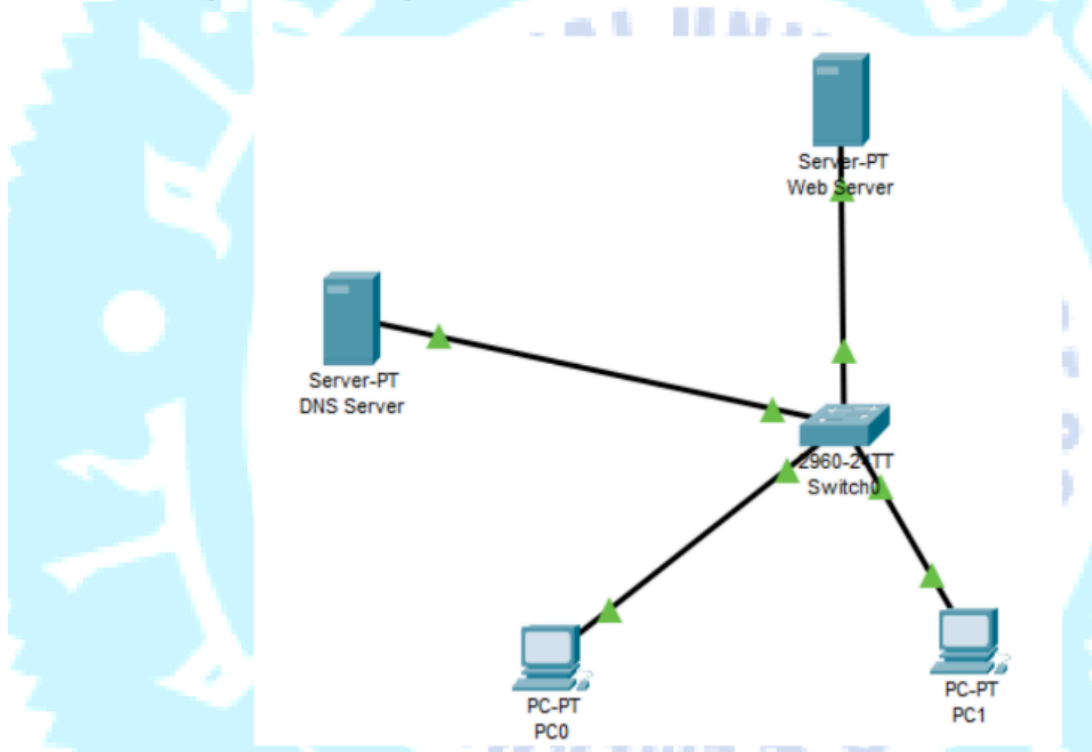


1. Create the following network with a DHCP server. Send DNS packets to your network. Attach a snapshot of each step.



DNS Server

DNS Server 23K-0842

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 192.168.1.3

IPv6 Configuration

DNS Server 23K-0842

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
CNLab4	192.168.1.1	192.168.1.2	192.168.1.10	255.255.2...	246	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168.1.0	255.255.2...	512	0.0.0.0	0.0.0.0

Configuring Web Server:

Web Server 23K-0842

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

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

Web Server 23K-0842

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.3

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

Web Server 23K-0842

Physical **Config** Services Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

FastEthernet0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00E0.F7D5.EA19

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.3

Subnet Mask 255.255.255.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address: FE80::2E0:F7FF:FED5:EA19

Web Server 23K-0842

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.kinza23k0842.com	A Record	192.168.1.3

PC0:

PC0 23K-0842

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface **FastEthernet0** ▼

IP Configuration

☒ DHCP ☐ Static

IPv4 Address

Subnet Mask

Default Gateway

DNS Server

IPv6 Configuration

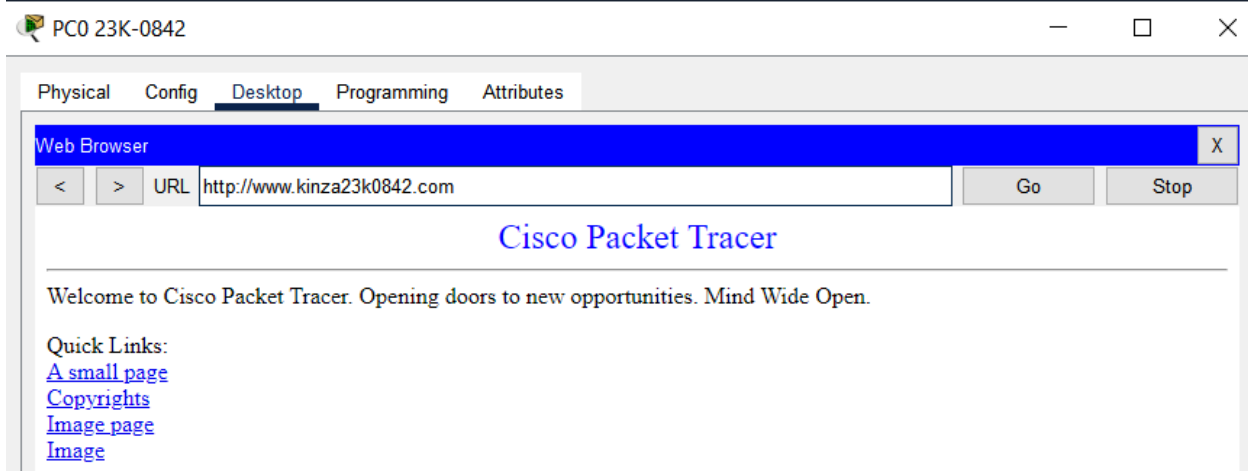
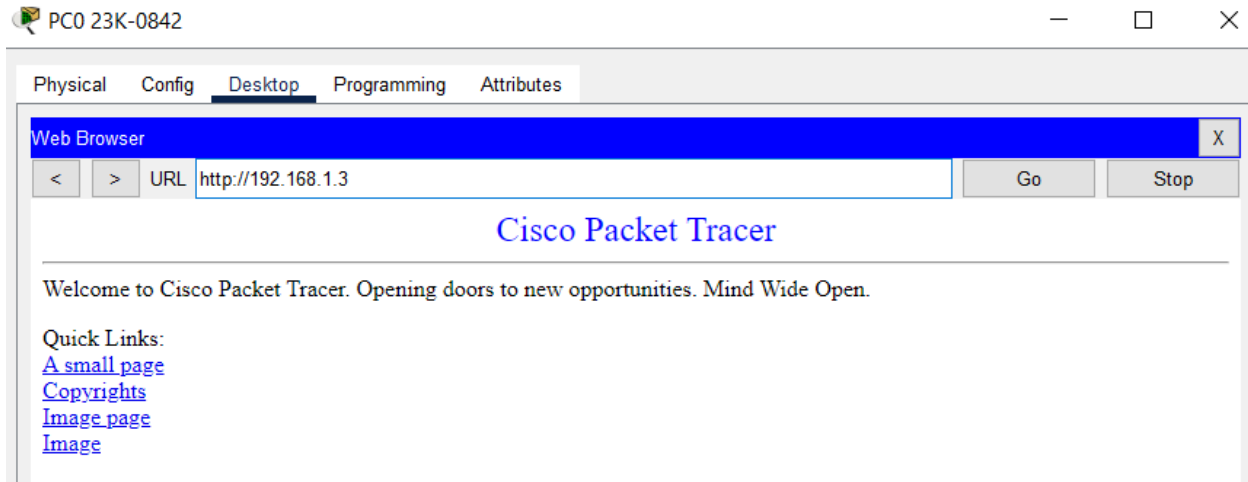
☐ Automatic ☒ Static

