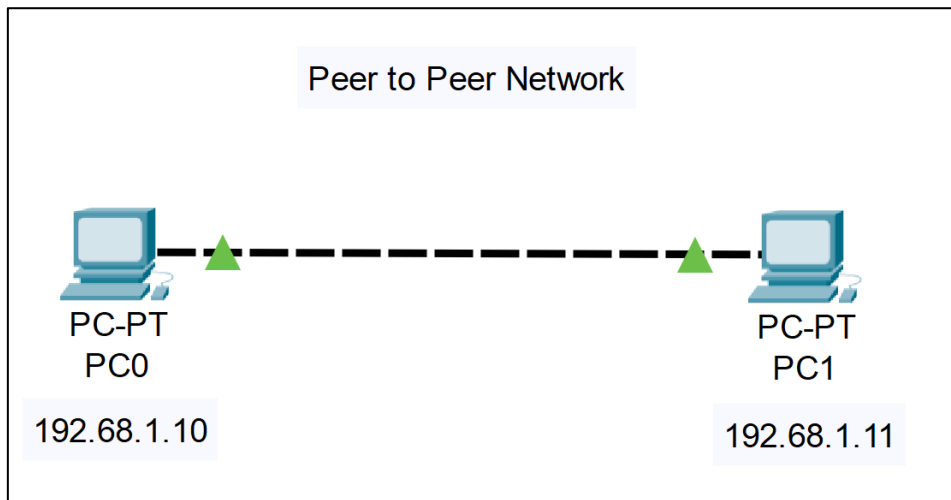
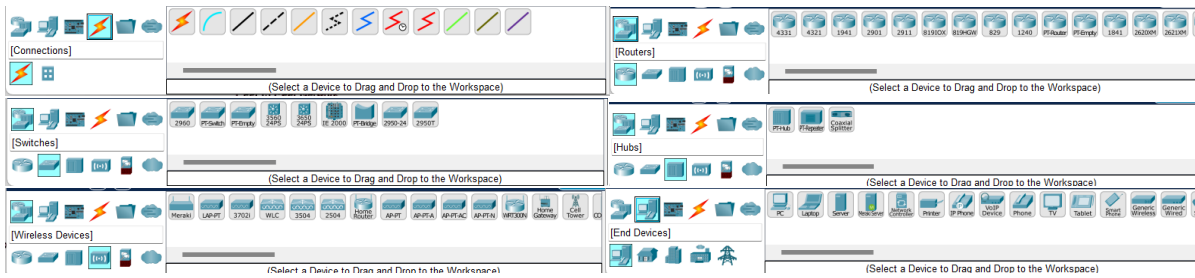


Experiment 1



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection: (default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::260:5CFF:FE1E:9492
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 192.68.1.10
    Subnet Mask . . . . .: 255.255.255.0
    Default Gateway . . . . .: ::
                                0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                                0.0.0.0

C:\>ping 192.68.1.11

Pinging 192.68.1.11 with 32 bytes of data:

Reply from 192.68.1.11: bytes=32 time=11ms TTL=128
Reply from 192.68.1.11: bytes=32 time<1ms TTL=128
Reply from 192.68.1.11: bytes=32 time<1ms TTL=128
Reply from 192.68.1.11: bytes=32 time<1ms TTL=128

Ping statistics for 192.68.1.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 11ms, Average = 2ms

C:\>
```

☐ Top

PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection: (default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::20C:CFFF:FE26:73A0
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 192.68.1.11
    Subnet Mask . . . . .: 255.255.255.0
    Default Gateway . . . . .: ::
                                0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                                0.0.0.0

C:\>ping 192.68.1.10

Pinging 192.68.1.10 with 32 bytes of data:

Reply from 192.68.1.10: bytes=32 time<1ms TTL=128
Reply from 192.68.1.10: bytes=32 time<1ms TTL=128
Reply from 192.68.1.10: bytes=32 time<1ms TTL=128
Reply from 192.68.1.10: bytes=32 time=1ms TTL=128

Ping statistics for 192.68.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

☐ Top

Experiment 2

```
Administrator: Command Prompt

C:\Windows\System32>ping google.com

Pinging google.com [216.58.196.206] with 32 bytes of data:
Reply from 216.58.196.206: bytes=32 time=5ms TTL=118
Reply from 216.58.196.206: bytes=32 time=5ms TTL=118
Reply from 216.58.196.206: bytes=32 time=13ms TTL=118
Reply from 216.58.196.206: bytes=32 time=5ms TTL=118

Ping statistics for 216.58.196.206:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 5ms, Maximum = 13ms, Average = 7ms
```

```
Administrator: Command Prompt

C:\Windows\System32>tracert google.com

Tracing route to google.com [216.58.196.206]
over a maximum of 30 hops:

  0  1 ms    2 ms    8 ms   192.168.1.1
  1  39 ms   6 ms   76 ms  172.28.153.1
  2  7 ms    4 ms    3 ms   103.139.60.1
  3  6 ms    10 ms   9 ms   10.100.8.37
  4  382 ms  184 ms  133 ms  72.14.205.145
  5  18 ms   32 ms   10 ms  192.178.83.243
  6  6 ms    7 ms    7 ms   216.239.47.99
  7  8 ms    6 ms    6 ms   del03s06-in-f14.1e100.net [216.58.196.206]

Trace complete.
```

```
Administrator: Command Prompt

C:\Windows\System32>pathping google.com

Tracing route to google.com [216.58.196.206]
over a maximum of 30 hops:
  0  rohi-s [192.168.1.106]
  1  192.168.1.1
  2  172.28.153.1
  3  103.139.60.1
  4  10.100.8.37
  5  72.14.205.145
  6  192.178.83.243
  7  216.239.47.99
  8  *      del03s06-in-f14.1e100.net [216.58.196.206]

Computing statistics for 200 seconds...
Hop  RTT      Source to Here   This Node/Link   Address
  0   RTT      Lost/Sent = Pct  Lost/Sent = Pct  Address
  0   14ms     1/ 100 = 1%     0/ 100 = 0%     rohi-s [192.168.1.106]
  1   14ms     3/ 100 = 3%     2/ 100 = 2%     192.168.1.1
  2   12ms     5/ 100 = 5%     4/ 100 = 4%     172.28.153.1
  3   17ms     2/ 100 = 2%     1/ 100 = 1%     103.139.60.1
  4   23ms     1/ 100 = 1%     0/ 100 = 0%     10.100.8.37
  5   17ms     2/ 100 = 2%     0/ 100 = 0%     72.14.205.145
  6   ---     100/ 100 =100%  97/ 100 = 97%   192.178.83.243
  7   17ms     3/ 100 = 3%     0/ 100 = 0%     216.239.47.99
  8   17ms     3/ 100 = 3%     0/ 100 = 0%     del03s06-in-f14.1e100.net [216.58.196.206]

Trace complete.
```

```
Administrator: Command Prompt

C:\Windows\System32>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

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

Wireless LAN adapter Local Area Connection* 1:

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

Wireless LAN adapter Local Area Connection* 2:

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

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::e74b:f286:a671:903f%19
    IPv4 Address. . . . . : 192.168.1.106
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1
```

```
Administrator: Command Prompt

C:\Windows\System32>getmac

Physical Address    Transport Name
=====
84-A9-3E-AE-33-B0   Media disconnected
48-A4-72-1A-B8-D2   \Device\NPF{E77F8D98-F8AB-4F7B-9921-5C9FC803307D}
```

```
Administrator: Command Prompt

C:\Windows\System32>arp -a

Interface: 192.168.1.106 --- 0x13
Internet Address   Physical Address   Type
192.168.1.1        38-6b-1c-af-98-c0 dynamic
192.168.1.104       f8-28-19-31-7c-1e dynamic
192.168.1.105       08-7c-39-71-2f-2e dynamic
192.168.1.255       ff-ff-ff-ff-ff-ff static
224.0.0.2           01-00-5e-00-00-02 static
224.0.0.22          01-00-5e-00-00-16 static
224.0.0.251         01-00-5e-00-00-fb static
224.0.0.252         01-00-5e-00-00-fc static
239.255.255.250     01-00-5e-7f-ff-fa static
255.255.255.255     ff-ff-ff-ff-ff-ff static
```

```
Administrator: Command Prompt
C:\Windows\System32>nslookup google.com
Server: UnKnown
Address: 192.168.1.1

Non-authoritative answer:
Name: google.com
Addresses: 2404:6800:4002:815::200e
          216.58.196.206
```

```
Administrator: Command Prompt
C:\Windows\System32>route print

Interface List
12...84 a9 3e ae 33 b0 .....Intel(R) Ethernet Connection (4) I219-LM
14...48 a4 72 1a b8 d3 .....Microsoft Wi-Fi Direct Virtual Adapter
18...4a a4 72 1a b8 d2 .....Microsoft Wi-Fi Direct Virtual Adapter #2
19...48 a4 72 1a b8 d2 .....Intel(R) Dual Band Wireless-AC 8265
1.....Software Loopback Interface 1

IPv4 Route Table

Active Routes:
Network Destination        Netmask          Gateway           Interface         Metric
0.0.0.0                    0.0.0.0          192.168.1.1       192.168.1.106     60
127.0.0.0                  255.0.0.0        On-link           127.0.0.1         331
127.0.0.1                  255.0.0.1        On-link           127.0.0.1         331
127.255.255.255            255.255.255.255 On-link           127.0.0.1         331
192.168.1.0                 255.255.255.0    On-link           192.168.1.106     316
192.168.1.106               255.255.255.255 On-link           192.168.1.106     316
192.168.1.255               255.255.255.255 On-link           192.168.1.106     316
224.0.0.0                  240.0.0.0        On-link           127.0.0.1         331
224.0.0.0                  240.0.0.0        On-link           192.168.1.106     316
255.255.255.255            255.255.255.255 On-link           127.0.0.1         331
255.255.255.255            255.255.255.255 On-link           192.168.1.106     316

