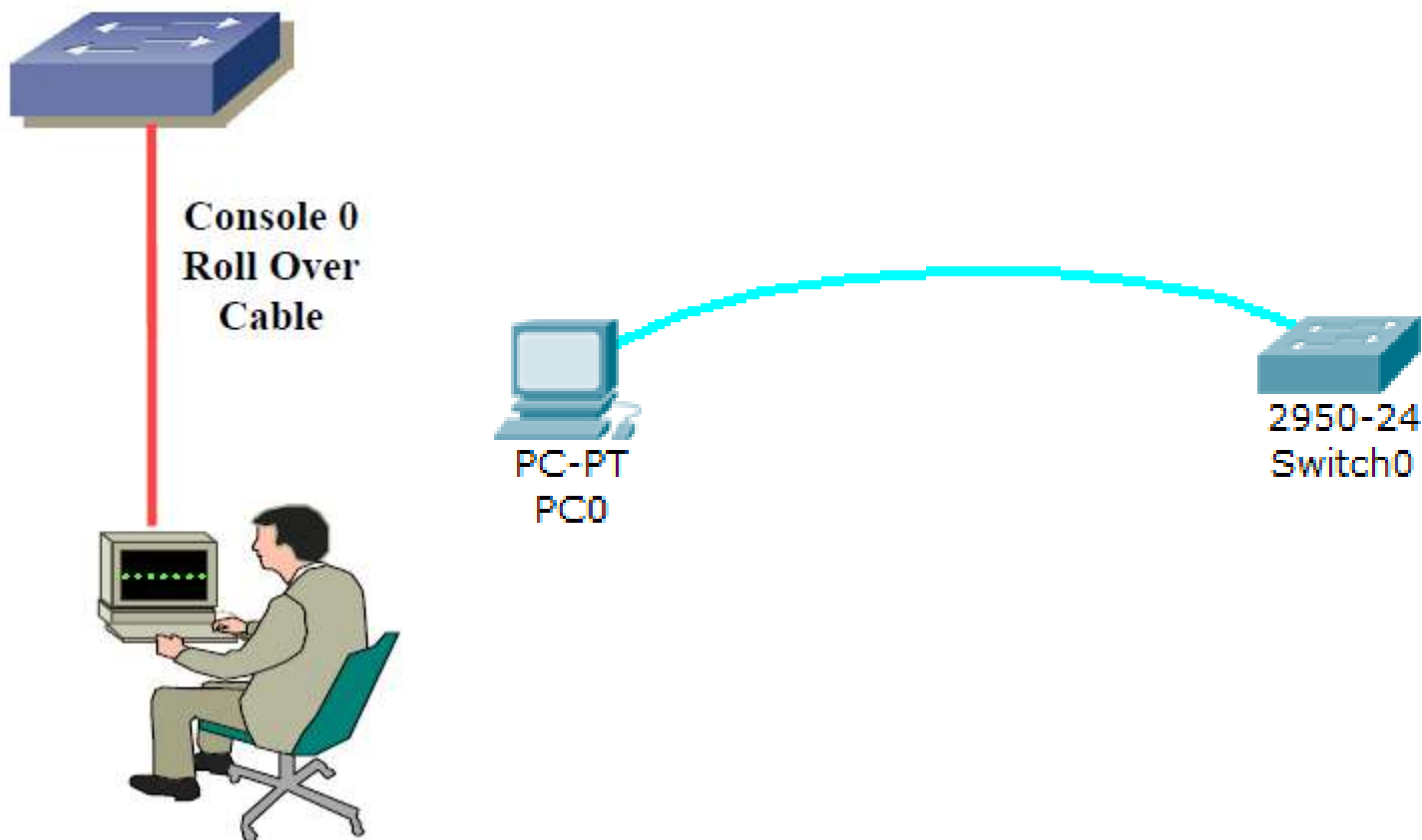


Practical Applications in Networks I

Peer2peer network using packet tracer

1.1 24 ports switch basic configuration

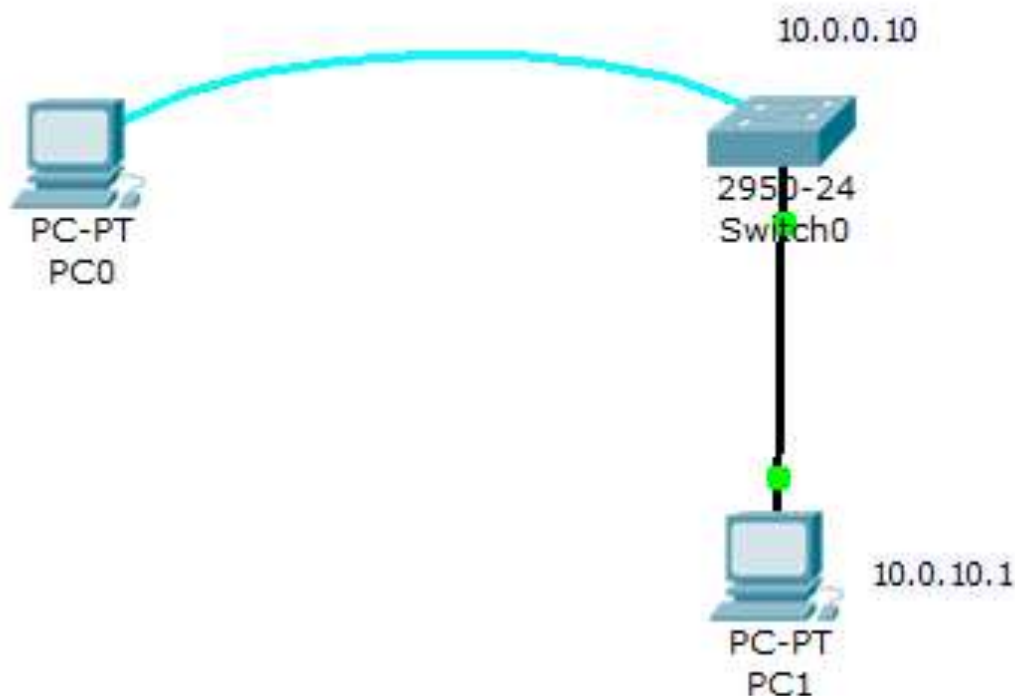
SWA-2950



```
enable
config t
hostname SW-FL01-R01
