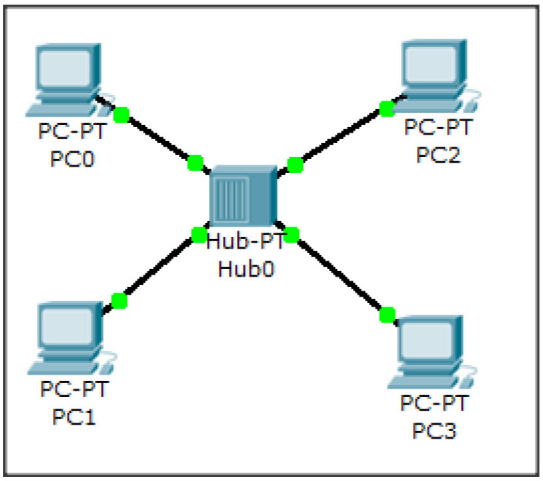
Network I Lab 08

Building a simple Client Server Network I

Part 1 : DHCP/DNS servers implementation

Part1: Build simple star network



PC name	PC0
IP	192.168.1.100
Subnet mask	255.255.255.0
Gateway	-
DNS	-

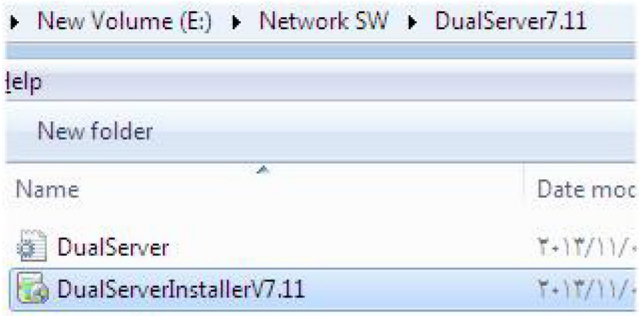
PC name	PC1
IP	auto
Subnet mask	
Gateway	
DNS	

PC name	PC2
IP	auto
Subnet mask	
Gateway	
DNS	

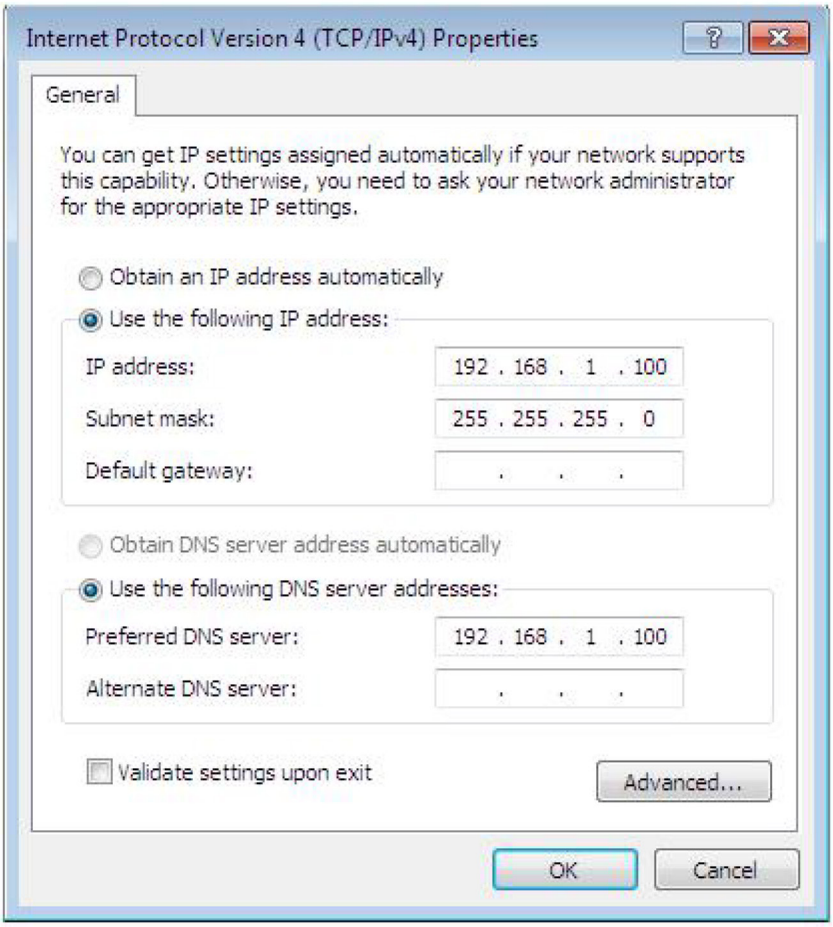
PC name	PC3
IP	auto
Subnet mask	
Gateway	
DNS	

