disk
☑ Empty Temporary Internet Files folder when browser is clo
□ Enable 64-bit processes for Enhanced Protected Mode*
☑ Enable DOM Storage
□ Enable Enhanced Protected Mode*
☑ Enable Integrated Windows Authentication*
☑ Enable native XMLHTTP support
☑ Enable SmartScreen Filter
□ Send Do Not Track requests to sites you visit in Internet E
□ Use SSL 2.0
□ Use SSL 3.0
☑ Use TLS 1.0

*Takes effect after you restart your computer

Resets Internet Explorer's settings to their default condition.

You should only use this if your browser is in an unusable state.

- Now open the web site www.reena.com



Welcome to My First Website

Reenaben Kishanbhai Devda

CentOS is an Enterprise-class Linux Distribution derived from sources freely provided to the public by Red Hat, Inc. for Red Hat Enterprise Linux. CentOS conforms fully with the upstream vendors redistribution policy and aims to be functionally compatible. (CentOS mainly changes packages to remove upstream vendor branding and artwork.)

CentOS is developed by a small but growing team of core developers. In turn the core developers are supported by an active user community including system administrators, network administrators, enterprise users, managers, core Linux contributors and Linux enthusiasts from around the world.

CentOS has numerous advantages including: an active and growing user community, quickly rebuilt, tested, and QA'ed errata packages, an extensive mirror network, developers who are contactable and responsive, Special Interest Groups (SIGs) to add functionality to the core CentOS distribution, and multiple community support avenues including a wiki, IRC Chat, Email Lists, Forums, Bugs Database, and an FAQ.