Persistent Routes:
None

IPv6 Route Table

Active Routes:
If Metric Network Destination      Gateway
1 331 ::1/128 On-link
19 316 fe80::/64 On-link
19 316 fe80::e74b:f286:a671:903f/128 On-link
1 331 ff00::/8 On-link
19 316 ff00::/8 On-link

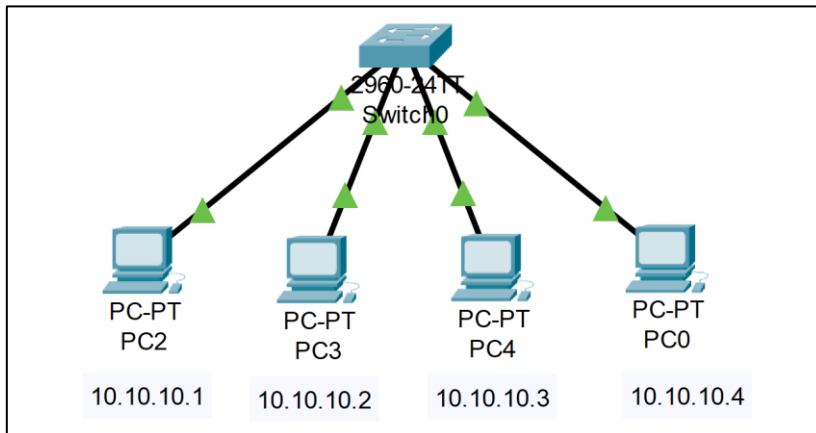
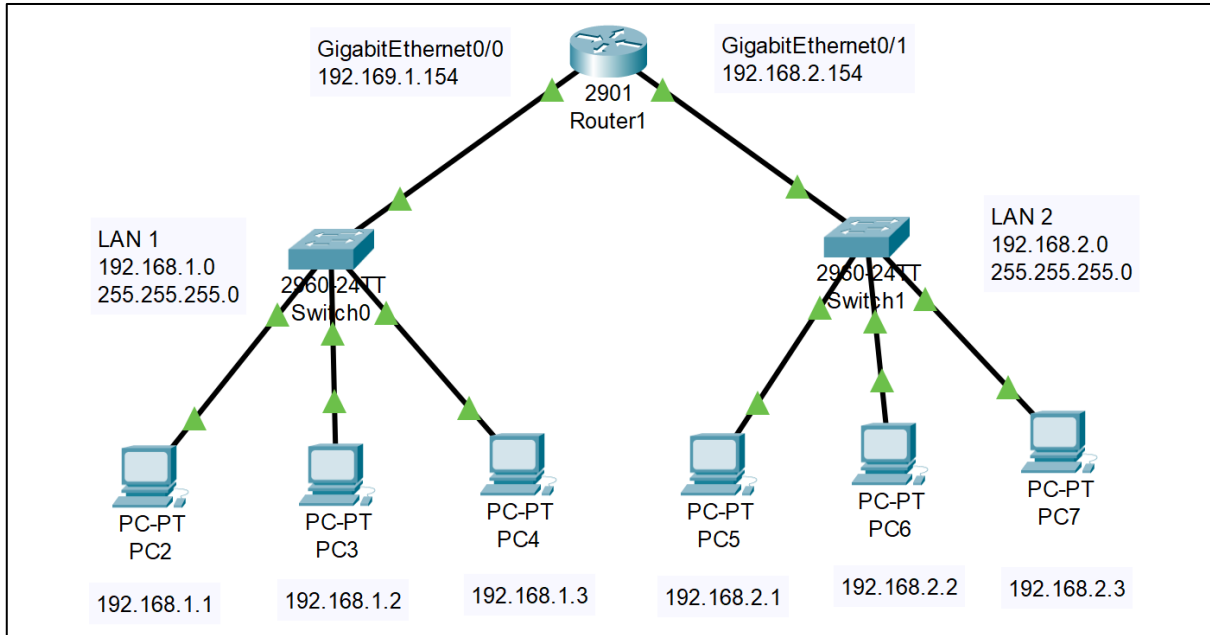
Persistent Routes:
None
```

```
Administrator: Command Prompt
C:\Windows\System32>netstat

Active Connections

Proto Local Address           Foreign Address         State
TCP 127.0.0.1:50388          platform:50389         ESTABLISHED
TCP 127.0.0.1:50389          platform:50388         ESTABLISHED
TCP 192.168.1.106:50439      del11s17-in-f10:https ESTABLISHED
TCP 192.168.1.106:50446      20.198.119.143:https ESTABLISHED
TCP 192.168.1.106:50457      del11s16-in-f10:https ESTABLISHED
TCP 192.168.1.106:50521      20.212.88.117:https ESTABLISHED
TCP 192.168.1.106:50612      vmi1505556:3321 ESTABLISHED
TCP 192.168.1.106:50754      20.189.173.8:https ESTABLISHED
TCP 192.168.1.106:50804      del11s14-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50805      del11s14-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50806      del12s09-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50807      del12s09-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50808      del11s14-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50809      del11s14-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50810      del11s14-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50811      del11s14-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50813      del11s20-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50815      del11s20-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50816      del11s20-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50817      del12s09-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50818      del12s09-in-f10:https CLOSE_WAIT
TCP 192.168.1.106:50823      del03s16-in-f14:https TIME_WAIT
TCP 192.168.1.106:50824      13.107.21.239:https ESTABLISHED
TCP 192.168.1.106:50825      52.109.56.129:https TIME_WAIT
TCP 192.168.1.106:50826      52.109.56.129:https TIME_WAIT
TCP 192.168.1.106:50827      13.107.5.80:https ESTABLISHED
TCP [::1]:1521              rohi-s:50418 ESTABLISHED
TCP [::1]:50418             rohi-s:1521 ESTABLISHED
```

Experiment 3



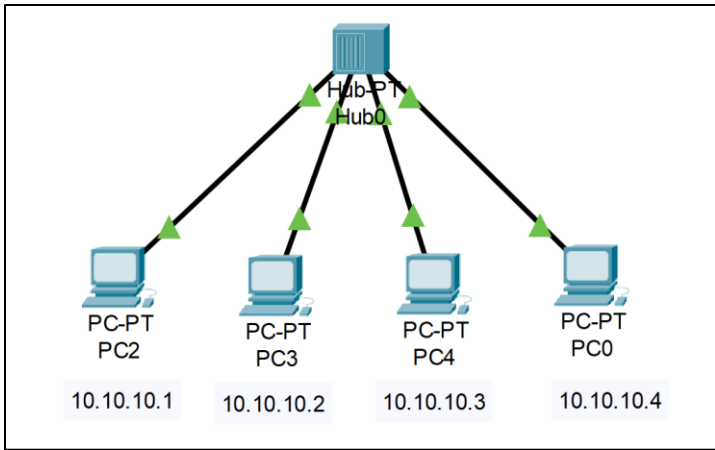
```
PC4
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.4

Pinging 10.10.10.4 with 32 bytes of data:

Reply from 10.10.10.4: bytes=32 time<1ms TTL=128
Reply from 10.10.10.4: bytes=32 time<1ms TTL=128
Reply from 10.10.10.4: bytes=32 time<1ms TTL=128
Reply from 10.10.10.4: bytes=32 time<1ms TTL=128

Ping statistics for 10.10.10.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.3

Pinging 10.10.10.3 with 32 bytes of data:

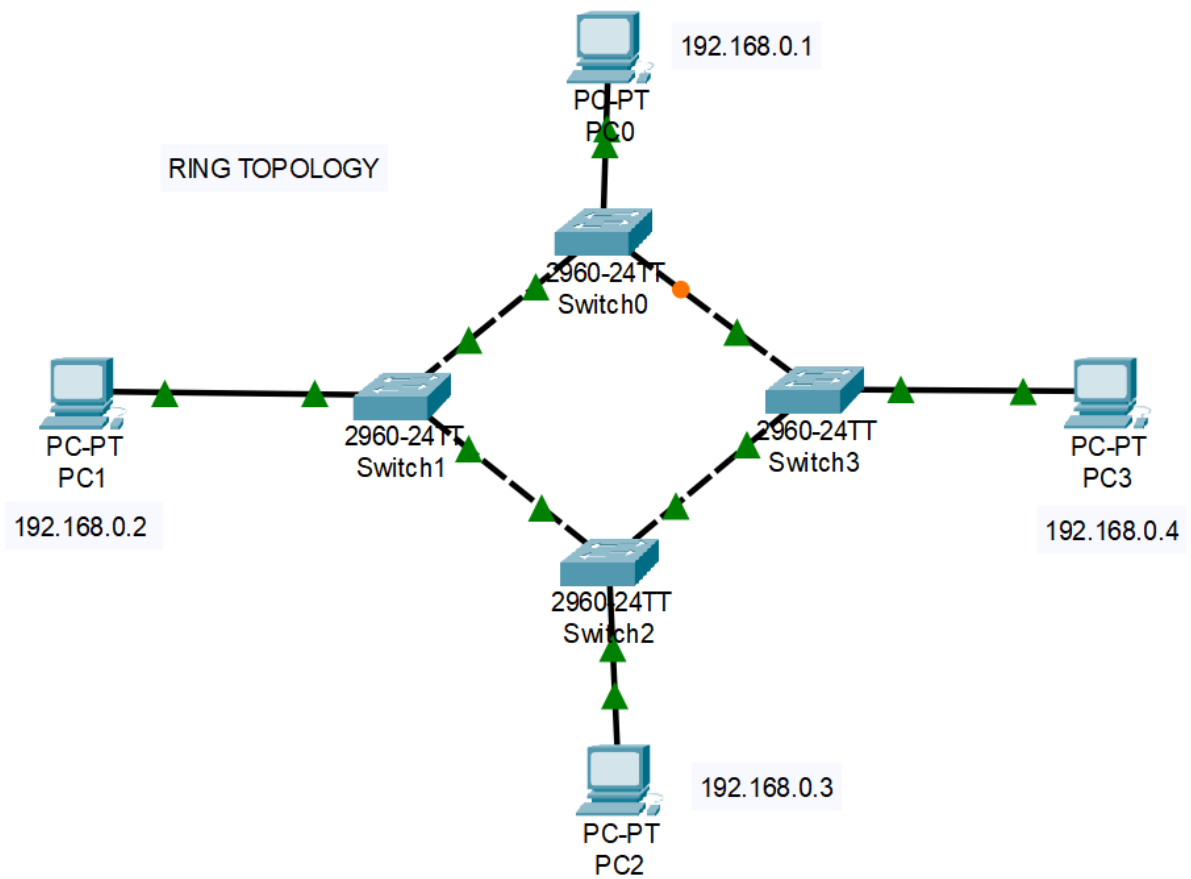
Reply from 10.10.10.3: bytes=32 time<1ms TTL=128
Reply from 10.10.10.3: bytes=32 time=1ms TTL=128
Reply from 10.10.10.3: bytes=32 time<1ms TTL=128
Reply from 10.10.10.3: bytes=32 time<1ms TTL=128