Part2: setup DHCP DNS Server

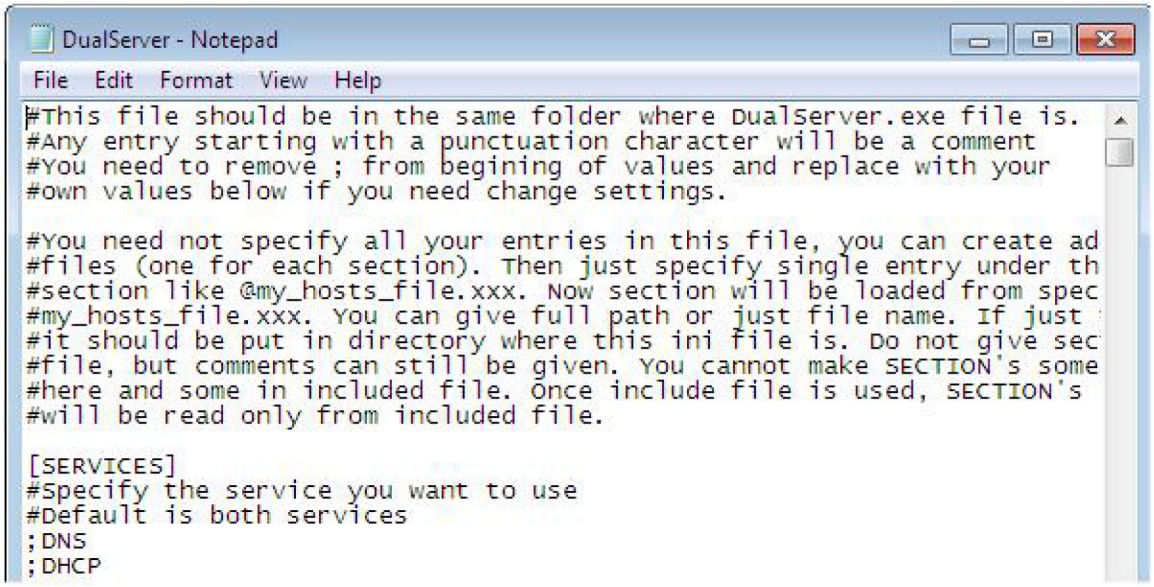
2.1 install dual server SW



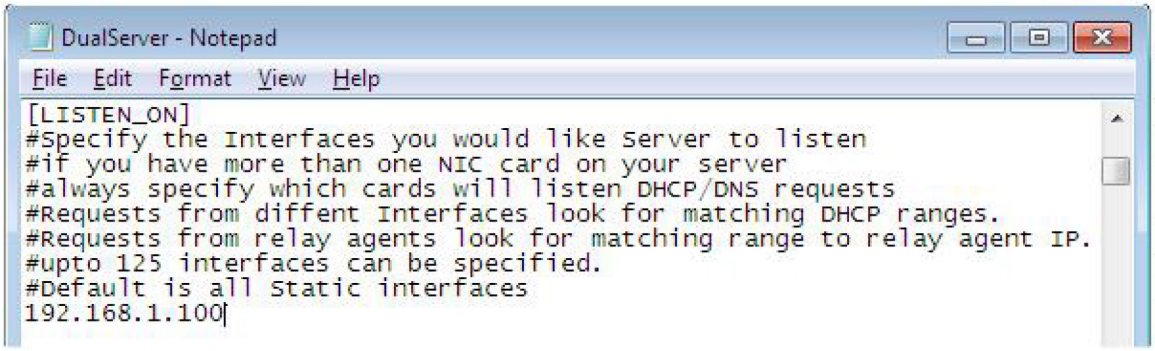
2. IP configuration of server PC

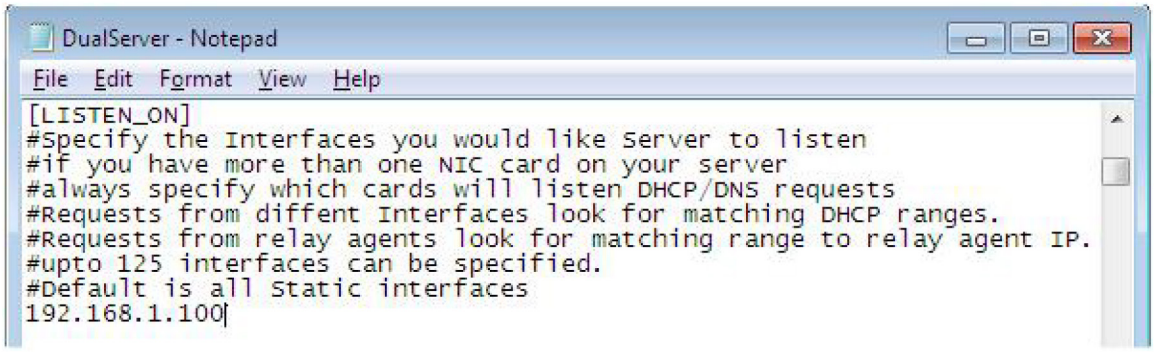


3. open dual server configuration file

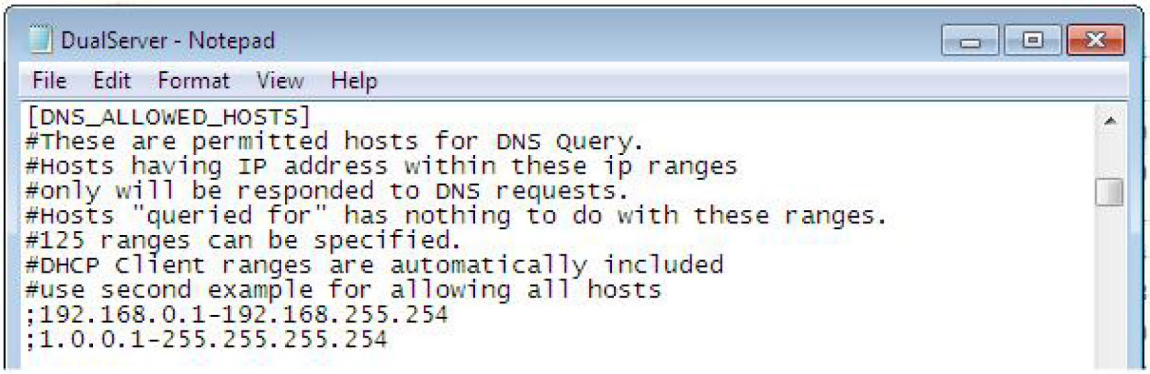


