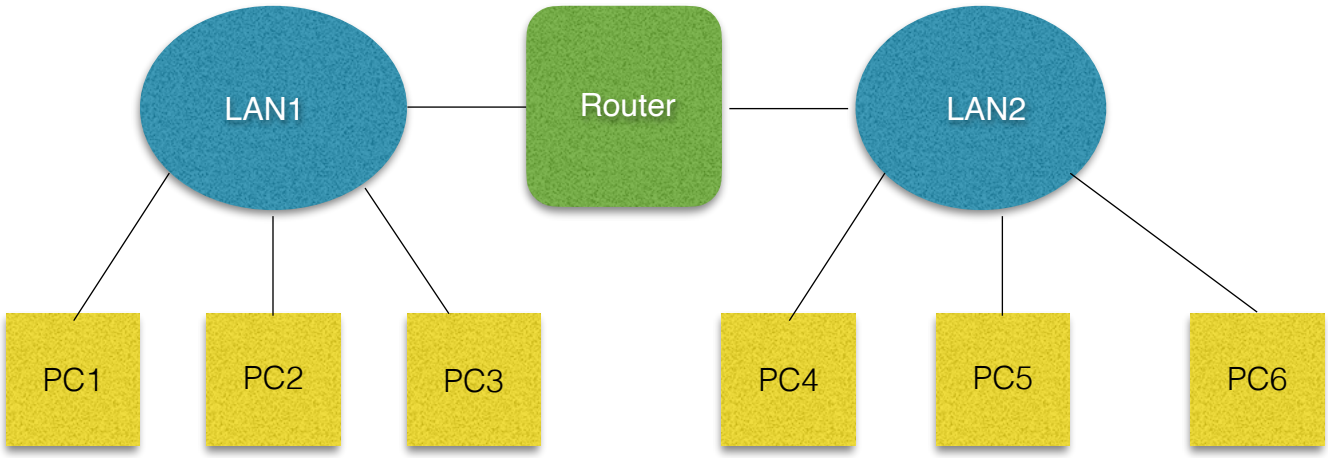
ISAA LAB ASSIGNMENT - 1

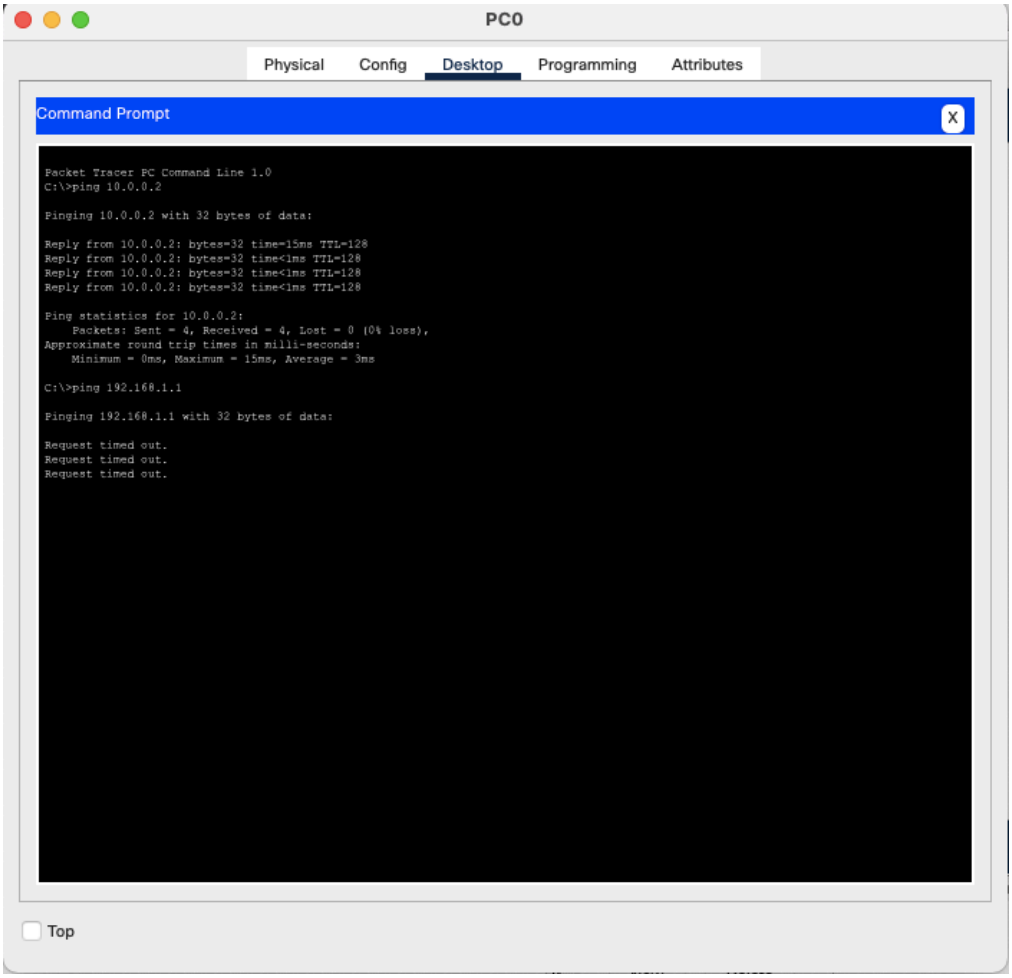
NAME	APOORVA REDDY BAGEPALLI
REGISTRATION NUMBER	19BCE2196