IPv6 Address /

Link Local Address

Default Gateway

DNS Server



```
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC1:

PC1 23K-0842

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface: FastEthernet0

IP Configuration

☒ DHCP ☐ Static

IPv4 Address: 192.168.1.4

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 192.168.1.3

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::209:7CFF:FE1E:BE5B

Default Gateway:

DNS Server:

PC1 23K-0842

Physical Config **Desktop** Programming Attributes

Web Browser X

< > URL: http://192.168.1.3 Go Stop

Cisco Packet Tracer





Welcome to Cisco Packet Tracer. Opening doors to new opportunities. Mind Wide Open.

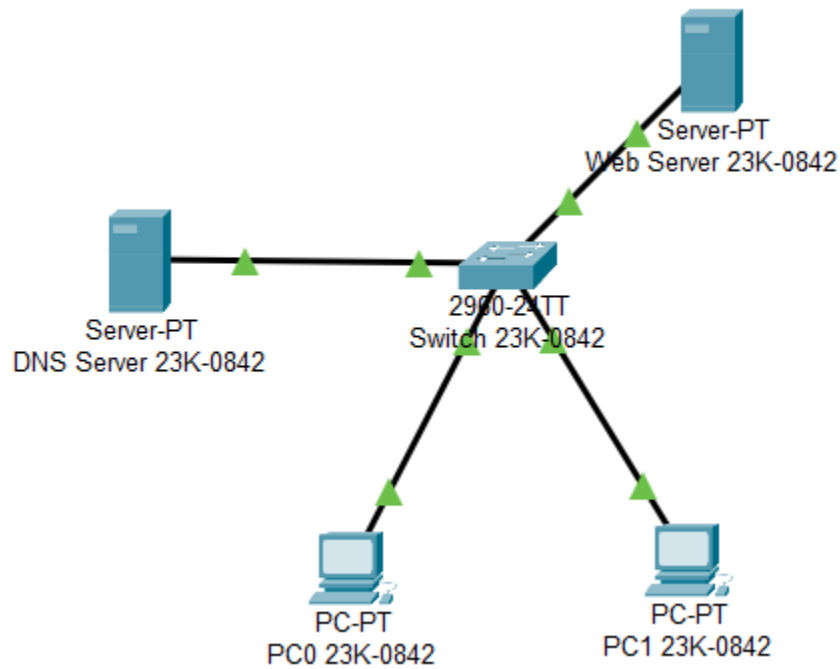
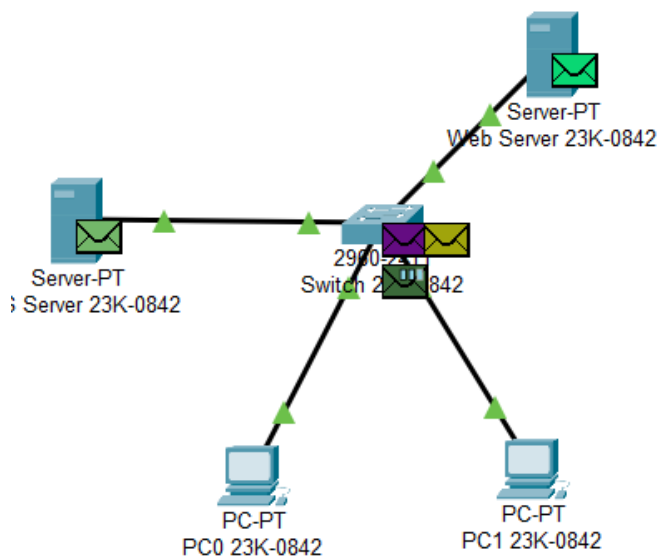
Quick Links:

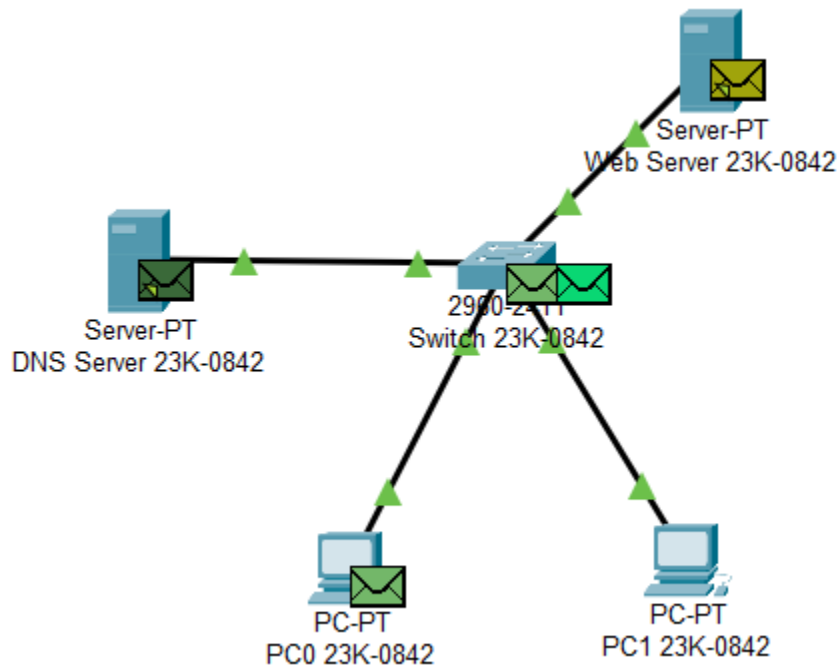
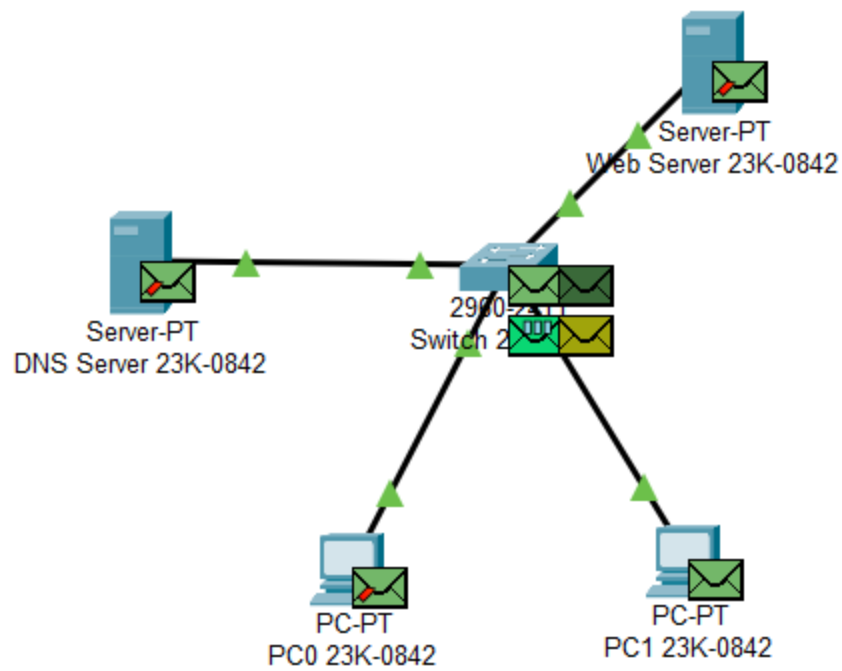
- [A small page](#)
- [Copyrights](#)
- [Image page](#)
- [Image](#)

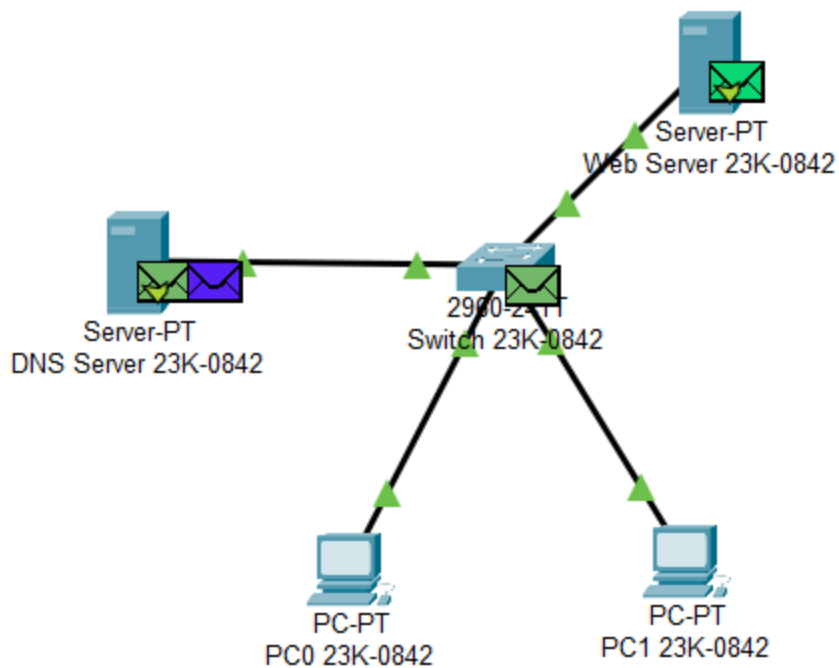
Simple PDU Usage Sending DNS packets:

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0 23K-0842	PC1 23K-0842	ICMP		0.000	N	0	(edit)	(delete)
	Successful	Web Server 23K-0842	PC0 23K-0842	ICMP		0.000	N	1	(edit)	(delete)
	Successful	Web Server 23K-0842	PC1 23K-0842	ICMP		0.000	N	2	(edit)	(delete)
	Successful	DNS Server 23K-0842	PC0 23K-0842	ICMP		0.000	N	3	(edit)	(delete)

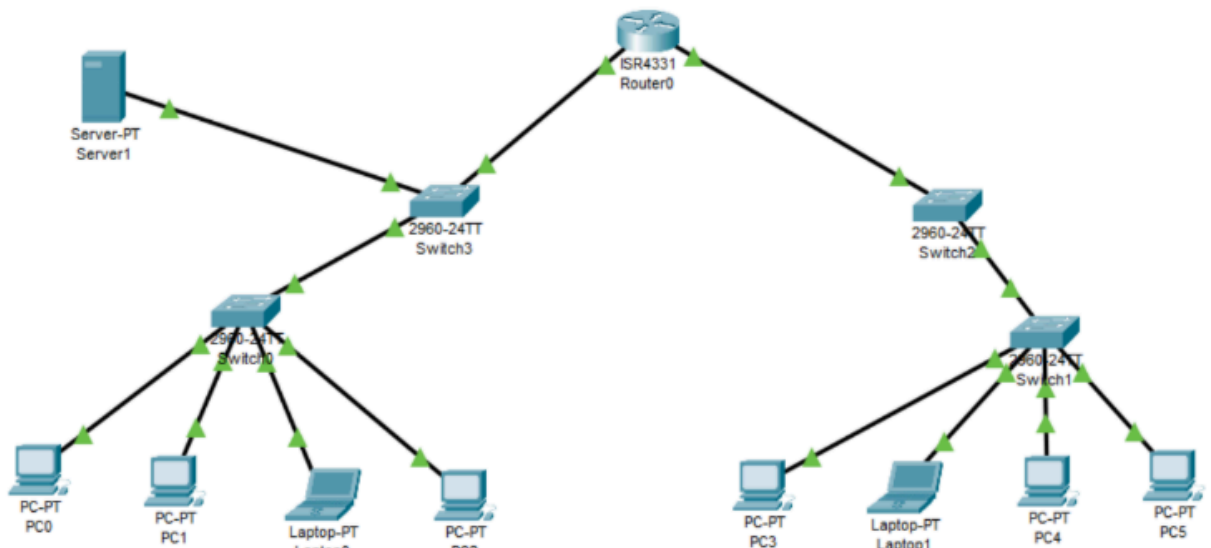
	Successful	Web Server 23K-0842	PC1 23K-0842	ICMP		0.000	N	2	(edit)	(delete)
	Successful	DNS Server 23K-0842	PC0 23K-0842	ICMP		0.000	N	3	(edit)	(delete)

REAL - TIME:**SIMULATION:**





2. Implement the given topology. Add some web servers to your network. Implement DNS & add records of your web servers. Attach a snapshot of each step.



Server0 23k-0842

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::20D:BDFE:FED3:6869

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Server0 23k-0842

Physical Config **Services** Desktop Programming Attributes

SERVICES

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

HTTP

☒ On ☐ Off

HTTPS

☒ On ☐ Off

File Manager

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

Server0 23k-0842

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.server123k0842.com	A Record	192.168.1.2

Router0 23k-0842

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- SWITCHING**
- VLAN Database
- INTERFACE**
- GigabitEthernet0/0/0
- GigabitEthernet0/0/1
- GigabitEthernet0/0/2

GigabitEthernet0/0/0

Port Status ☒ On

Bandwidth ☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

IP Configuration

IPv4 Address

Subnet Mask

Tx Ring Limit

Router0 23k-0842

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- SWITCHING**
- VLAN Database
- INTERFACE**
- GigabitEthernet0/0/0
- GigabitEthernet0/0/1**
- GigabitEthernet0/0/2

GigabitEthernet0/0/1

Port Status ☒ On

Bandwidth ☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

IP Configuration

IPv4 Address

Subnet Mask

Tx Ring Limit

Router0 23k-0842

Physical Config CLI Attributes

IOS Command Line Interface

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up
ip address 192.168.1.1 255.255.255.0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1, changed state to up
```

PC0 23k-0842

Physical Config Desktop Programming Attributes

IP Configuration

X

Interface FastEthernet0

IP Configuration

☐ DHCP☒ Static

IPv4 Address

192.168.1.110

Subnet Mask

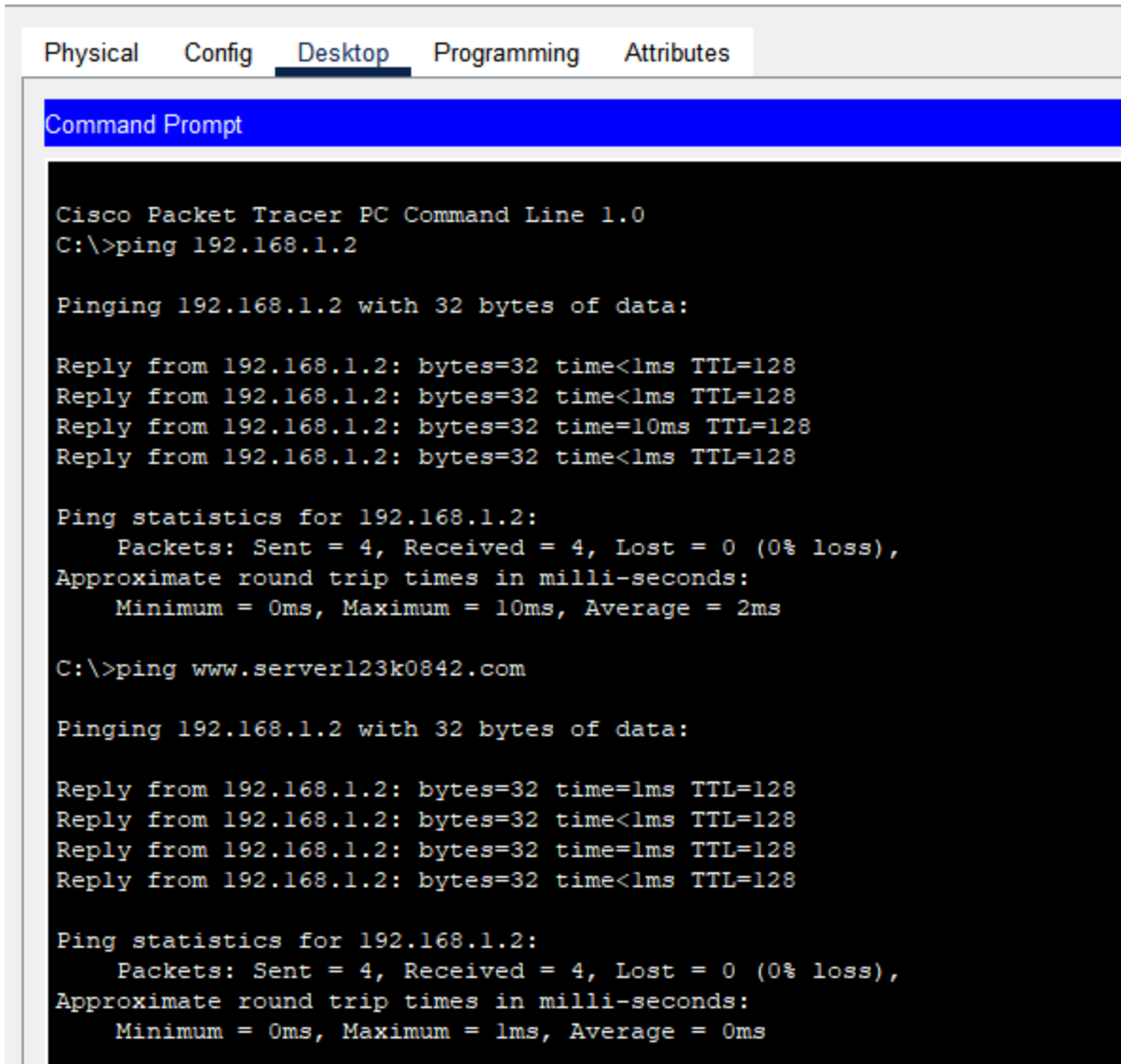
255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.2

 PC0 23k-0842

The image shows the Cisco Packet Tracer Desktop tab interface. At the top, there are five tabs: Physical, Config, Desktop (selected), Programming, and Attributes. Below the tabs is a blue header bar labeled "Command Prompt". The main area is a black terminal window with white text showing the output of two ping commands. The first command is "ping 192.168.1.2", which shows four successful replies with varying times and TTL values, followed by statistics indicating 0% loss and an average round trip time of 2ms. The second command is "ping www.server123k0842.com", which also shows four successful replies, followed by statistics indicating 0% loss and an average round trip time of 0ms.