banner motd #Hello & Welcome to Practical Applications on Networks I - Lecture 01#
interface vlan 1
ip address 10.0.0.10 255.0.0.0
no shutdown
end

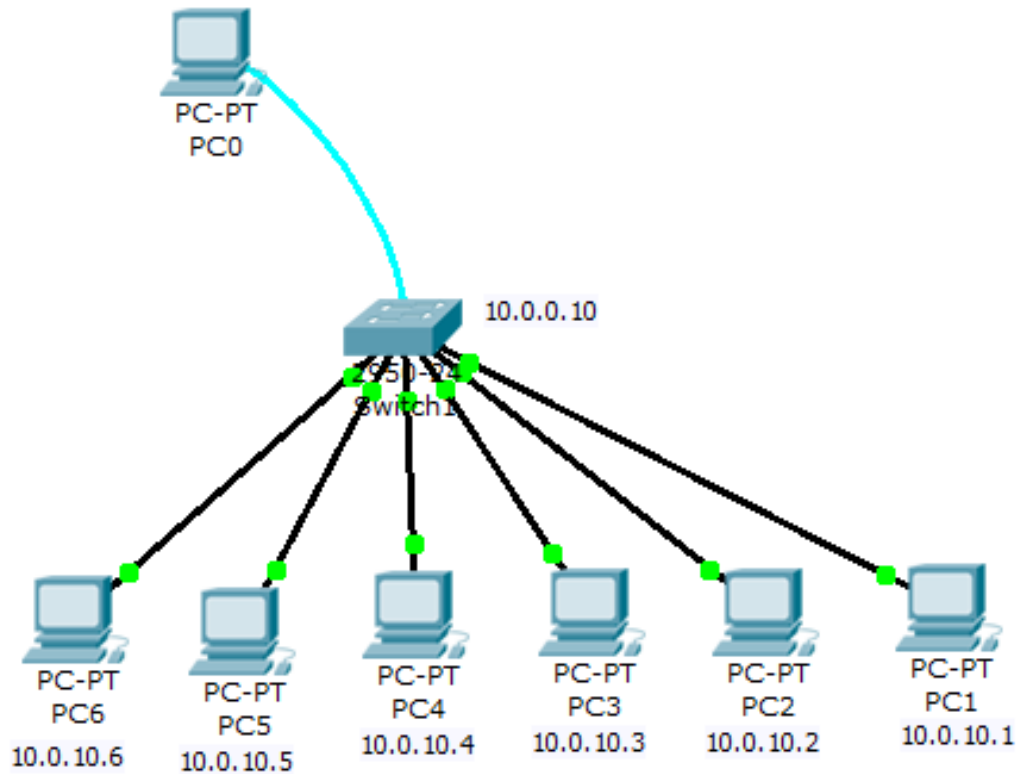
copy running-config startup-config
reload
```