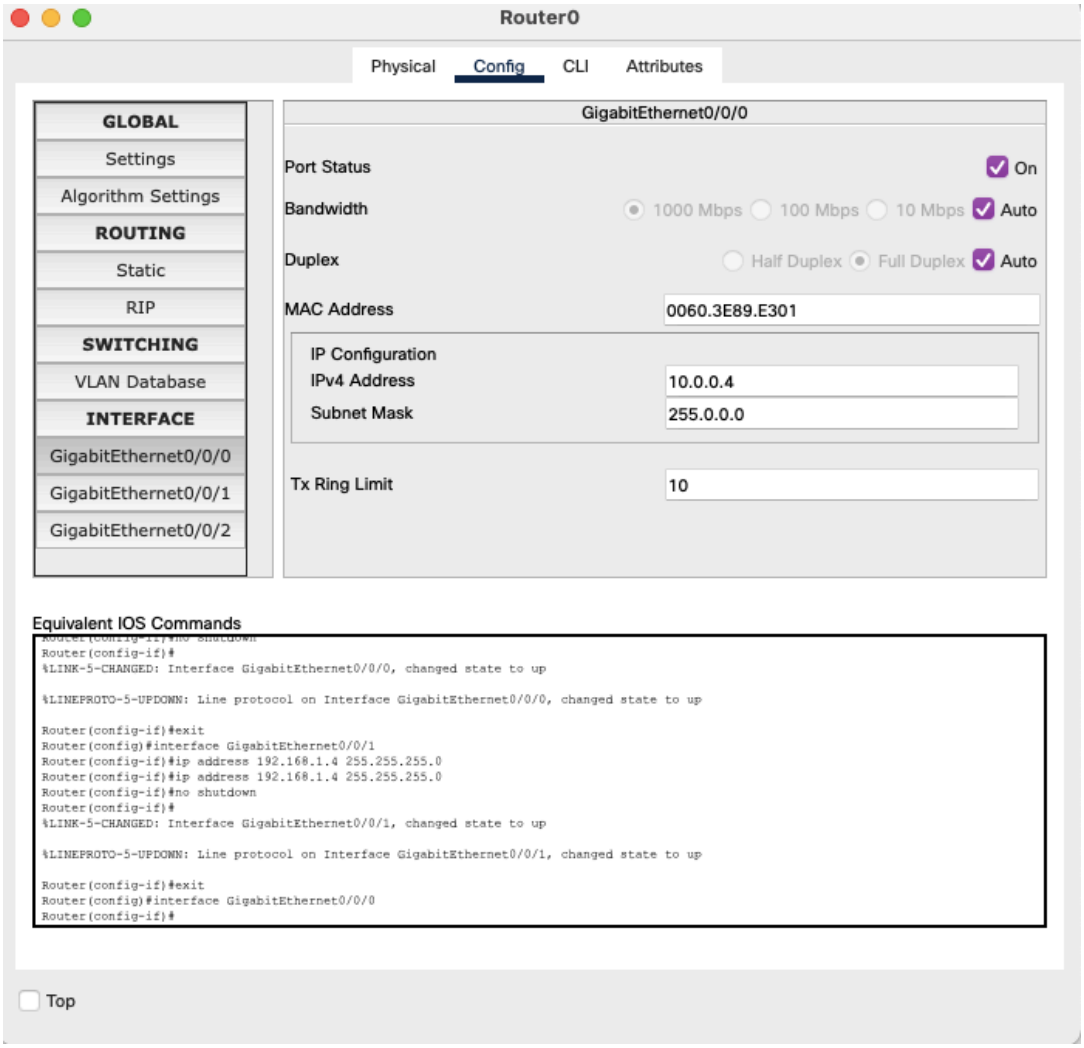
1(A) Connecting two LANs with Router

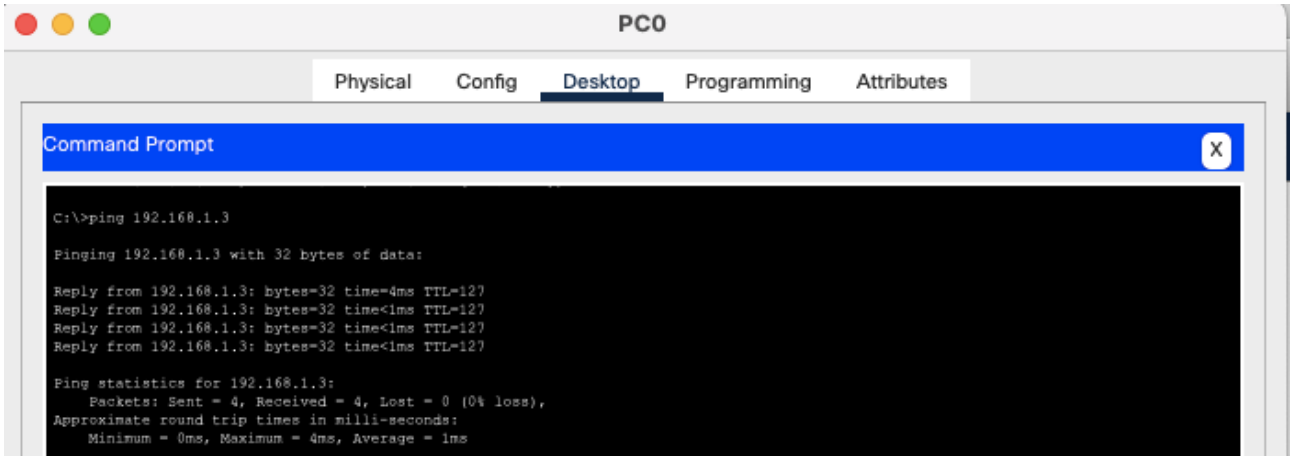


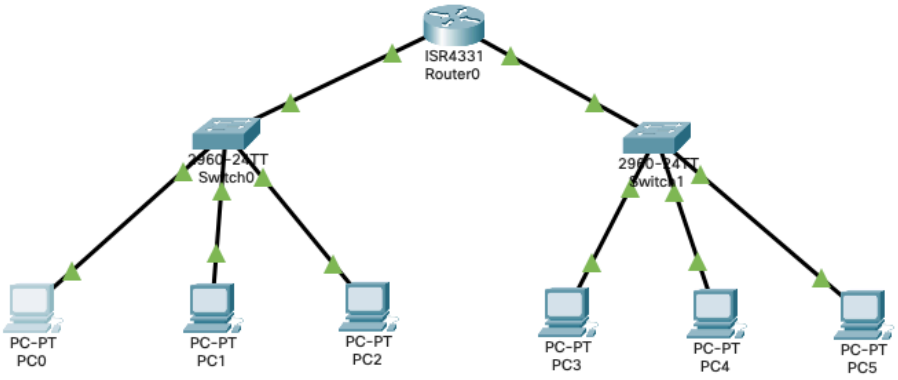
- Router IP Address for GigabitEthernet 0/0/0 is default gateway for PC1,PC2,PC3 (10.0.0.4)
- Router IP Address for GigabitEthernet 0/0/1 is default gateway for PC4,PC5,PC6 (192.168.1.4)
- Connecting six PCs to corresponding two LAN Switch respectively
- Connecting medium using copper straight through wire

