



# ADVANCED COMPUTER NETWORK

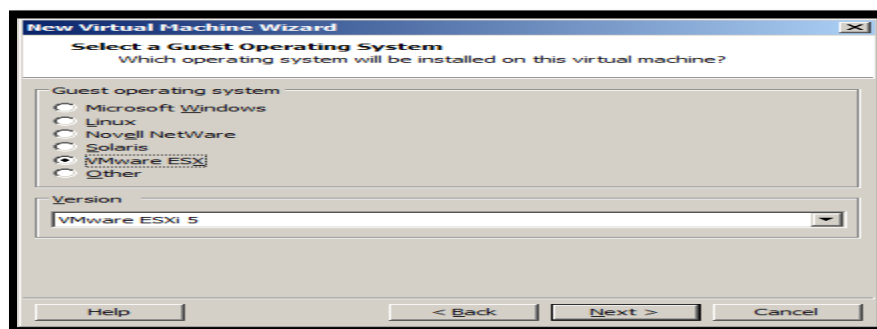
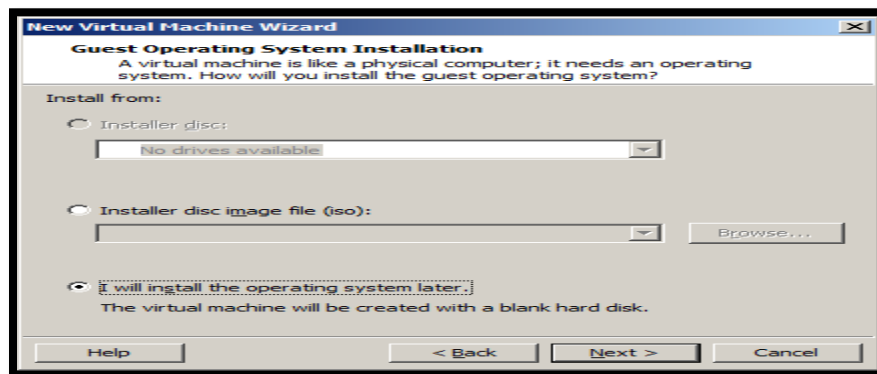
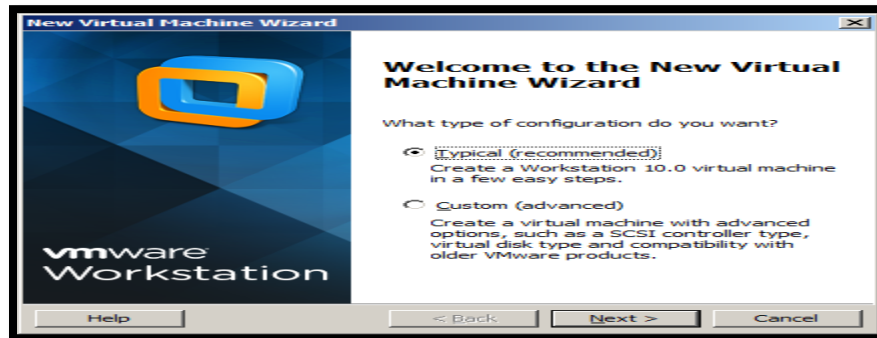
PRACTICAL NO 5

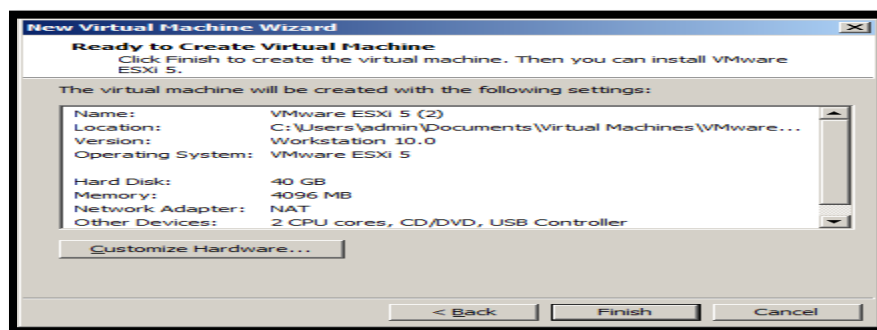
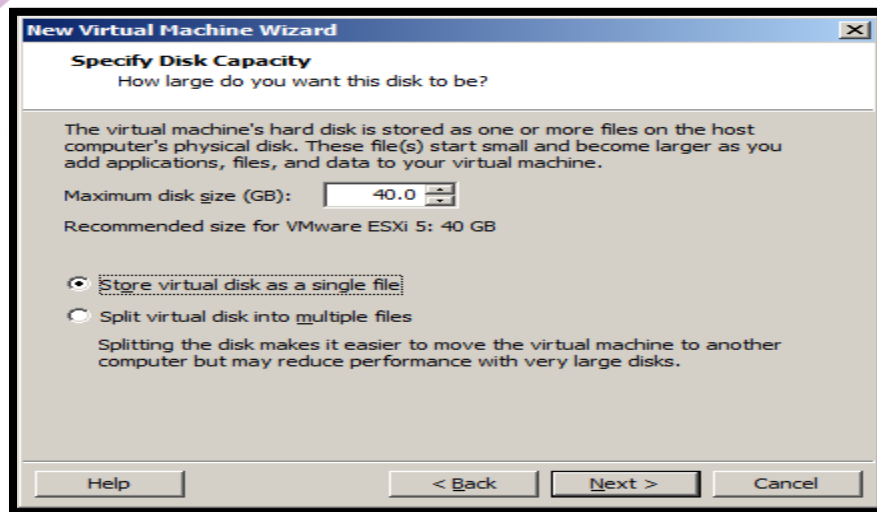
027\_Abhishek\_Ojha

## Practical No 5

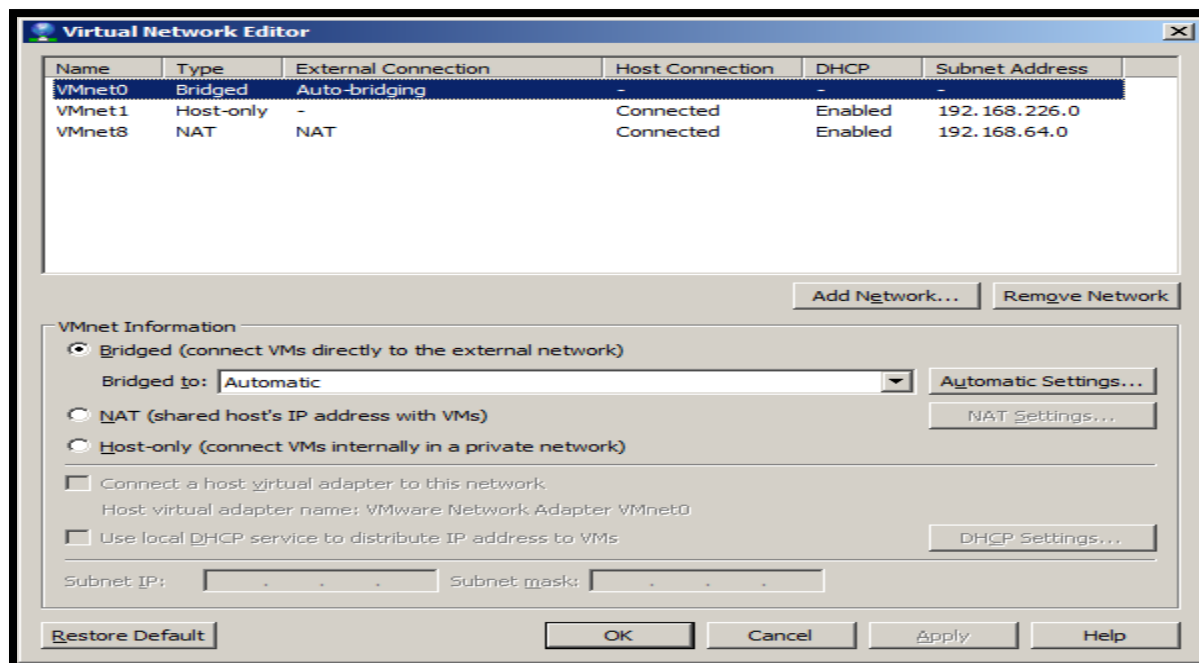
**Aim:** Create virtual PC based network using virtualization software and virtual NIC

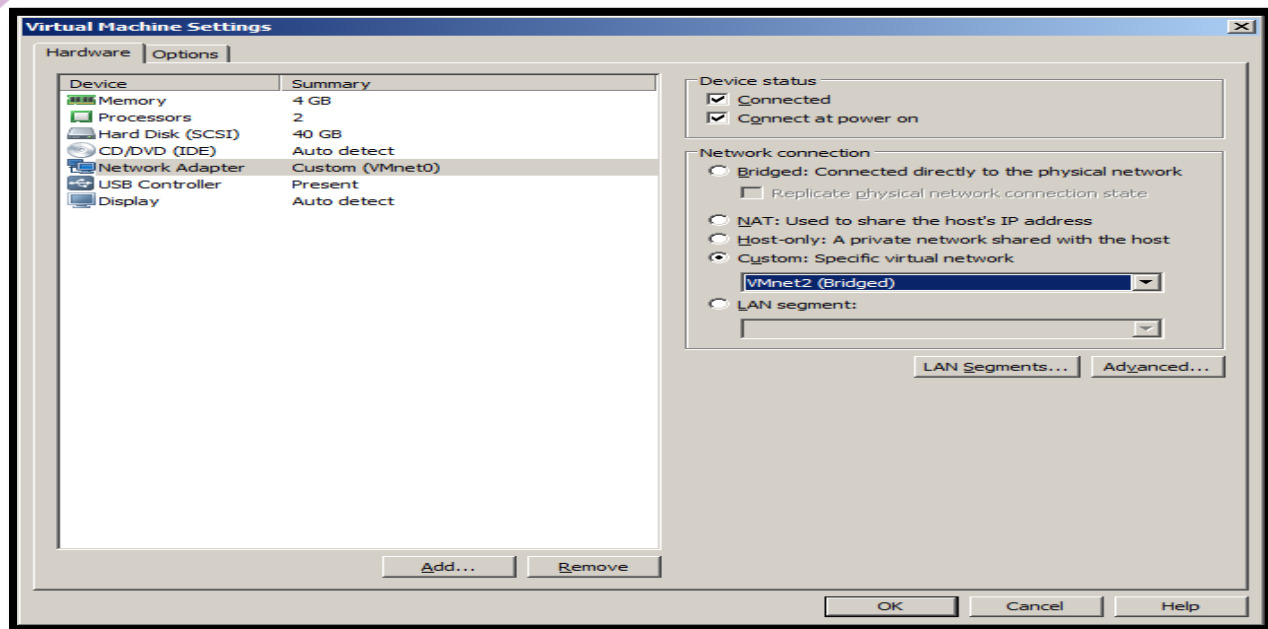