1.2 Connecting PCs



```
enabl
config t
line vty 0 4
password cisco
login
end
copy running-config startup-config
reload
enable
config t
line console 0
password cisco
login
enable password cisco
enable secret cisco1
copy running-config startup-config
reload
```

1.3 Build peer2peer star network



```

enable
config t
interface fa0/1
speed 100
duplex full
no sh
description Floor01-Rack01-Room-1101

ping 10.0.10.1
show mac address-table

interface range fa0/1-6
speed 100
duplex full
end

show mac address-table

```



Ping 10.0.10.2

Ping 10.0.10.3

Ping 10.0.10.4

Ping 10.0.10.5

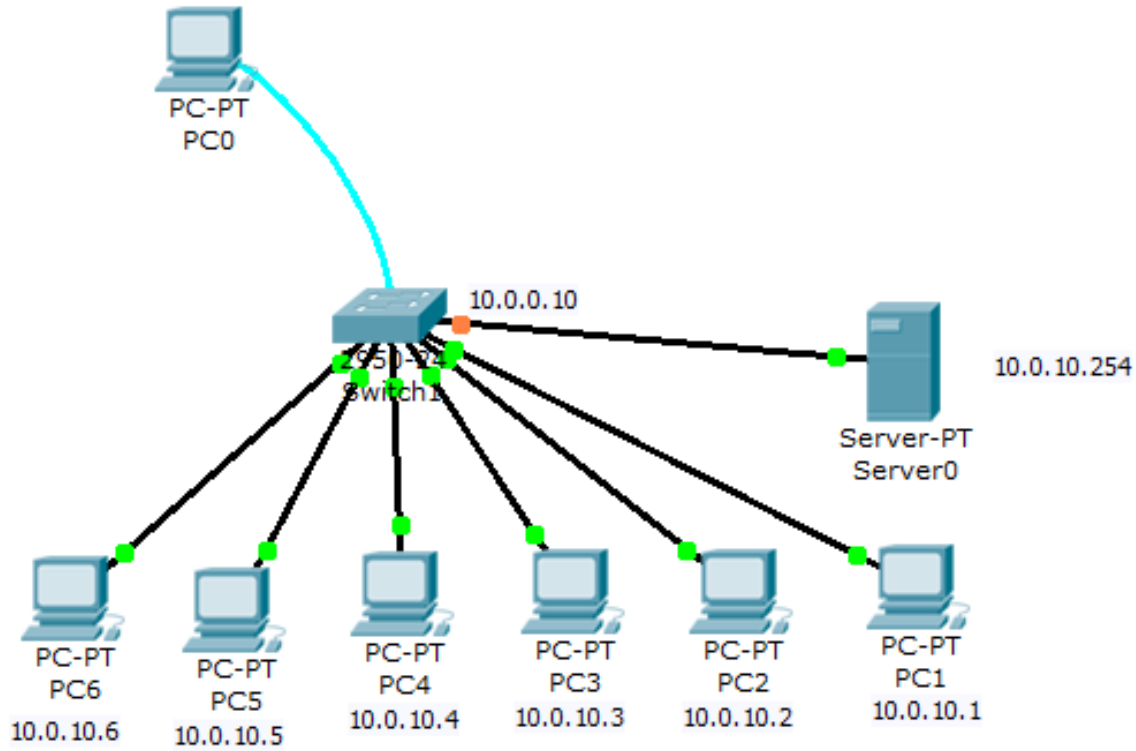
Ping 10.0.10.6

show mac address-table

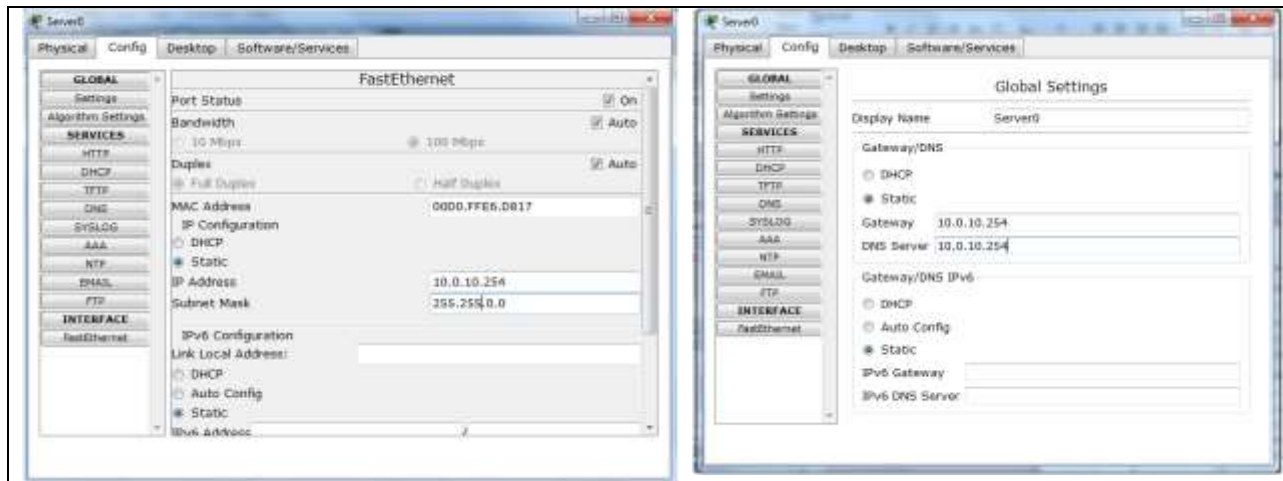
copy running-config startup-config

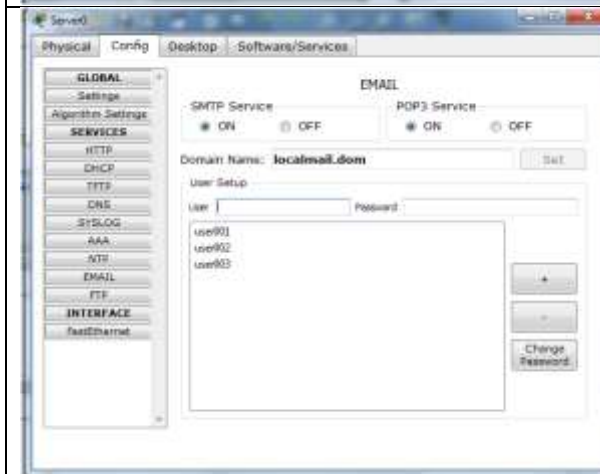
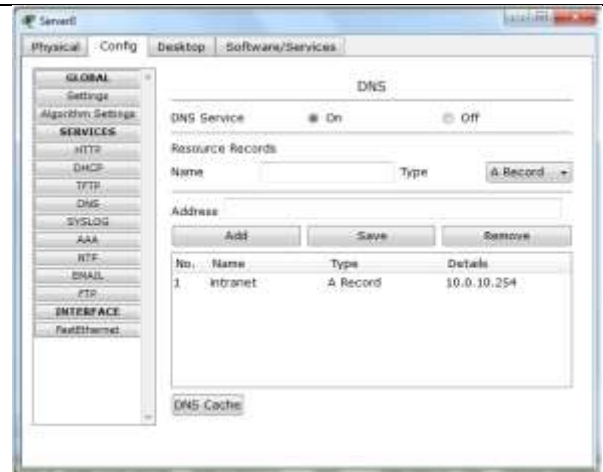
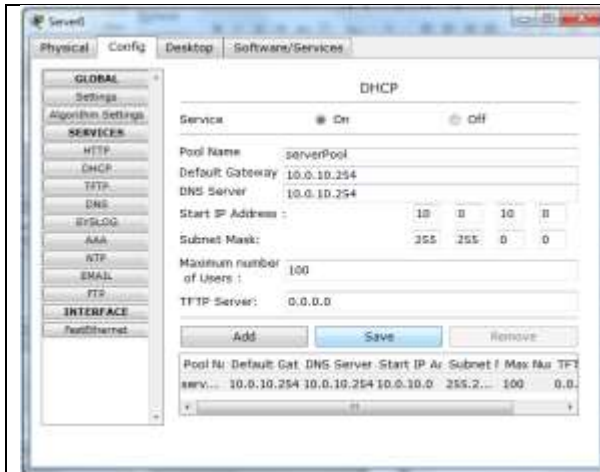
reload

