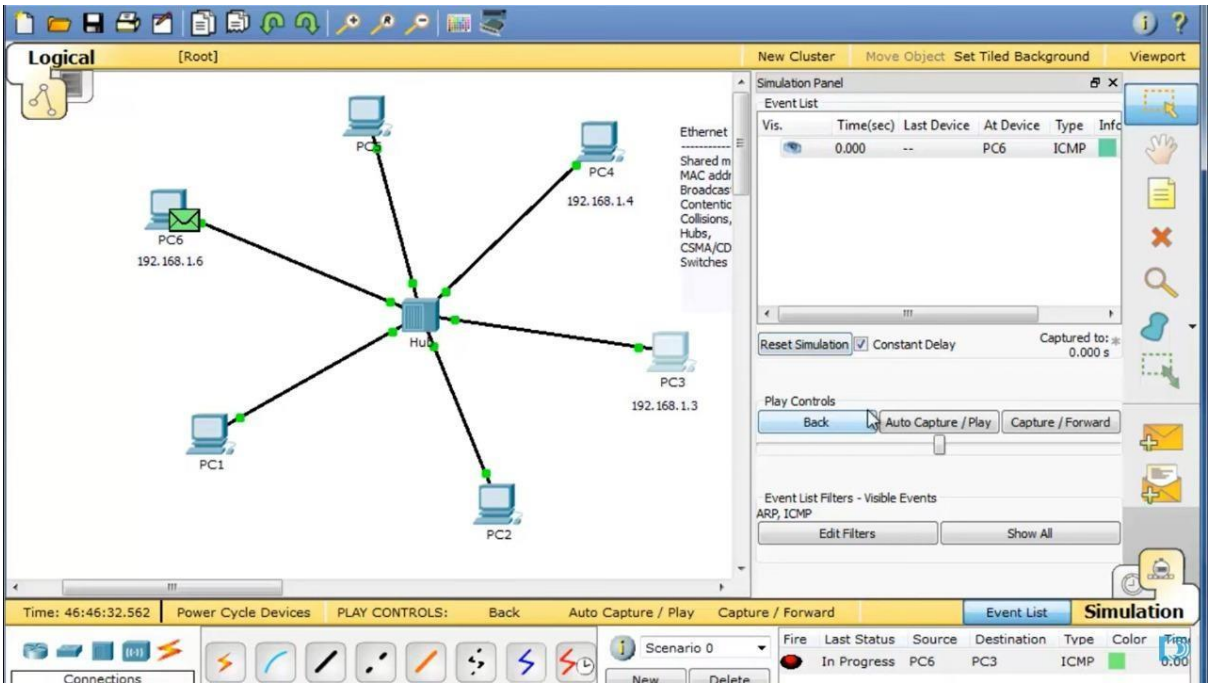
CSA-07

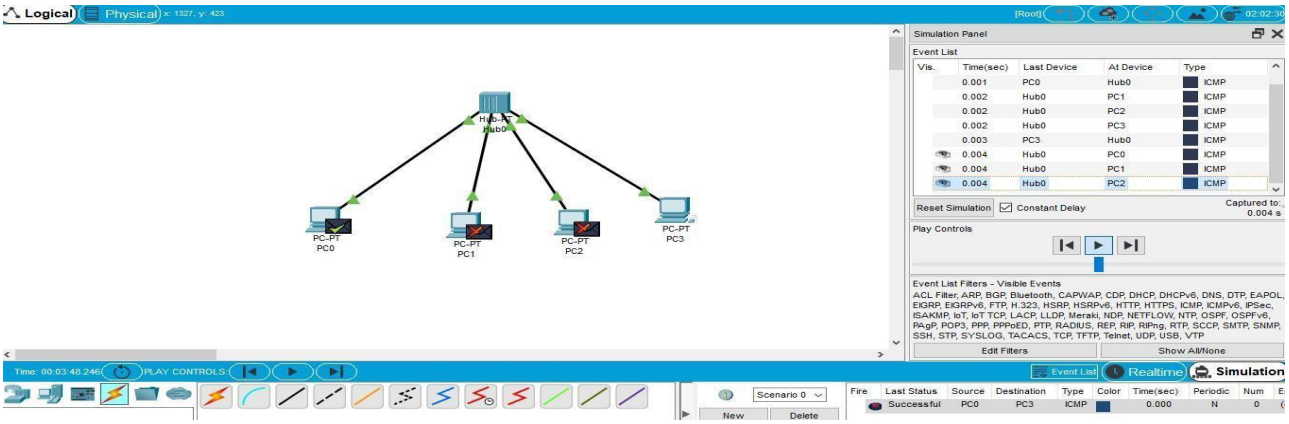
Lab Experiments: 1-5

1. Configuration of Network Devices using Packet Tracer tools (Hub, Switch, Ethernet, Broadcast)

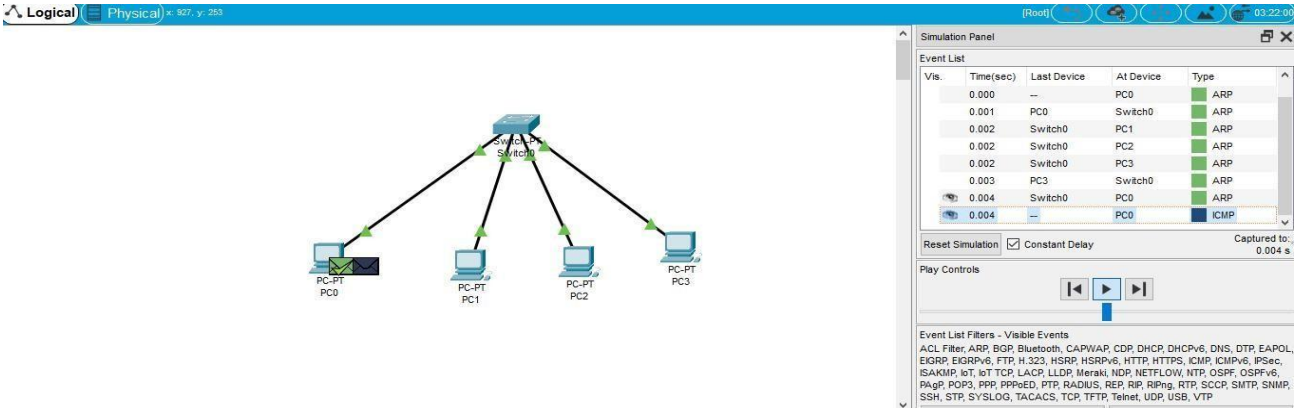