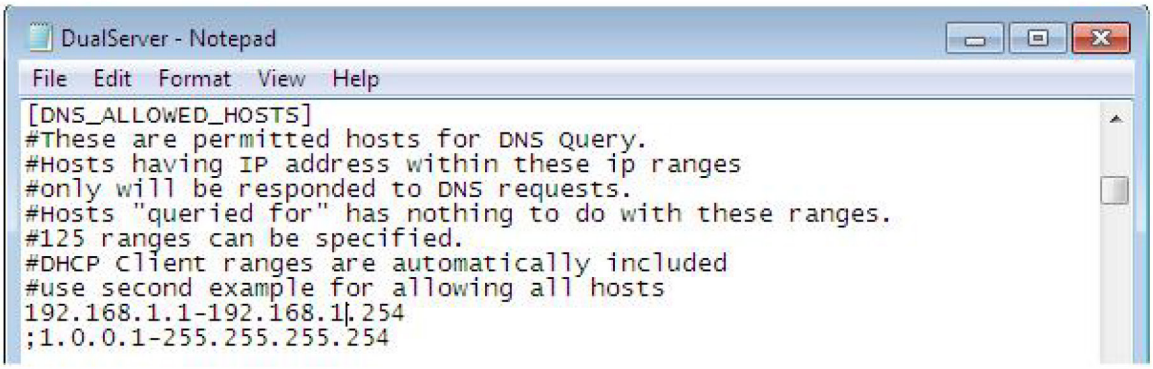
4. Edit [Listen_on] section



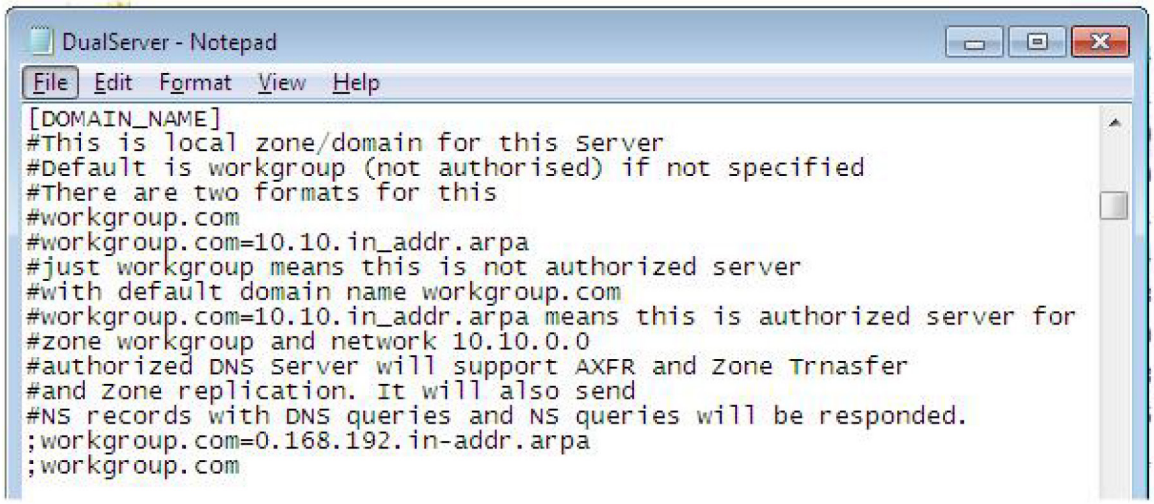


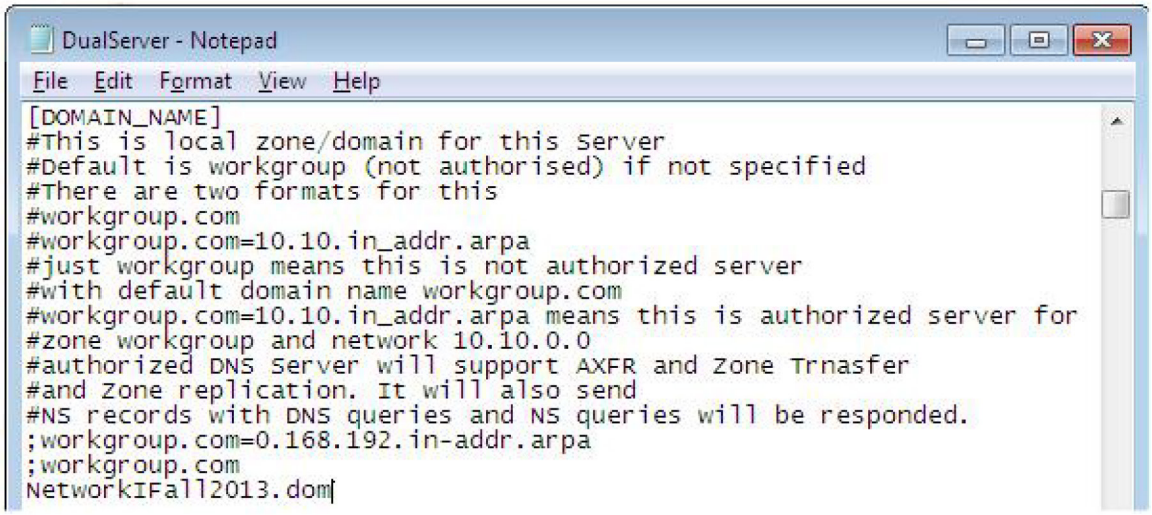
5. edit [DNS Allowed hosts] section



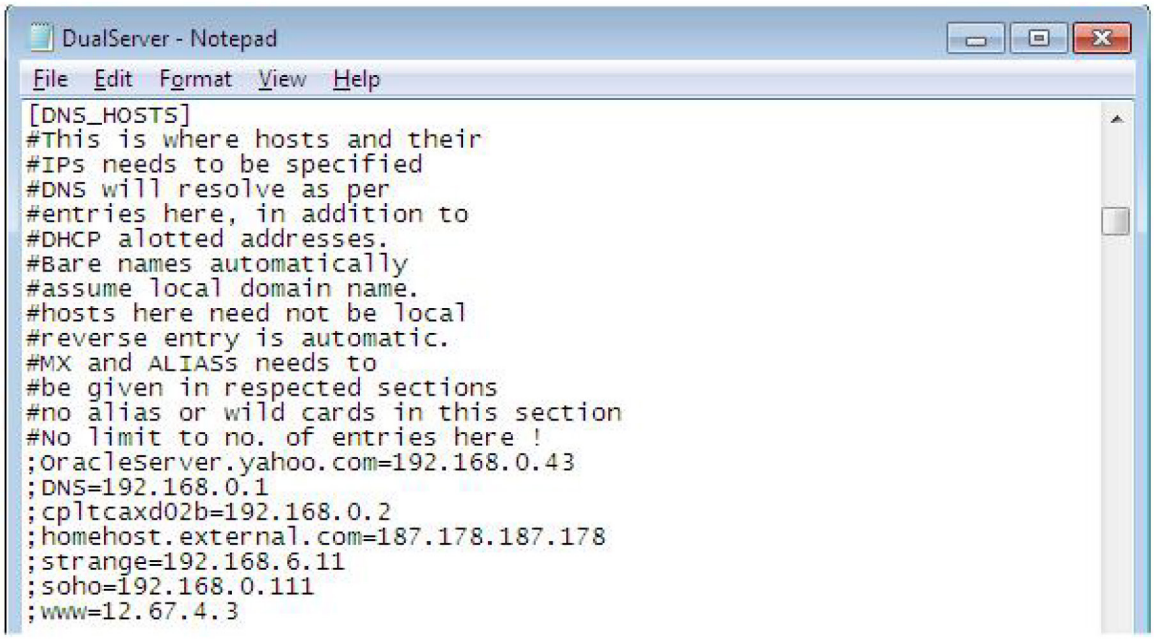


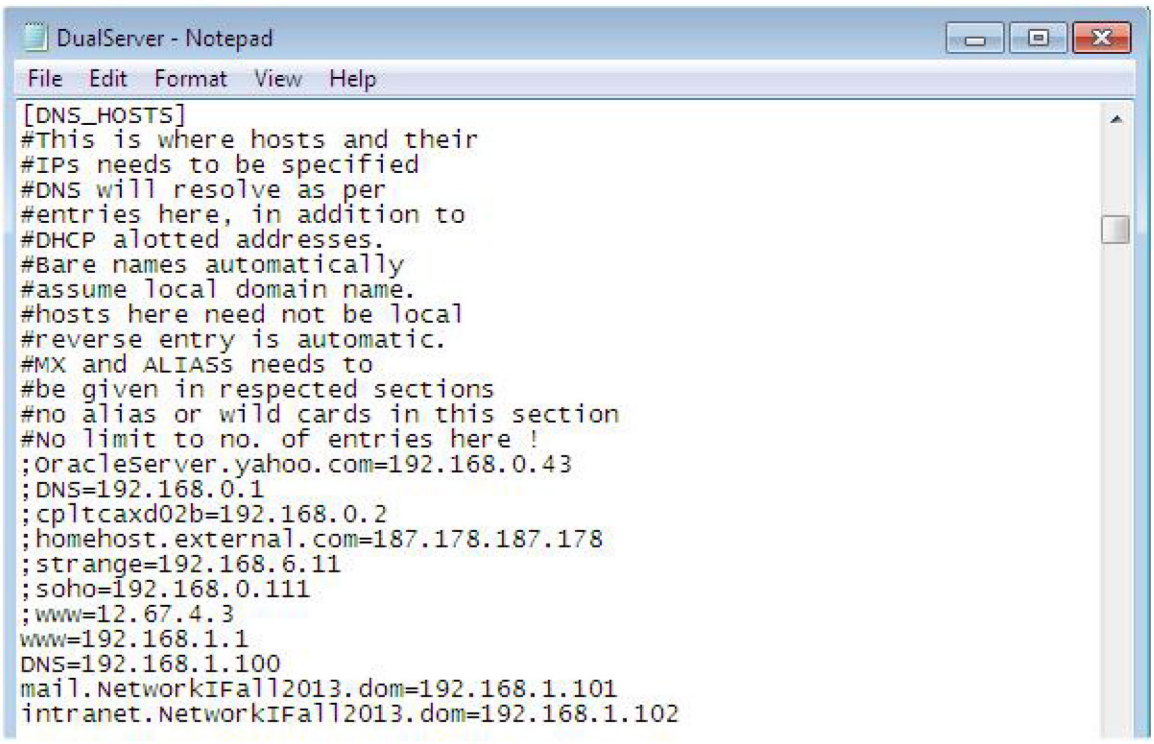