Ping statistics for 10.10.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>|
```

☐ Top

Experiment 4



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.0.1

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::20B:BEFF:FEB6:2CE9

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

PC0

Physical Config **Desktop** Programming Attributes

Command Prompt X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.2

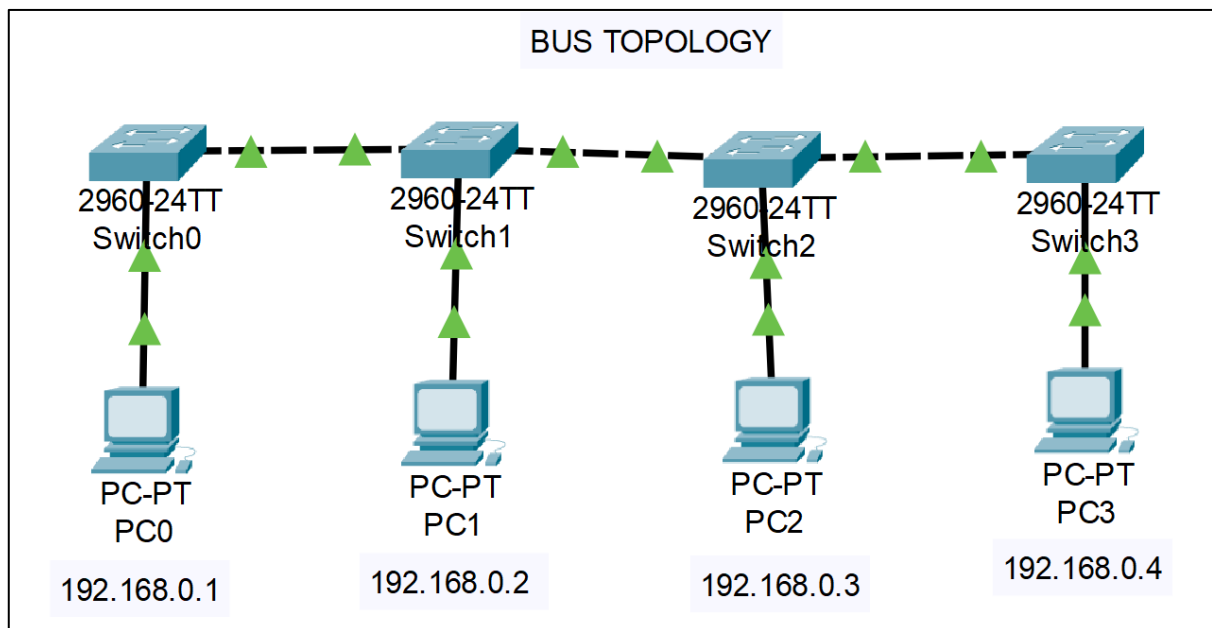
Pinging 192.168.0.2 with 32 bytes of data:

Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0%
    loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

☐ Top



PC0

Physical Config **Desktop** Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.2

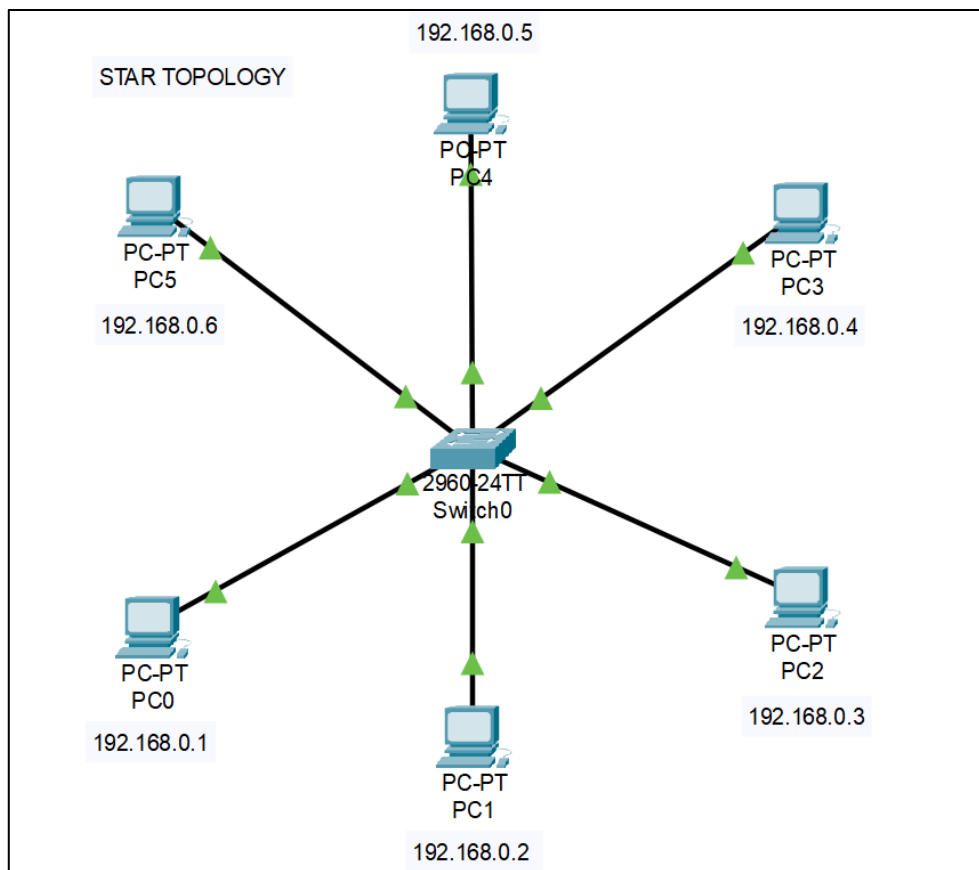
Pinging 192.168.0.2 with 32 bytes of data:

Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0%
    loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

☐ Top



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.2

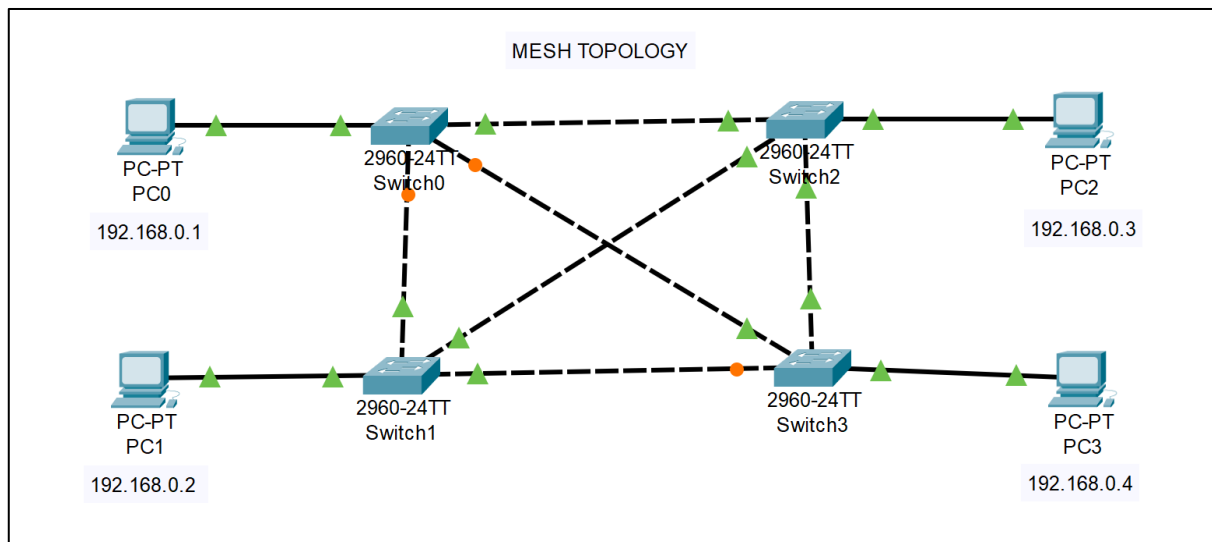
Pinging 192.168.0.2 with 32 bytes of data:

Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0%
loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|
```

☐ Top



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.2

Pinging 192.168.0.2 with 32 bytes of data:

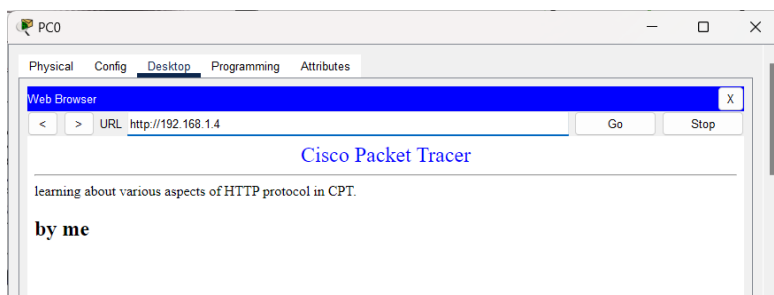
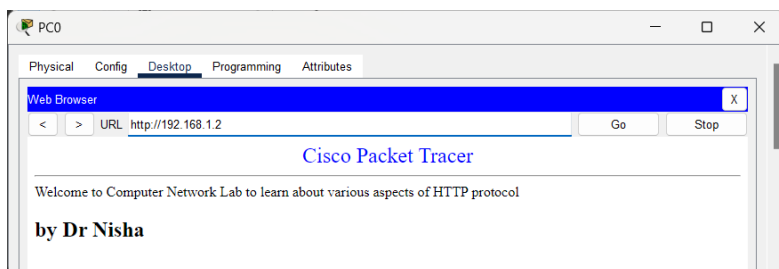
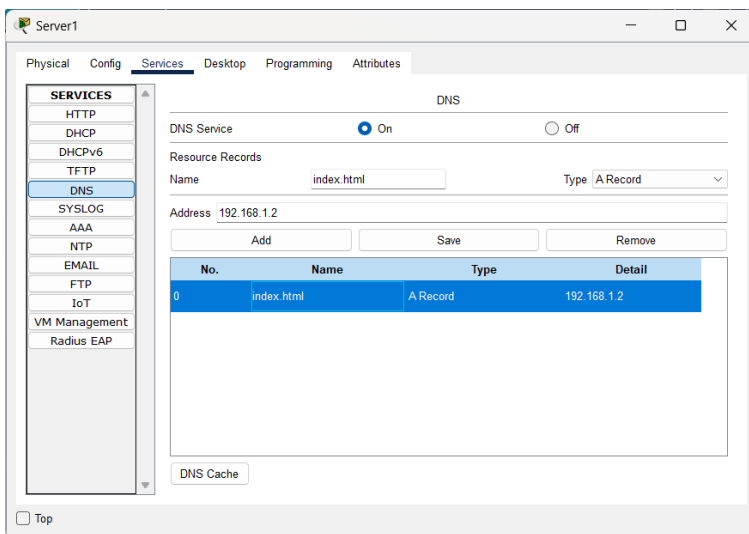
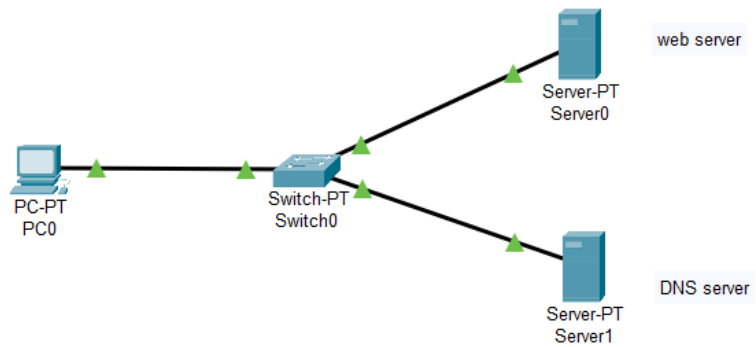
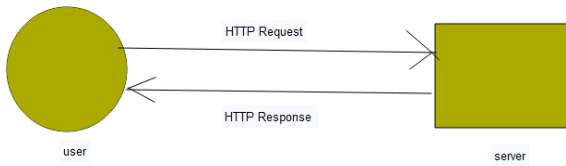
Reply from 192.168.0.2: bytes=32 time<lms TTL=128
Reply from 192.168.0.2: bytes=32 time<lms TTL=128
Reply from 192.168.0.2: bytes=32 time<lms TTL=128
Reply from 192.168.0.2: bytes=32 time<lms TTL=128

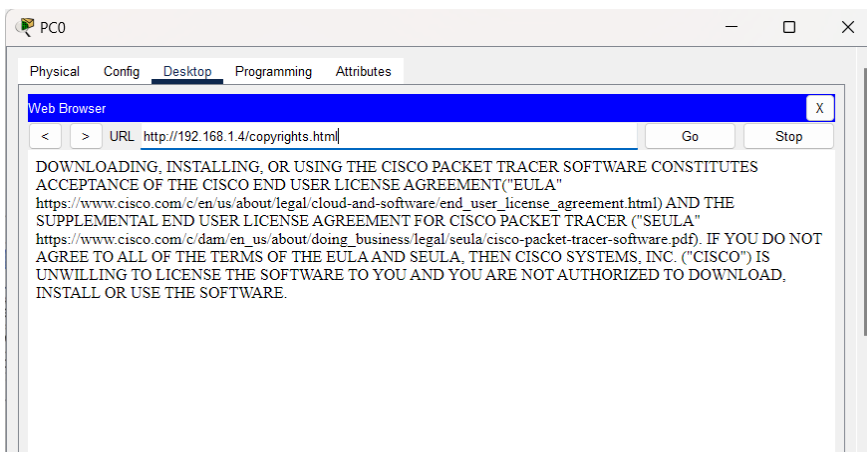
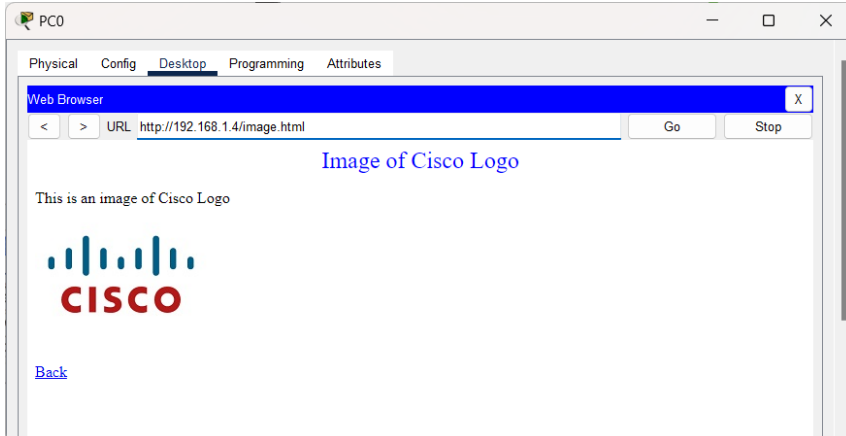
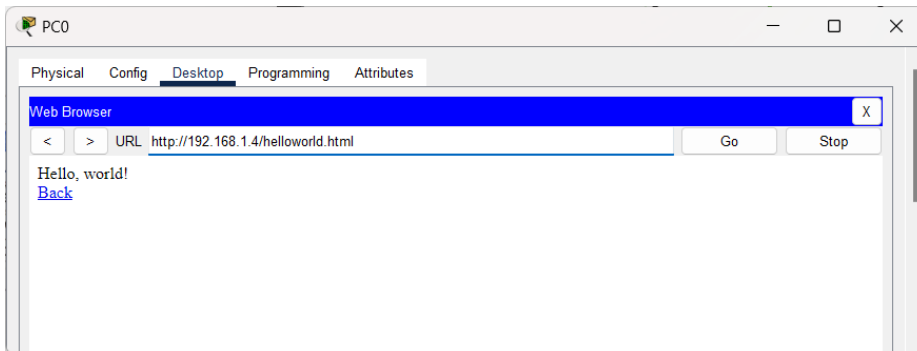
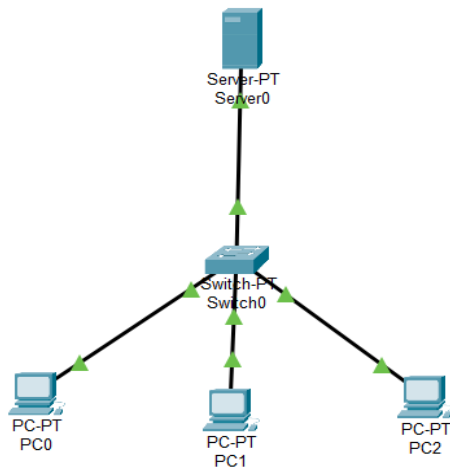
Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0%
    loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

☐ Top

Experiment 5





Server0

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP**
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DHCP

Interface: FastEthernet0 Service: ☐ On ☒ Off

Pool Name: serverPool

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

Start IP Address: 192 168 1 0

Subnet Mask: 255 255 255 0

Maximum Number of Users: 512

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	0.0.0.0	0.0.0.0	192.168.1.0	255.255.255.0	512	0.0.0.0	0.0.0.0

☐ Top

PC0

Physical **Config** Desktop Programming Attributes

GLOBAL

- Settings
- Algorithm Settings
- INTERFACE**
- FastEthernet0
- Bluetooth

Global Settings

Display Name: PC0

Interfaces: FastEthernet0

Gateway/DNS IPv4

☒ DHCP

☐ Static

Default Gateway:

DNS Server:

DNS

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS**
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DNS

DNS Service: ☒ On ☐ Off

Resource Records

Name: Type: A Record

Address:

Add Save Remove

No.	Name	Type	Detail
0	www.google.com	A Record	192.168.1.1
1	www.yahoo.com	A Record	192.168.1.2