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=10ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\>ping www.server123k0842.com

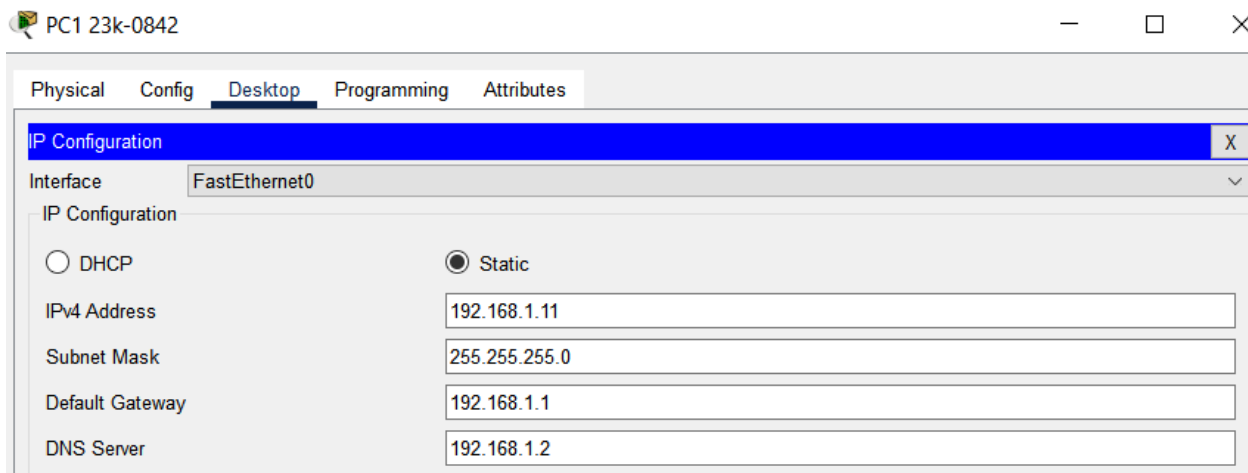
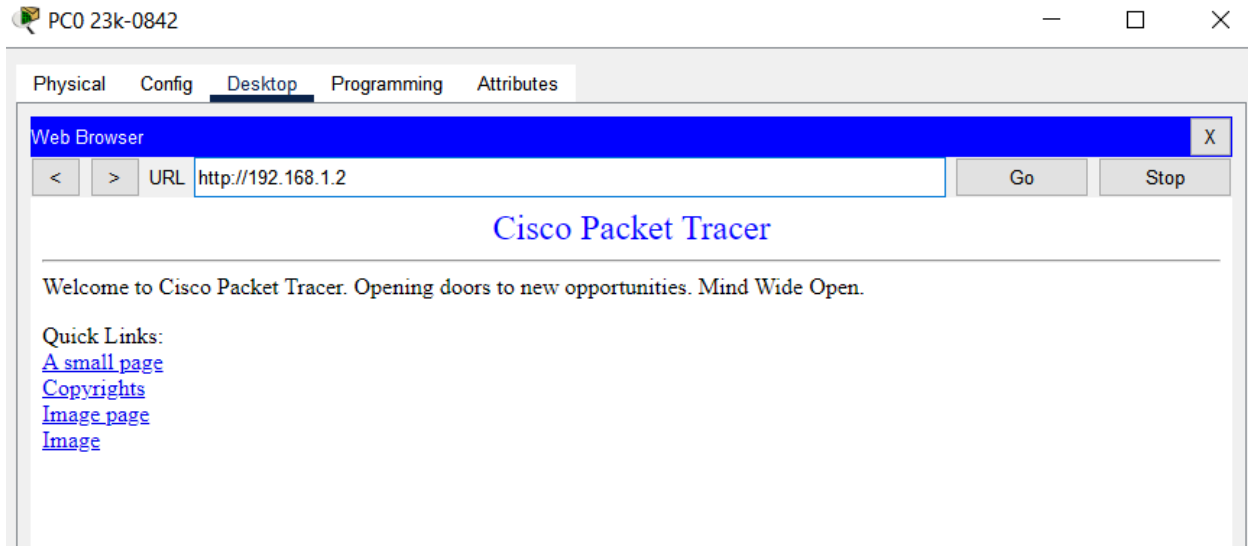
Pinging 192.168.1.2 with 32 bytes of data:

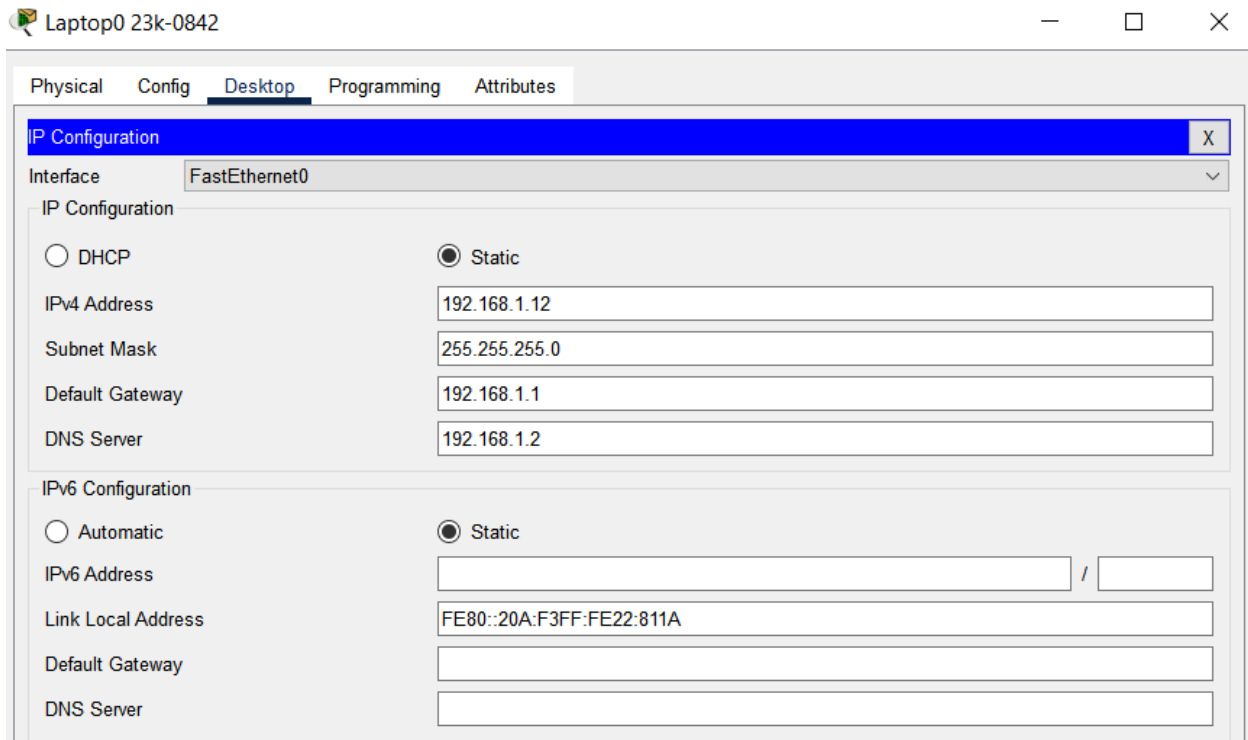
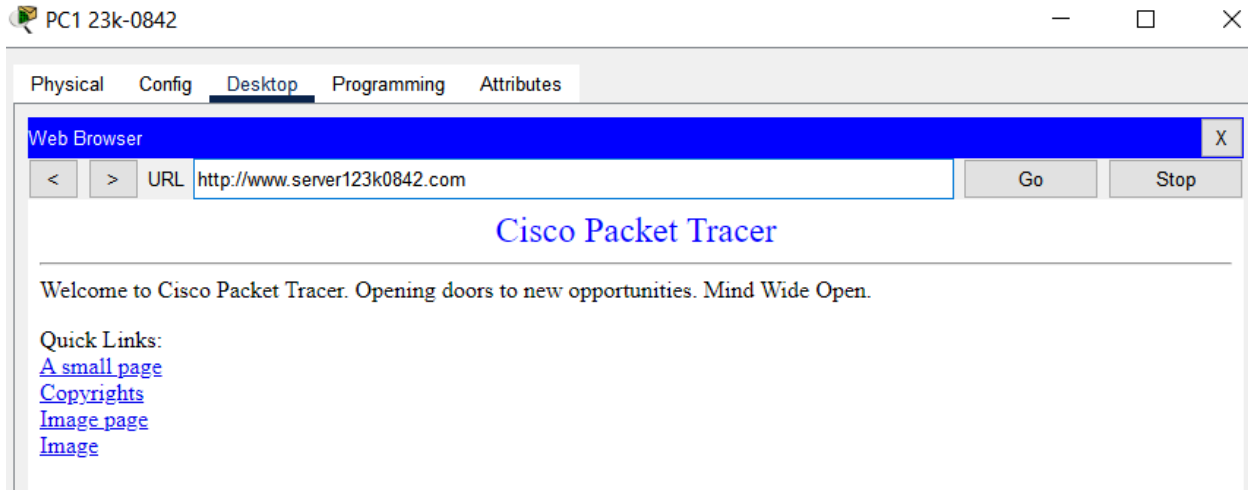
Reply from 192.168.1.2: bytes=32 time=1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

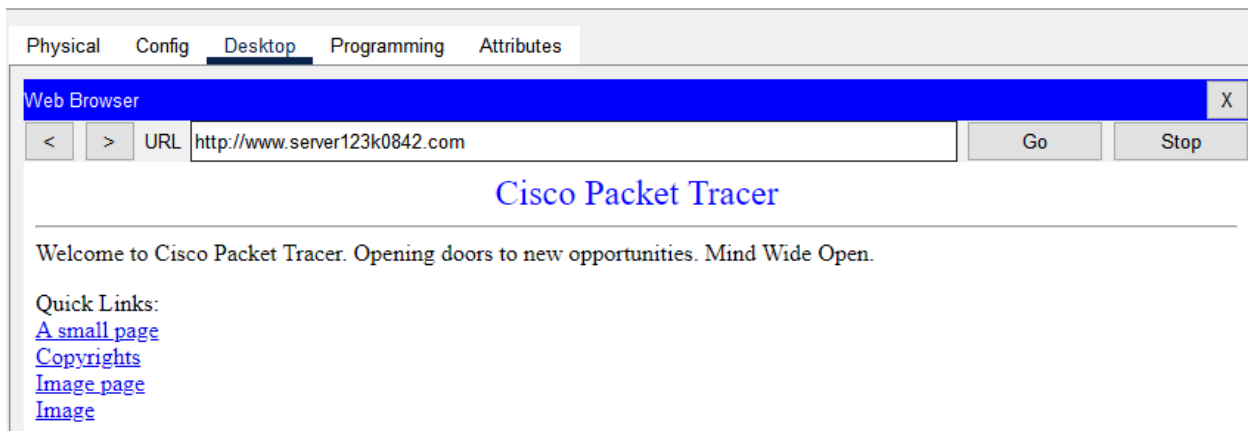
Ping www.server123k0842.com gives answer means that DNS server is able to resolve the hostname to IP address 192.168.1.2

The DNS server is correctly resolving the hostname www.server123k0842.com → 192.168.1.2.