### Virtual Machine Installation





### Bridged Connection Delivery:





```

C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\admin>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::902c:ffa:2d5f:8cf7%11
    IPv4 Address. . . . . : 172.13.24.86
    Subnet Mask . . . . . : 255.255.0.0
    Default Gateway . . . . . : 172.13.24.1

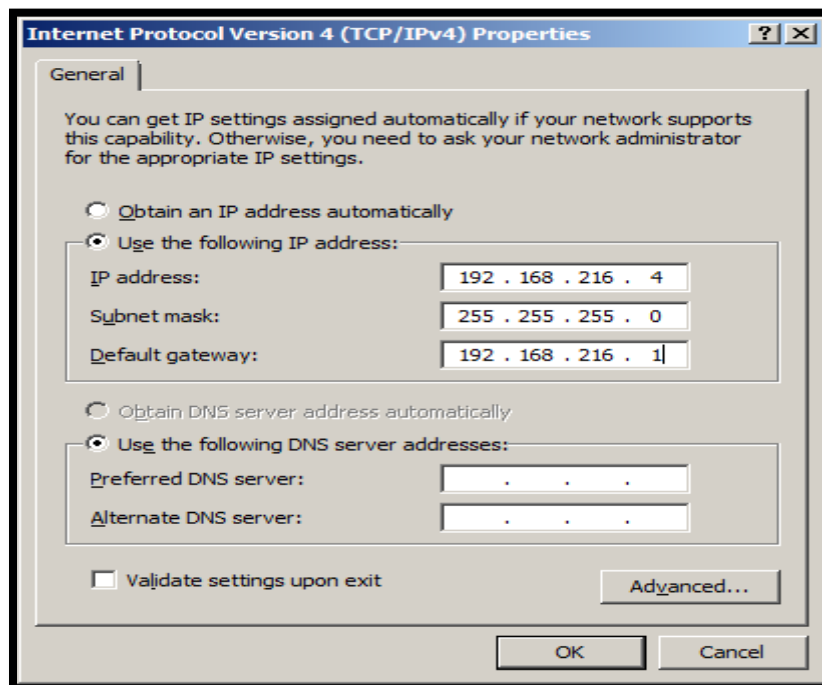
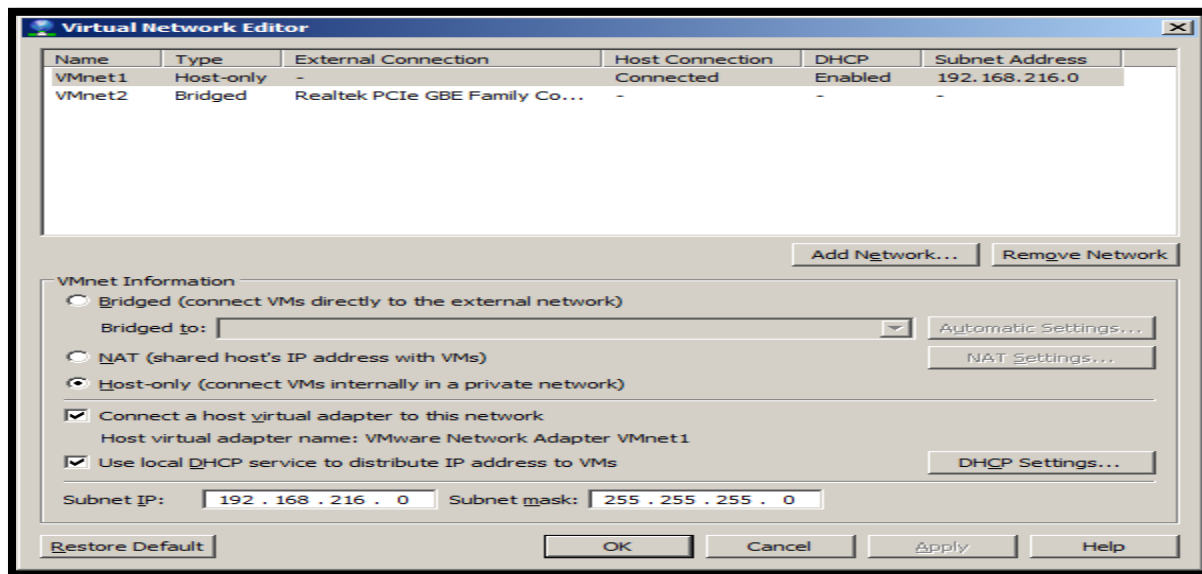