PC0

Physical Config **Desktop** Programming Attributes

Web Browser

< > URL http://www.google.com Go Stop

Welcome to google.com

Computer Networks Lab task 2

PC0

Physical Config **Desktop** Programming Attributes

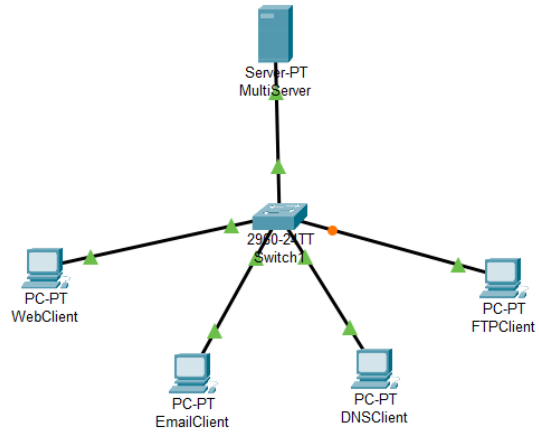
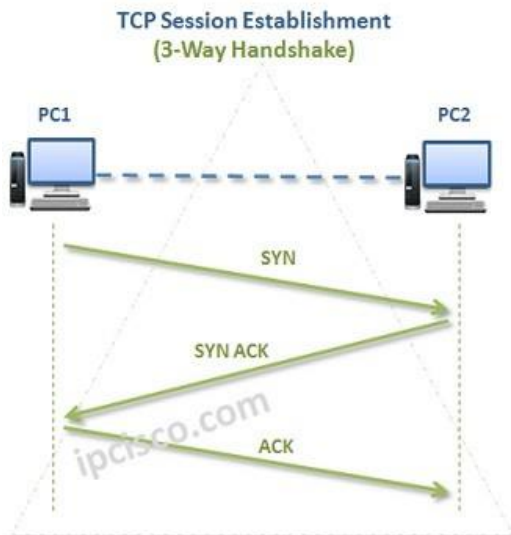
Web Browser

< > URL http://www.yahoo.com Go Stop

Welcome to yahoo.com

Computer Networks Lab task 2

Experiment 6



MultiServer

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS**
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name Type

Address

No.	Name	Type	Detail
0	www.google.com	A Record	192.168.11.5

MultiServer

Physical Config **Services** Desktop Programming Attributes

SERVICES

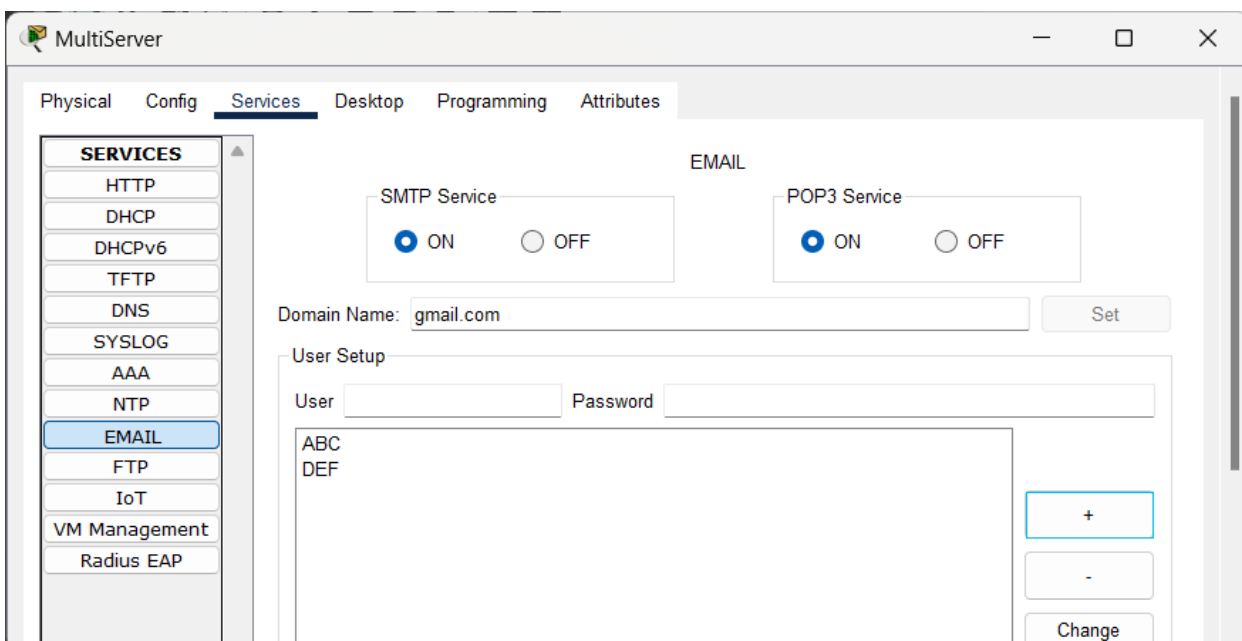
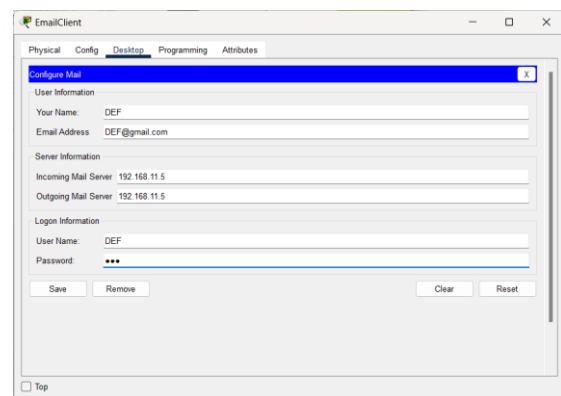
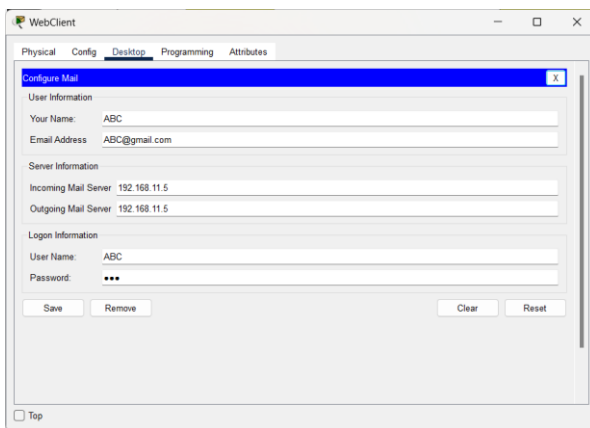
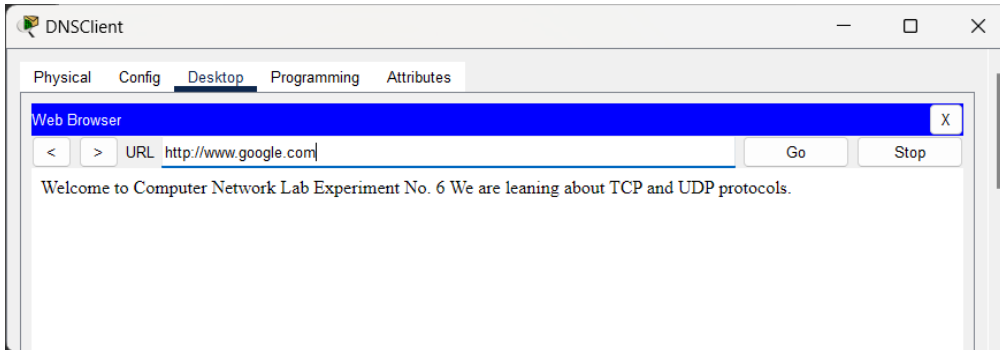
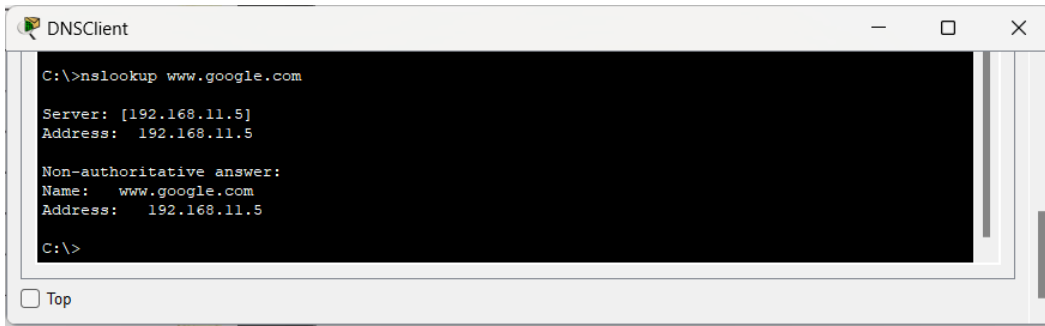
- HTTP**
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