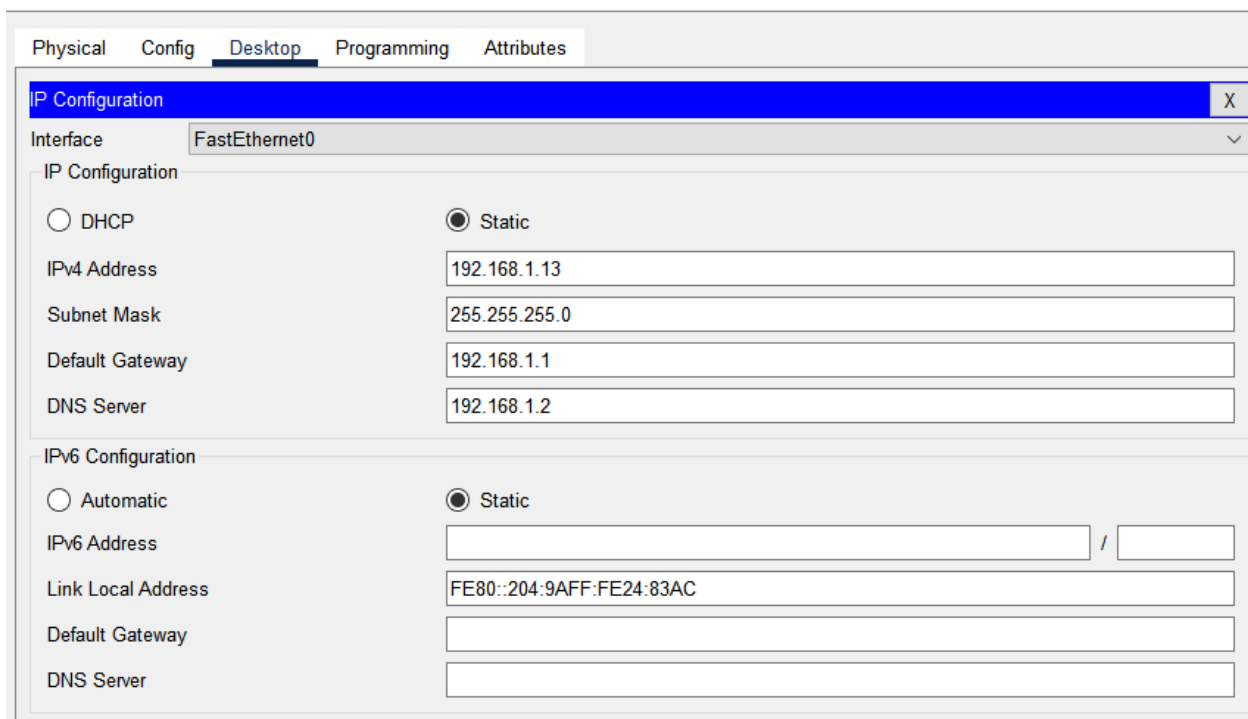


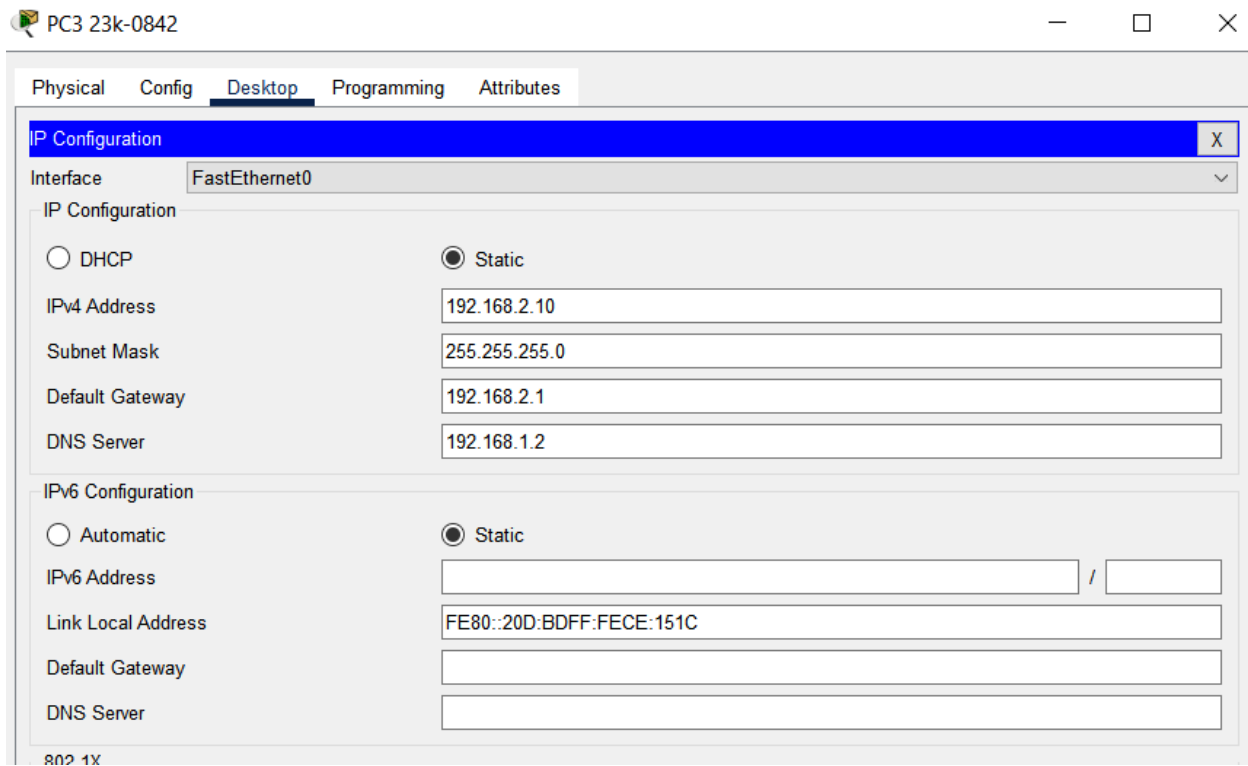
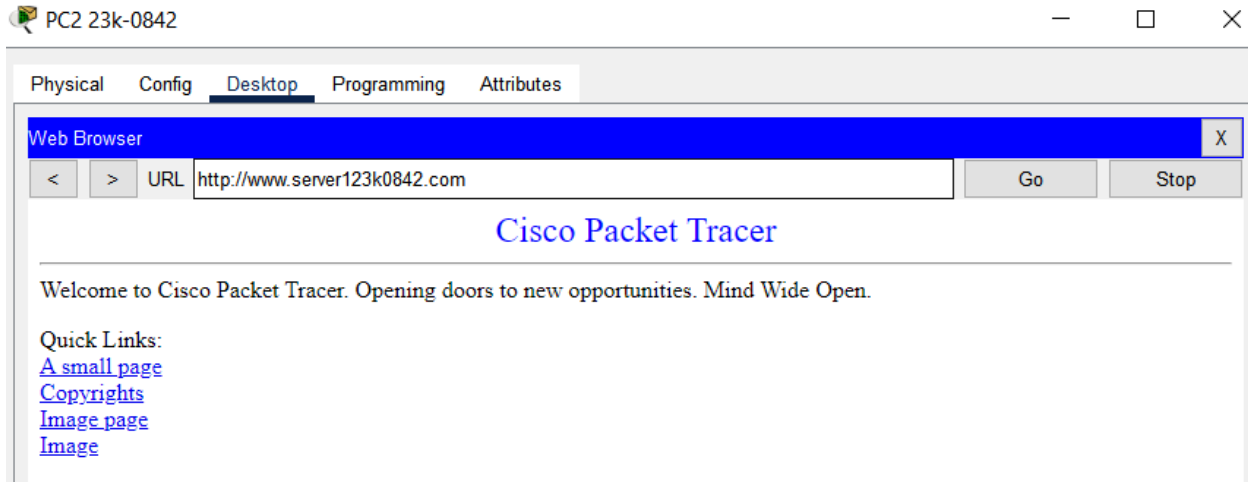


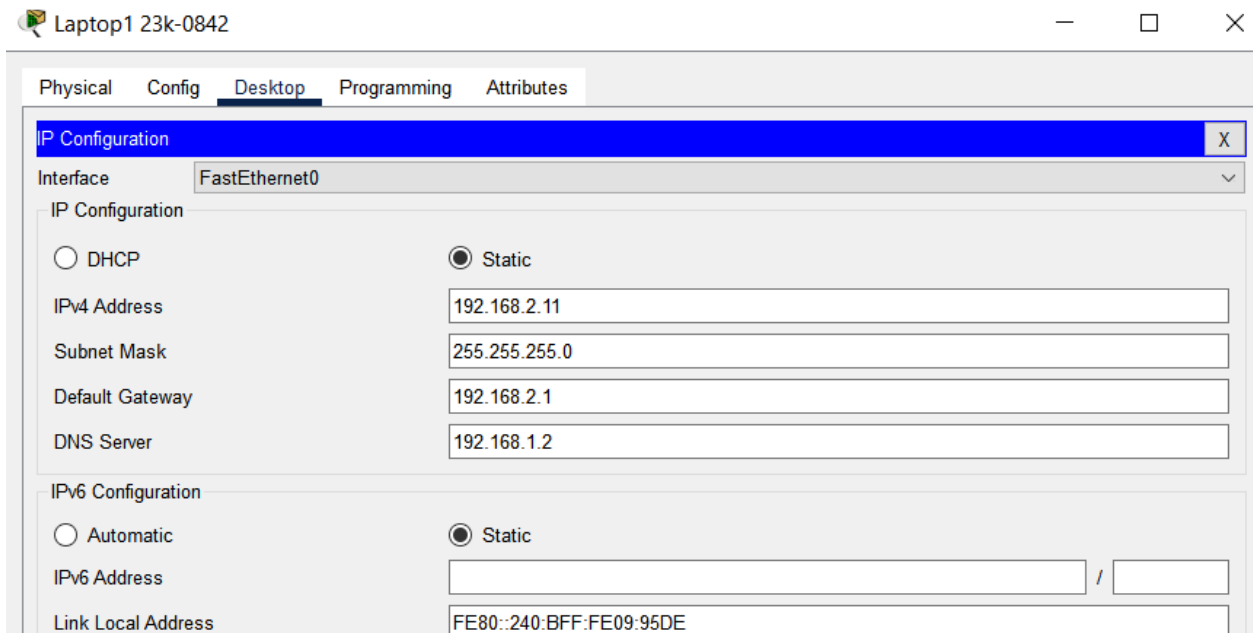
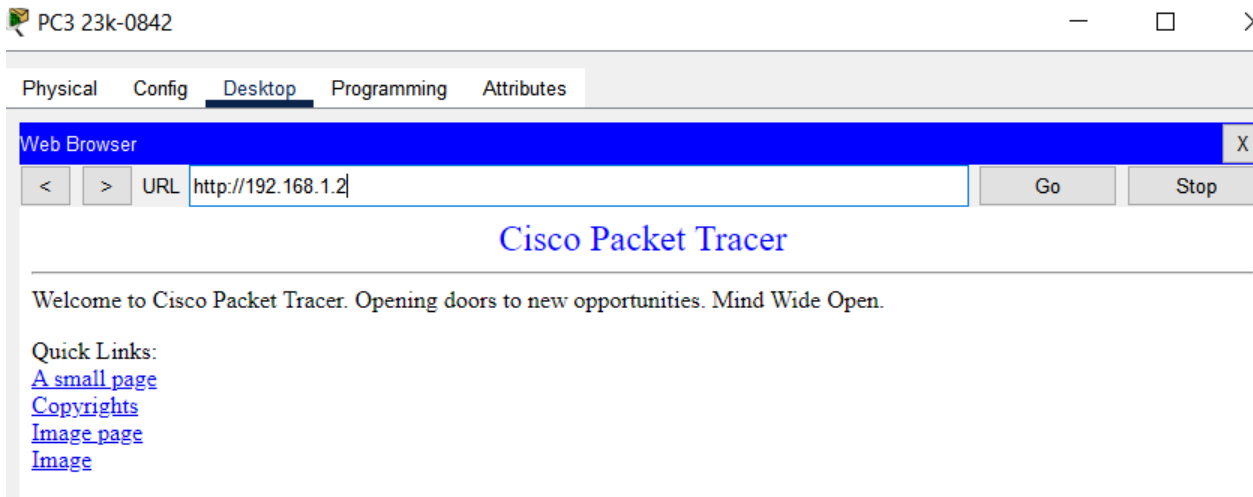
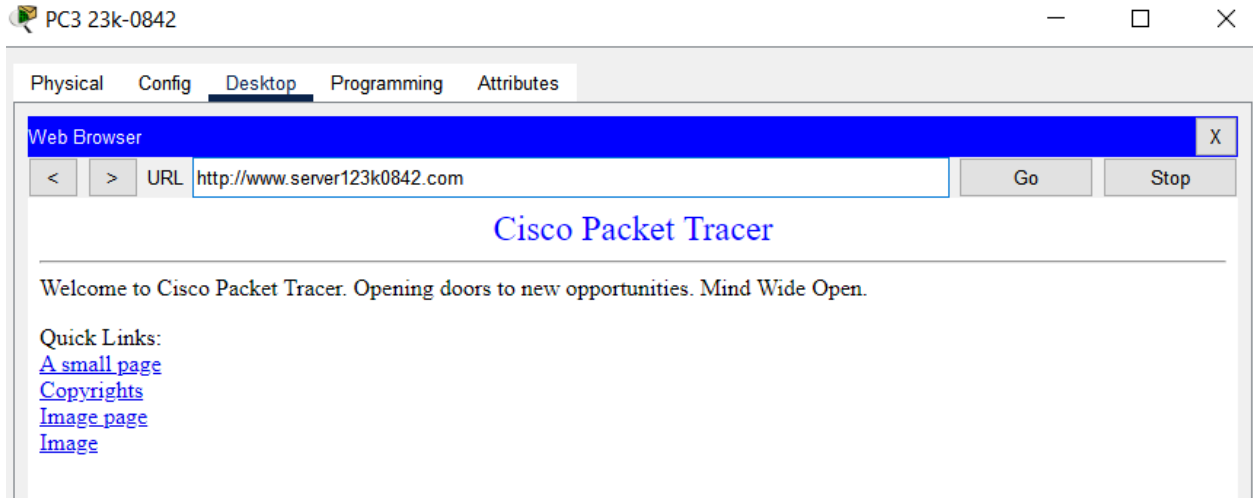
Laptop0 23k-0842

