

CYSE 270: Linux System for Cybersecurity
Lab 11 – Basic Network Configurations

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Task A

```
(matthew-f@kali)-[~]
└─$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::a00:27ff:fe49:a36e prefixlen 64 scopeid 0x20<link>
    inet6 fd17:625c:f037:2:a00:27ff:fe49:a36e prefixlen 64 scopeid 0x0<global>
    inet6 fd17:625c:f037:2:a03d:14f3:4ceb:ac45 prefixlen 64 scopeid 0x0<global>
    ether 08:00:27:49:a3:6e txqueuelen 1000 (Ethernet)
    RX packets 9 bytes 3699 (3.6 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 30 bytes 4974 (4.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

1.

```
(matthew-f@kali)-[~]
└─$ route -n
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
0.0.0.0 10.0.2.2 0.0.0.0 UG 100 0 0 eth0
10.0.2.0 0.0.0.0 255.255.255.0 U 100 0 0 eth0
```

2.

```
(matthew-f@kali)-[~]
└─$ netstat -t
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
```

3.

```
(matthew-f@kali)-[~]
└─$ ping ubuntu.com
PING ubuntu.com (185.125.190.21) 56(84) bytes of data:
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=1 ttl=255 time=97.6 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=2 ttl=255 time=99.8 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=3 ttl=255 time=108 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=4 ttl=255 time=99.2 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=5 ttl=255 time=103 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=6 ttl=255 time=102 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=7 ttl=255 time=104 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=8 ttl=255 time=101 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=9 ttl=255 time=112 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=10 ttl=255 time=109 ms
^C
— ubuntu.com ping statistics —
10 packets transmitted, 10 received, 0% packet loss, time 9015ms
rtt min/avg/max/mdev = 97.646/103.637/112.204/4.413 ms
```

4.

5.

```
(matthew-f@kali)-[~]
└─$ host www.odu.edu
www.odu.edu has address 35.170.140.174
```

6 and 7

```
(matthew-f@kali)-[~]
└─$ sudo cat /etc/hostname
[sudo] password for matthew-f:
kali
```

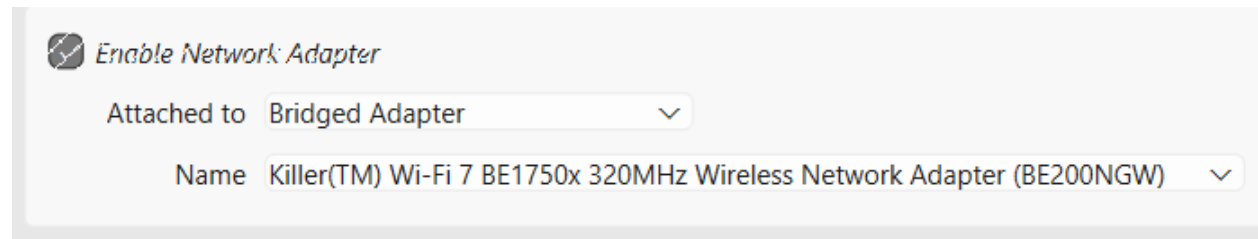
```
(matthew-f@kali)-[~]
└─$ sudo cat /etc/resolv.conf
# Generated by NetworkManager
nameserver 192.168.1.1
```

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```
(matthew-f@kali)-[~]
└─$ hostname
mfox014
```

Task B

1.



2., 3

```
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.1.46 netmask 255.255.255.0 broadcast 192.168.1.255
    inet6 fe80::a00:27ff:fe49:a36e prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:49:a3:6e txqueuelen 1000 (Ethernet)
    RX packets 598 bytes 77168 (75.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 34 bytes 5640 (5.5 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 8 bytes 480 (480.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 8 bytes 480 (480.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
(matthew-f@kali)-[~]
└─$ route
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
default         192.168.1.1    0.0.0.0         UG    100    0      0 eth0
192.168.1.0     0.0.0.0        255.255.255.0   U     100    0      0 eth0

(matthew-f@kali)-[~]
└─$ netstat -t
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State

(matthew-f@kali)-[~]
└─$ ping ubuntu.com
PING ubuntu.com (185.125.190.21) 56(84) bytes of data:
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=1 ttl=55 time=94.9 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=2 ttl=55 time=97.8 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=3 ttl=55 time=94.3 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=4 ttl=55 time=98.6 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=5 ttl=55 time=98.9 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=6 ttl=55 time=94.8 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=7 ttl=55 time=94.6 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=8 ttl=55 time=95.1 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=9 ttl=55 time=94.9 ms
64 bytes from website-content-cache-2.ps5.canonical.com (185.125.190.21): icmp_seq=10 ttl=55 time=93.8 ms
^C
--- ubuntu.com ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9014ms
rtt min/avg/max/mdev = 93.837/95.770/98.919/1.797 ms

(matthew-f@kali)-[~]
└─$ host www.odu.edu
www.odu.edu has address 35.170.140.174
ca

(matthew-f@kali)-[~]
└─$ cat /etc/hostname
kali

(matthew-f@kali)-[~]
└─$ cat /etc/resolv.conf
# Generated by NetworkManager
nameserver 192.168.1.1
```