6. Edit [Domain name] section



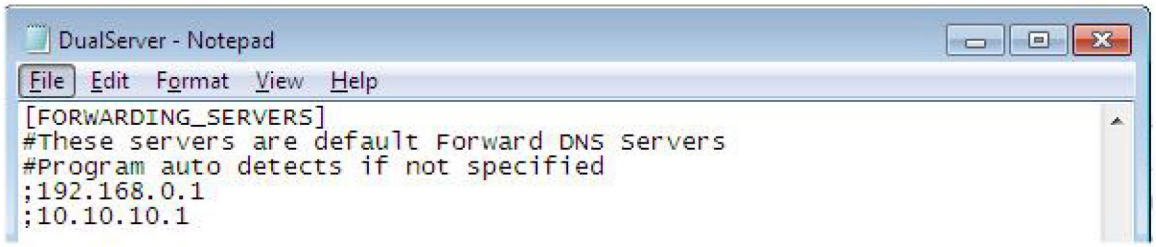


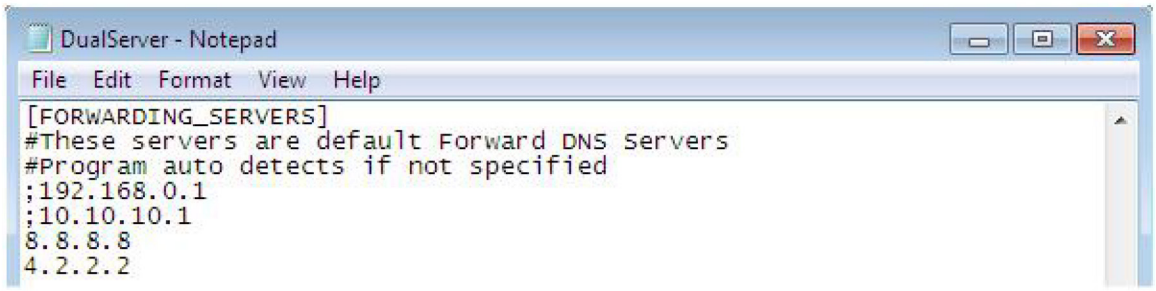
7. Edit [DNS Hosts] section



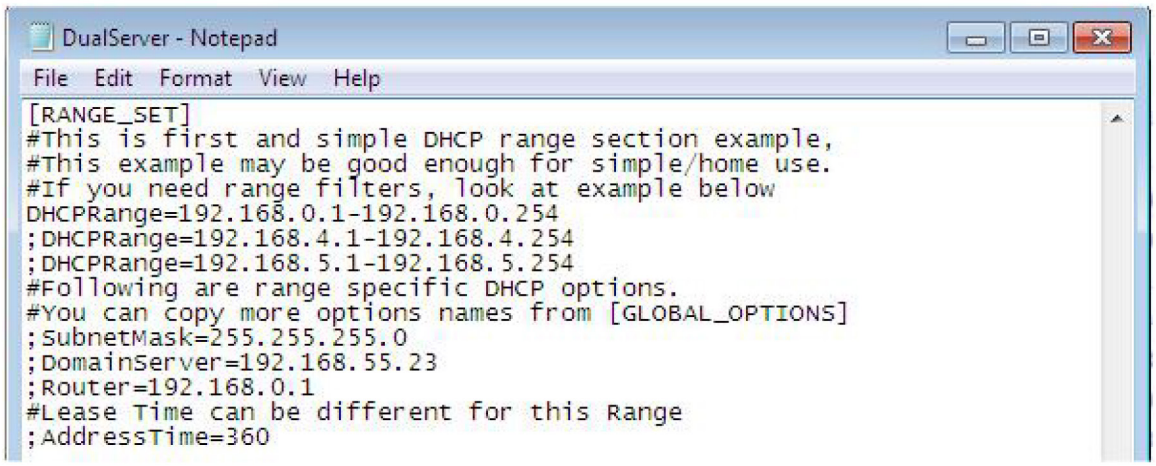


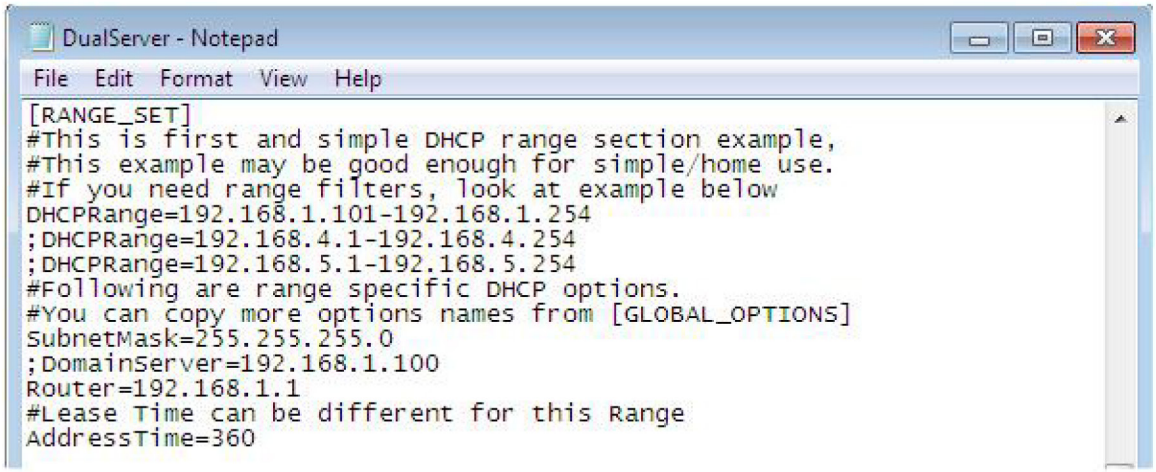
8. Edit [Forwarding servers] section



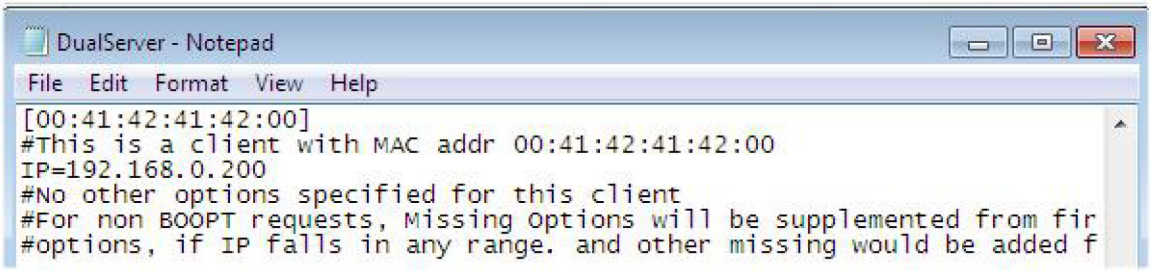


