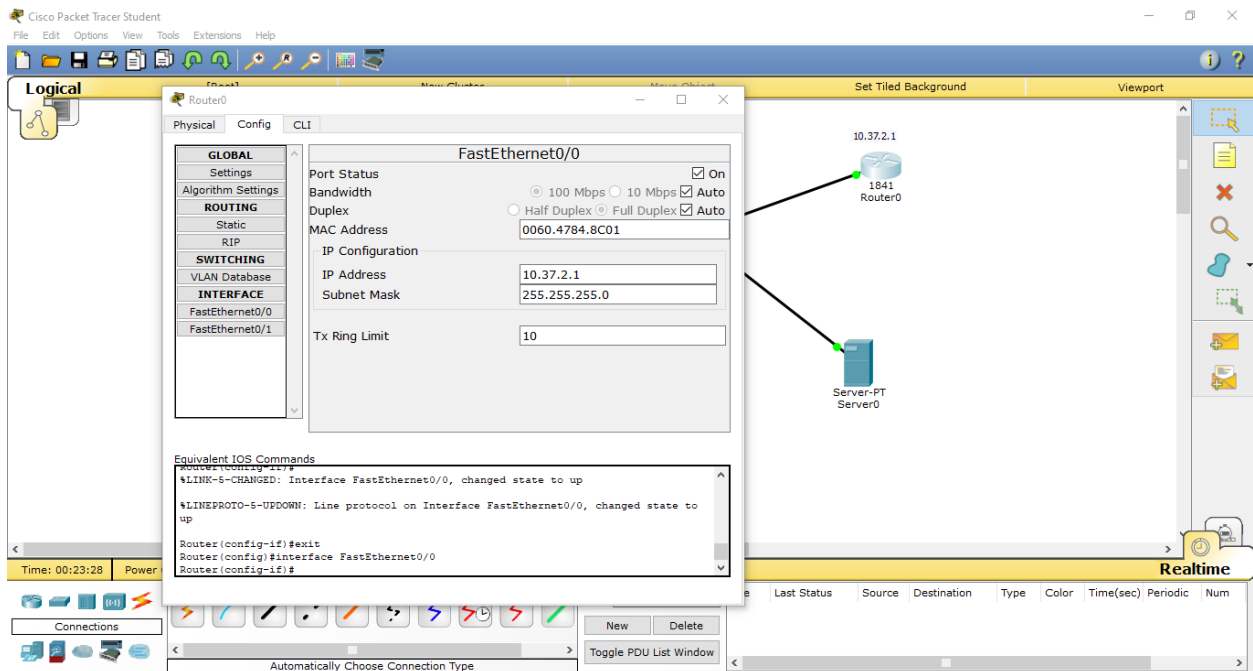
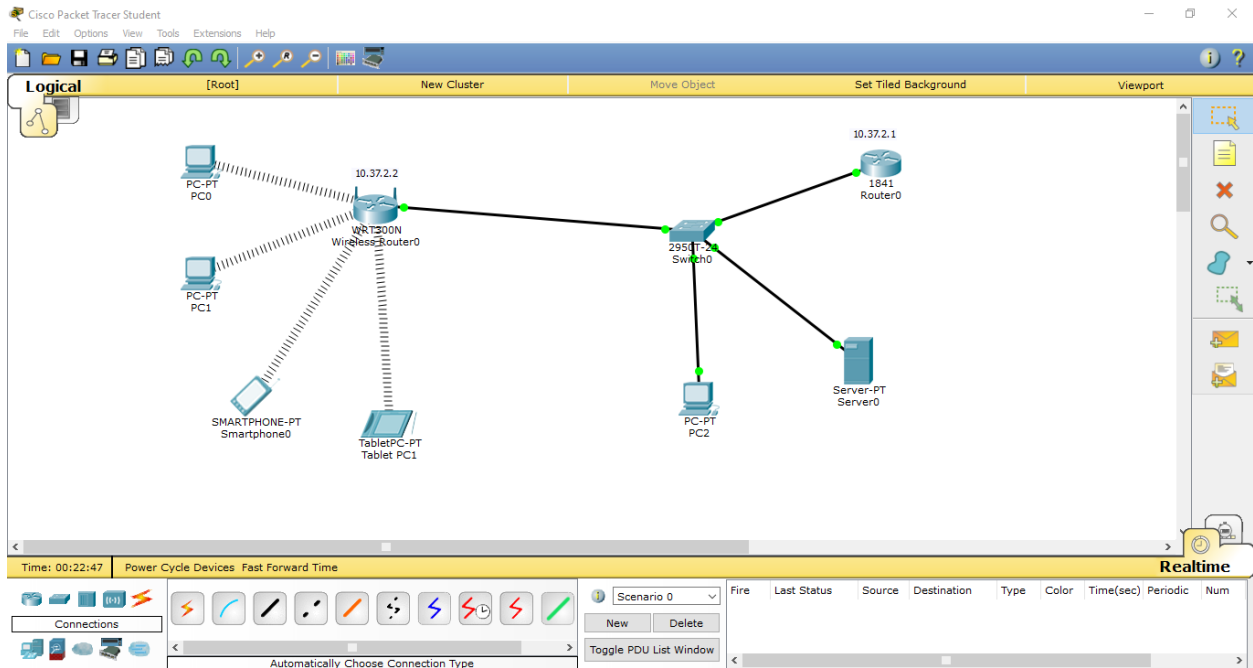


COMPUTER NETWORKS LAB 11

QUESTION # 1:



The image displays two screenshots of the Cisco Packet Tracer Student interface, showing network configuration for a PC and a Wireless Router.

Top Screenshot: PC Configuration

The **Logical** tab is selected for the **PC2** device. The **Config** sub-tab shows the **IP Configuration** window. The configuration is set to **Static** IP.

Field	Value
IP Address	10.37.2.10
Subnet Mask	255.255.255.0
Default Gateway	10.37.2.1
DNS Server	

The **IPv6 Configuration** section is also visible, set to **Static**.

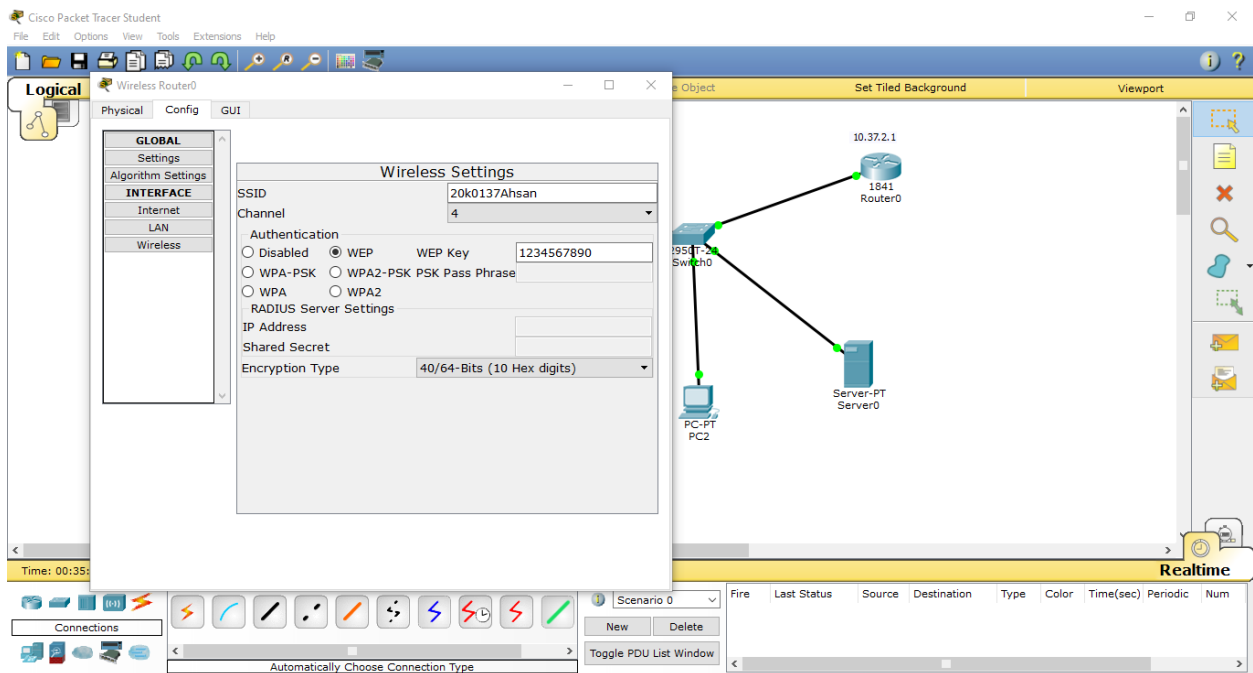
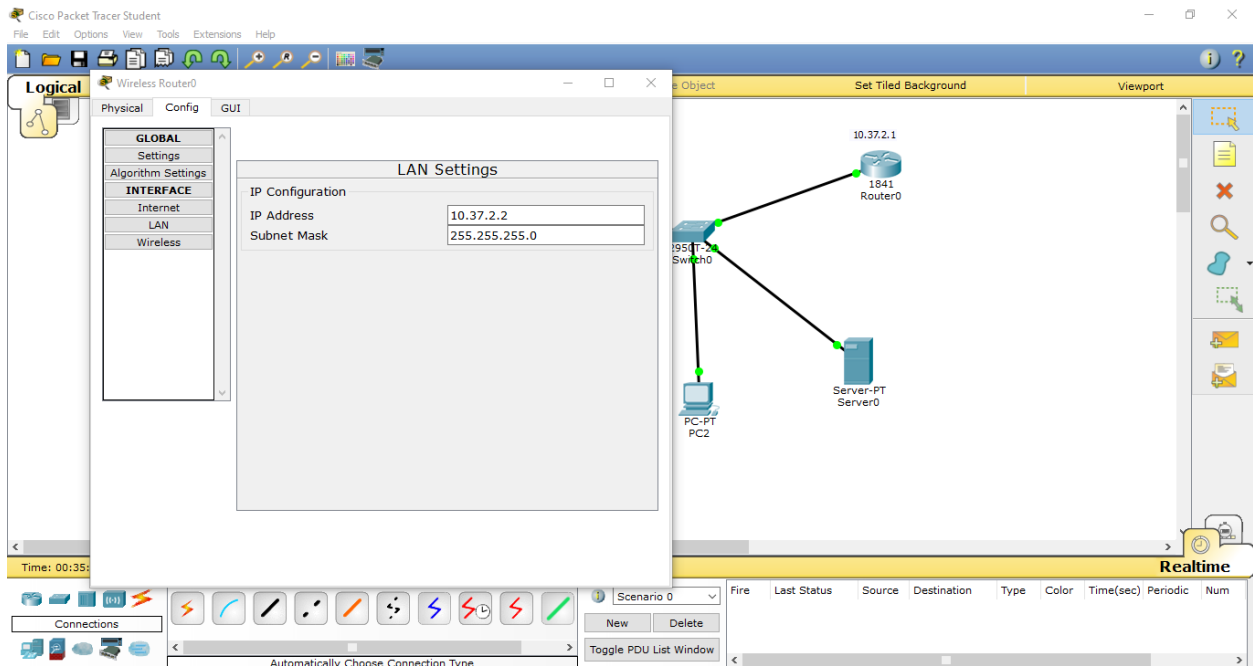
The network diagram shows a **2951T-24 Switch0** connected to a **1841 Router0** (IP: 10.37.2.1), a **PC-PT PC2**, and a **Server-PT Server0**.