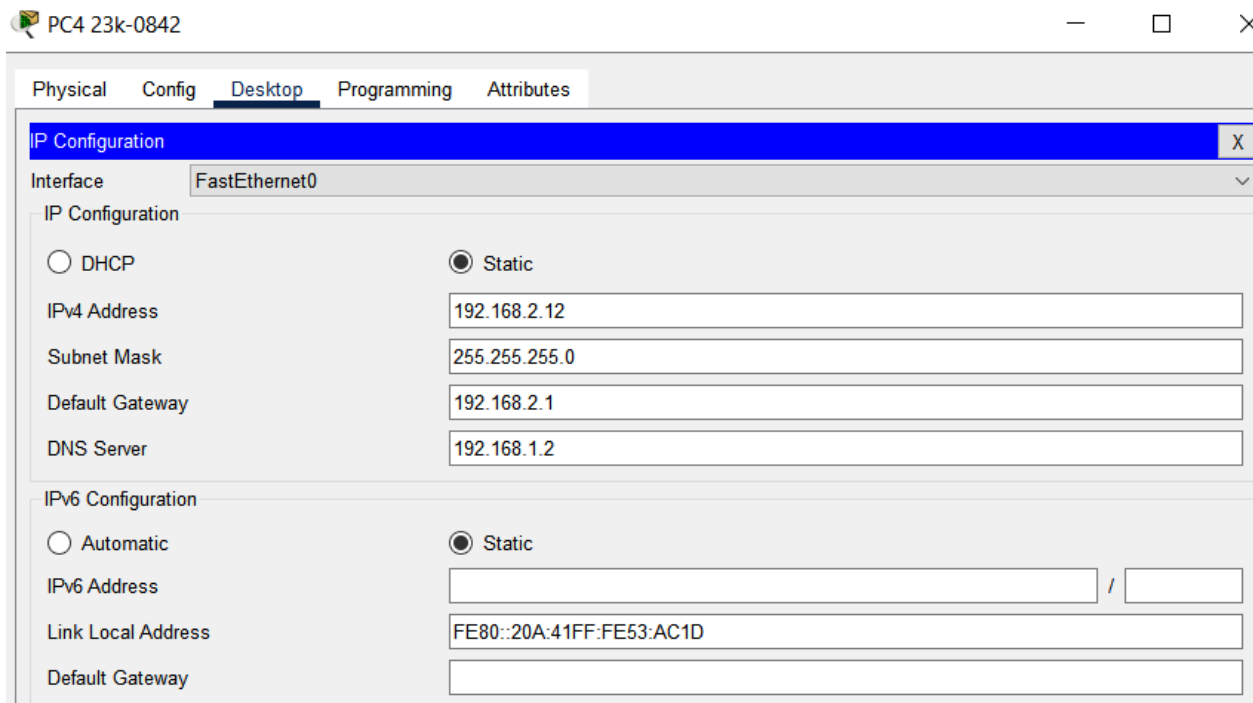
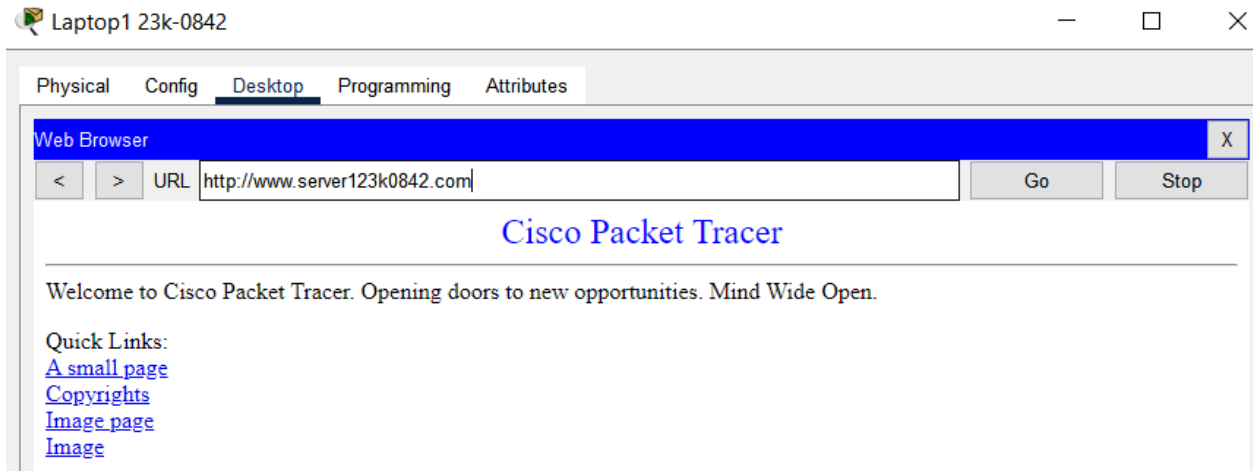


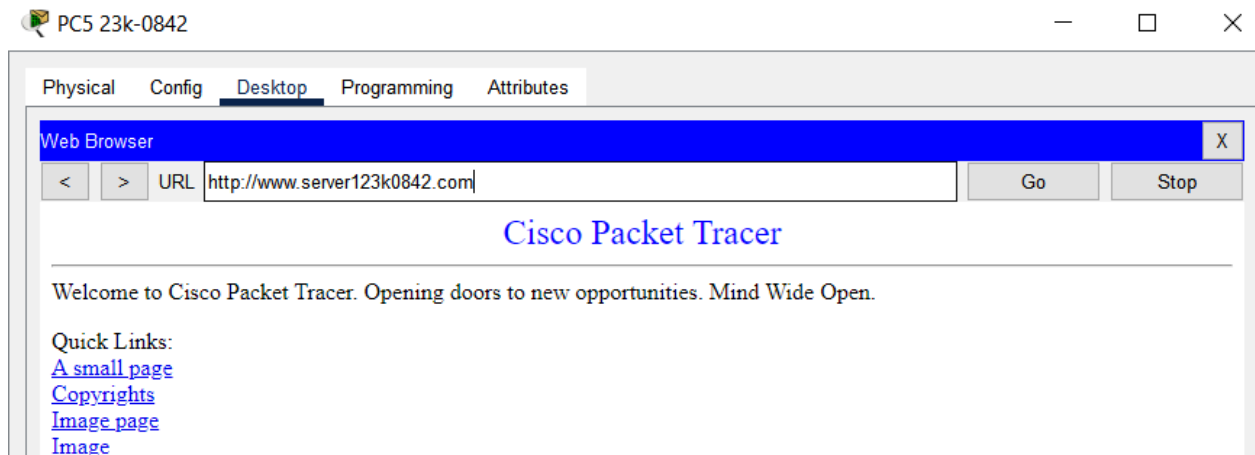
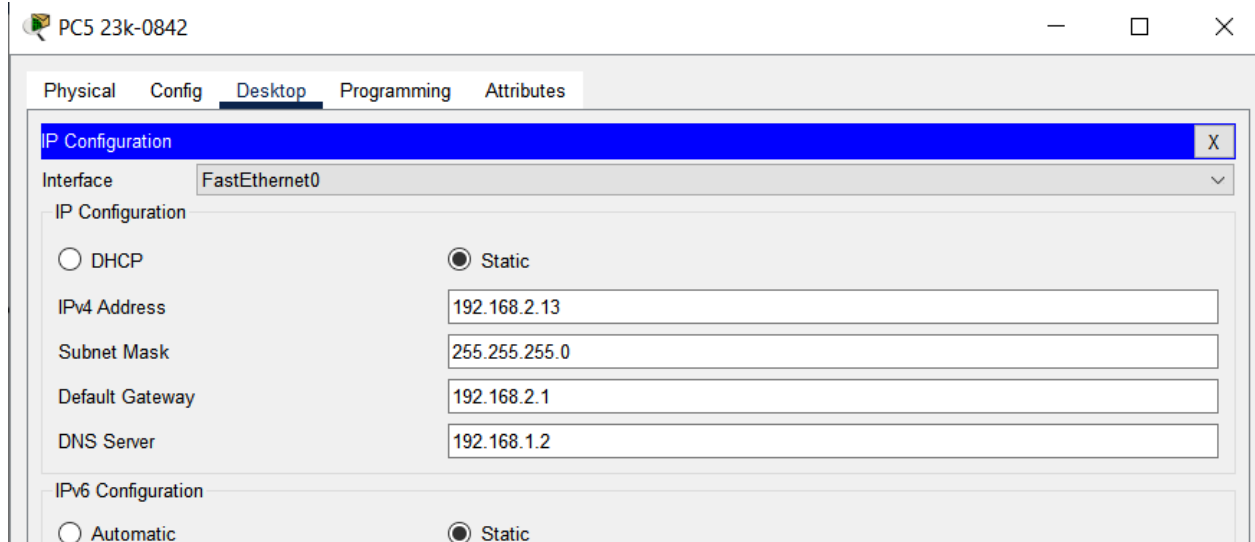
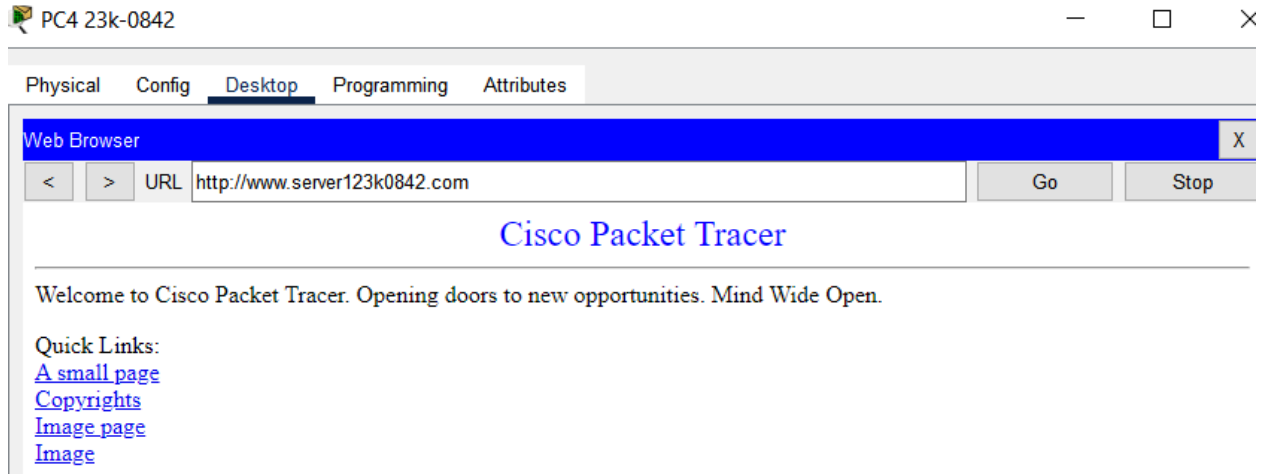
PC2 23k-0842