9. Edit [Range Set] section

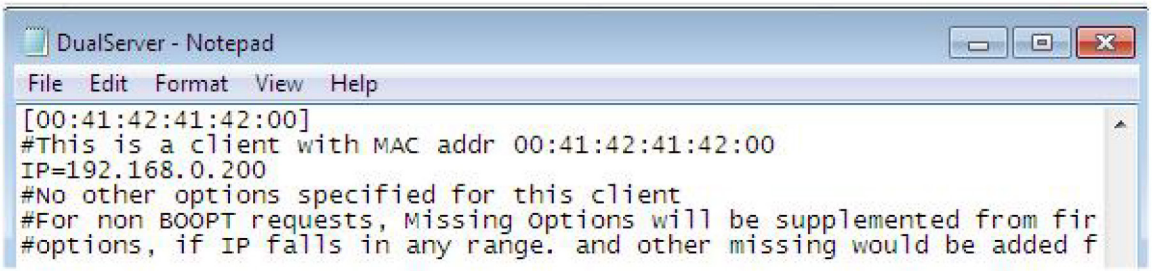




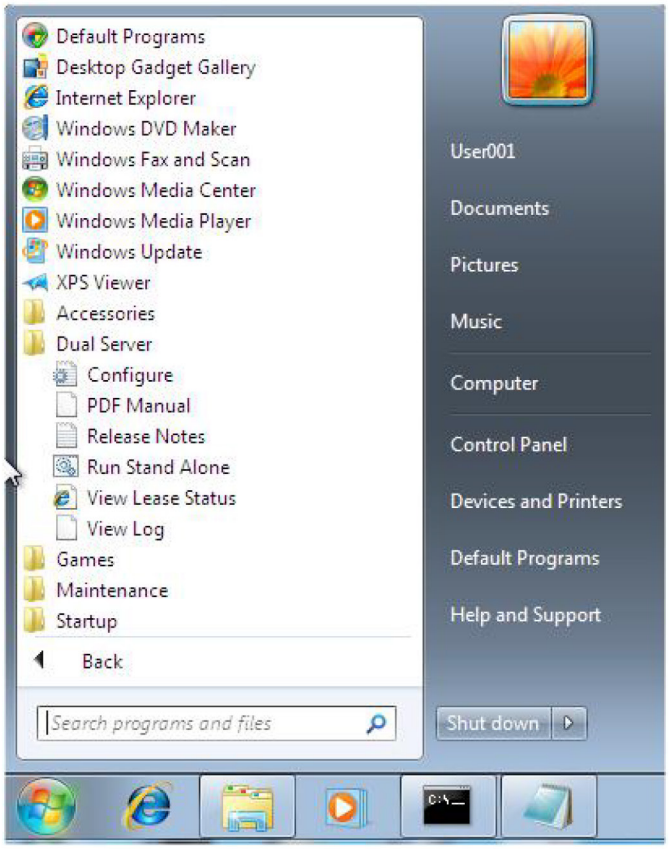
10. Edit [static IP/MAC] section

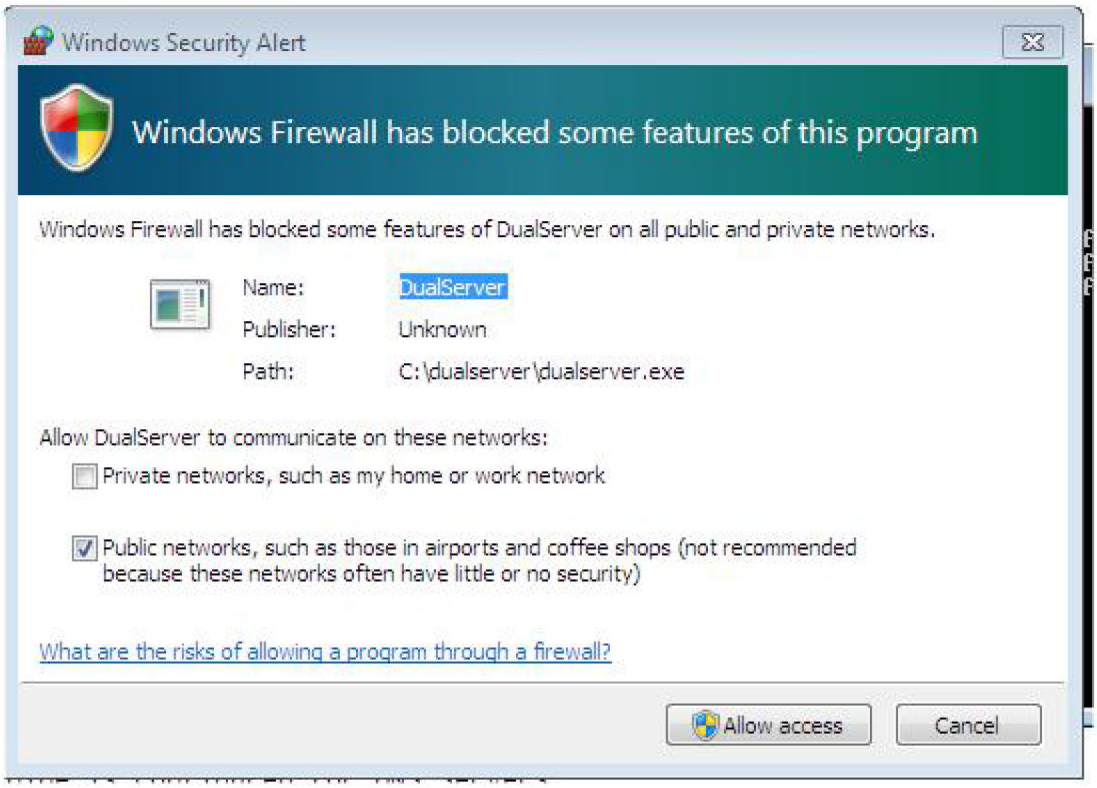


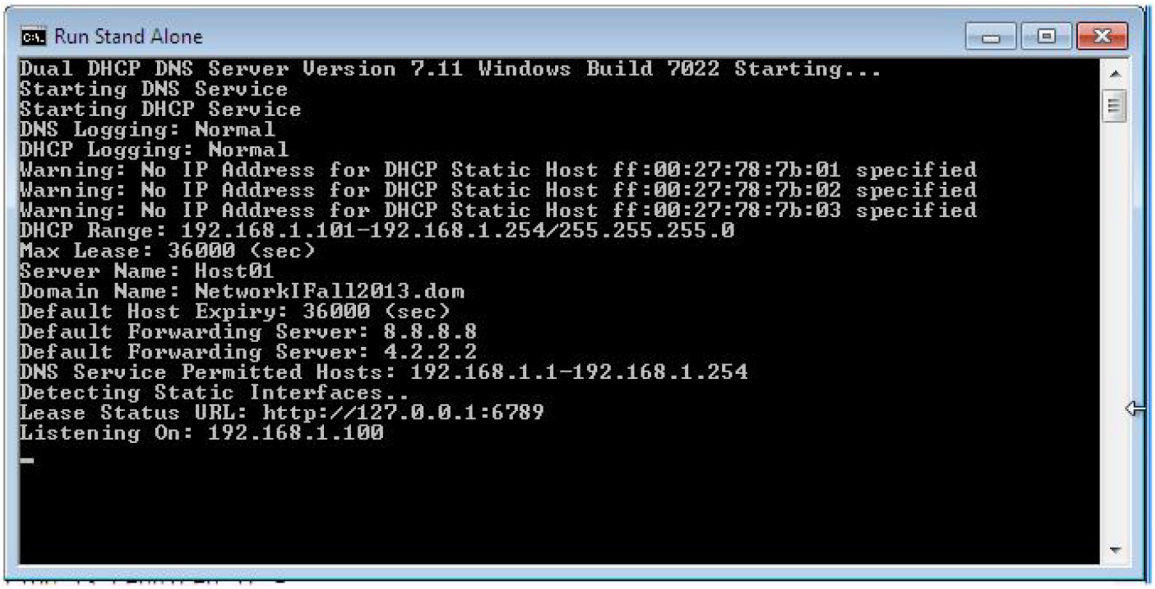
11. Edit [MAC that doesn't belong to the network] section