1.4 Clients/Server star network



Server configuration



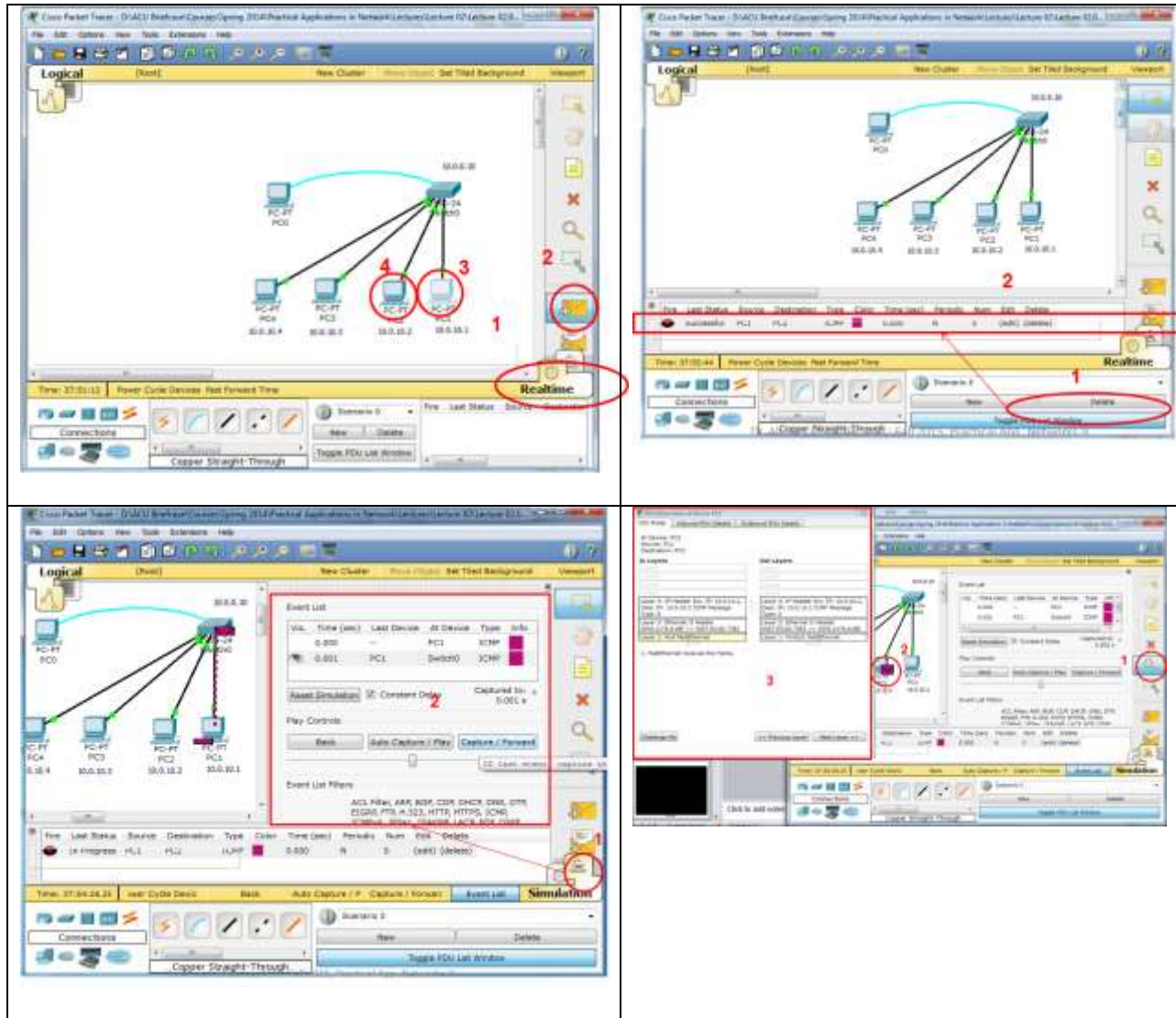




PC0	item	Configuration	PC1	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	auto
	Port status	On		Port status	On
	Band width	Auto		Band width	Auto
	Duplex	Auto		Duplex	Auto
	IP	auto		IP	auto
	Mask	auto		Mask	auto