Ethernet adapter VMware Network Adapter VMnet1:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::bd89:64ef:9d4d:be13%21
    IPv4 Address. . . . . : 192.168.216.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 

Tunnel adapter isatap.{FCE4E178-6B8A-4C90-934C-1517E9714DFE}:

```

### Host - Host Connection Delivery:



```

C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\admin>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::902c:ffa:2d5f:8cf7%11
    IPv4 Address. . . . . : 172.13.24.86
    Subnet Mask . . . . . : 255.255.0.0
    Default Gateway . . . . . : 172.13.24.1

Ethernet adapter VMware Network Adapter VMnet1:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::bd89:64ef:9d4d:be13%21
    IPv4 Address. . . . . : 192.168.216.1
    Subnet Mask . . . . . : 255.255.255.0
    IPv4 Address. . . . . : 192.168.216.4
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 0.0.0.0

Tunnel adapter isatap.{FCE4E178-6B8A-4C90-934C-1517E9714DFE}:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

Tunnel adapter 6T04 Adapter:

    Connection-specific DNS Suffix  . : 
    IPv6 Address. . . . . : 2002::ac0d:1856::ac0d:1856
    Default Gateway . . . . . : 

Tunnel adapter isatap.{E9FC4092-B727-4127-9CF9-B38A7AC4F8B6}:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

```

```

C:\Windows\system32\cmd.exe

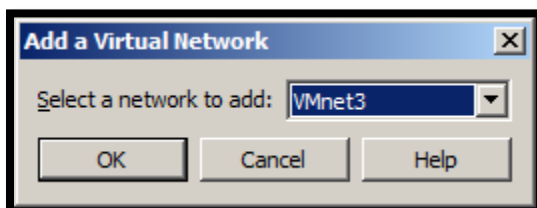
C:\Users\admin>ping 172.13.24.86

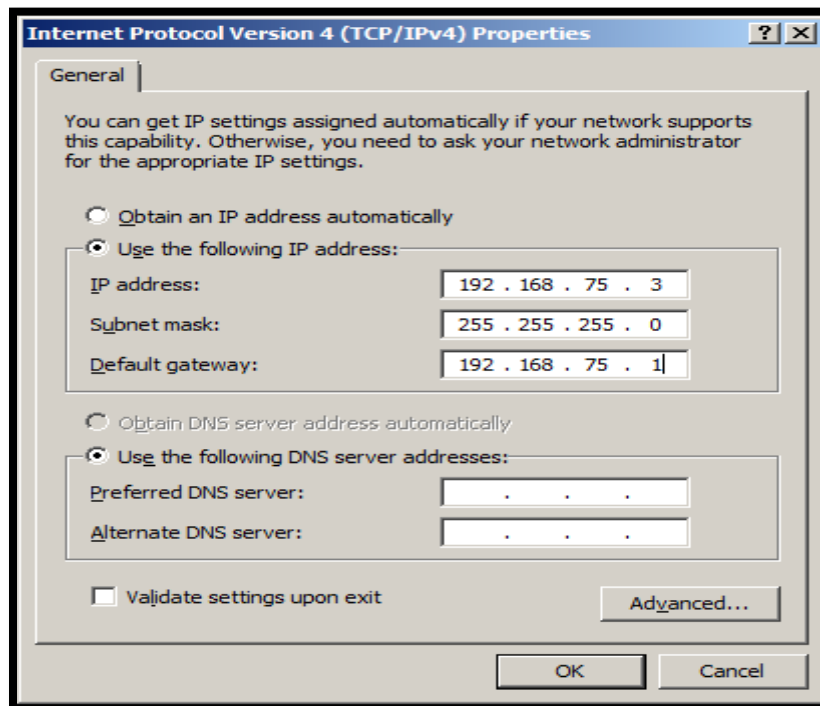