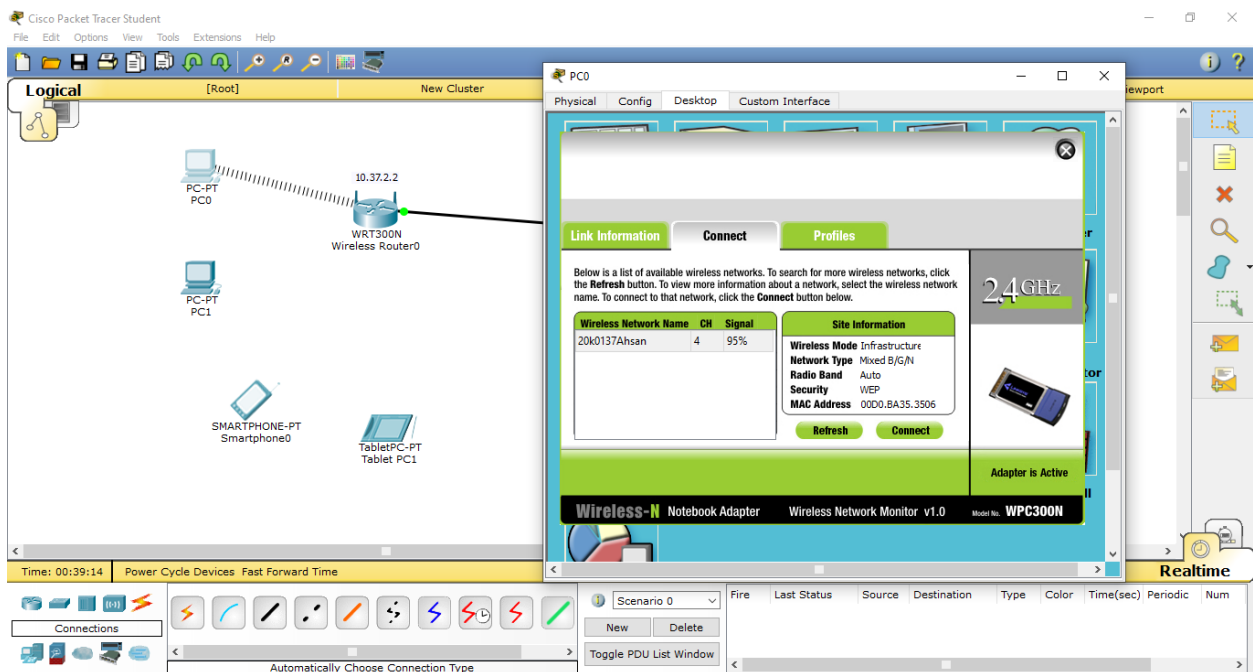
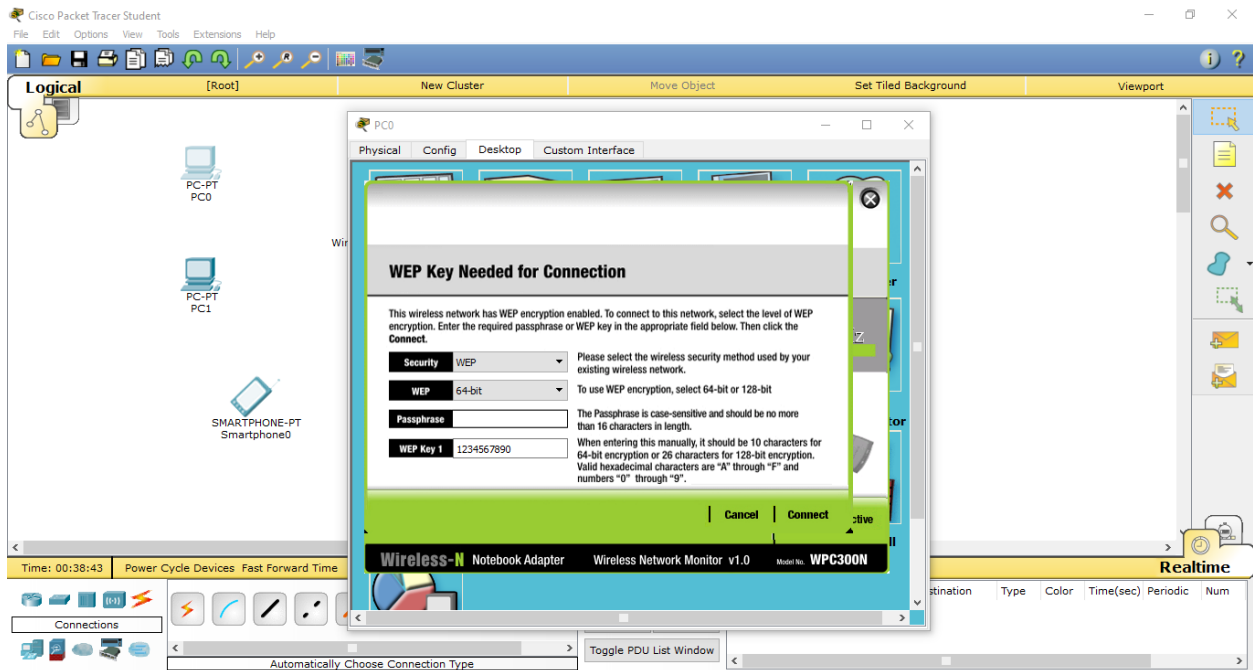
Bottom Screenshot: Wireless Router Configuration