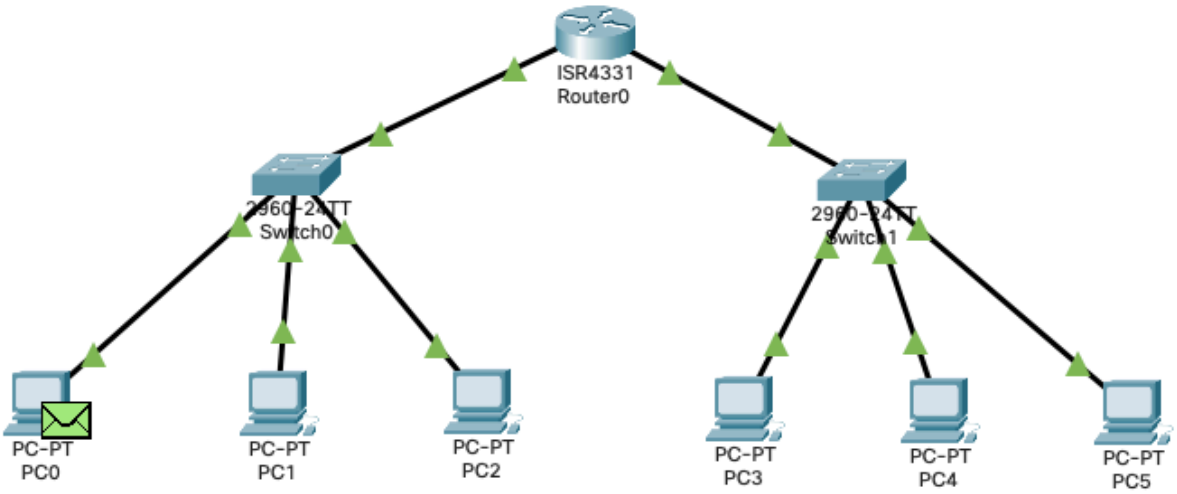
Screenshot:

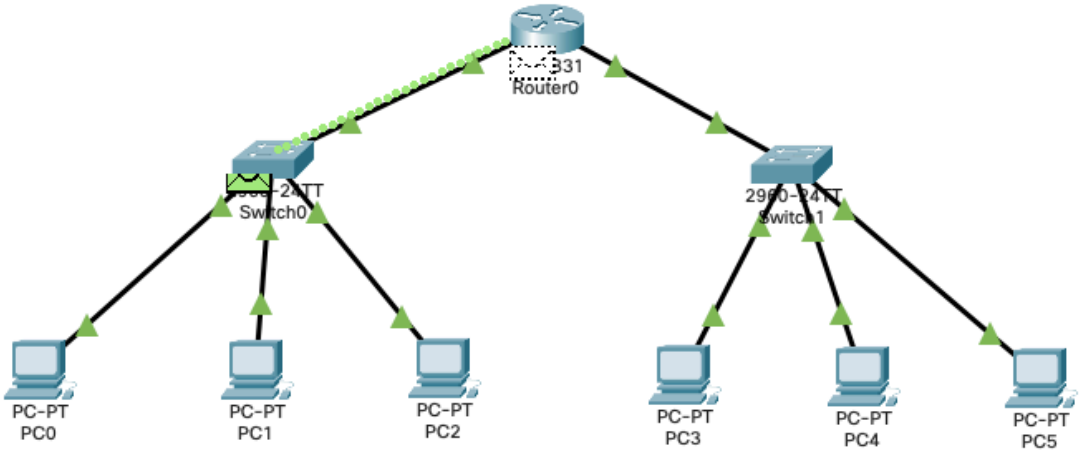


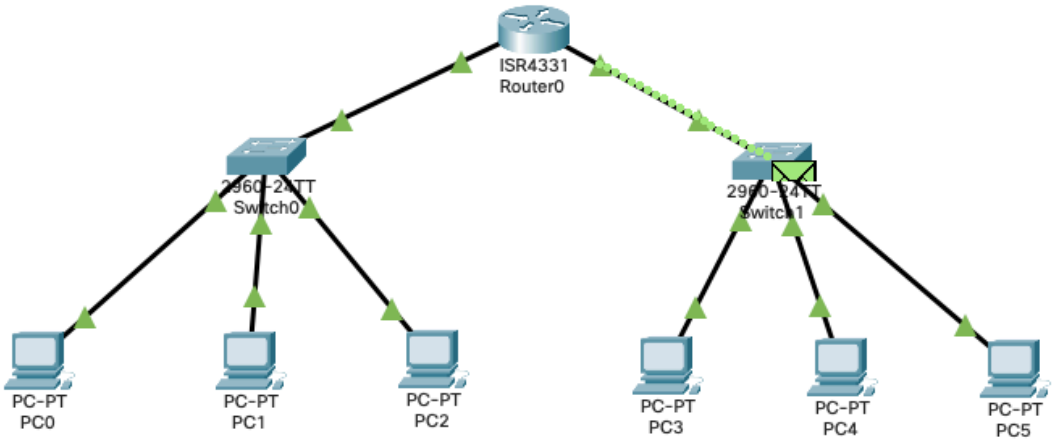

Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
GigabitEthernet0/0/2
GigabitEthernet0/0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0060.3E89.E301
IP Configuration
IPv4 Address
10.0.0.4
Subnet Mask
255.0.0.0
Tx Ring Limit
10
Equivalent IOS Commands
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
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 192.168.1.4 255.255.255.0
Router(config-if)#ip address 192.168.1.4 255.255.255.0
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
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
Top