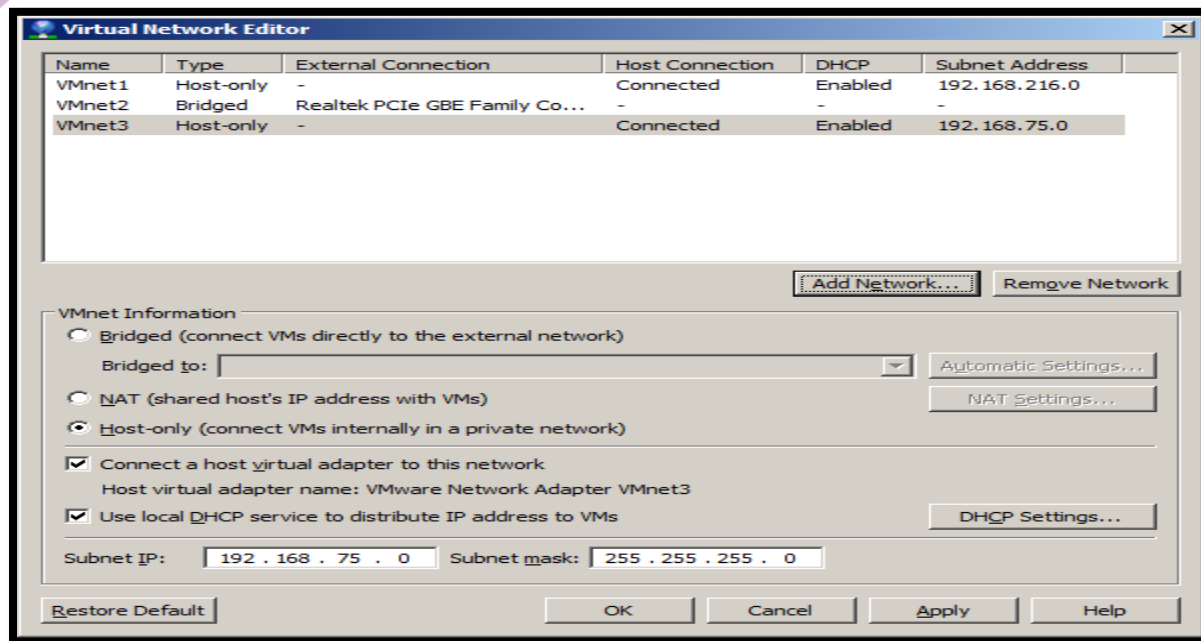
Pinging 172.13.24.86 with 32 bytes of data:
Reply from 172.13.24.86: bytes=32 time<1ms TTL=128
Reply from 172.13.24.86: bytes=32 time<1ms TTL=128
Reply from 172.13.24.86: bytes=32 time<1ms TTL=128
Reply from 172.13.24.86: bytes=32 time<1ms TTL=128

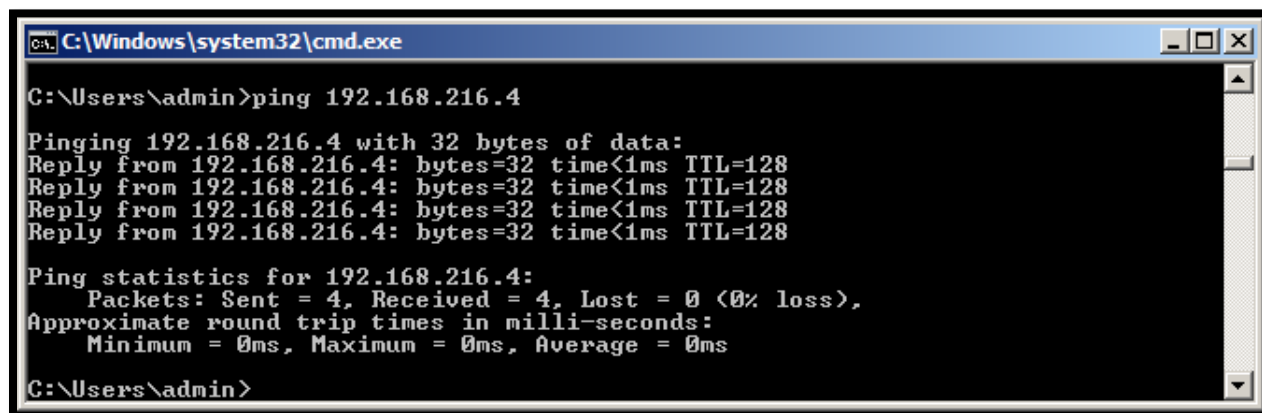
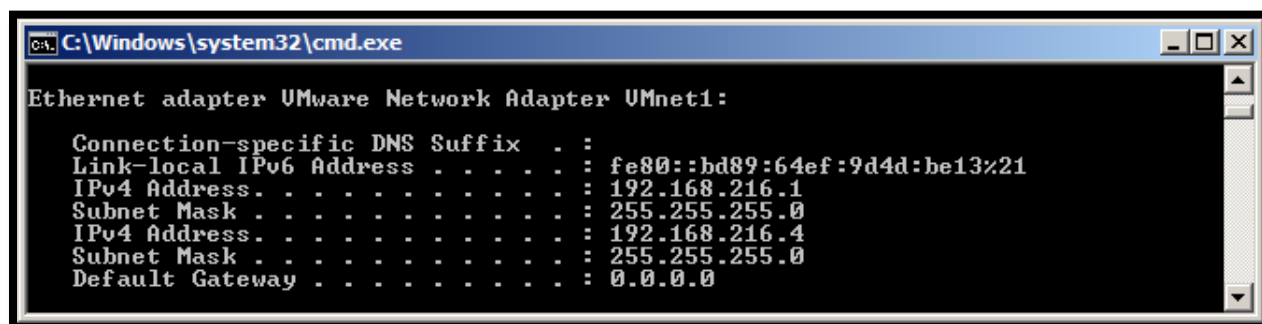
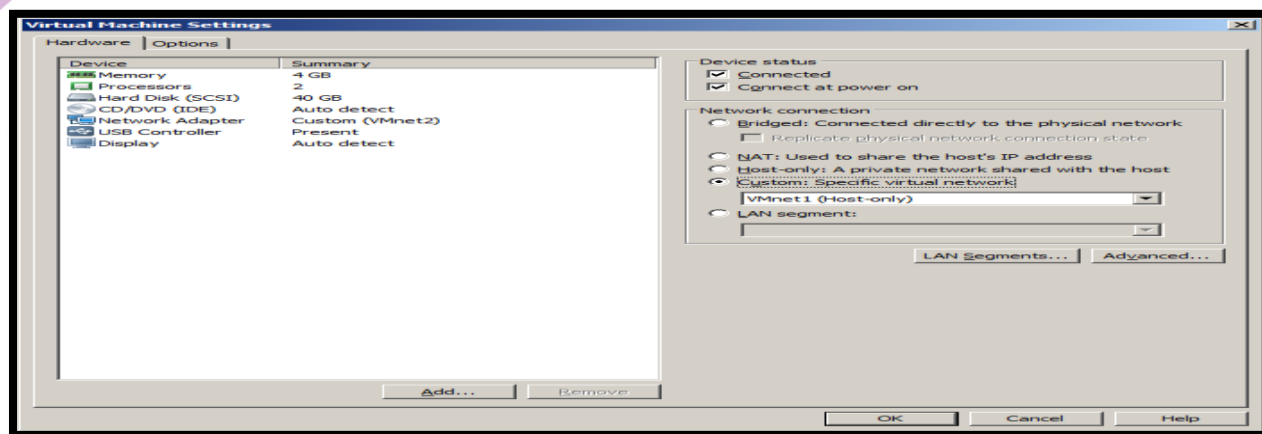
Ping statistics for 172.13.24.86:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\admin>