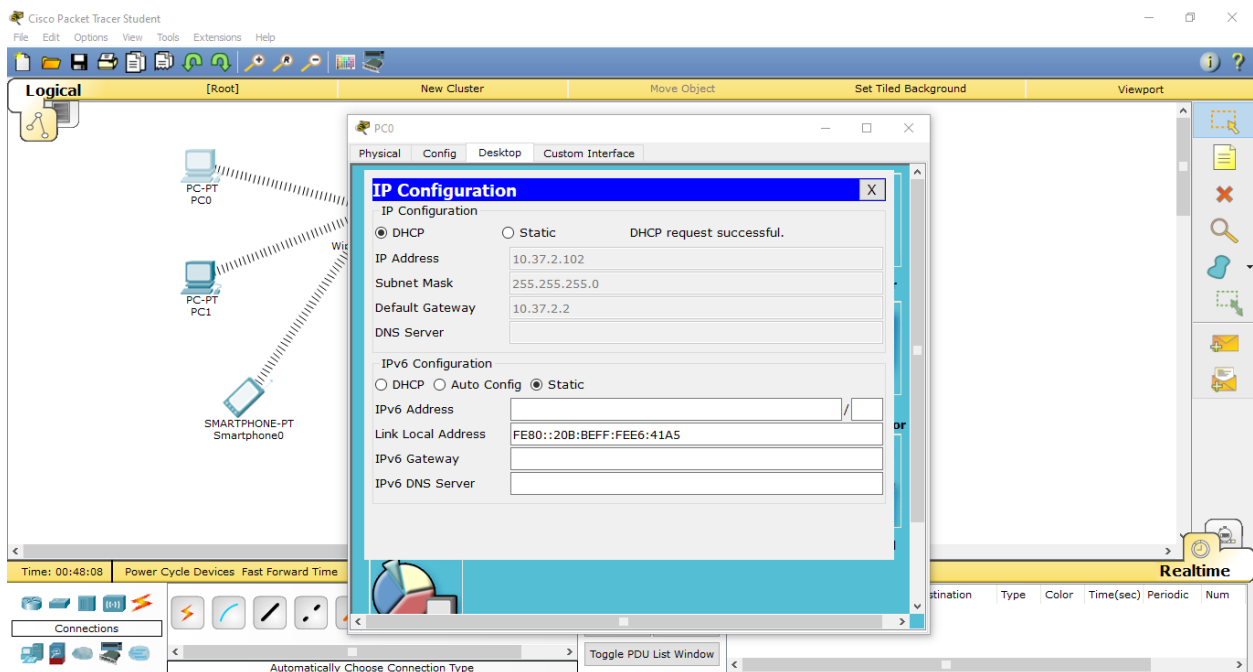
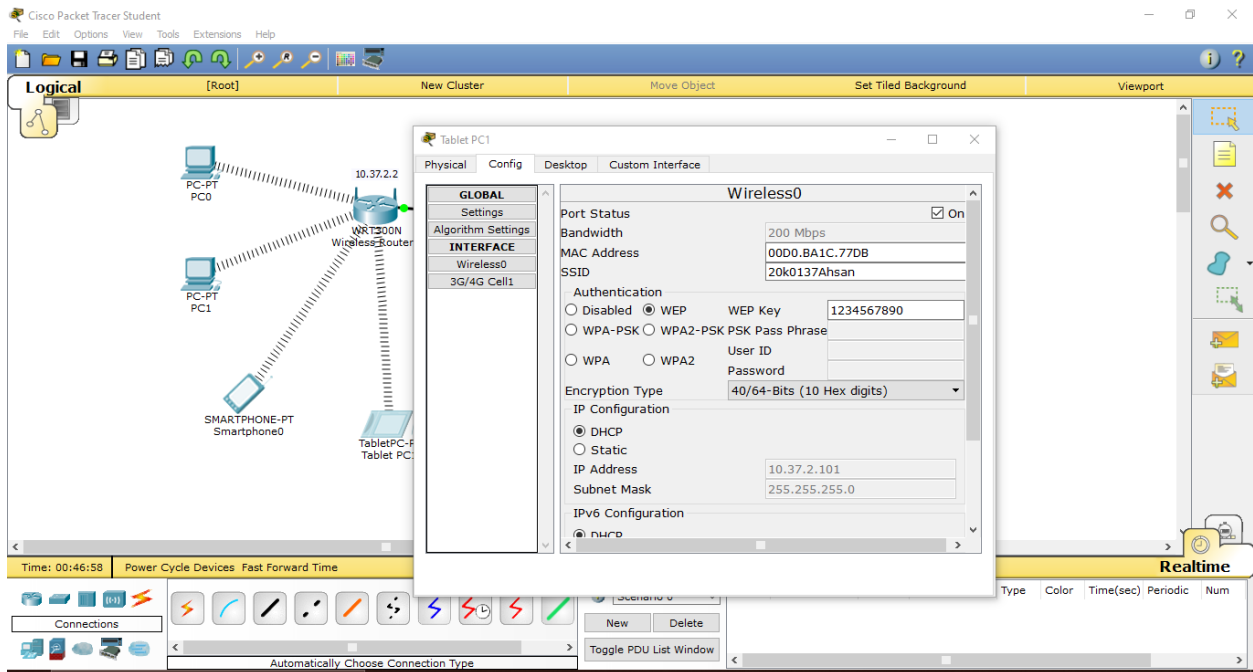
The **Logical** tab is selected for the **Wireless Router0** device. The **Config** sub-tab shows the **Internet Settings** window. The configuration is set to **Static** IP.

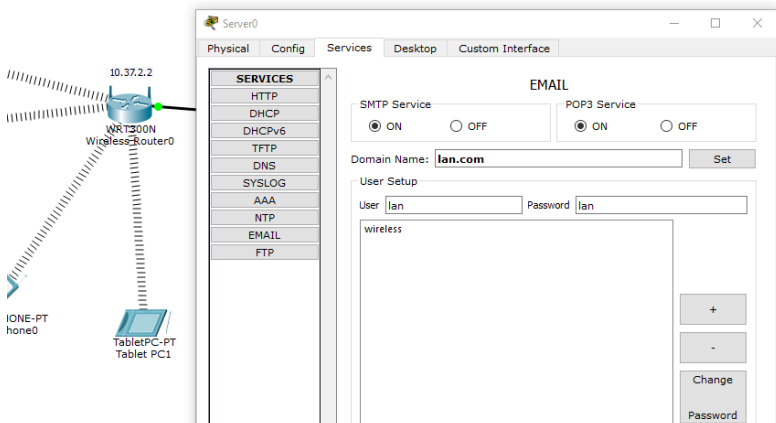
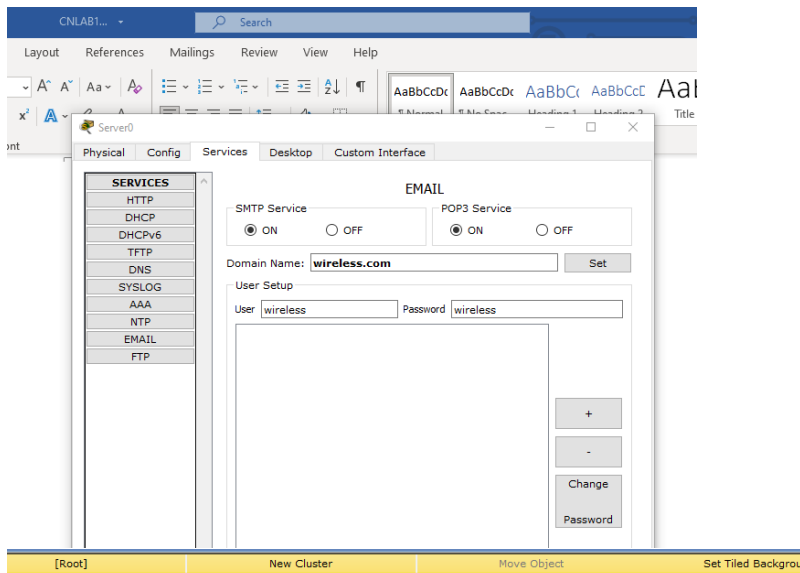
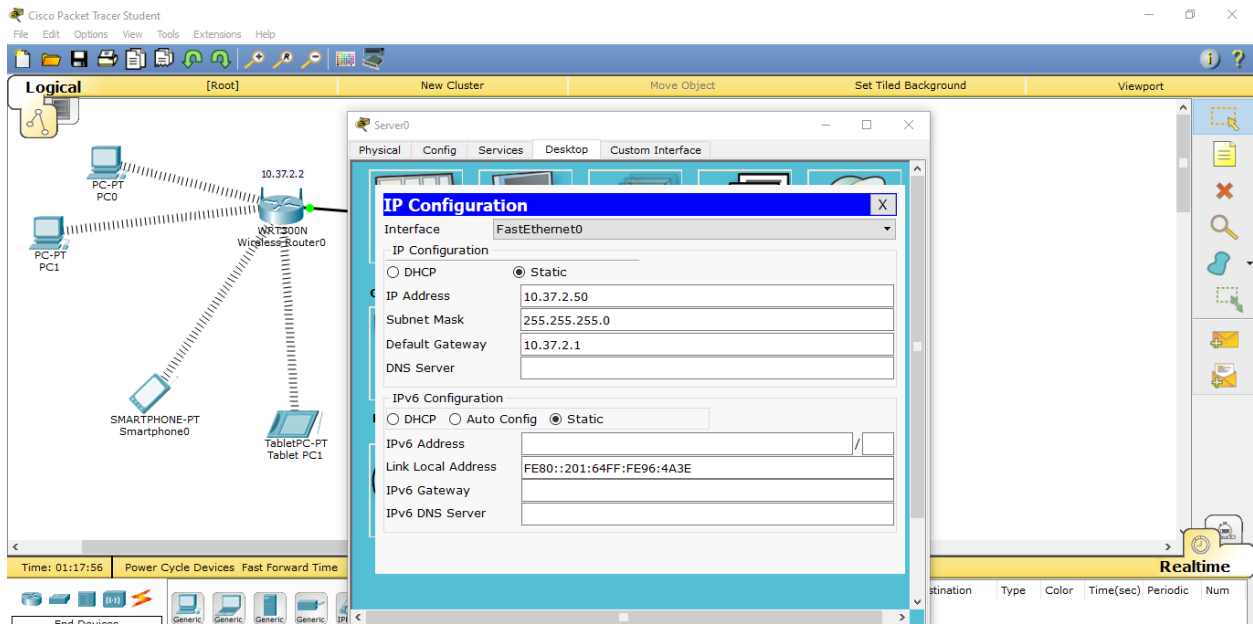
Field	Value
UserName	
Password	
Default Gateway	10.37.2.1
IP Address	
Subnet Mask	
DNS Server	