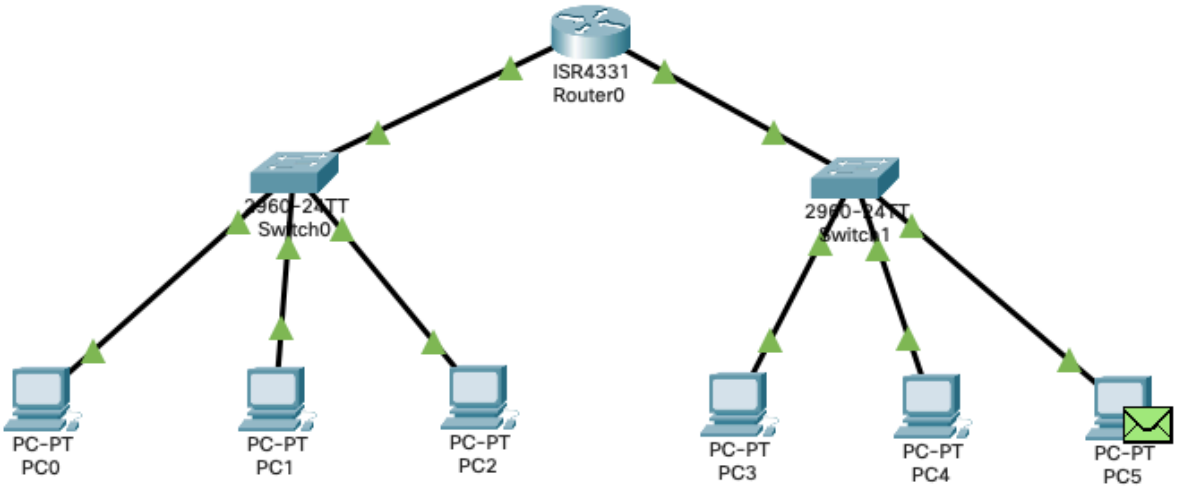

PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
C:\>ping 192.168.1.3
Pinging 192.168.1.3 with 32 bytes of data:
Reply from 192.168.1.3: bytes=32 time=4ms TTL=127
Reply from 192.168.1.3: bytes=32 time<1ms TTL=127
Reply from 192.168.1.3: bytes=32 time<1ms TTL=127
Reply from 192.168.1.3: bytes=32 time<1ms TTL=127
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 = 4ms, Average = 1ms

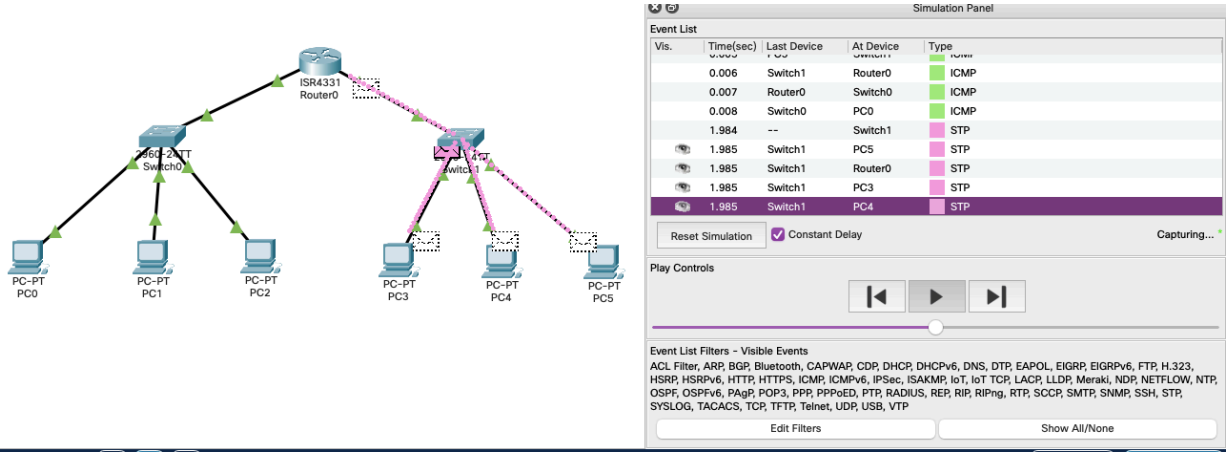

ISR4331
Router0
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5


ISR4331
Router0
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5

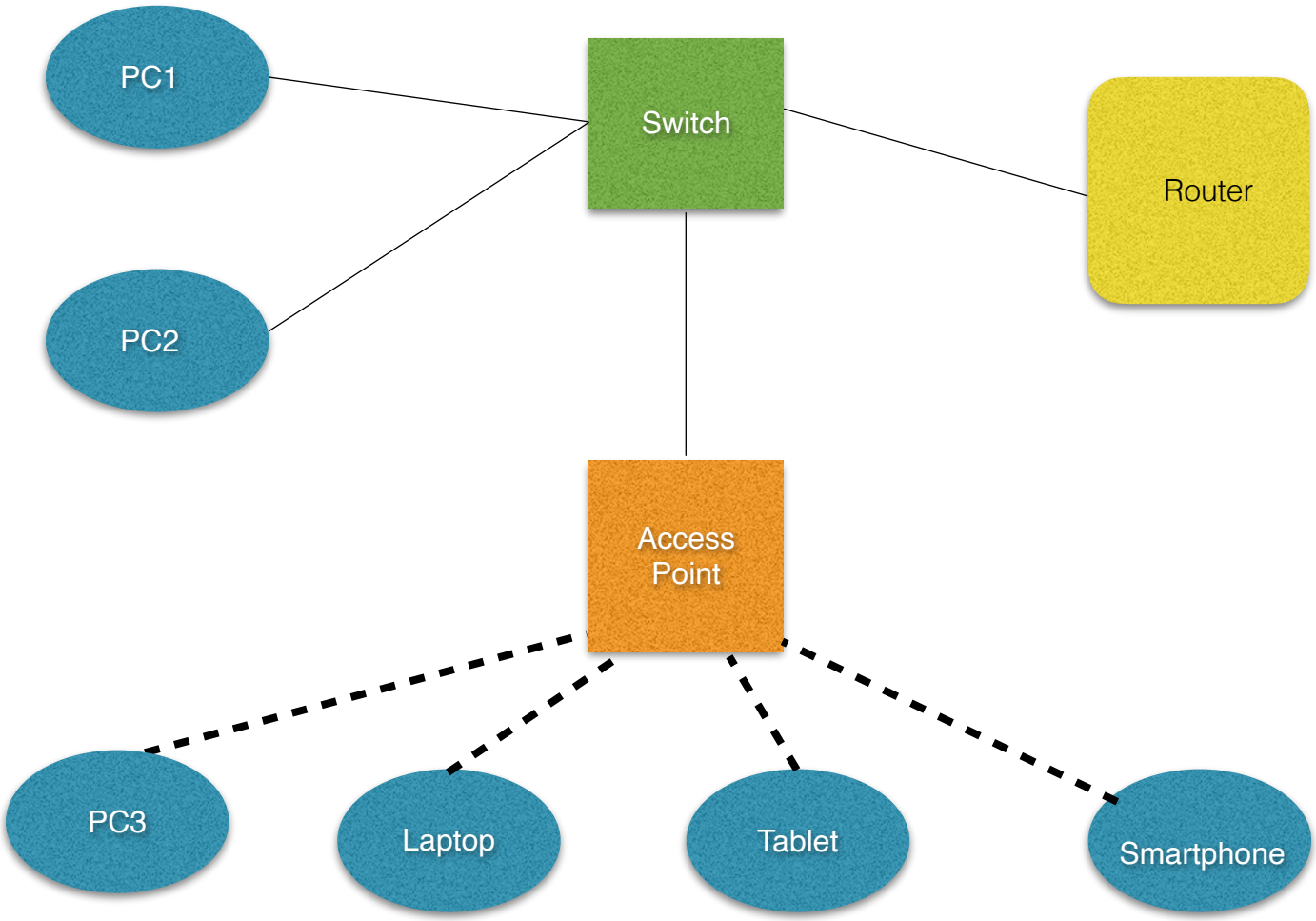

Router0
Switch0
2960-24TT
Switch1
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5