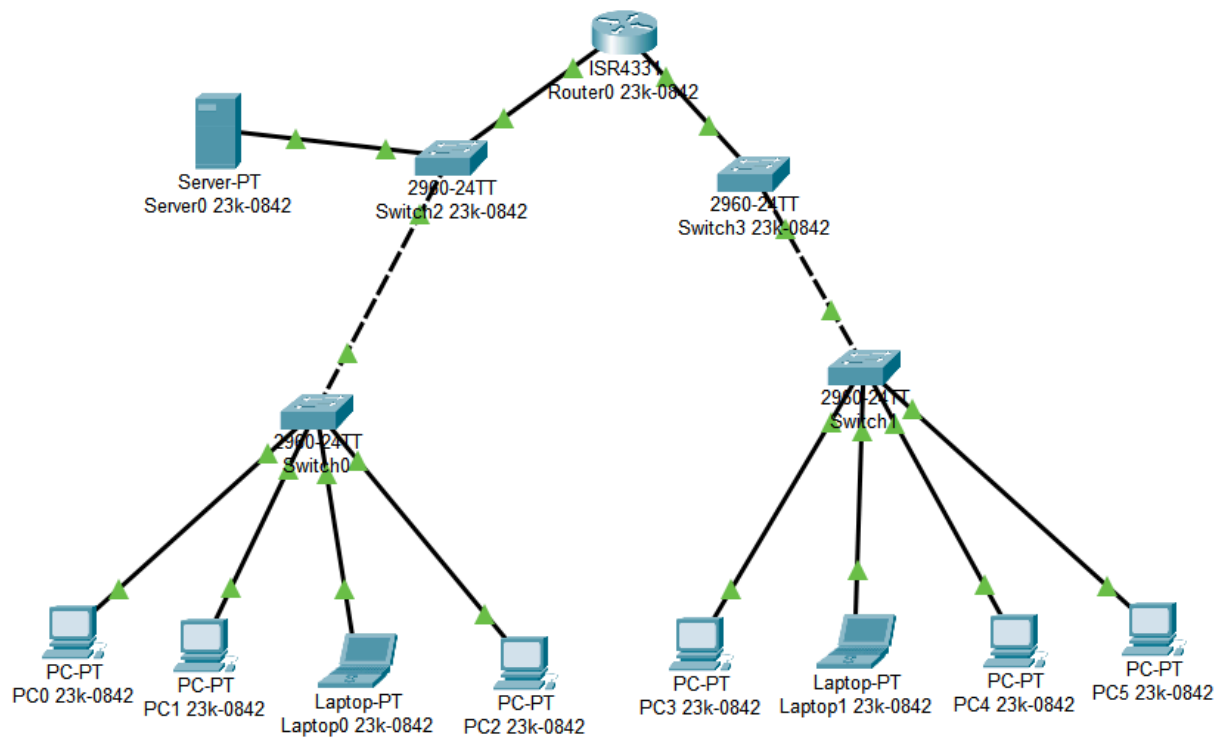










REAL TIME:

Simulation Panel

Event List

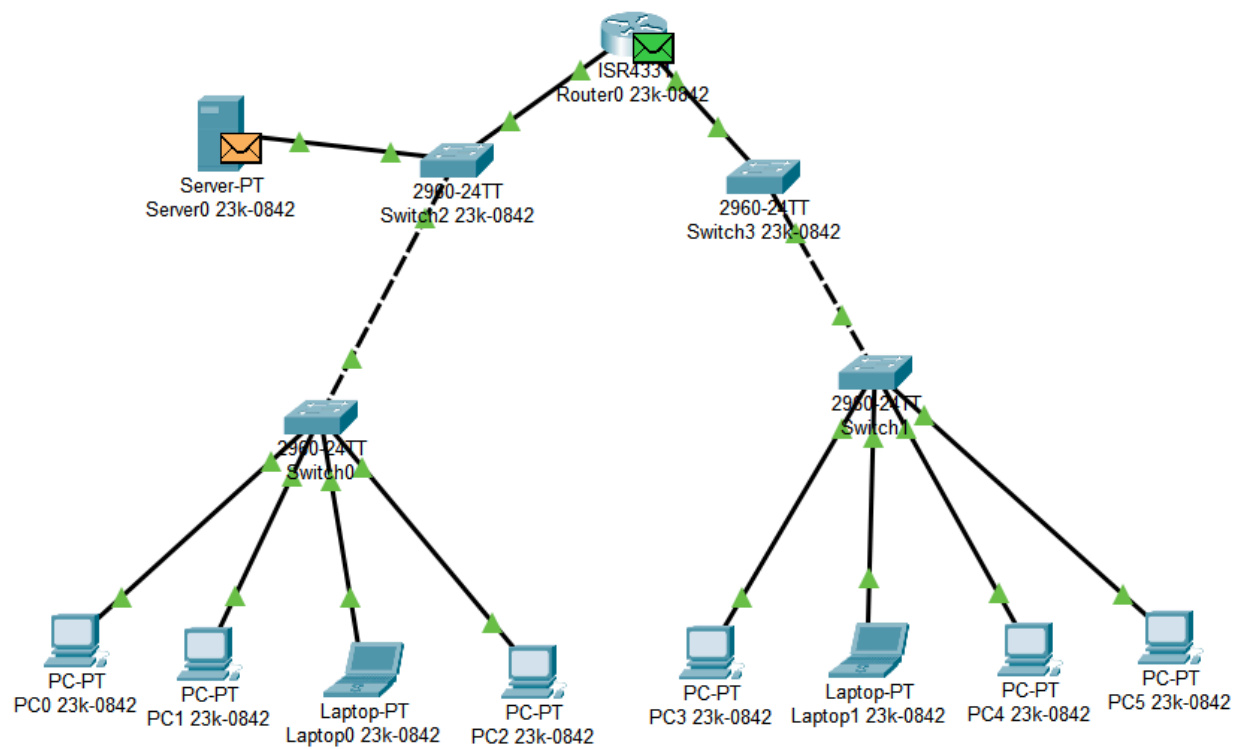
Vis.	Time(sec)	Last Device
	0.000	--
	0.000	--
	0.001	Server0 23k-0842
	0.001	Router0 23k-0842
	0.002	Switch2 23k-0842
	0.002	Switch3 23k-0842
	0.003	Switch0
	0.003	Switch1
	0.004	PC0 23k-0842
	0.004	PC3 23k-0842
	0.005	Switch0
	0.005	Switch1
	0.006	Switch2 23k-0842
	0.006	Switch3 23k-0842

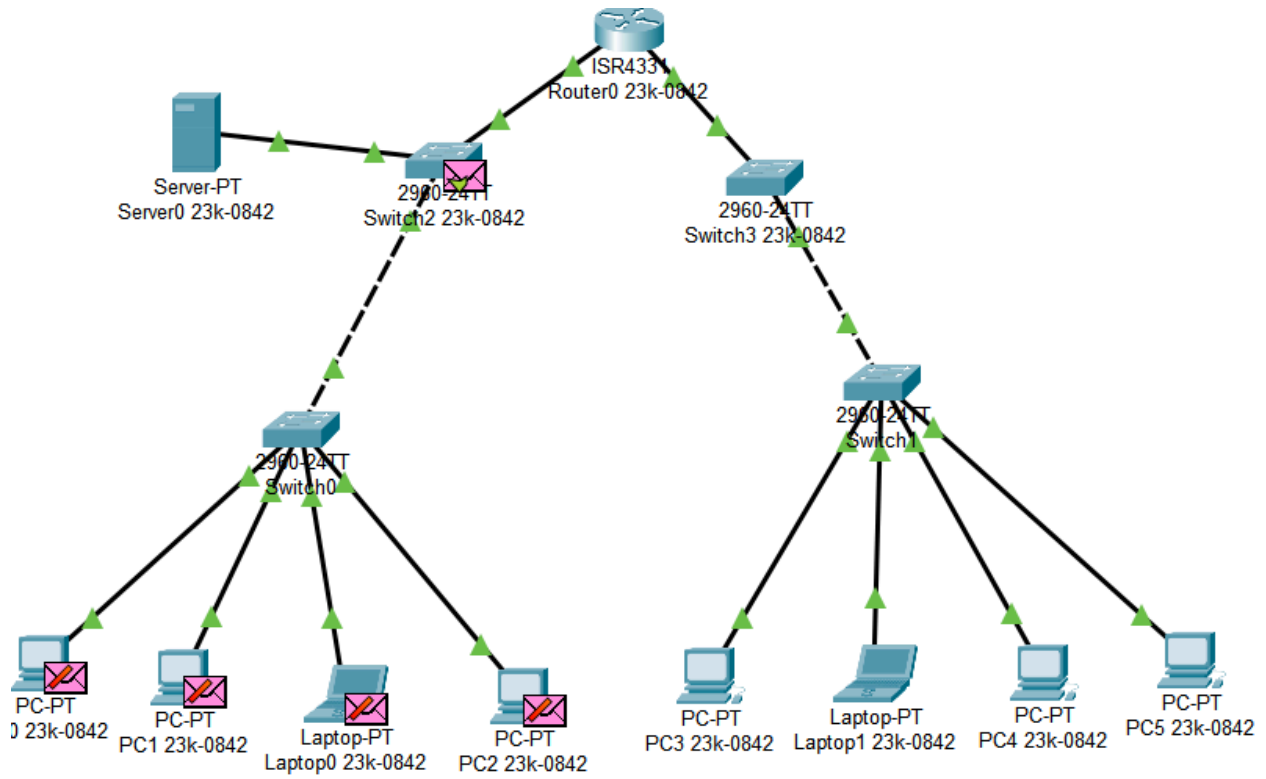
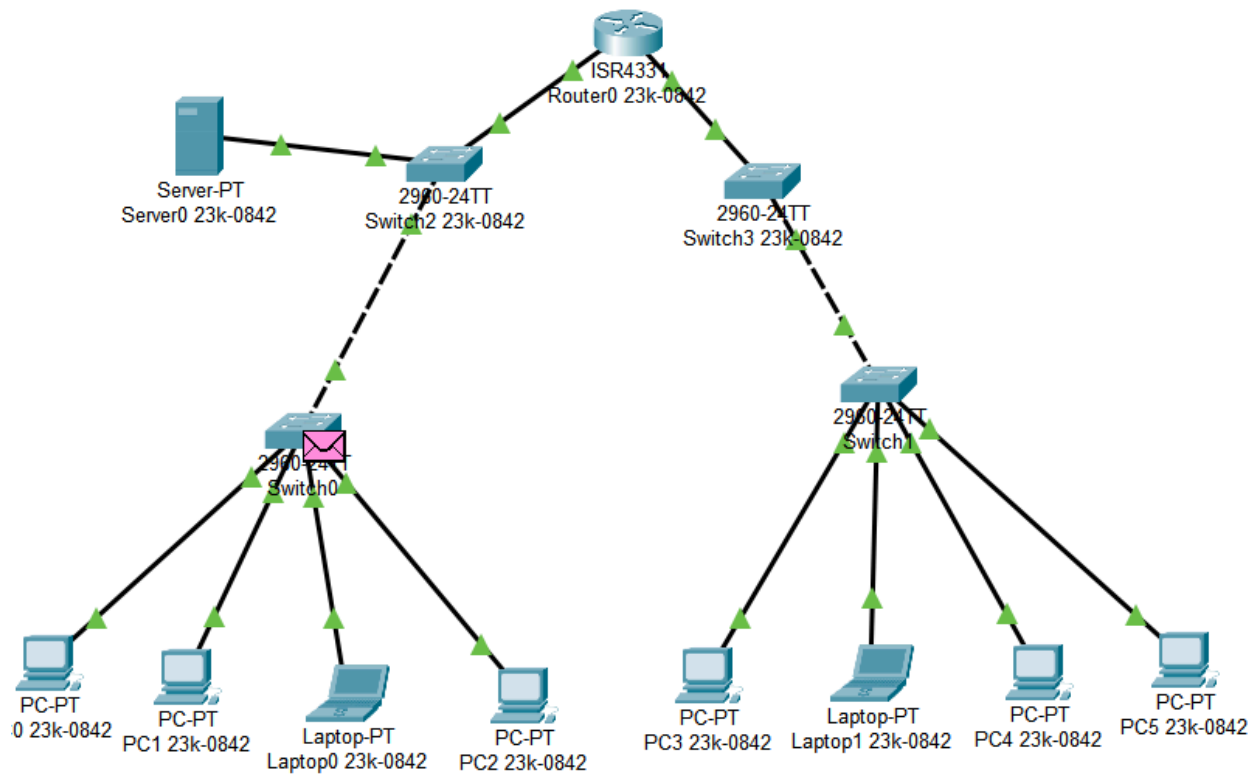
Reset Simulation ☒ Constant Delay Captured to: 0.006 s