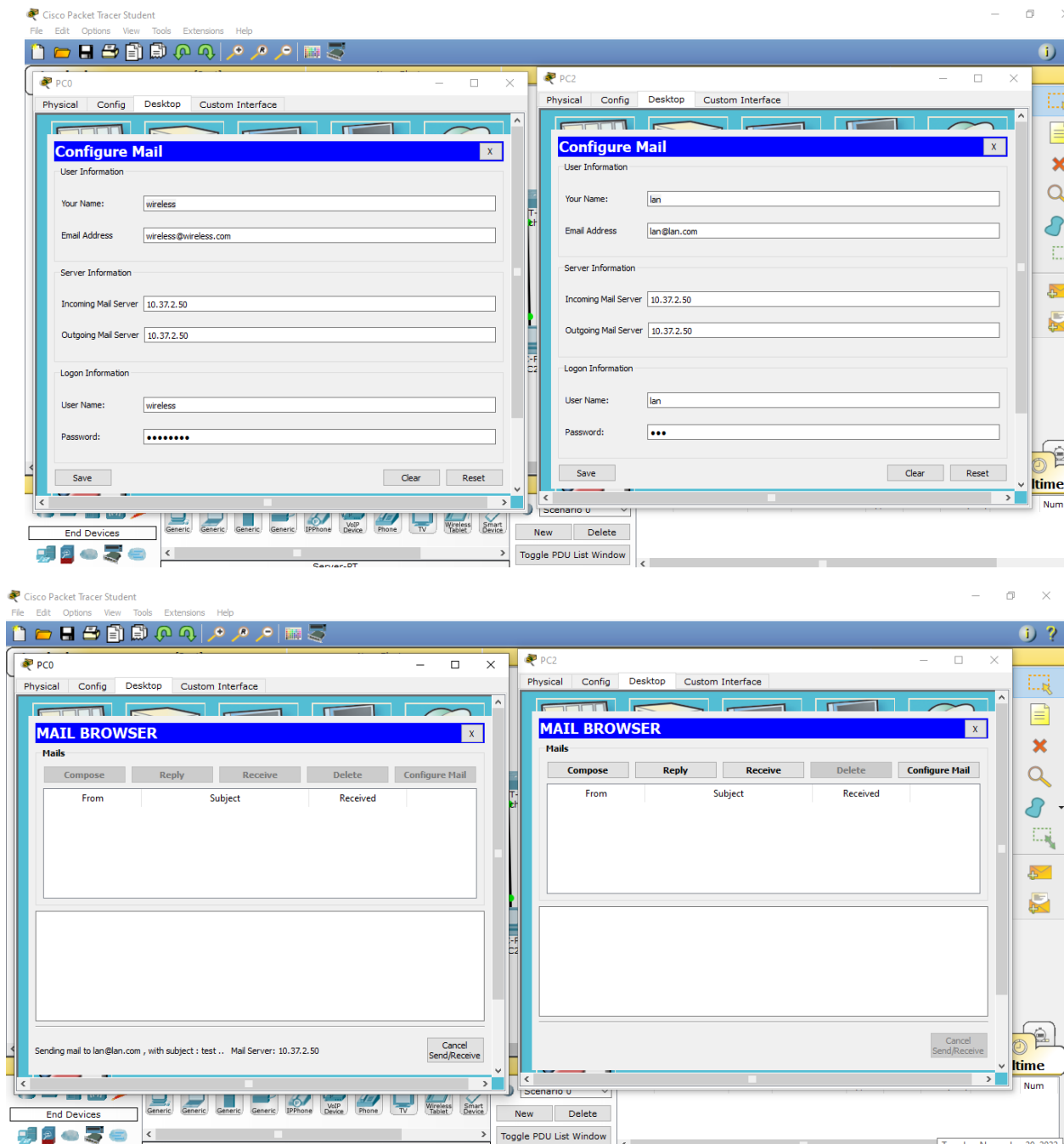
The network diagram is identical to the top screenshot, showing the **2951T-24 Switch0** connected to the **1841 Router0**, **PC-PT PC2**, and **Server-PT Server0**.

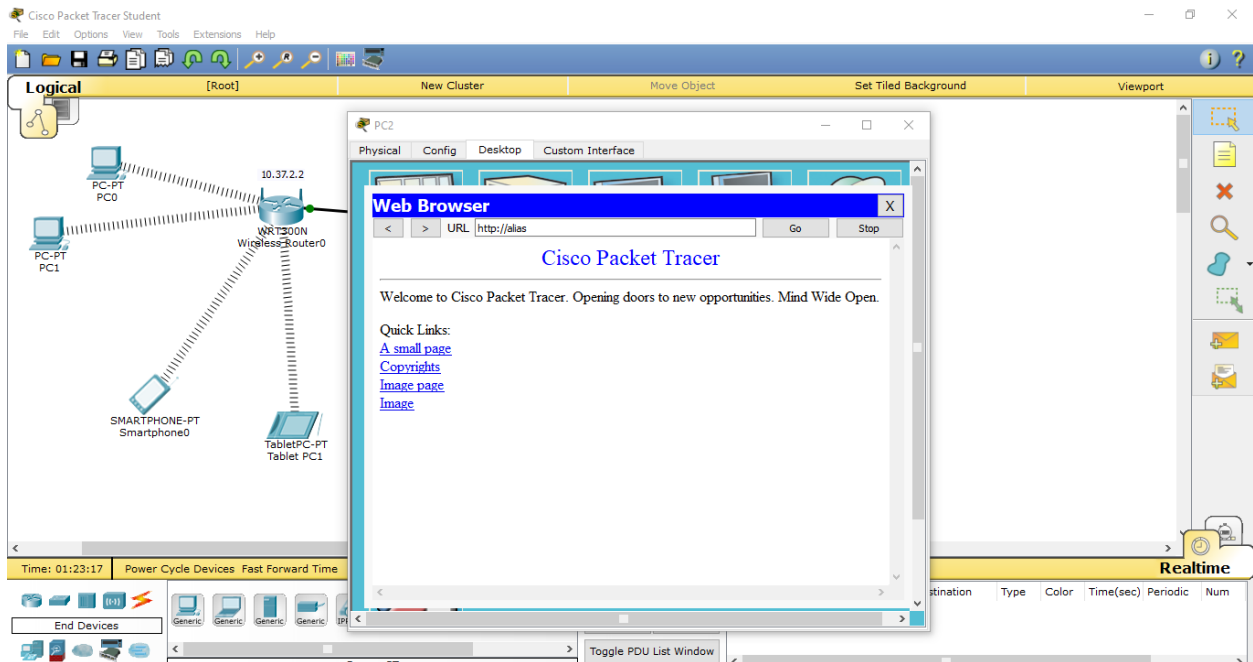
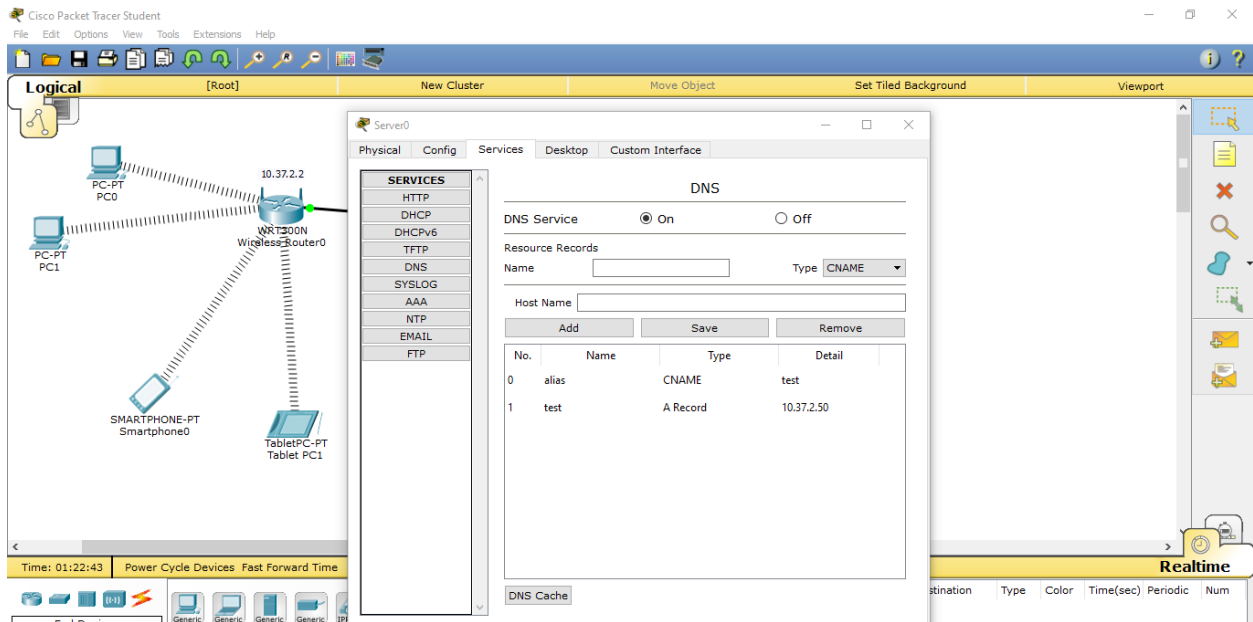