ISR4331
Router0
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5


ISR4331
Router0
2960-24TT
Switch0
2960-24TT
Switch1
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5

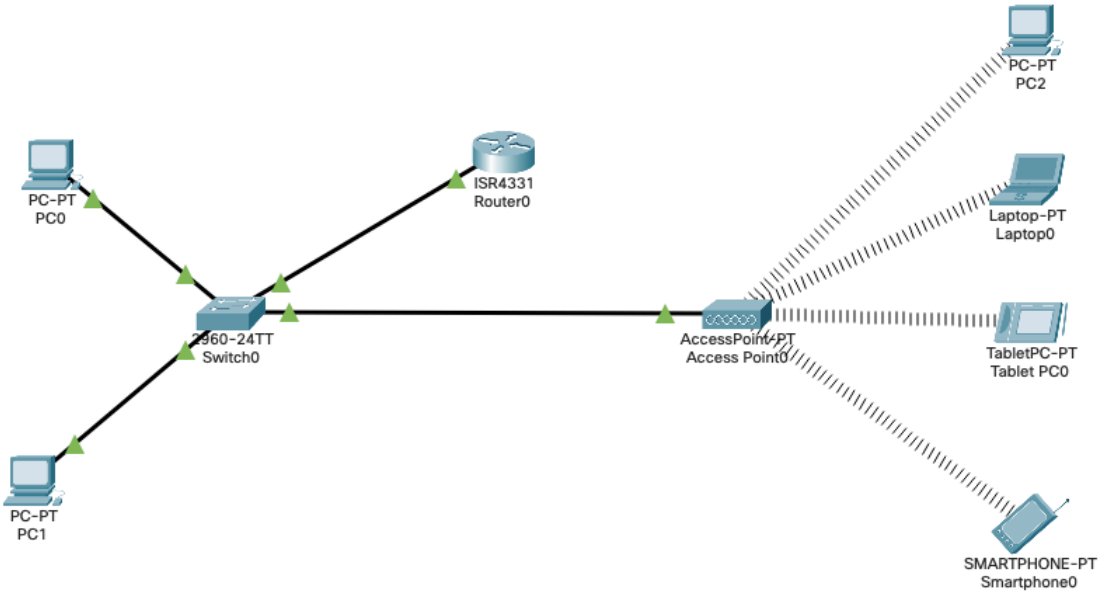

ISR4331
Router0
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.006 Switch1 Router0 ICMP
0.007 Router0 Switch0 ICMP
0.008 Switch0 PC0 ICMP
1.984 -- Switch1 STP
1.985 Switch1 PC5 STP
1.985 Switch1 Router0 STP
1.985 Switch1 PC3 STP
1.985 Switch1 PC4 STP
Reset Simulation
Constant Delay
Capturing...
Play Controls
Event List Filters - Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoED, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP
Edit Filters
Show All/None