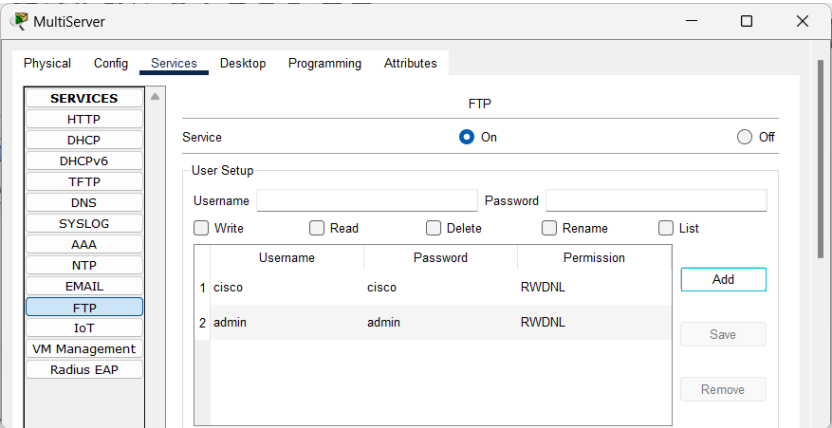
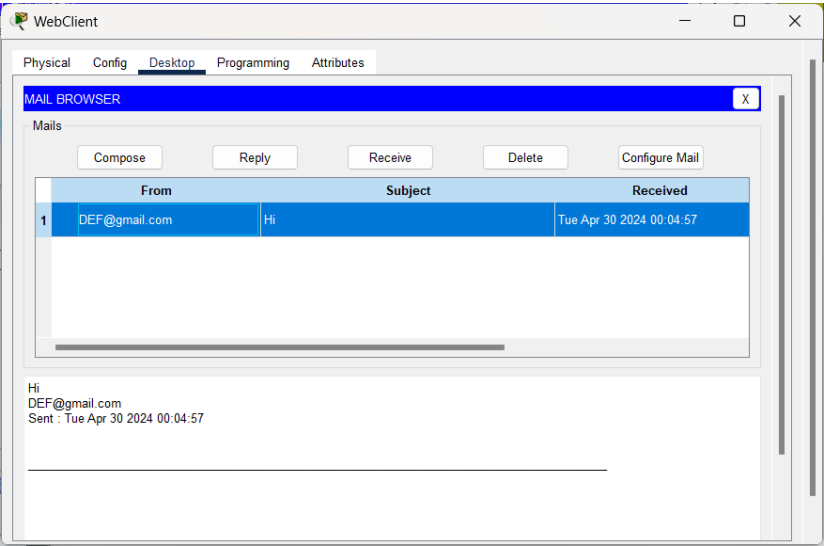
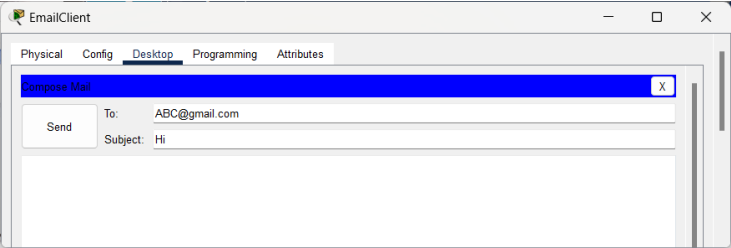
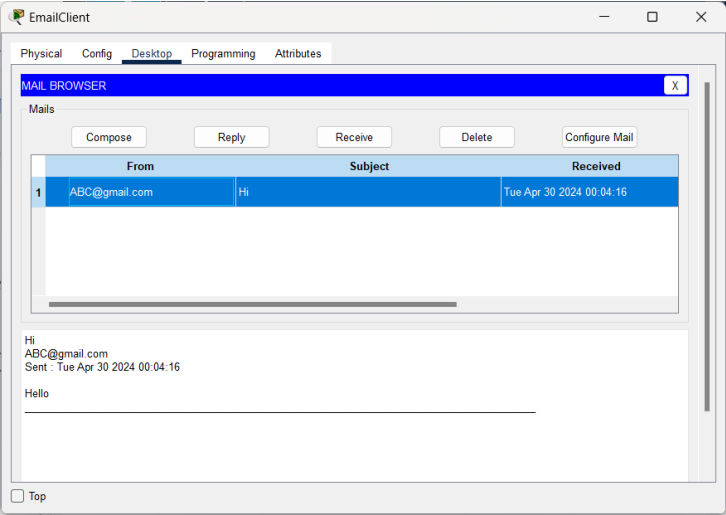
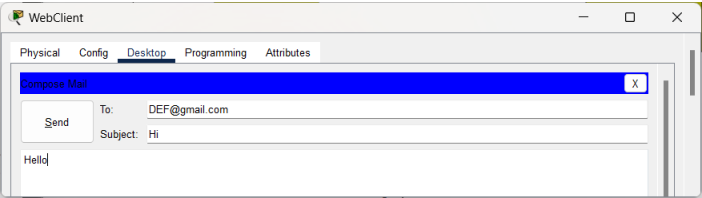
HTTP

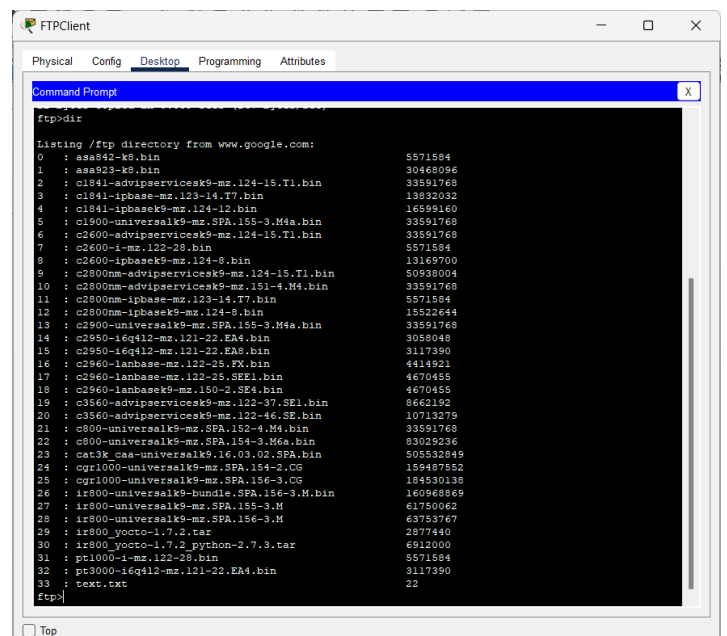
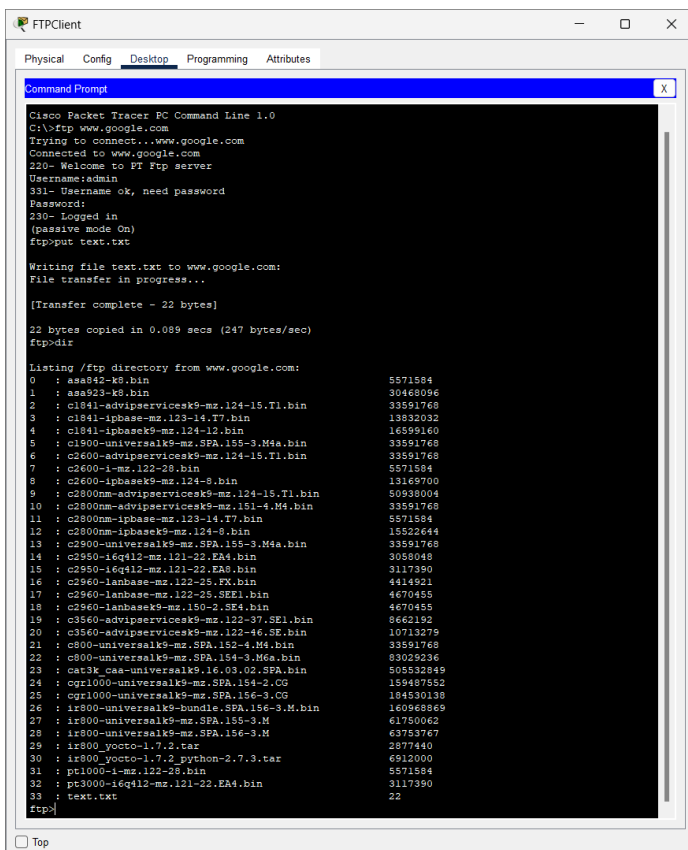
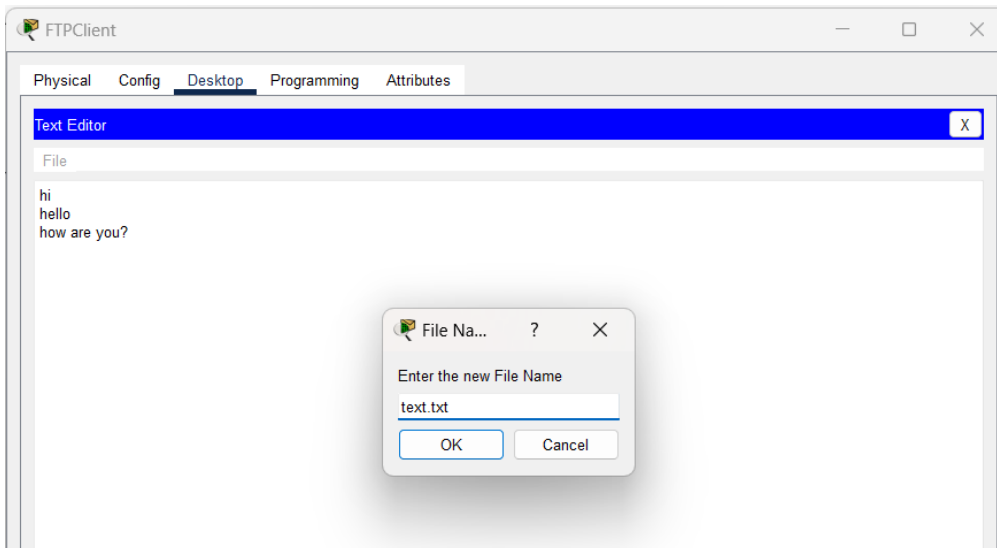
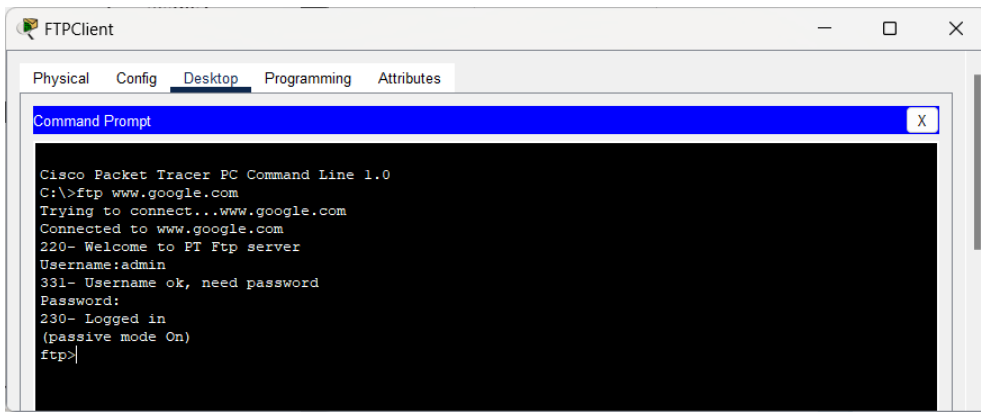
HTTP ☒ On ☐ Off HTTPS ☒ On ☐ Off