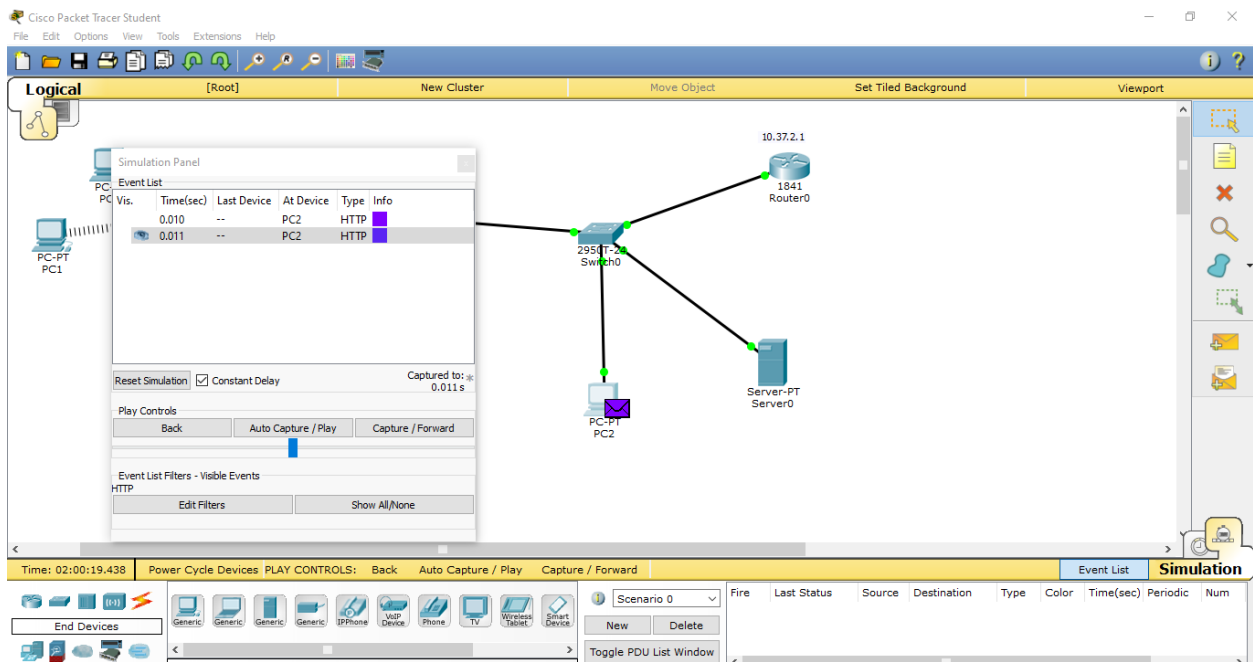
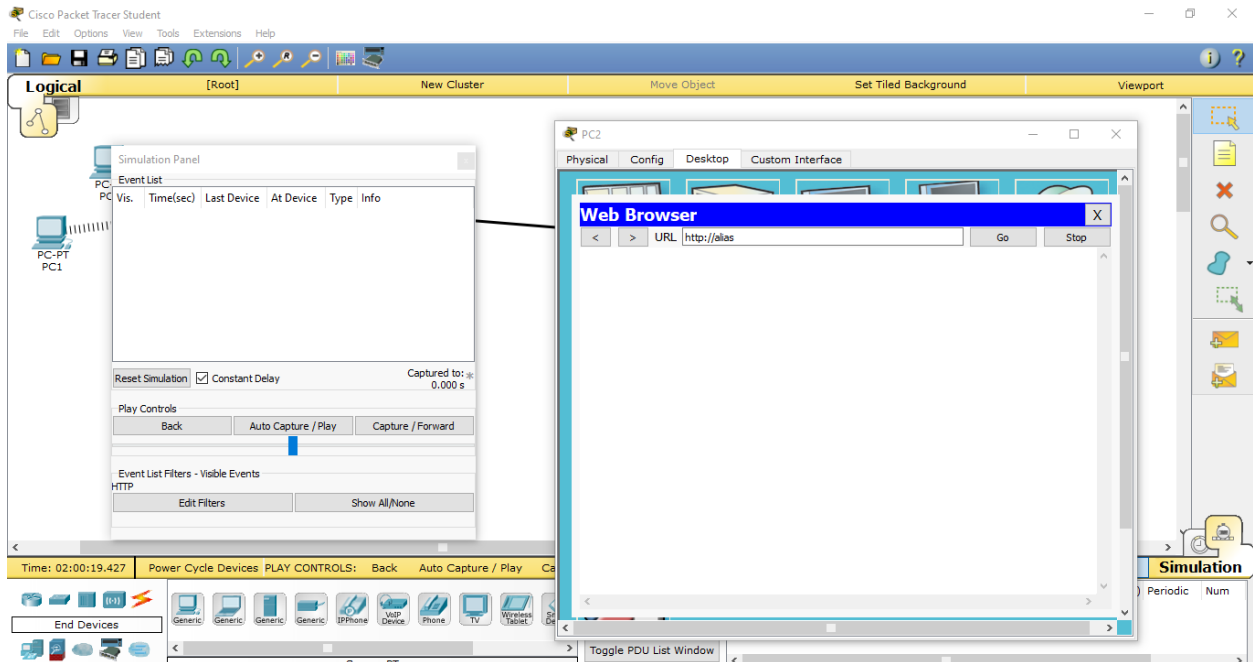












Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.010	--	PC2	HTTP	
	0.011	--	PC2	HTTP	
	0.012	PC2	Switch0	HTTP	
	0.013	Switch0	Server0	HTTP	

Reset Simulation ☒ Constant Delay Captured to: 0.013 s

Play Controls

Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

HTTP Edit Filters Show All/None

Time: 02:00:19.440 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

End Devices Generic Generic Generic Generic iPhone VoIP Device Phone TV Wireless Tablet Smart Device

Scenario 0 Fire Last Status Source Destination Type Color Time(sec) Periodic Num

New Delete

Simulation

Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.010	--	PC2	HTTP	
	0.011	--	PC2	HTTP	
	0.012	PC2	Switch0	HTTP	
	0.013	Switch0	Server0	HTTP	
	0.014	Server0	Switch0	HTTP	
	0.015	Switch0	PC2	HTTP	

Reset Simulation ☒ Constant Delay Captured to: 150.024 s

Play Controls

Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

HTTP Edit Filters Show All/None

Time: 02:02:49.451 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

End Devices Generic Generic Generic Generic iPhone VoIP Device Phone TV Wireless Tablet Smart Device

Scenario 0 Fire Last Status Source Destination Type Color Time(sec) Periodic Num

New Delete

Simulation

Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move PC2

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.009	--	PC2	HTTPS	
	0.010	--	PC2	HTTPS	

Reset Simulation ☒ Constant Delay Captured to: 0.010 s

Play Controls: Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events: HTTPS Edit Filters Show All/None

Time: 02:18:28.593 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

End Devices: Generic Generic Generic Generic VoIP Device iPhone TV Wireless Tablet Smart Device

Scenario 0 New Delete

Web Browser

URL: https://alias Go Stop

2951T-24 Switch0

PC-PT PC1

PC-PT PC2

Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.009	--	PC2	HTTPS	
	0.010	--	PC2	HTTPS	
	0.011	PC2	Switch0	HTTPS	
	0.012	Switch0	Server0	HTTPS	

Reset Simulation ☒ Constant Delay Captured to: 0.012 s

Play Controls: Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events: HTTPS Edit Filters Show All/None

Time: 02:18:28.595 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

End Devices: Generic Generic Generic Generic VoIP Device iPhone TV Wireless Tablet Smart Device