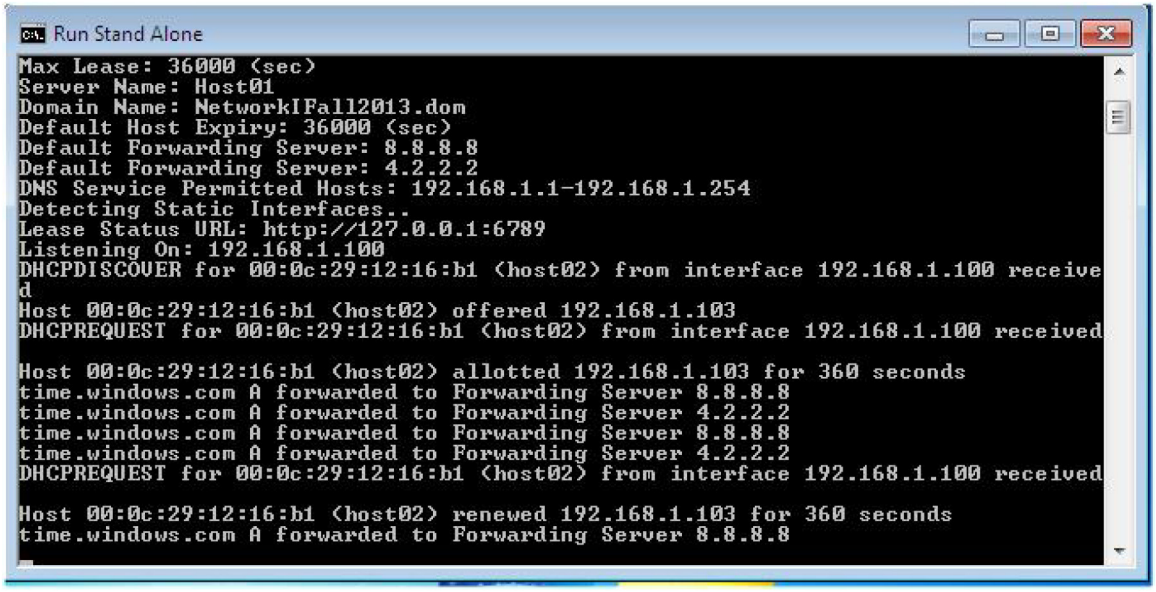
12. run Dual server

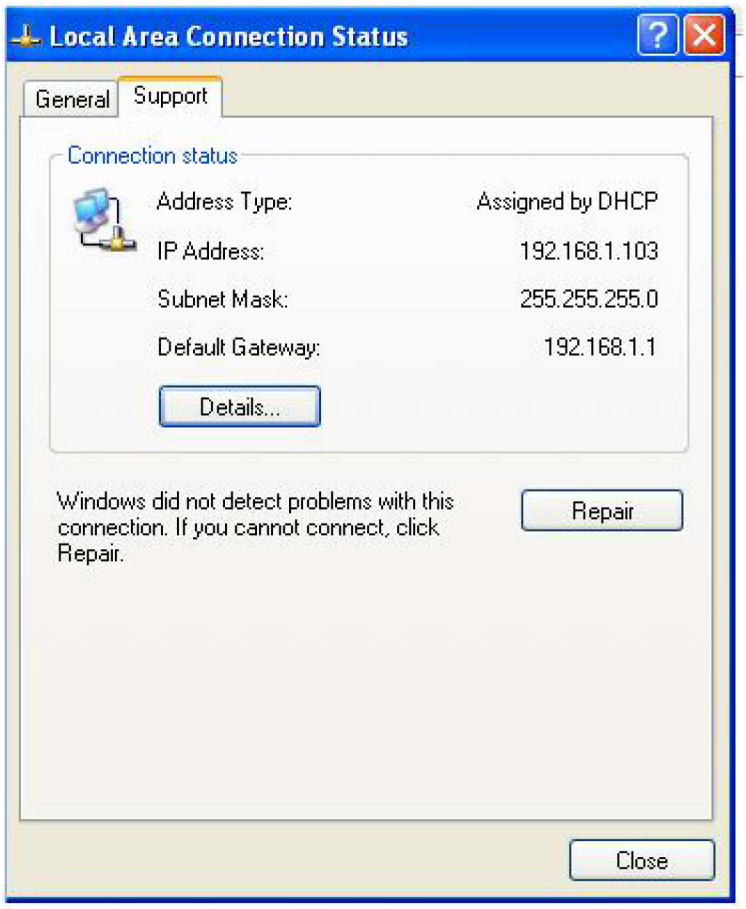


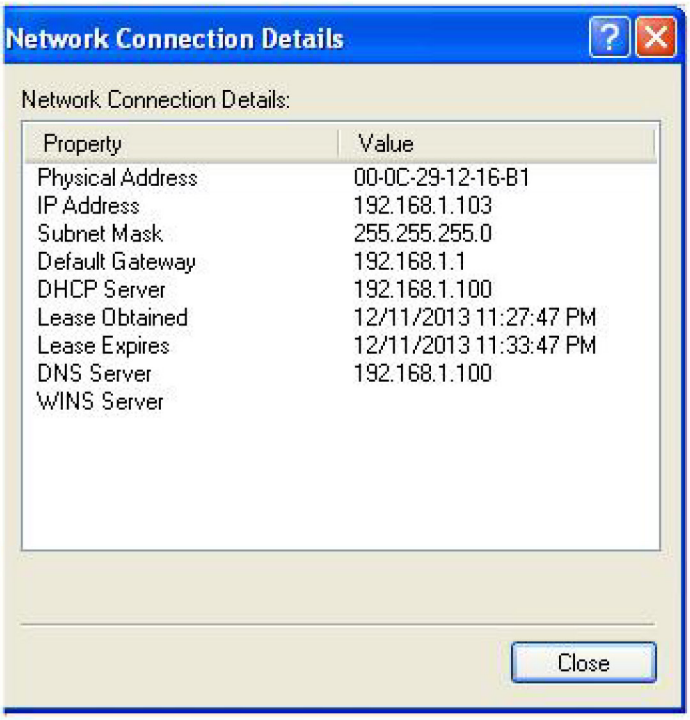

Windows Security Alert
Windows Firewall has blocked some features of this program
Windows Firewall has blocked some features of DualServer on all public and private networks.
Name: DualServer
Publisher: Unknown
Path: C:\dualserver\dualserver.exe
Allow DualServer to communicate on these networks:
Private networks, such as my home or work network
Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)
What are the risks of allowing a program through a firewall?
Allow access
Cancel