File Manager

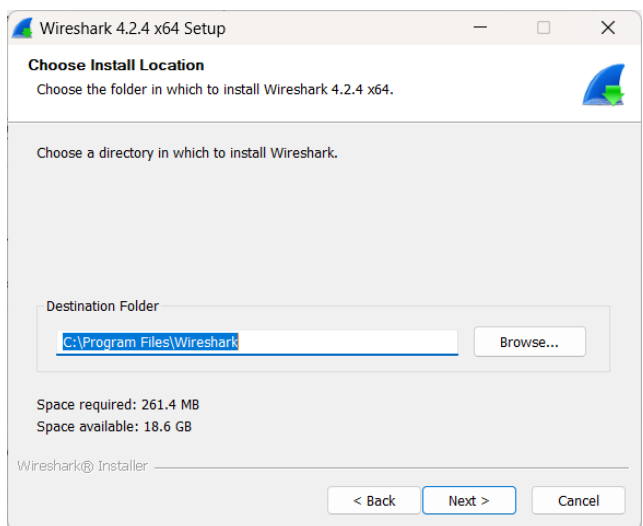
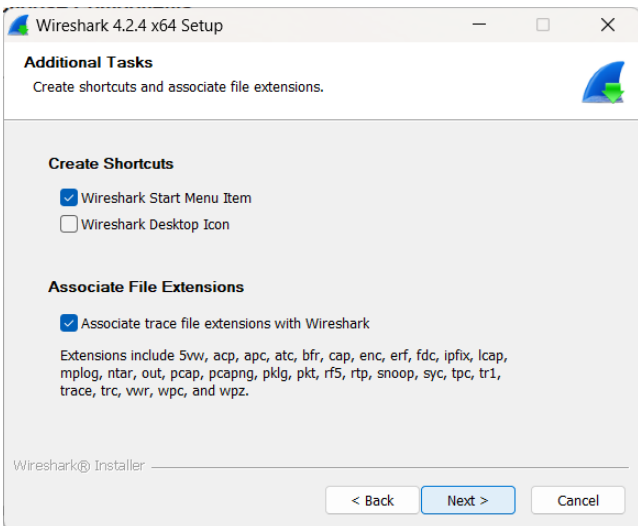
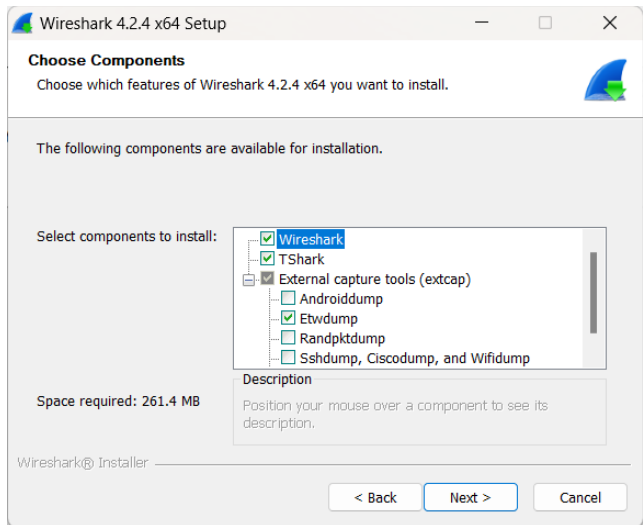
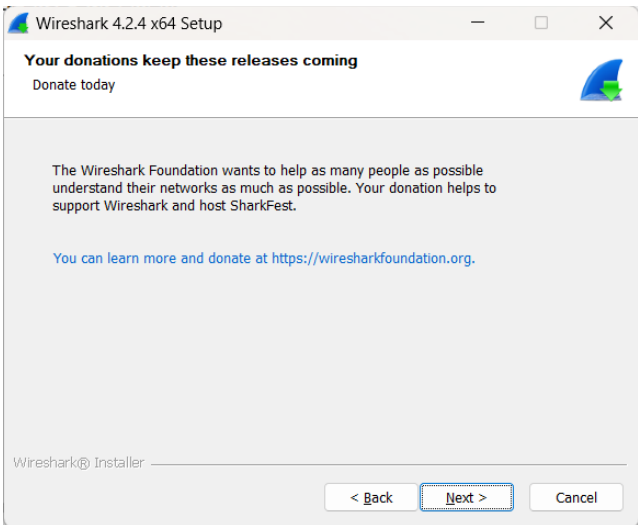
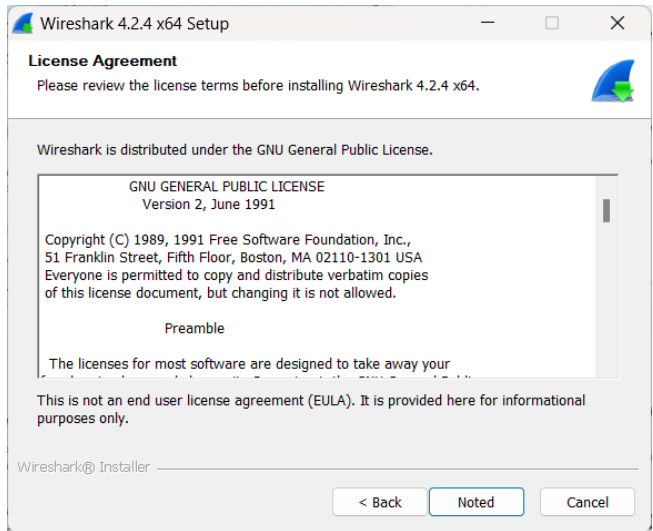
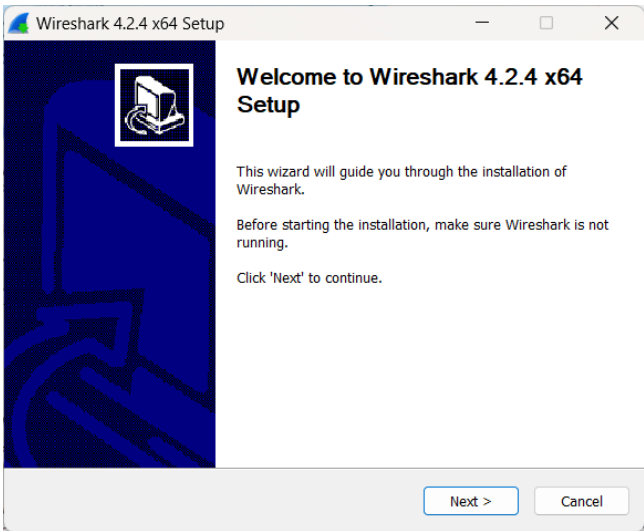
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1	copyrights.html	(edit)	(delete)
2	cscoptlogo177x111.jpg		(delete)
3	helloworld.html	(edit)	(delete)
4	image.html	(edit)	(delete)
5	index.html	(edit)	(delete)

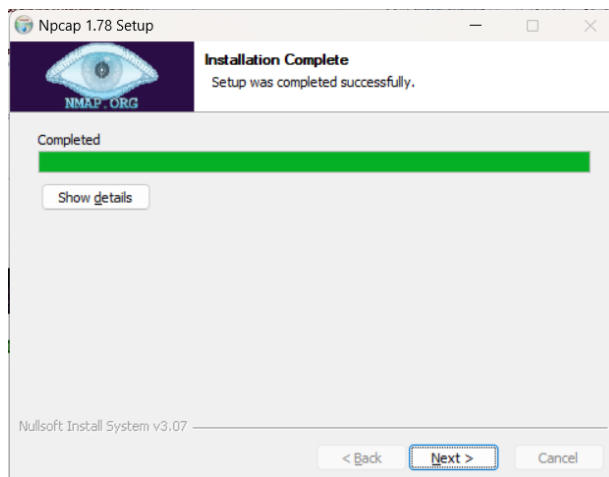
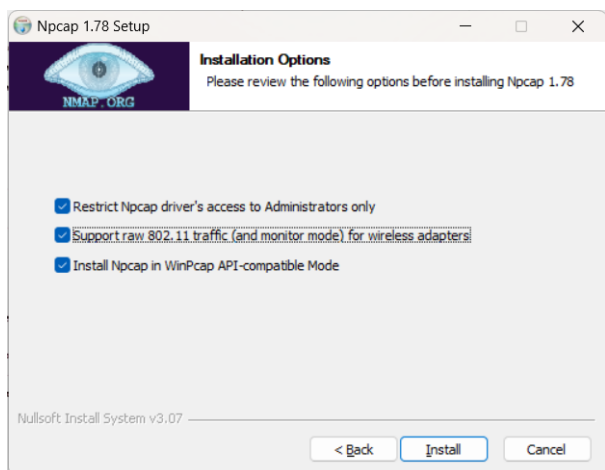
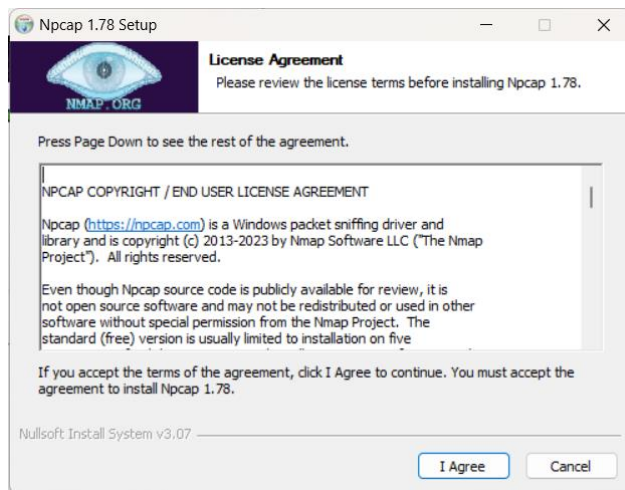
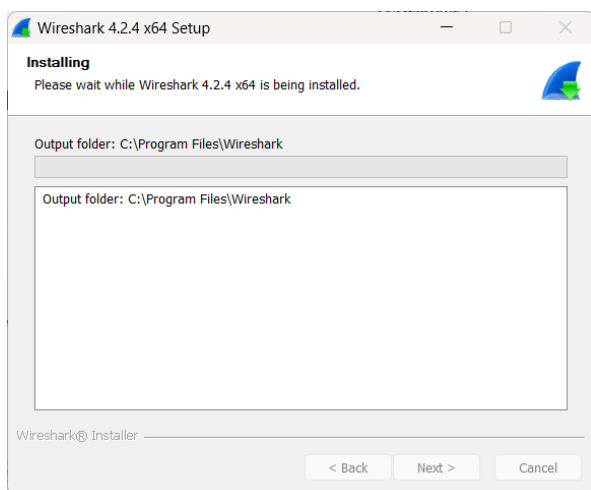
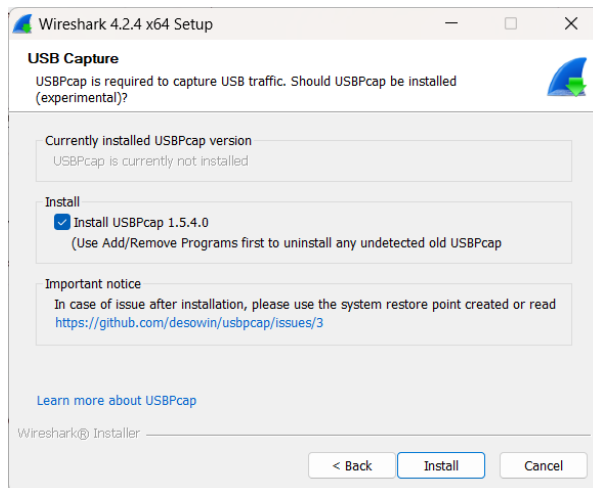
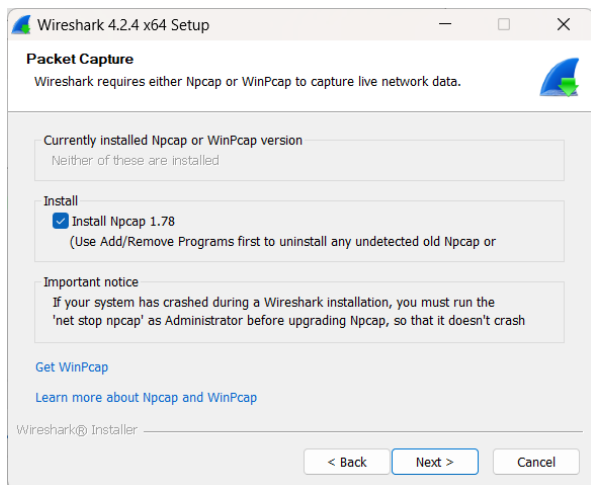