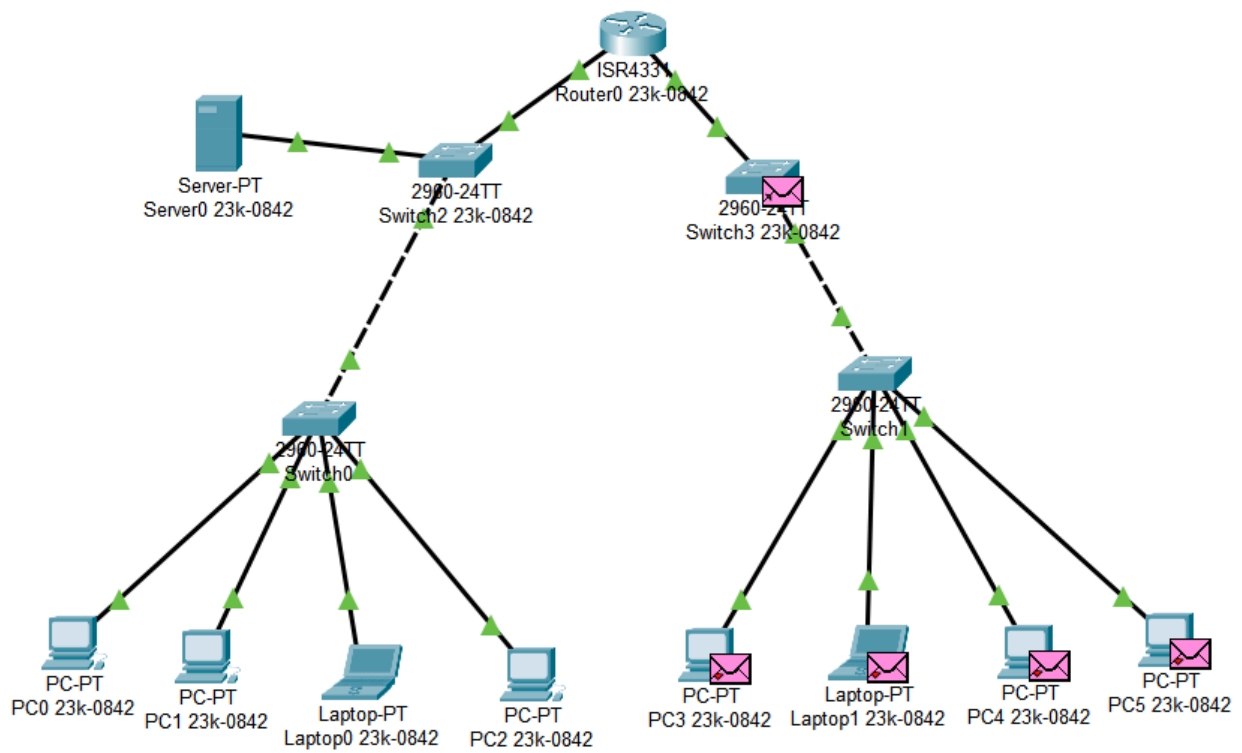
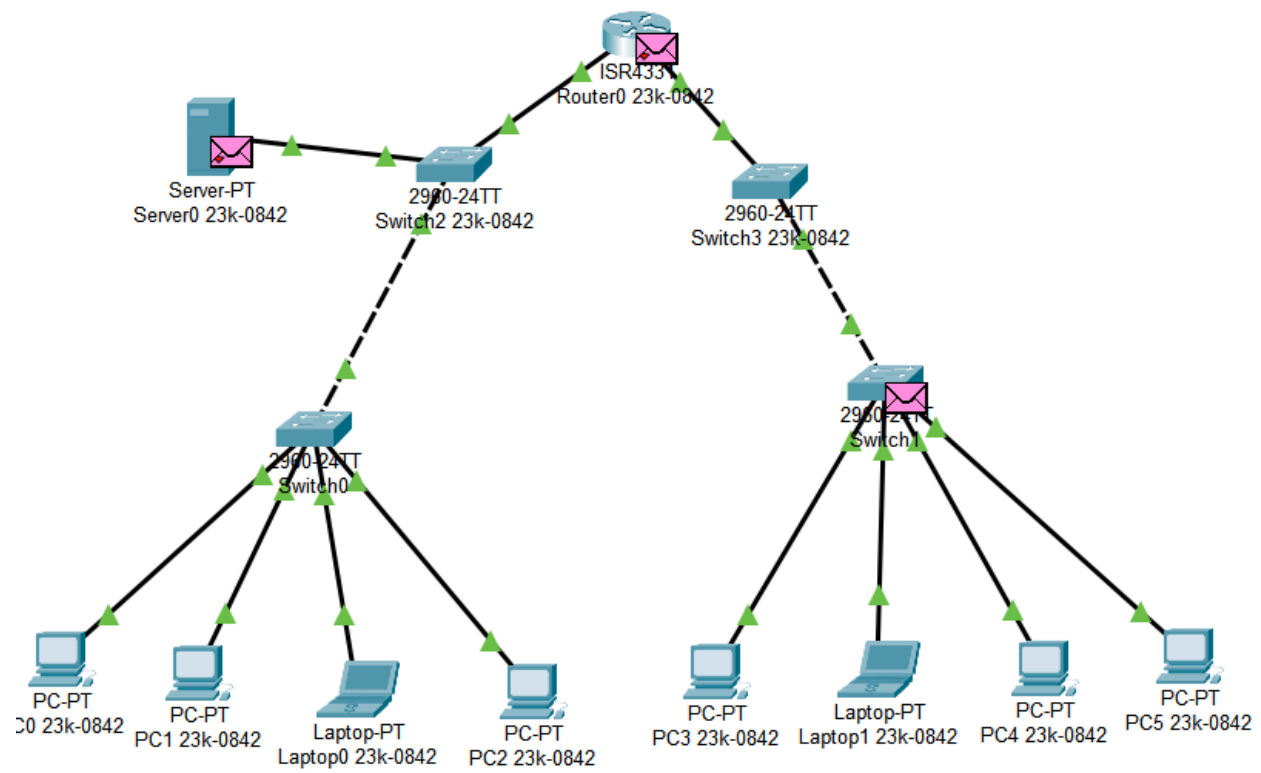
Play Controls

⏮ ⏪ ⏩ ⏭

Event List		
Vis.	Time(sec)	Last Device
	1.667	--
	1.668	Switch0
	1.668	Switch0
	1.668	Switch0
	1.668	Switch0
	1.668	Switch0
	1.669	Switch2 23k-0842
	1.669	Switch2 23k-0842
	1.669	--
	1.670	Switch1
	1.670	Switch1
	1.670	Switch1
	1.670	Switch1
	1.670	Switch1







3. Which HTTP header sets a "best before" date for cached items?

Expires header, It specifies the date/time after which the cached response is considered stale.

4. HTTP PUT and POST methods are different or not? Explain the reason in one line.

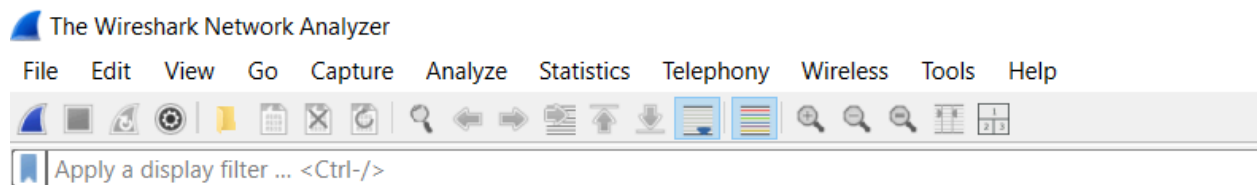
Yes they are different. POST creates a new resource (non-idempotent), while PUT updates a resource at a specific URI (idempotent).

Wireshark Lab Exercise

1. Follow the **Wireshark HTTP Analysis** steps for HTTPS. Take a Snapshot of each Step, and Explain in a one-line answer, what do you understand here?
2. Apply the following filters. Attach a snapshot of each step.
 1. Tcp
 2. Udp
 3. IP address equal to

Step 1: Capture

Captured using Wi-Fi



Welcome to Wireshark

Capture

...using this filter:

Wi-Fi



Event Tracing for Windows (ETW) reader

Step 2: For https we can apply filter tcp.port==443

Capturing from Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

tcp.port==443

No.	Time	Source	Destination	Protocol	Length	Info
1003	33.055352	192.168.100.9	142.250.200.238	TCP	54	49400 → 443 [ACK] Seq=3 Ack=2 Win=259 Len=0
1004	33.156052	142.250.200.238	192.168.100.9	UDP	109	443 → 65031 Len=67
1005	33.187936	192.168.100.9	142.250.200.238	UDP	76	65031 → 443 Len=34
1006	33.191415	142.250.200.238	192.168.100.9	UDP	68	443 → 65031 Len=26
1007	33.403204	192.168.100.9	142.250.200.238	UDP	71	65031 → 443 Len=29
1008	33.680747	142.250.200.238	192.168.100.9	UDP	68	443 → 65031 Len=26
1009	33.888271	192.168.100.9	142.250.200.238	UDP	71	65031 → 443 Len=29
1010	34.170449	142.250.200.238	192.168.100.9	UDP	68	443 → 65031 Len=26
1011	34.371889	192.168.100.9	142.250.200.238	UDP	71	65031 → 443 Len=29
1012	34.722617	142.250.200.238	192.168.100.9	UDP	68	443 → 65031 Len=26
1013	34.937709	192.168.100.9	142.250.200.238	UDP	71	65031 → 443 Len=29
1014	35.215103	142.250.200.238	192.168.100.9	UDP	68	443 → 65031 Len=26

This filter shows only encrypted HTTPS packets (port 443).

Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

tcp.port==443

No.	Time	Source	Destination	Protocol	Length	Info
3	0.670007	192.168.100.9	172.64.155.209	TCP	55	49359 → 443 [ACK] Seq=1 Ack=1 Win=257 Len=1
4	0.680104	172.64.155.209	192.168.100.9	TCP	66	443 → 49359 [ACK] Seq=1 Ack=2 Win=19 Len=0 SLE=1 SRE=2
50	4.029732	172.64.148.235	192.168.100.9	TLSv1.2	78	Application Data
51	4.029984	192.168.100.9	172.64.148.235	TLSv1.2	82	Application Data
52	4.044891	172.64.148.235	192.168.100.9	TCP	60	443 → 63530 [ACK] Seq=25 Ack=29 Win=16 Len=0
60	4.328217	192.168.100.9	52.123.129.14	TCP	66	51543 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
61	4.369758	52.123.129.14	192.168.100.9	TCP	66	443 → 51543 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1412 WS=256 SACK_PERM
62	4.369859	192.168.100.9	52.123.129.14	TCP	54	51543 → 443 [ACK] Seq=1 Ack=1 Win=262144 Len=0
63	4.370381	192.168.100.9	52.123.129.14	TLSv1.2	543	Client Hello (SNI=ecs.office.com)
64	4.431552	52.123.129.14	192.168.100.9	TCP	54	443 → 51543 [ACK] Seq=1 Ack=490 Win=12583168 Len=0
65	4.431552	52.123.129.14	192.168.100.9	TLSv1.2	199	Server Hello, Change Cipher Spec, Encrypted Handshake Message
66	4.431609	192.168.100.9	52.123.129.14	TCP	54	51543 → 443 [ACK] Seq=490 Ack=146 Win=261888 Len=0
67	4.432433	192.168.100.9	52.123.129.14	TLSv1.2	105	Change Cipher Spec, Encrypted Handshake Message
68	4.442987	192.168.100.9	52.123.129.14	TLSv1.2	674	Application Data
69	4.458323	52.123.129.14	192.168.100.9	TCP	60	443 → 51543 [ACK] Seq=146 Ack=541 Win=12583168 Len=0
70	4.470067	52.123.129.14	192.168.100.9	TCP	60	443 → 51543 [ACK] Seq=146 Ack=1161 Win=12582400 Len=0
80	4.592274	52.123.129.14	192.168.100.9	TLSv1.2	934	Application Data
81	4.592327	192.168.100.9	52.123.129.14	TCP	54	51543 → 443 [ACK] Seq=1161 Ack=1026 Win=260864 Len=0

▼ Frame 3: 55 bytes on wire (440 bits), 55 bytes captured (440 bits) on interface \Device\NPF_{96C9F77D...}

Section number: 1

Interface id: 0 (\Device\NPF_{96C9F77D-AS2E-464F-84AB-A7E8ABD2330D})

Encapsulation type: Ethernet (1)

Arrival Time: Sep 11, 2025 09:49:38.852769000 Pakistan Standard Time

UTC Arrival Time: Sep 11, 2025 04:49:38.852769000 UTC

Epoch Arrival Time: 1757566178.852769000

[Time shift for this packet: 0.000000000 seconds]

[Time delta from previous captured frame: 0.388538000 seconds]

[Time delta from previous displayed frame: 0.000000000 seconds]

[Time since reference or first frame: 0.670007000 seconds]

Frame Number: 3

Frame Length: 55 bytes (440 bits)

Capture Length: 55 bytes (440 bits)

[Frame is marked: False]

[Frame is ignored: False]

[Protocols in frame: eth:ethertype:ip:tcp]

[Coloring Rule Name: TCP]

Coloring Rule Status: tcp

0000 04 b0 e7 e9 38 26 a4 42 3b 0f 7b 34 08 00 45 00 ...8&B ;{4-E-

0010 00 29 c5 0c 40 00 80 06 00 00 c0 a8 64 09 ac 40 ...d...@

0020 9b d1 c0 cf 01 bb 36 fe 13 b7 b3 1b c2 46 50 10 ...6...FP

0030 01 01 6c df 00 00 00 ...1....

Applying tcp filter: This shows all TCP packets regardless of port.

Wireshark interface showing a TCP packet capture. The packet list shows a SYN packet from 192.168.100.9 to 172.64.155.209. The packet details pane shows the TCP header and options. The packet bytes pane shows the raw data.

No.	Time	Source	Destination	Protocol	Length	Info
3	0.670907	192.168.100.9	172.64.155.209	TCP	55	49359 → 443 [ACK] Seq=1 Ack=1 Win=257 Len=1
4	0.680104	172.64.155.209	192.168.100.9	TCP	66	443 → 49359 [ACK] Seq=1 Ack=2 Win=19 Len=0 SLE=1 SRE=2
50	4.029732	172.64.148.235	192.168.100.9	TLSv1.2	78	Application Data
51	4.029984	192.168.100.9	172.64.148.235	TLSv1.2	82	Application Data
52	4.044891	172.64.148.235	192.168.100.9	TCP	60	443 → 63530 [ACK] Seq=25 Ack=29 Win=16 Len=0
60	4.328217	192.168.100.9	52.123.129.14	TCP	66	51543 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
61	4.369758	52.123.129.14	192.168.100.9	TCP	66	443 → 51543 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1412 WS=256 SACK_PERM
62	4.369859	192.168.100.9	52.123.129.14	TCP	54	51543 → 443 [ACK] Seq=1 Ack=1 Win=262144 Len=0
63	4.370381	192.168.100.9	52.123.129.14	TLSv1.2	543	Client Hello (SNI=ecs.office.com)
64	4.431552	52.123.129.14	192.168.100.9	TCP	54	443 → 51543 [ACK] Seq=1 Ack=490 Win=12583168 Len=0
65	4.431552	52.123.129.14	192.168.100.9	TLSv1.2	199	Server Hello, Change Cipher Spec, Encrypted Handshake Message
66	4.431609	192.168.100.9	52.123.129.14	TCP	54	51543 → 443 [ACK] Seq=490 Ack=146 Win=261888 Len=0
67	4.432433	192.168.100.9	52.123.129.14	TLSv1.2	105	Change Cipher Spec, Encrypted Handshake Message
68	4.442987	192.168.100.9	52.123.129.14	TLSv1.2	674	Application Data
69	4.458323	52.123.129.14	192.168.100.9	TCP	60	443 → 51543 [ACK] Seq=146 Ack=541 Win=12583168 Len=0
70	4.470067	52.123.129.14	192.168.100.9	TCP	60	443 → 51543 [ACK] Seq=146 Ack=1161 Win=12582400 Len=0
80	4.592274	52.123.129.14	192.168.100.9	TLSv1.2	934	Application Data
81	4.592327	192.168.100.9	52.123.129.14	TCP	54	51543 → 443 [ACK] Seq=1161 Ack=1026 Win=260864 Len=0

Frame 3: 55 bytes on wire (440 bits), 55 bytes captured (440 bits) on interface \Device\NPF_{96C9F77D-A52E-464F-84AB-A7E8ABD23300} (Ethernet 1)

Section number: 1

Interface id: 0 (\Device\NPF_{96C9F77D-A52E-464F-84AB-A7E8ABD23300})

Encapsulation type: Ethernet (1)

Arrival Time: Sep 11, 2025 09:49:38.852769000 Pakistan Standard Time

UTC Arrival Time: Sep 11, 2025 04:49:38.852769000 UTC

Epoch Arrival Time: 1757566178.852769000

[Time shift for this packet: 0.000000000 seconds]

[Time delta from previous captured frame: 0.388538000 seconds]

[Time delta from previous displayed frame: 0.000000000 seconds]

[Time since reference or first frame: 0.670907000 seconds]

Frame Number: 3

Frame Length: 55 bytes (440 bits)

Capture Length: 55 bytes (440 bits)

[Frame is marked: False]

[Frame is ignored: False]

[Protocols in frame: eth:ethertype:ip:tcp]

[Coloring Rule Name: TCP]

Transmission Control Protocol: Protocol

Packets: 33724 - Displayed: 846 (2.5%) - Dropped: 0 (0.0%)

Applying udp filter: This shows all UDP packets regardless of port.

Wireshark interface showing a UDP packet capture. The packet list shows a query from 192.168.100.9 to 142.250.200.238. The packet details pane shows the UDP header and options. The packet bytes pane shows the raw data.

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	192.168.100.9	142.250.200.238	UDP	71	65031 → 443 Len=29
2	0.281469	142.250.200.238	192.168.100.9	UDP	68	443 → 65031 Len=26
5	1.095501	192.168.100.9	142.250.200.238	UDP	71	65031 → 443 Len=29
6	1.214510	192.168.100.9	142.251.37.174	UDP	1285	61724 → 443 Len=1243
7	1.214606	192.168.100.9	142.251.37.174	UDP	1292	61724 → 443 Len=1250
8	1.214640	192.168.100.9	142.251.37.174	UDP	1292	61724 → 443 Len=1250
9	1.214668	192.168.100.9	142.251.37.174	UDP	1292	61724 → 443 Len=1250
10	1.214694	192.168.100.9	142.251.37.174	UDP	104	61724 → 443 Len=62
11	1.380535	142.250.200.238	192.168.100.9	UDP	68	443 → 65031 Len=26
12	1.545175	142.251.37.174	192.168.100.9	UDP	74	443 → 61724 Len=32
13	1.545175	142.251.37.174	192.168.100.9	UDP	745	443 → 61724 Len=703
14	1.545175	142.251.37.174	192.168.100.9	UDP	116	443 → 61724 Len=74
15	1.549565	192.168.100.9	192.168.100.1	DNS	70	Standard query 0x7f65 A google.com
16	1.563998	192.168.100.1	192.168.100.9	DNS	190	Standard query response 0x7f65 A google.com A 142.250.200.206 NS ns1.google.com NS ns4.google.com NS ns3.google.com NS ns2.google.com
17	1.566481	192.168.100.9	142.250.200.206	QUIC	1292	Initial, DCID=c8737864f018e4b4, PKN: 1, CRYPTO, CRYPTO, CRYPTO, PING, CRYPTO, CRYPTO, CRYPTO, CRYPTO, CRYPTO, PING, CRY...
18	1.566609	192.168.100.9	142.250.200.206	QUIC	1292	Initial, DCID=c8737864f018e4b4, PKN: 2, PING, PADDING, PING, PING, PING, PADDING, CRYPTO, PING, CRYPTO, PING, CRYPTO
19	1.566835	192.168.100.9	142.250.200.206	QUIC	121	0-RTT, DCID=c8737864f018e4b4
20	1.582572	192.168.100.9	142.251.37.174	UDP	81	61724 → 443 Len=39

Frame 2: 68 bytes on wire (544 bits), 68 bytes captured (544 bits) on interface \Device\NPF_{96C9F77D-A52E-464F-84AB-A7E8ABD23300} (Ethernet 1)

Section number: 1

Interface id: 0 (\Device\NPF_{96C9F77D-A52E-464F-84AB-A7E8ABD23300})

Encapsulation type: Ethernet (1)

Arrival Time: Sep 11, 2025 09:49:38.464231000 Pakistan Standard Time

UTC Arrival Time: Sep 11, 2025 04:49:38.464231000 UTC

Epoch Arrival Time: 1757566178.464231000

[Time shift for this packet: 0.000000000 seconds]

[Time delta from previous captured frame: 0.281469000 seconds]

[Time delta from previous displayed frame: 0.281469000 seconds]

[Time since reference or first frame: 0.281469000 seconds]

Frame Number: 2

Frame Length: 68 bytes (544 bits)

Capture Length: 68 bytes (544 bits)

[Frame is marked: False]

[Frame is ignored: False]

[Protocols in frame: eth:ethertype:ip:udp:data]

[Coloring Rule Name: UDP]

User Datagram Protocol: Protocol

Packets: 33724 - Displayed: 32874 (97.5%) - Dropped: 0 (0.0%)

Profile: 1