PC2	item	Configuration	PC3	item	Configuration
	Gateway	auto		Gateway	auto
	DNS	auto		DNS	On
	Port status	On		Port status	Auto
	Band width	Auto		Band width	Auto
	Duplex	Auto		Duplex	auto
	IP	auto		IP	auto
	Mask	auto		Mask	auto

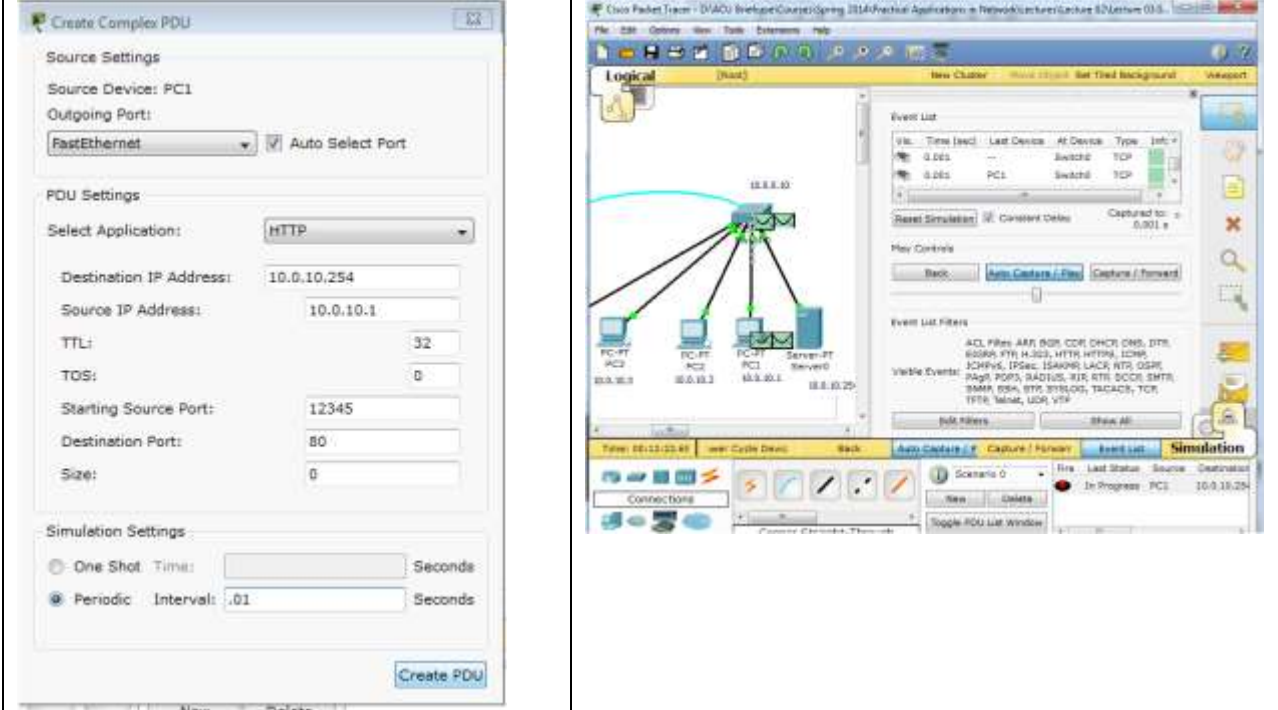
1.5 Traffic analysis using Packet Tracer