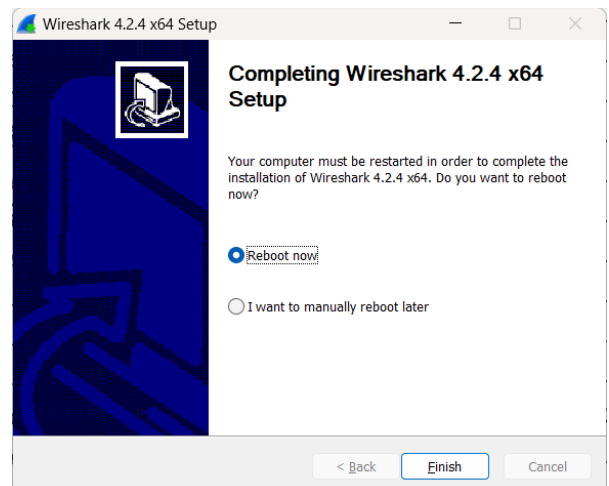
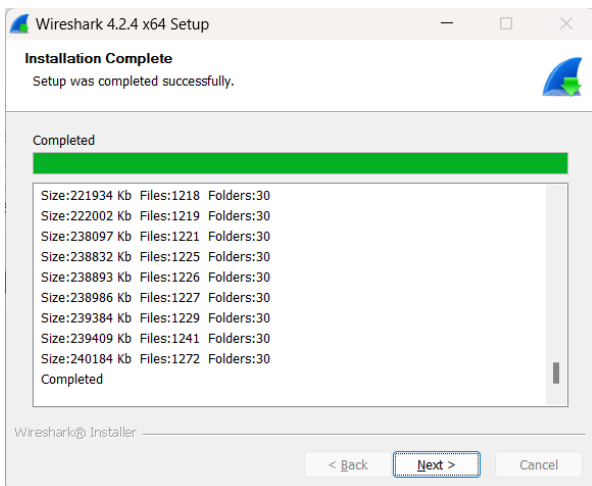
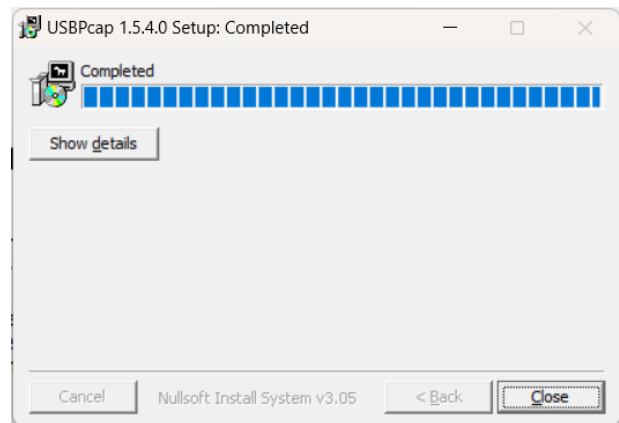
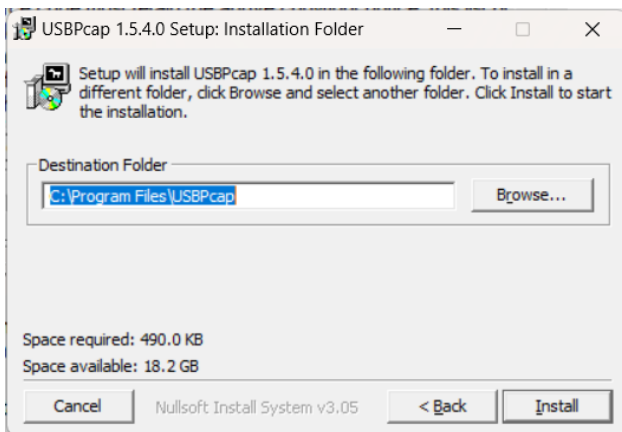
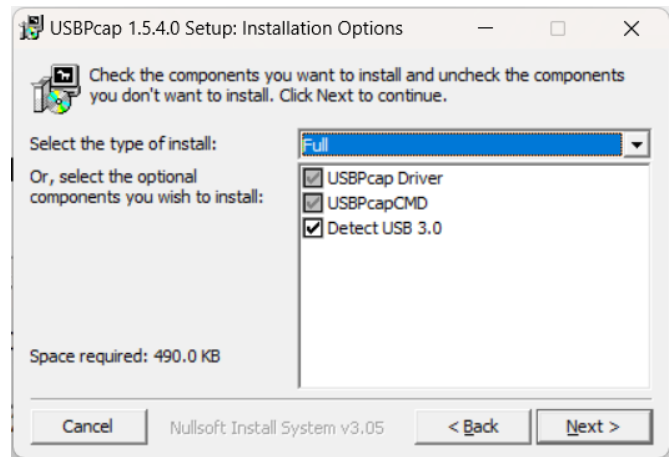
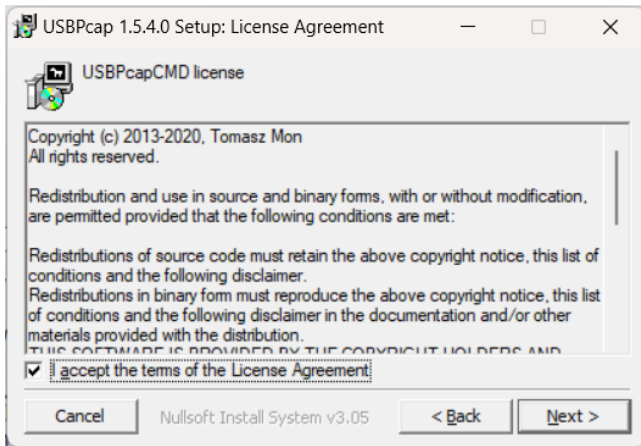
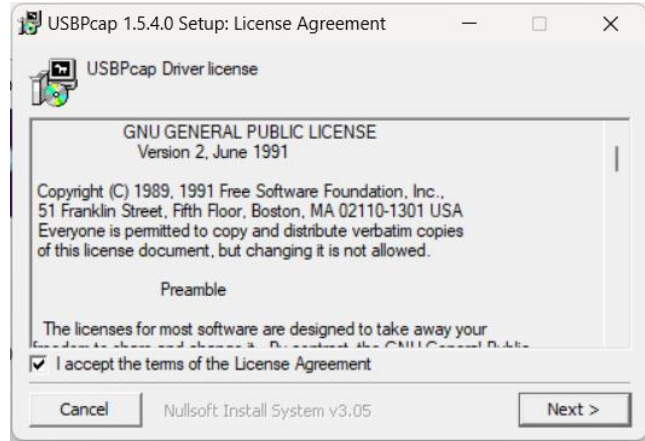
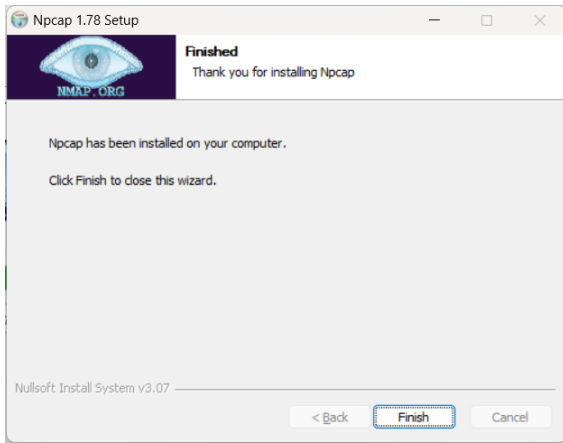




Experiment 7







Experiment 8