Scenario 0 New Delete

10.37.2.1 1841 Router0

2951T-24 Switch0

PC-PT PC1

PC-PT PC2

Server-PT Server0

Event List Simulation

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num
------	-------------	--------	-------------	------	-------	-----------	----------	-----

Toggle PDU List Window

Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Simulation Panel

Event List

Time(sec)	Last Device	At Device	Type	Info
0.009	--	PC2	HTTPS	
0.010	--	PC2	HTTPS	
0.011	PC2	Switch0	HTTPS	
0.012	Switch0	Server0	HTTPS	
0.013	Server0	Switch0	HTTPS	
0.014	Switch0	PC2	HTTPS	

Reset Simulation ☒ Constant Delay Captured to: 0.014 s

Play Controls

Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

HTTPS Edit Filters Show All/None

Time: 02:18:28.597 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Scenario 0 Fire Last Status Source Destination Type Color Time(sec) Periodic Num

QUESTION # 2:

Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Time: 00:02:59 Power Cycle Devices Fast Forward Time

Scenario 0 Fire Last Status Source Destination Type Color Time(sec) Periodic Num

Connections

Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Router1

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/1

Port Status

Bandwidth

Duplex

MAC Address

IP Configuration

IP Address

Subnet Mask

Tx Ring Limit

Equivalent IOS Commands

Router(config-if)#ip address 10.37.1.1 255.255.255.0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router2

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/0

Port Status

Bandwidth

Duplex

MAC Address

IP Configuration

IP Address

Subnet Mask

Tx Ring Limit

Equivalent IOS Commands

Router(config-if)#ip address 10.37.1.2 255.255.255.0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Time: 00:00:00

Connections

Scenario 0

New Delete

Toggle PDU List Window

Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Router1

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/0

Port Status

Bandwidth

Duplex

MAC Address

IP Configuration

IP Address

Subnet Mask

Tx Ring Limit

Equivalent IOS Commands

Router(config-if)#ip address 192.168.10.1 255.255.255.0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router2

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/1

Port Status

Bandwidth

Duplex

MAC Address

IP Configuration

IP Address

Subnet Mask

Tx Ring Limit

Equivalent IOS Commands

Router(config-if)#ip address 10.0.0.1 255.255.255.0

Router(config-if)#no shutdown

Router(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router(config-if)#exit

Router(config)#interface FastEthernet0/1

Router(config-if)#ip address 10.0.0.1 255.255.255.0

Router(config-if)#

Time: 00:00:00

Connections

Scenario 0

New Delete

Toggle PDU List Window

The image displays the Cisco Packet Tracer Student interface, showing the configuration of three devices: Server0, Server1, and PC0. The interface includes a network diagram and a CLI window for Router1.

Server0 IP Configuration:

- Interface: FastEthernet0
- IP Configuration: Static
- IP Address: 192.168.10.4
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.10.1
- DNS Server:
- IPv6 Configuration: Static
- IPv6 Address:
- Link Local Address: FE80::260:5CFF:FE35:2115
- IPv6 Gateway:
- IPv6 DNS Server:

Server1 IP Configuration:

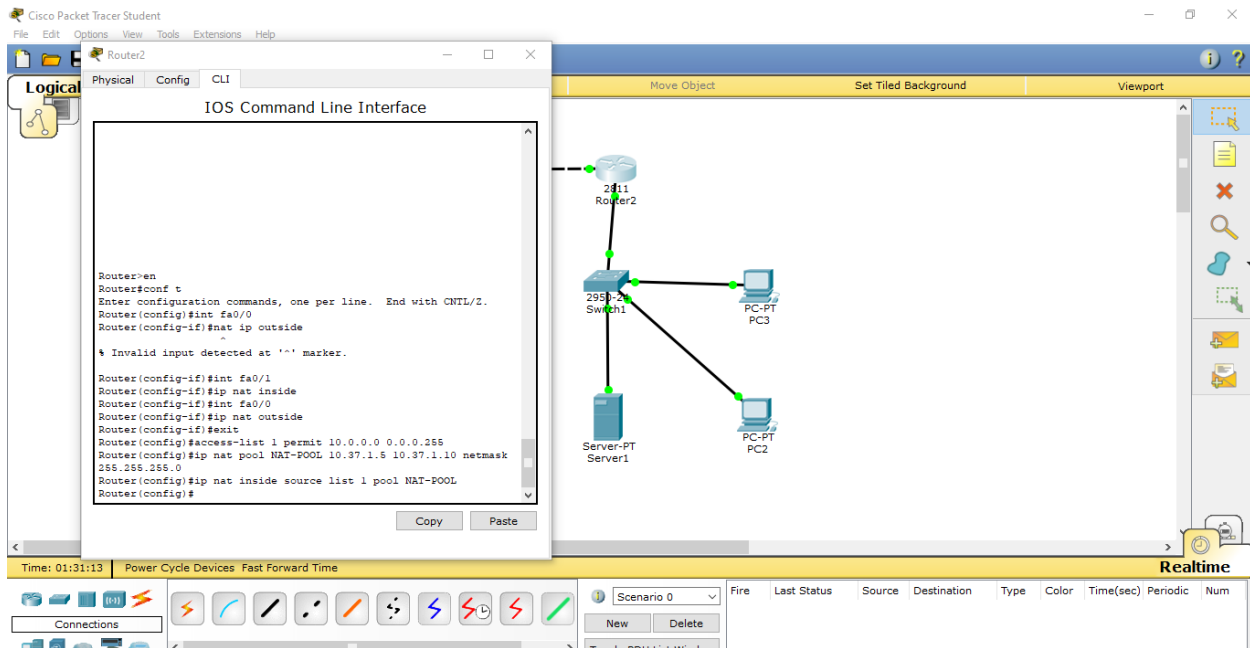
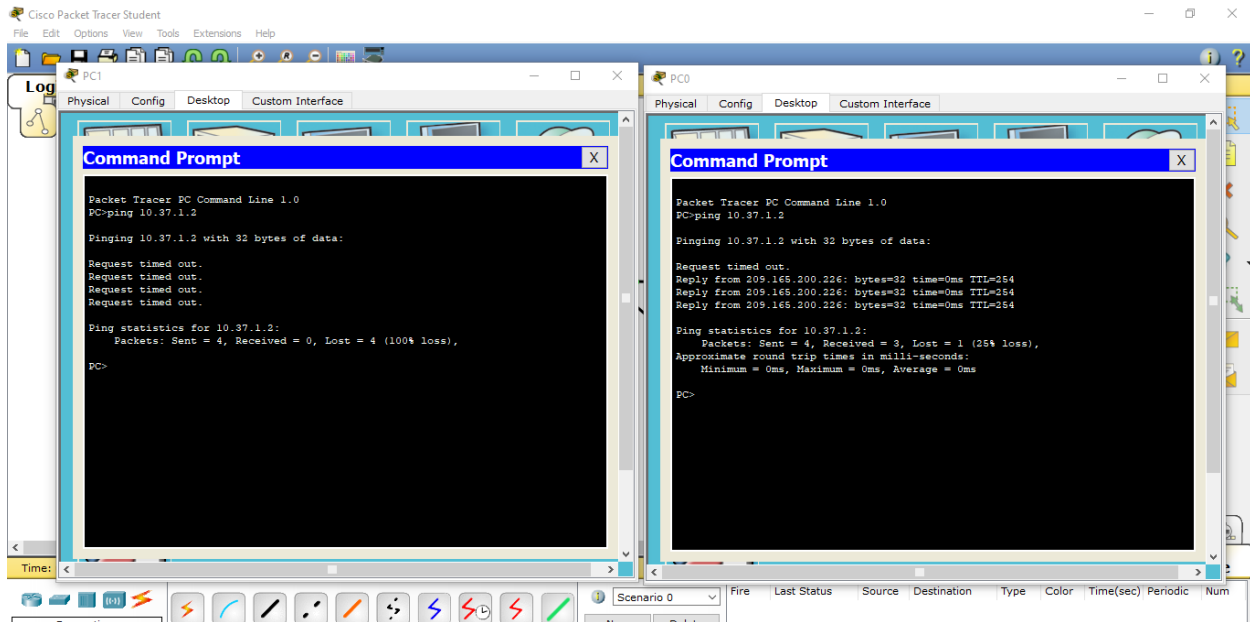
- Interface: FastEthernet0
- IP Configuration: Static
- IP Address: 10.0.0.4
- Subnet Mask: 255.255.255.0
- Default Gateway: 10.0.0.1
- DNS Server:
- IPv6 Configuration: Static
- IPv6 Address:
- Link Local Address: FE80::201:C9FF:FEEA:B4C3
- IPv6 Gateway:
- IPv6 DNS Server:

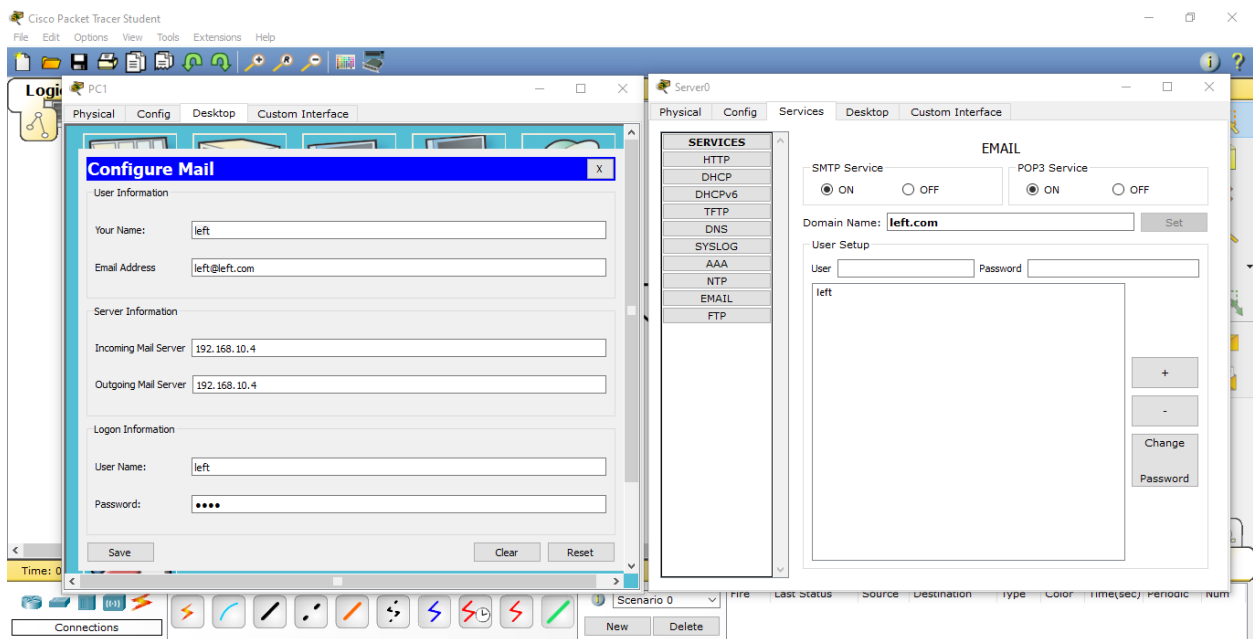
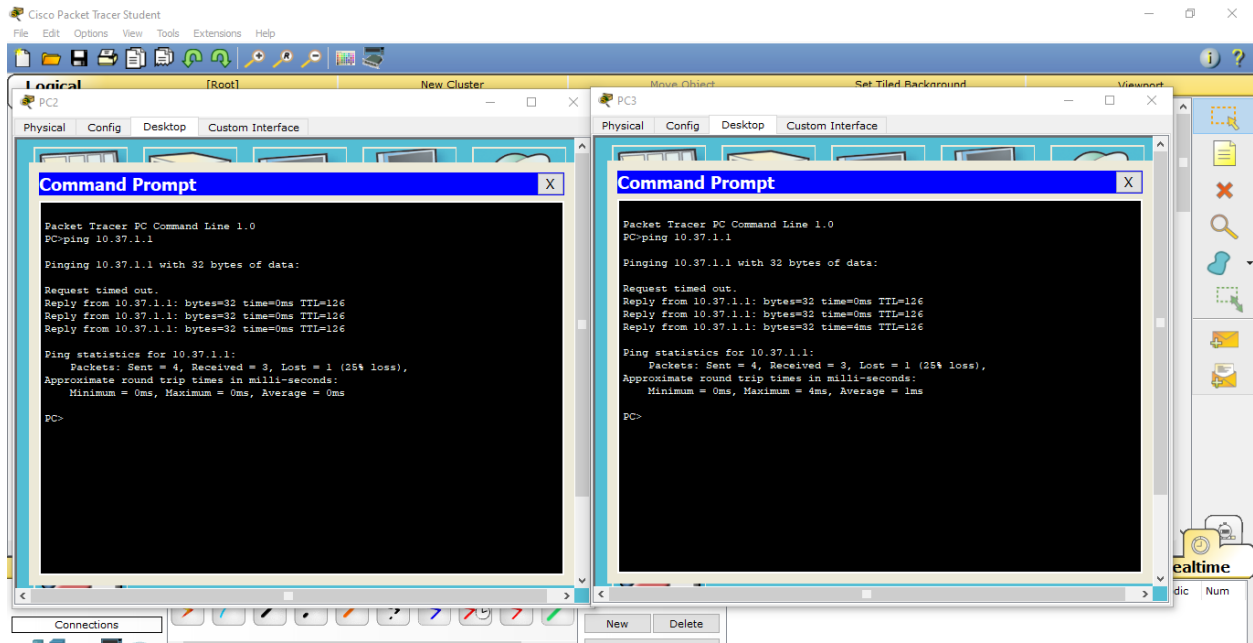
PC0 IP Configuration:

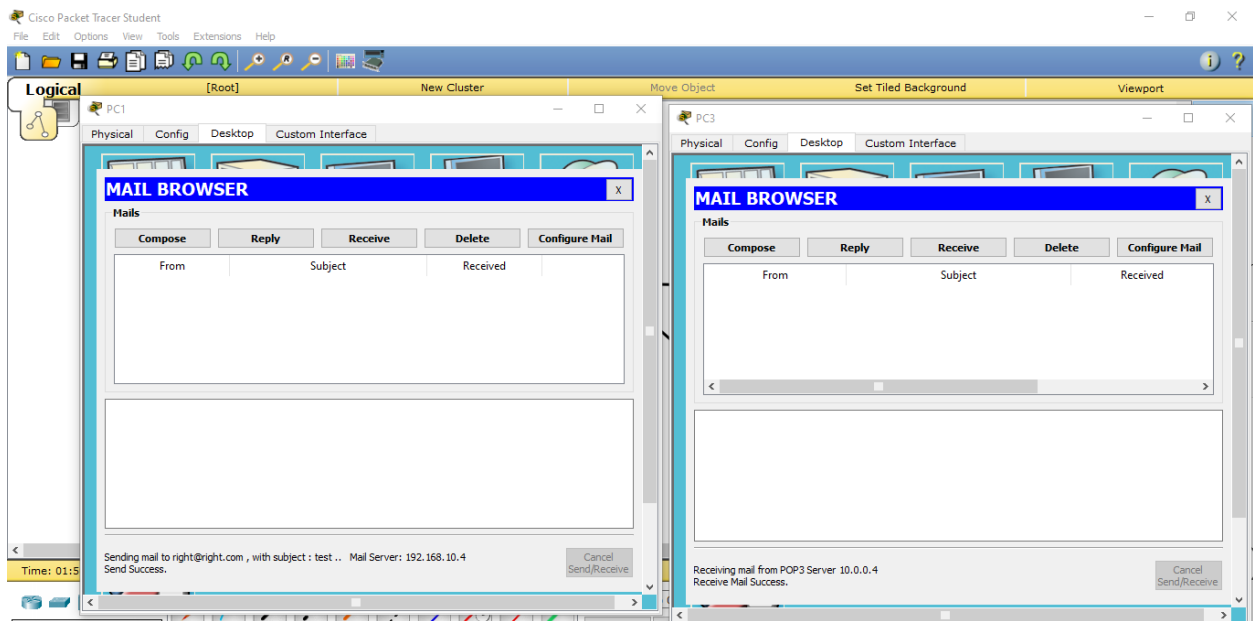
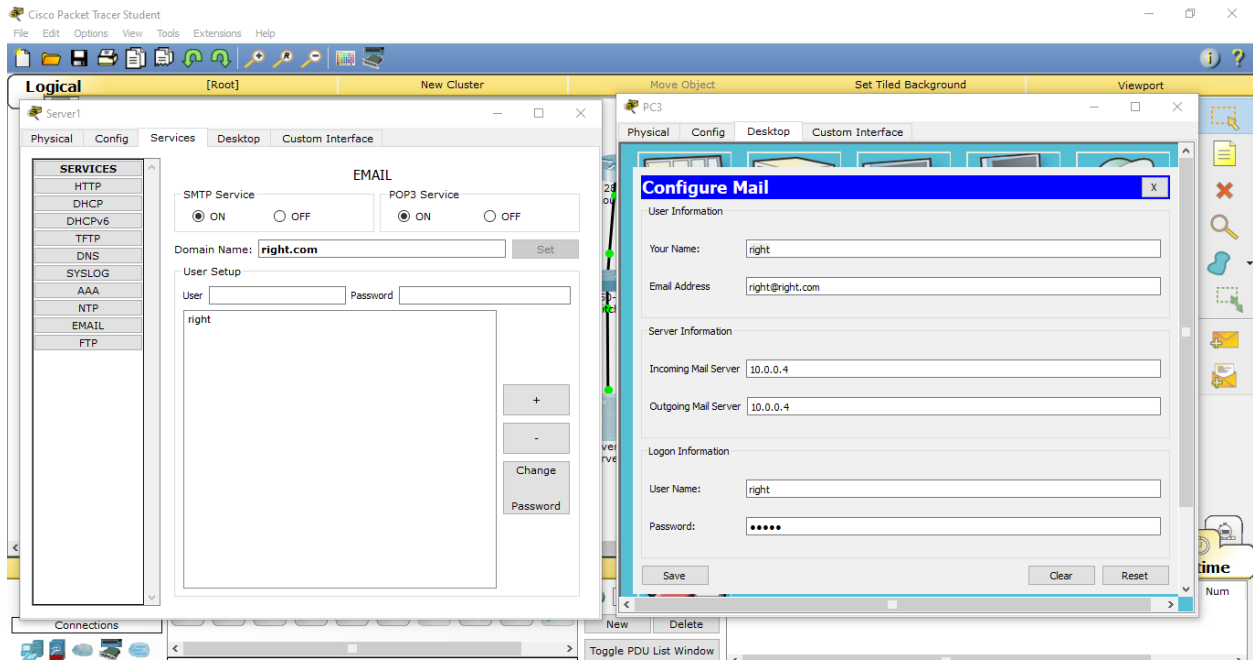
- Interface: FastEthernet0
- IP Configuration: Static
- IP Address: 192.168.10.2
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.10.1
- DNS Server:
- IPv6 Configuration: Static
- IPv6 Address:
- Link Local Address: FE80::290:21FF:FEE1:9AB3
- IPv6 Gateway:
- IPv6 DNS Server:

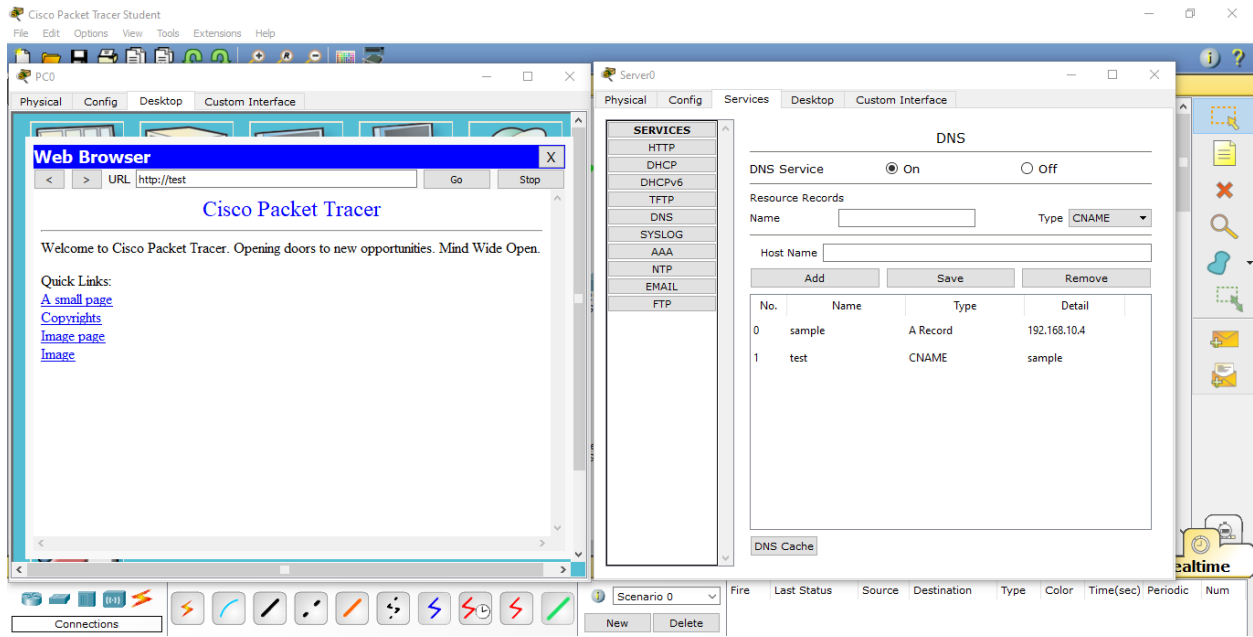
Router1 CLI:

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#int fa0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
Router(config)#ip nat inside source 192.168.10.2 10.37.1.1
% Invalid input detected at '^' marker.
Router(config)#ip nat inside source static 192.168.10.2 10.37.1.1
Router(config)#
```









QUESTION # 3:

1. 192.168.1.100
2. http doesn't return any result but ip.addr == 64.233.169.104 returns result:

No.	Time	Source	Destination	Protocol	Length	Info
53	16:43:07.344792	192.168.1.100	64.233.169.104	TCP	66	4335→80 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 W...
54	16:43:07.378121	64.233.169.104	192.168.1.100	TCP	66	80→4335 [SYN, ACK] Seq=0 Ack=1 Win=5720 Len=0 ...
55	16:43:07.578188	192.168.1.100	64.233.169.104	TCP	54	4335→80 [ACK] Seq=1 Ack=1 Win=260176 Len=0
56	16:43:07.378402	192.168.1.100	64.233.169.104	TCP	60	4335→80 [PSH, ACK] Seq=1 Ack=1 Win=260176 Len=...
57	16:43:07.409363	64.233.169.104	192.168.1.100	TCP	60	80→4335 [ACK] Seq=1 Ack=636 Win=7040 Len=0
58	16:43:07.427567	64.233.169.104	192.168.1.100	TCP	1404	80→4335 [ACK] Seq=1 Ack=636 Win=7040 Len=1430
59	16:43:07.427896	64.233.169.104	192.168.1.100	TCP	1404	80→4335 [ACK] Seq=1431 Ack=636 Win=7040 Len=14...
60	16:43:07.427932	64.233.169.104	192.168.1.100	TCP	814	80→4335 [PSH, ACK] Seq=2861 Ack=636 Win=7040 L...
61	16:43:07.427979	192.168.1.100	64.233.169.104	TCP	54	4335→80 [ACK] Seq=636 Ack=3621 Win=260176 Len=0
62	16:43:07.550534	192.168.1.100	64.233.169.104	TCP	719	4335→80 [PSH, ACK] Seq=636 Ack=3621 Win=260176...
63	16:43:07.584154	64.233.169.104	192.168.1.100	TCP	309	80→4335 [PSH, ACK] Seq=3621 Ack=1301 Win=8320 ...
64	16:43:07.584711	64.233.169.104	192.168.1.100	TCP	1404	80→4335 [ACK] Seq=3676 Ack=1301 Win=8320 Len=1...
65	16:43:07.584776	192.168.1.100	64.233.169.104	TCP	54	4335→80 [ACK] Seq=1301 Ack=5306 Win=260176 Len...
66	16:43:07.585855	64.233.169.104	192.168.1.100	TCP	1404	80→4335 [ACK] Seq=5306 Ack=1301 Win=8320 Len=1...
67	16:43:07.585388	64.233.169.104	192.168.1.100	TCP	1290	80→4335 [PSH, ACK] Seq=6736 Ack=1301 Win=8320 ...
68	16:43:07.585418	192.168.1.100	64.233.169.104	TCP	54	4335→80 [ACK] Seq=1301 Ack=7972 Win=260176 Len...
69	16:43:07.617865	64.233.169.104	192.168.1.100	TCP	1404	80→4335 [ACK] Seq=7972 Ack=1301 Win=8320 Len=1...
70	16:43:07.618238	64.233.169.104	192.168.1.100	TCP	1404	80→4335 [ACK] Seq=9402 Ack=1301 Win=8320 Len=1...
71	16:43:07.618278	192.168.1.100	64.233.169.104	TCP	54	4335→80 [ACK] Seq=1301 Ack=10832 Win=260176 L...
72	16:43:07.618557	64.233.169.104	192.168.1.100	TCP	1404	80→4335 [ACK] Seq=10832 Ack=1301 Win=8320 Len=...
73	16:43:07.618586	64.233.169.104	192.168.1.100	TCP	226	80→4335 [PSH, ACK] Seq=12262 Ack=1301 Win=8320...
74	16:43:07.618809	192.168.1.100	64.233.169.104	TCP	54	4335→80 [ACK] Seq=1301 Ack=12434 Win=260176 L...
75	16:43:07.639320	192.168.1.100	64.233.169.104	TCP	809	4335→80 [PSH, ACK] Seq=1301 Ack=12434 Win=2601...

3. Source IP: 192.168.1.100, Source Port :4335, Destination IP: 64.233.169.104, Destination Port: 80
4. Time: 7.158798, Destination IP: 192.168.1.100, Destination Port :4335, Source IP: 64.233.169.104, Source Port: 80
5. Time: 7.075657 , Source IP: 192.168.1.100, Source Port :4335, Destination IP: 64.233.169.104, Destination Port: 80, Destination IP: 192.168.1.100, Destination Port :4335, Source IP: 64.233.169.104, Source Port: 80, Time: 7.108986