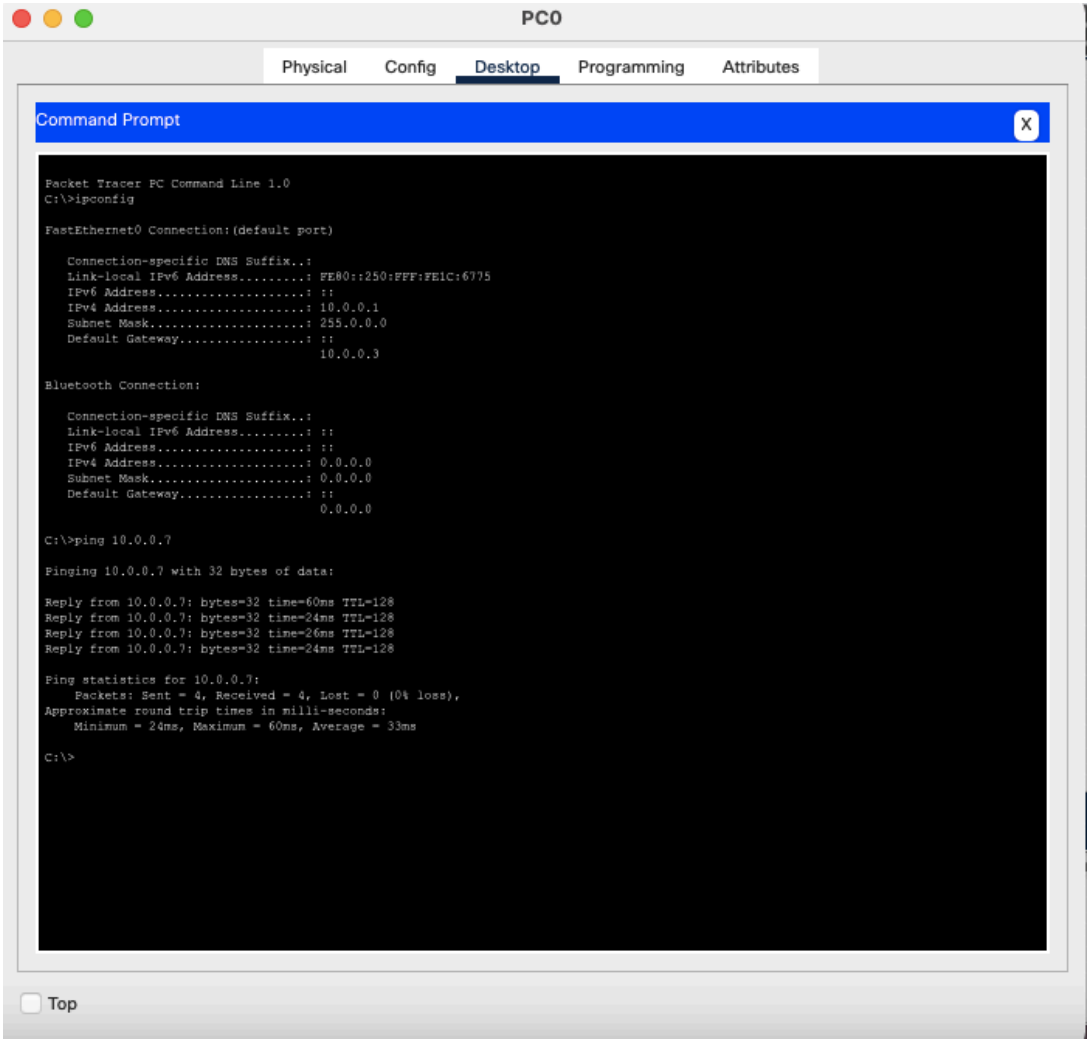
1(B) Wireless Connection

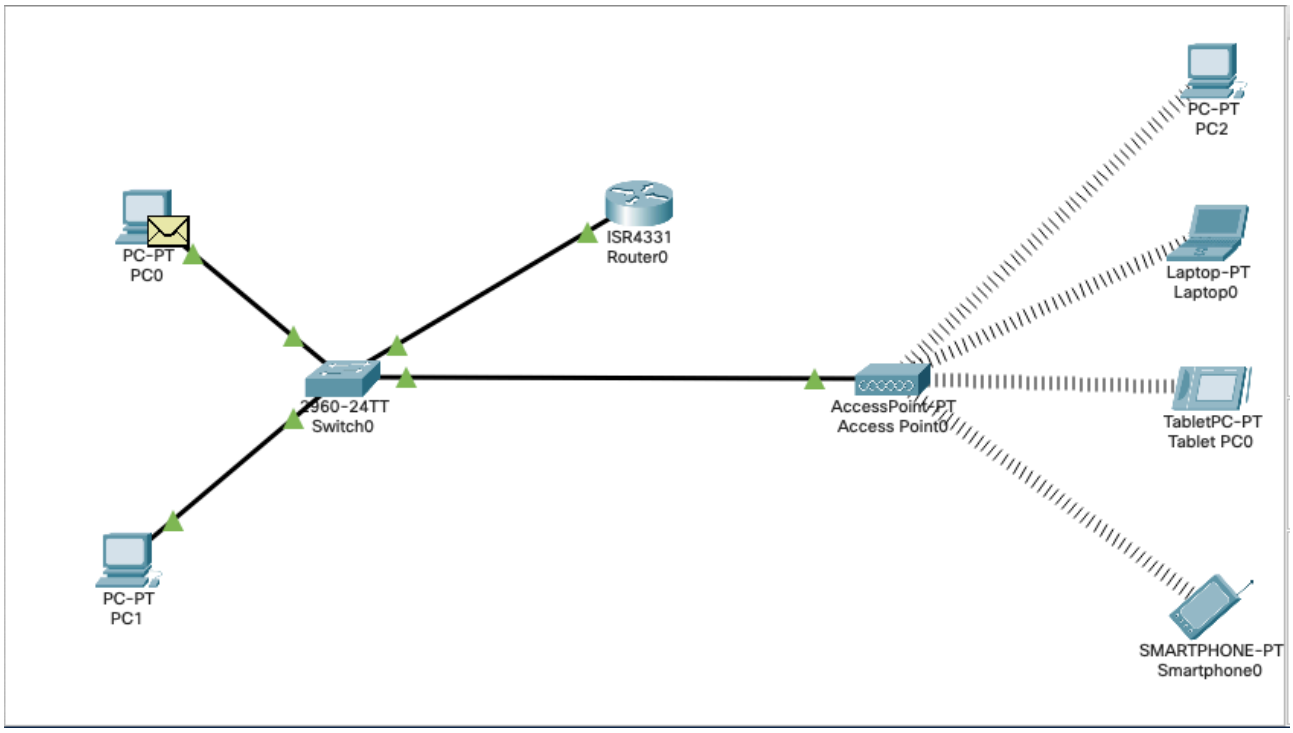


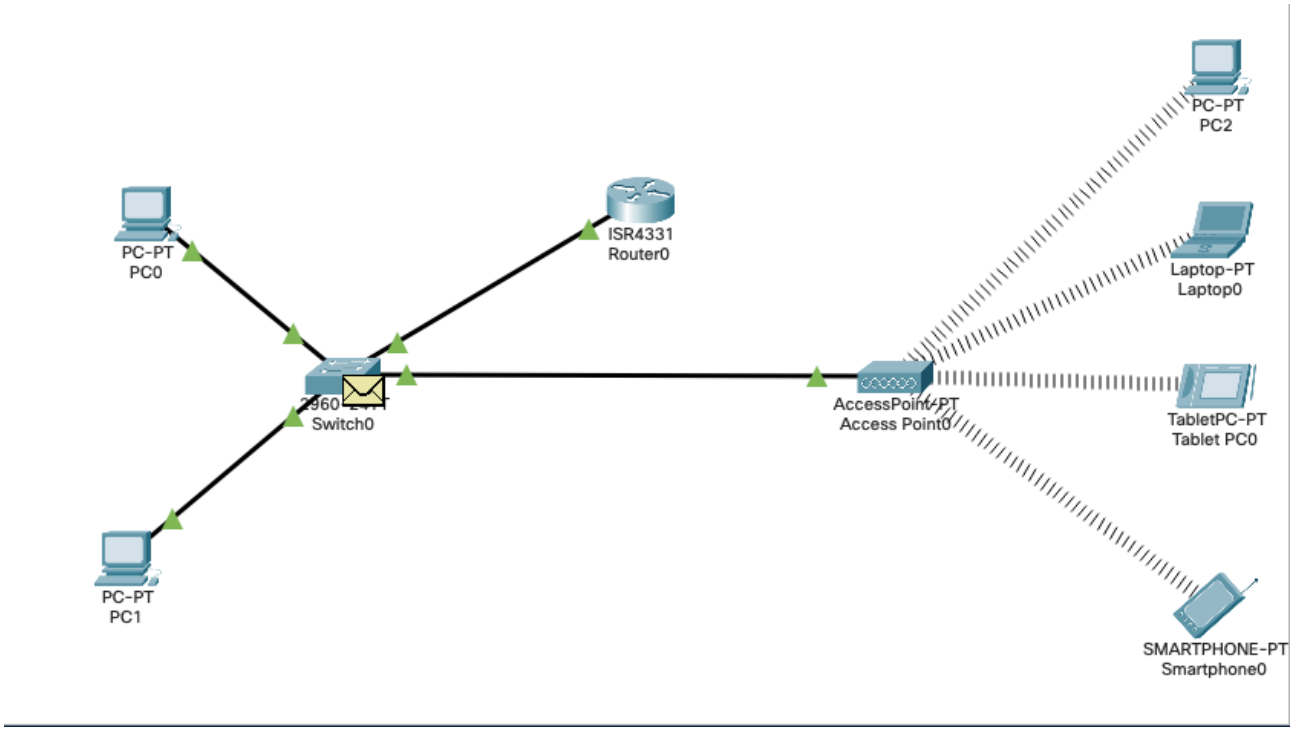
- At Access point, Port 1 configure SSID and WEP key
- Two PCs are connected to the corresponding Switch which is then connected to the router
- Configure Default gateway of Router to the two connected PCs
- Access Point (wireless device) is connected to the Switch and and other four devices - PC,Laptop,Tablet, Smartphone
- Configure Wifi connection in all the four devices to the access point