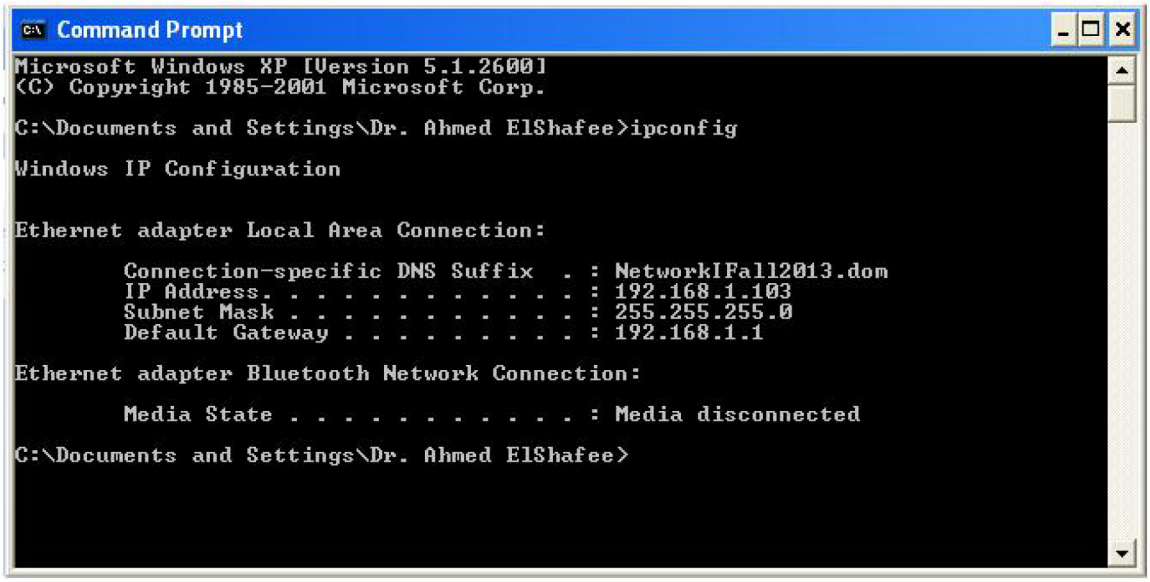

Run Stand Alone
Dual DHCP DNS Server Version 7.11 Windows Build 7022 Starting...
Starting DNS Service
Starting DHCP Service
DNS Logging: Normal
DHCP Logging: Normal
Warning: No IP Address for DHCP Static Host ff:00:27:78:7b:01 specified
Warning: No IP Address for DHCP Static Host ff:00:27:78:7b:02 specified
Warning: No IP Address for DHCP Static Host ff:00:27:78:7b:03 specified
DHCP Range: 192.168.1.101-192.168.1.254/255.255.255.0
Max Lease: 36000 (sec)
Server Name: Host01
Domain Name: NetworkIFall2013.dom
Default Host Expiry: 36000 (sec)
Default Forwarding Server: 8.8.8.8
Default Forwarding Server: 4.2.2.2
DNS Service Permitted Hosts: 192.168.1.1-192.168.1.254
Detecting Static Interfaces..
Lease Status URL: http://127.0.0.1:6789
Listening On: 192.168.1.100

13. connect first host

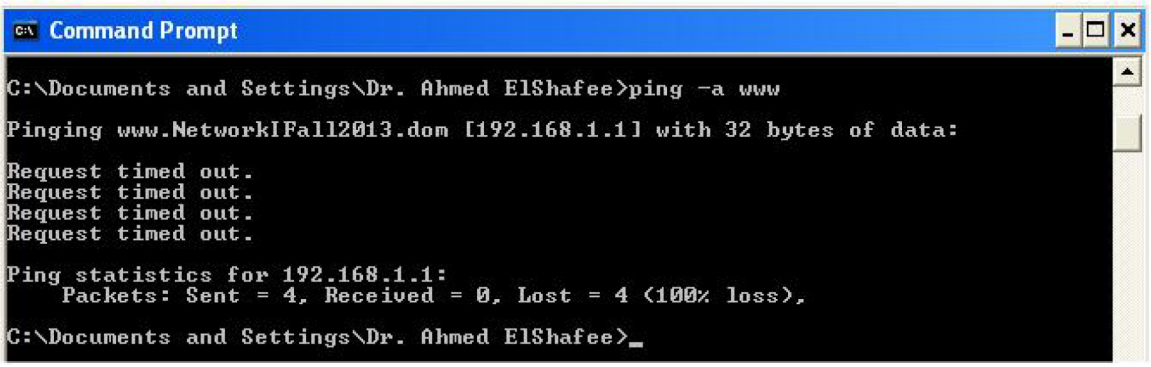


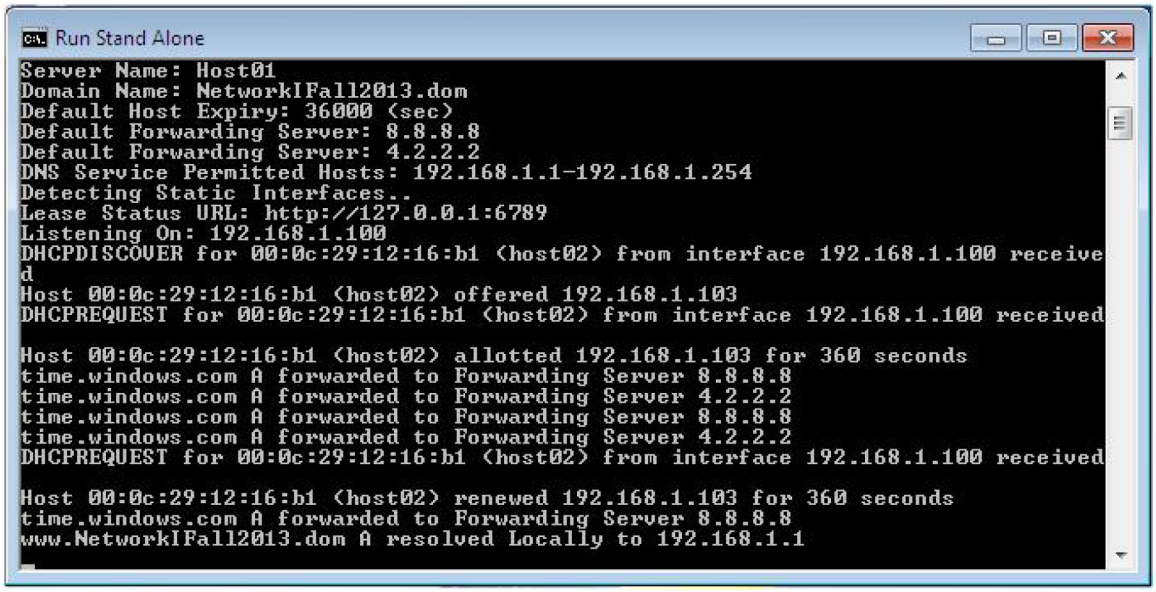


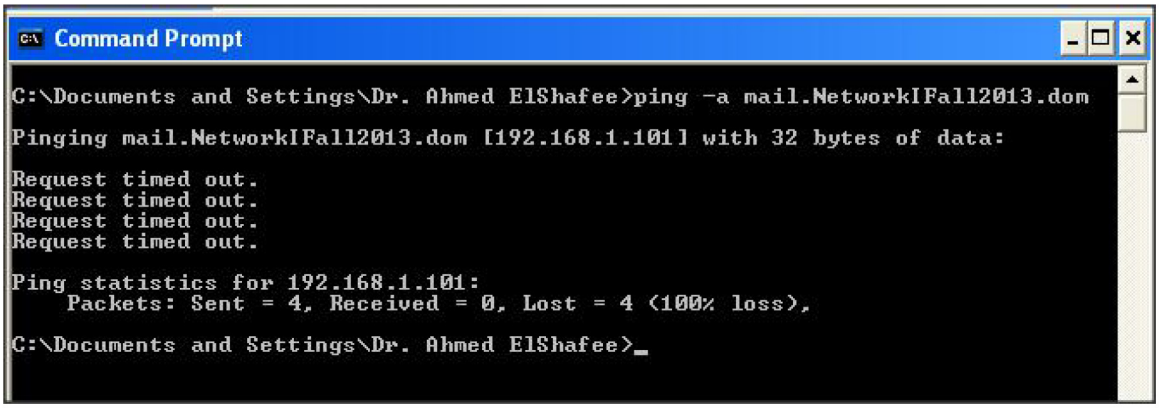

Network Connection Details
Network Connection Details:
Property
Value
Physical Address
00-0C-29-12-16-B1
IP Address
192.168.1.103
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DHCP Server
192.168.1.100
Lease Obtained
12/11/2013 11:27:47 PM
Lease Expires
12/11/2013 11:33:47 PM
DNS Server
192.168.1.100
WINS Server
Close


Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\Dr. Ahmed ElShafee>ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : NetworkIFall2013.dom
IP Address. . . . . : 192.168.1.103
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1
Ethernet adapter Bluetooth Network Connection:
Media State . . . . . : Media disconnected
C:\Documents and Settings\Dr. Ahmed ElShafee>

14. test network using ping command







```
Host 00:0c:29:12:16:b1 (host02) renewed 192.168.1.103 for 360 seconds
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 4.2.2.2
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 8.8.8.8
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 4.2.2.2
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 8.8.8.8
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 4.2.2.2
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 4.2.2.2
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 8.8.8.8
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 4.2.2.2
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 8.8.8.8
mail.NetworkIFall20.13.dom A forwarded to Forwarding Server 4.2.2.2
mail.NetworkIFall2013.dom A resolved Locally to 192.168.1.101
```

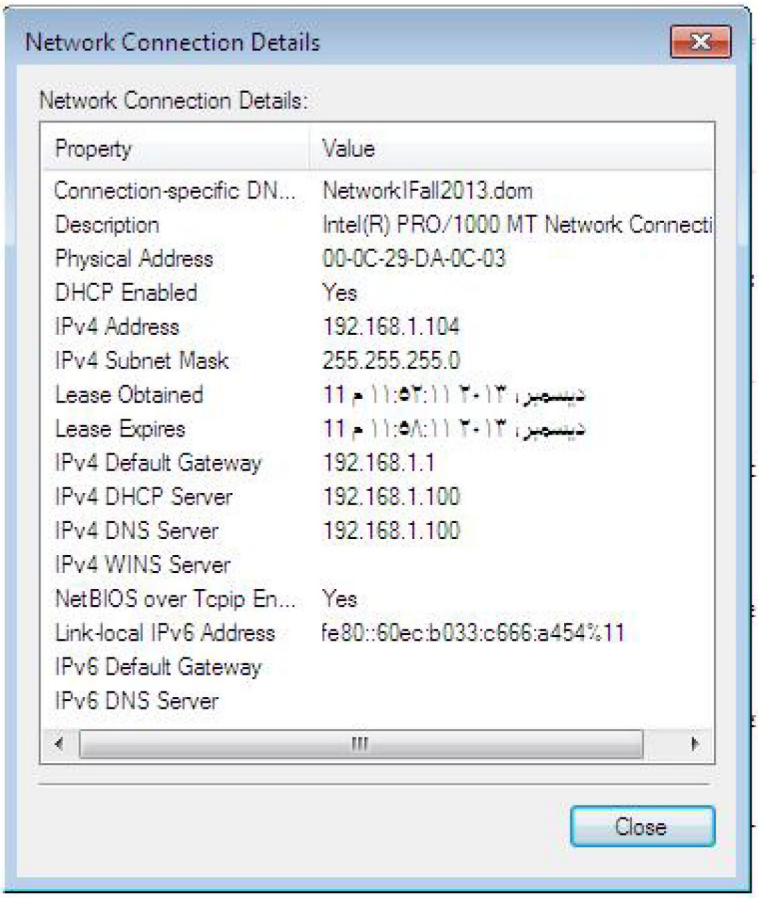
```
Command Prompt

C:\Documents and Settings\Dr. Ahmed ElShafee>ping -a dns

Pinging dns.NetworkIFall2013.dom [192.168.1.100] with 32 bytes of data:

Reply from 192.168.1.100: bytes=32 time<1ms TTL=128
Reply from 192.168.1.100: bytes=32 time<1ms TTL=128
Reply from 192.168.1.100: bytes=32 time<1ms TTL=128
Reply from 192.168.1.100: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\Dr. Ahmed ElShafee>
```

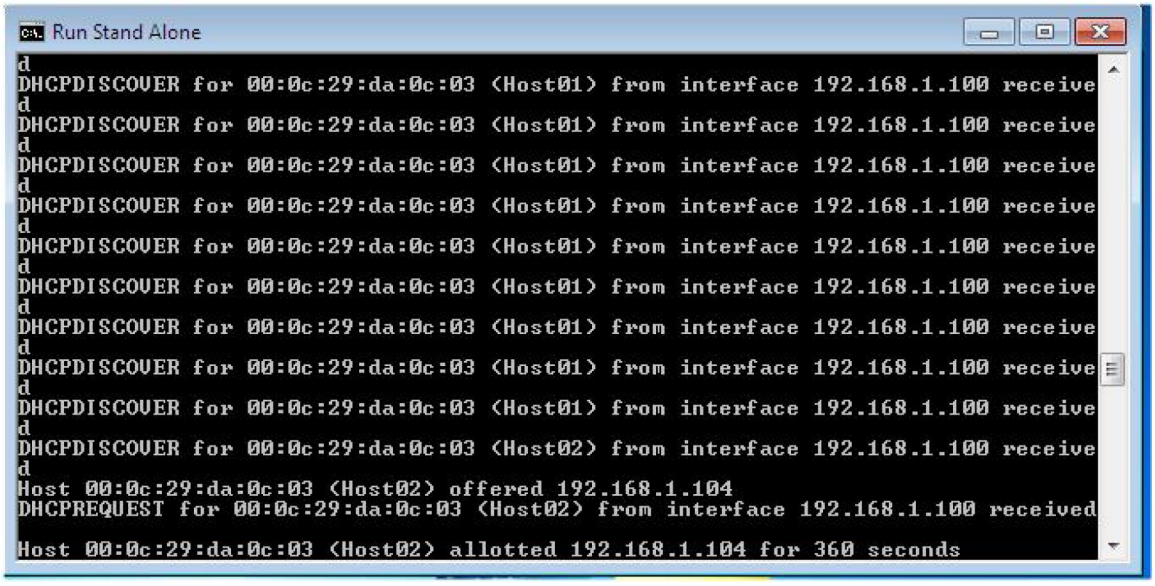
```
dns.NetworkIFall2013.dom A resolved Locally to 192.168.1.100
DHCPREQUEST for 00:0c:29:12:16:b1 (host02) from interface 192.168.1.100 received

Host 00:0c:29:12:16:b1 (host02) renewed 192.168.1.103 for 360 seconds
```

```
Command Prompt

C:\Documents and Settings\Dr. Ahmed ElShafee>ping -a google.com
Ping request could not find host google.com. Please check the name and try again
.

C:\Documents and Settings\Dr. Ahmed ElShafee>
```

```
Host 00:0c:29:12:16:b1 (host02) renewed 192.168.1.103 for 360 seconds
google.com A forwarded to Forwarding Server 8.8.8.8
google.com A forwarded to Forwarding Server 4.2.2.2
google.com A forwarded to Forwarding Server 8.8.8.8
google.com A forwarded to Forwarding Server 4.2.2.2
google.com A forwarded to Forwarding Server 8.8.8.8
```

15. connecting 2nd host





16. connecting 3rd host