The figure consists of four screenshots from the Packet Tracer interface, illustrating the process of traffic analysis:

- Top Left:** Shows a network diagram with a central switch (S0.0.24) connected to four PCs (S0.0.10.1 to S0.0.10.4). Red circles and numbers 1, 2, 3, and 4 highlight the Realtime button, the switch, and the PCs respectively.
- Top Right:** Shows the network diagram with a red box highlighting the Realtime button and the 'Realtime' tab in the bottom panel.
- Bottom Left:** Shows the network diagram with the 'Event List' window open. The 'Event List' table is highlighted with a red box, showing details for a packet capture event. Below the table, the 'Event List Filters' section is also visible.
- Bottom Right:** Shows the 'Event List' window with a red box highlighting the 'Event List' button in the bottom panel and the 'Event List' window itself.

1.6 Traffic analysis, complex PDU, http



The image displays two screenshots from Cisco Packet Tracer, illustrating the configuration and execution of a traffic analysis simulation.

Left Screenshot: Create Complex PDU Dialog

- Source Settings:** Source Device: PC1, Outgoing Port: FastEthernet, Auto Select Port:
- PDU Settings:** Select Application: HTTP, Destination IP Address: 10.0.10.254, Source IP Address: 10.0.10.1, TTL: 32, TOS: 0, Starting Source Port: 12345, Destination Port: 80, Size: 0
- Simulation Settings:** One Shot: Time: [] Seconds; Periodic: Interval: .01 Seconds
- Button: Create PDU

Right Screenshot: Packet Tracer Simulation Interface

- Logical Network Diagram:** Shows a central switch (S.S.0.0) connected to four devices: PC1 (S.S.0.1), PC2 (S.S.0.2), PC3 (S.S.0.3), and Server0 (S.S.0.25).
- Event List:**

Vis.	Time (sec)	Last Device	At Device	Type	Info
PC1	0.005	---	Switch0	TCP	
PC1	0.005	PC1	Switch0	TCP	
- Event List Filters:** ACL, Filter, ARP, BGP, CDP, DHCP, DNS, DTP, EIGRP, FTP, H-323, HTTP, HTTPS, ICMP, ICHRP, IPsec, ISAKMP, LACP, NTP, OSPF, Page, POP3, RADIUS, SIP, RTP, SDO, SMTP, SNMP, SSH, STP, STPLOG, TACACS, TFTP, Telnet, UDP, VTY
- Simulation Controls:** Back, Auto Capture / Stop, Capture / Forward, Event List, Simulation
- Simulation Status:** Scenario 0, Fire: In Progress, Source: PC1, Destination: 10.0.10.254