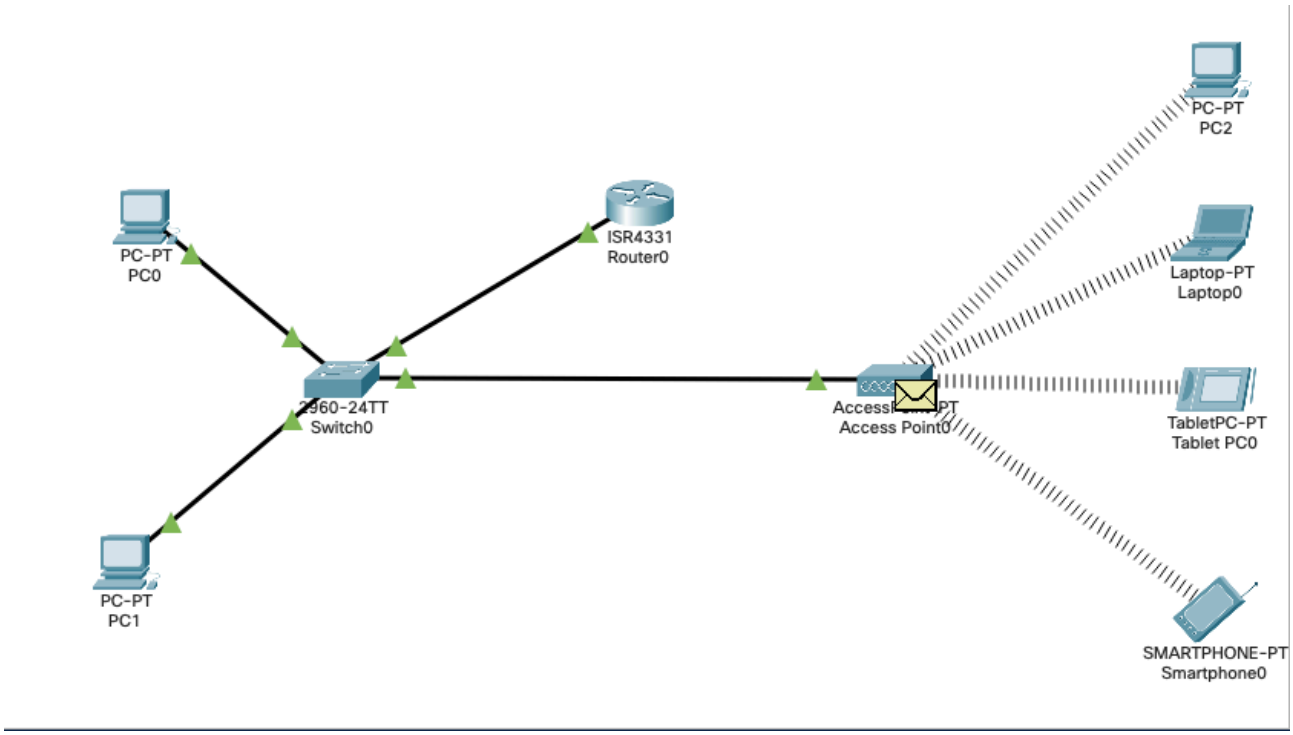
ScreenShot

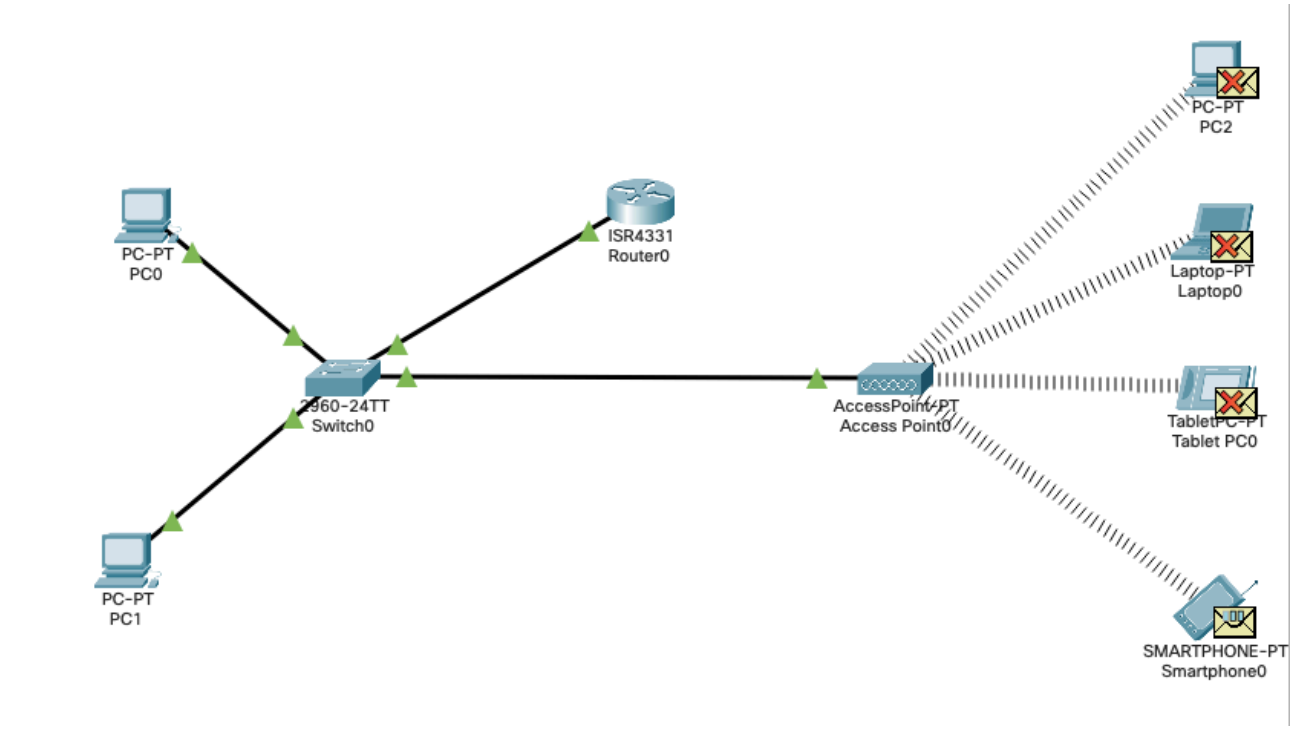

PC-PT
PC2
PC-PT
PC0
ISR4331
Router0
Laptop-PT
Laptop0
2960-24TT
Switch0
AccessPoint-PT
Access Point0
TabletPC-PT
Tablet PC0
PC-PT
PC1
SMARTPHONE-PT
Smartphone0

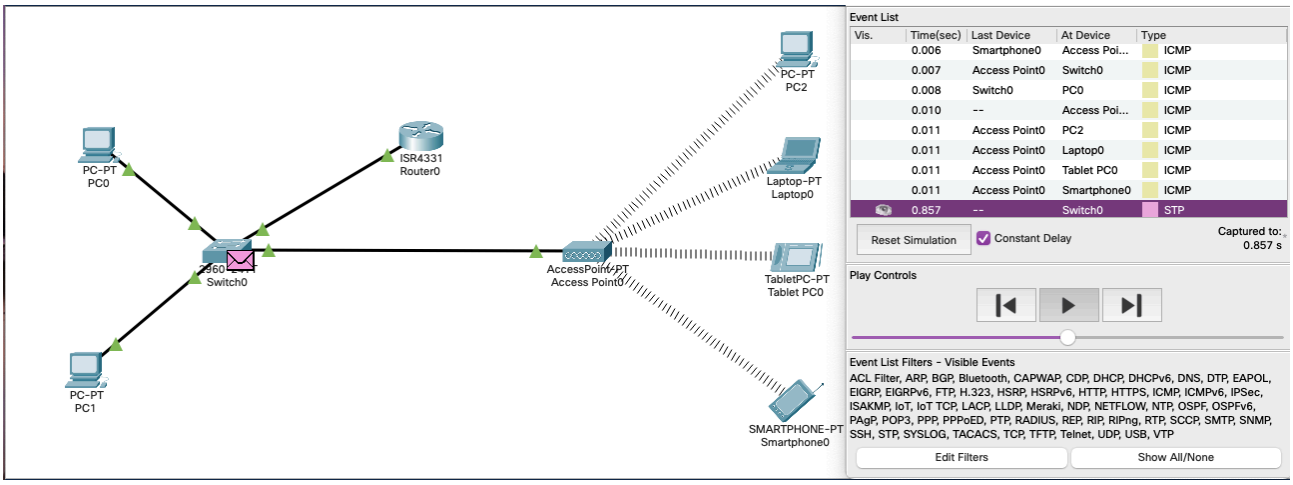

PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Packet Tracer PC Command Line 1.0
C:\>ipconfig
FastEthernet0 Connection:(default port)
Connection-specific DNS Suffix..:
Link-local IPv6 Address.....: FE80::250:FFF:FE1C:6775
IPv6 Address.....: ::
IPv4 Address.....: 10.0.0.1
Subnet Mask.....: 255.0.0.0
Default Gateway.....: ::
10.0.0.3
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 10.0.0.7
Pinging 10.0.0.7 with 32 bytes of data:
Reply from 10.0.0.7: bytes=32 time=60ms TTL=128
Reply from 10.0.0.7: bytes=32 time=24ms TTL=128
Reply from 10.0.0.7: bytes=32 time=26ms TTL=128
Reply from 10.0.0.7: bytes=32 time=24ms TTL=128
Ping statistics for 10.0.0.7:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 24ms, Maximum = 60ms, Average = 33ms
C:\>
Top


PC-PT
PC2
PC-PT
PC0
ISR4331
Router0
Laptop-PT
Laptop0
2960-24TT
Switch0
AccessPoint-PT
Access Point0
TabletPC-PT
Tablet PC0