```

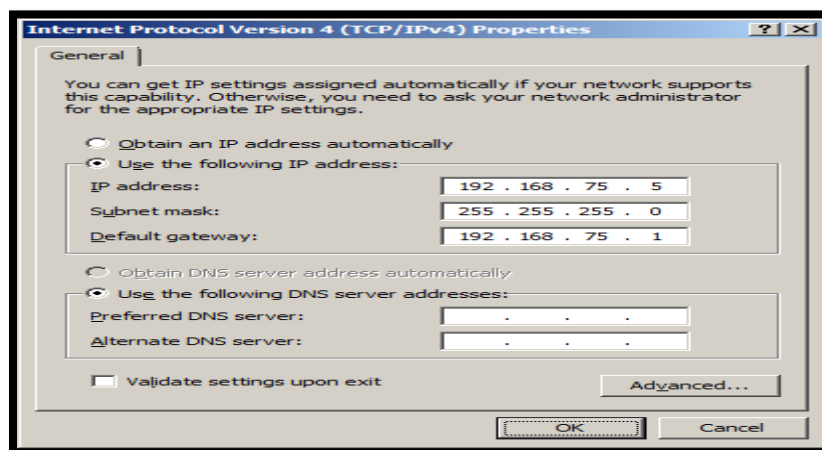
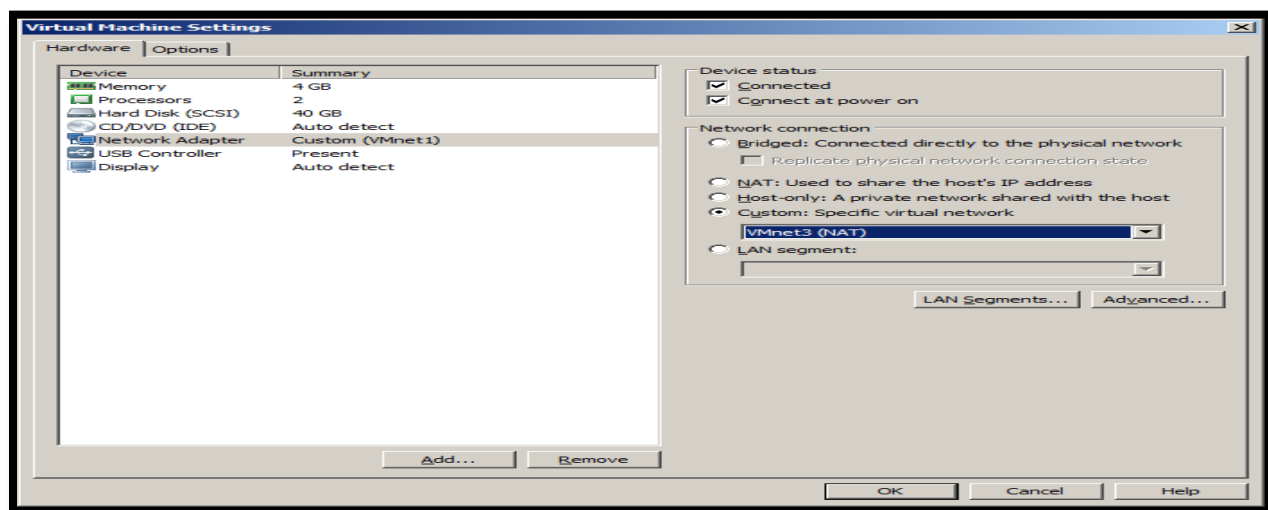
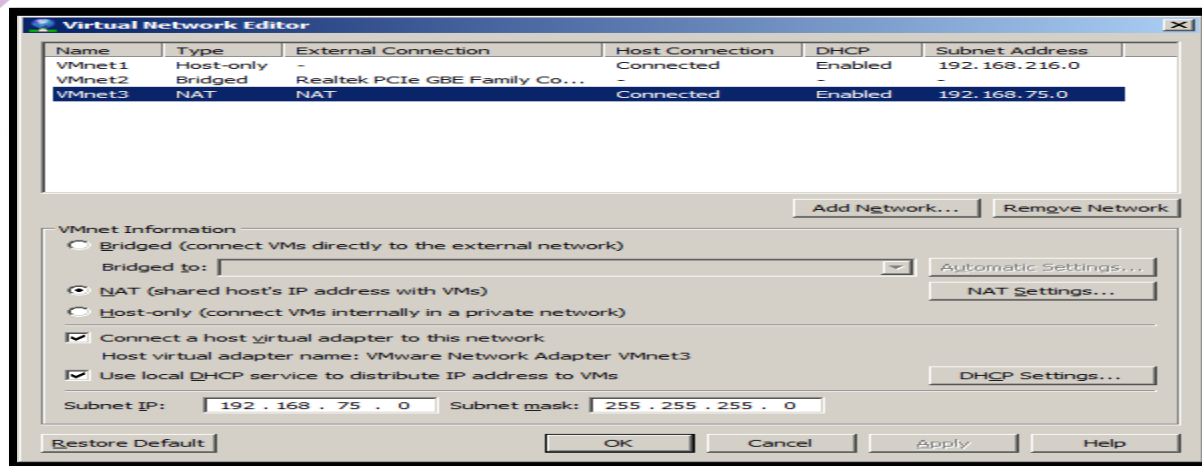






### NAT Connection Delivery:





```
C:\Windows\system32\cmd.exe

Ethernet adapter VMware Network Adapter VMnet3:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::d989:d2a6:c971:c7dd%23
    IPv4 Address. . . . . : 192.168.75.5
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.75.1

Tunnel adapter isatap.{FCE4E178-6B8A-4C90-934C-1517E9714DFE}:
```

```
C:\Windows\system32\cmd.exe

C:\Users\admin>ping 192.168.75.5

Pinging 192.168.75.5 with 32 bytes of data:
Reply from 192.168.75.5: bytes=32 time<1ms TTL=128
Reply from 192.168.75.5: bytes=32 time<1ms TTL=128
Reply from 192.168.75.5: bytes=32 time<1ms TTL=128
Reply from 192.168.75.5: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.75.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\admin>
```