PC-PT
PC1
SMARTPHONE-PT
Smartphone0


PC-PT
PC2
PC-PT
PC0
ISR4331
Router0
Laptop-PT
Laptop0
Switch0
AccessPoint-PT
Access Point0
TabletPC-PT
Tablet PC0
PC-PT
PC1
SMARTPHONE-PT
Smartphone0


PC-PT
PC2
Laptop-PT
Laptop0
TabletPC-PT
Tablet PC0
SMARTPHONE-PT
Smartphone0
ISR4331
Router0
PC-PT
PC0
2960-24TT
Switch0
Access Point0
PC-PT
PC1


PC-PT
PC2
Laptop-PT
Laptop0
Tablet PC0
SMARTPHONE-PT
Smartphone0
ISR4331
Router0
PC-PT
PC0
2960-24TT
Switch0
Access Point0
PC-PT
PC1


PC-PT
PC0
ISR4331
Router0
PC-PT
PC2
Laptop-PT
Laptop0
2960-24TT
Switch0
AccessPoint-PT
Access Point0
TabletPC-PT
Tablet PC0
PC-PT
PC1
SMARTPHONE-PT
Smartphone0
Event List
Vis. Time(sec) Last Device At Device Type
0.006 Smartphone0 Access Poi... ICMP
0.007 Access Point0 Switch0 ICMP
0.008 Switch0 PC0 ICMP
0.010 -- Access Poi... ICMP
0.011 Access Point0 PC2 ICMP
0.011 Access Point0 Laptop0 ICMP
0.011 Access Point0 Tablet PC0 ICMP
0.011 Access Point0 Smartphone0 ICMP
0.857 -- Switch0 STP
Reset Simulation
Constant Delay
Captured to: 0.857 s
Play Controls
Event List Filters – Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoED, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP
Edit Filters
Show All/None