2. Design and Configuration of Star Topologies using Packet Tracer

Star Topology using Hub:

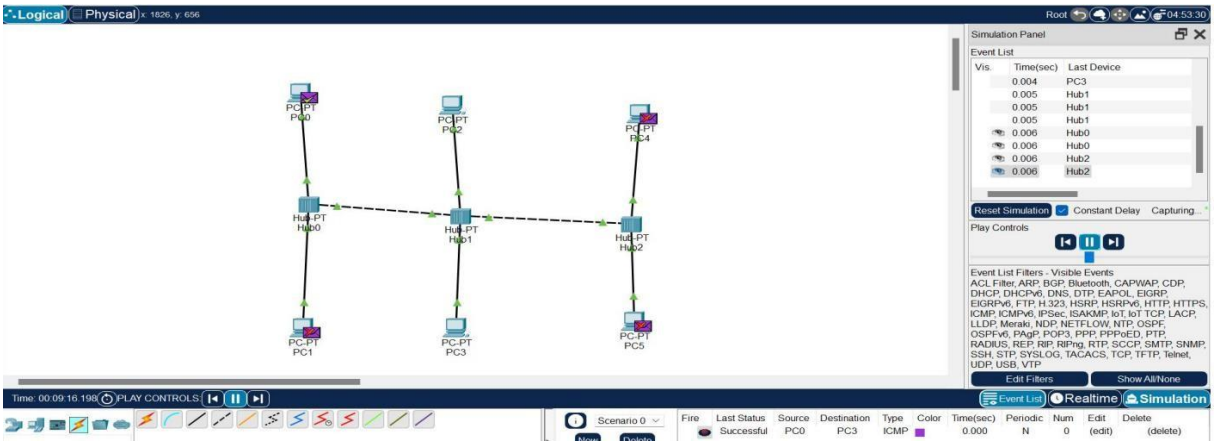


Star Topology using Switch:

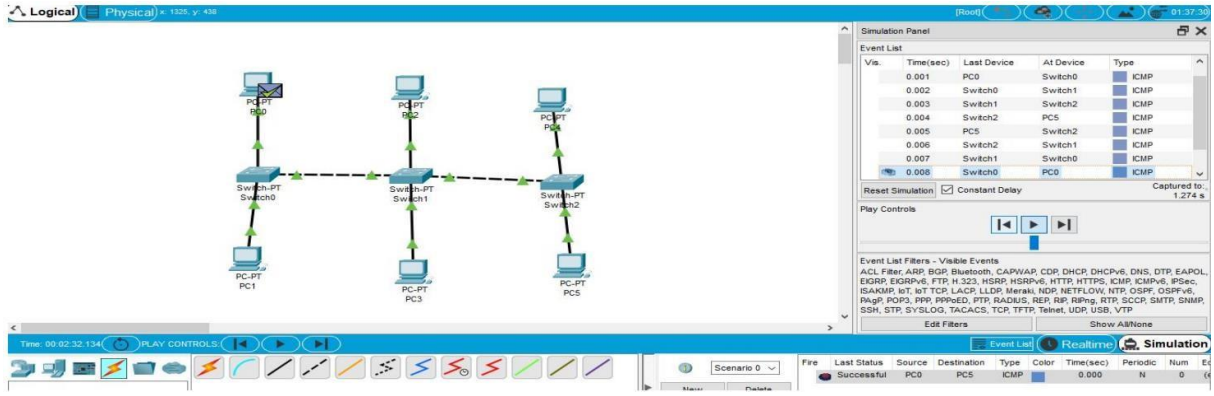


3. Design and Configuration of BUS Topologies using Packet Tracer.

Bus Topology using Hub:

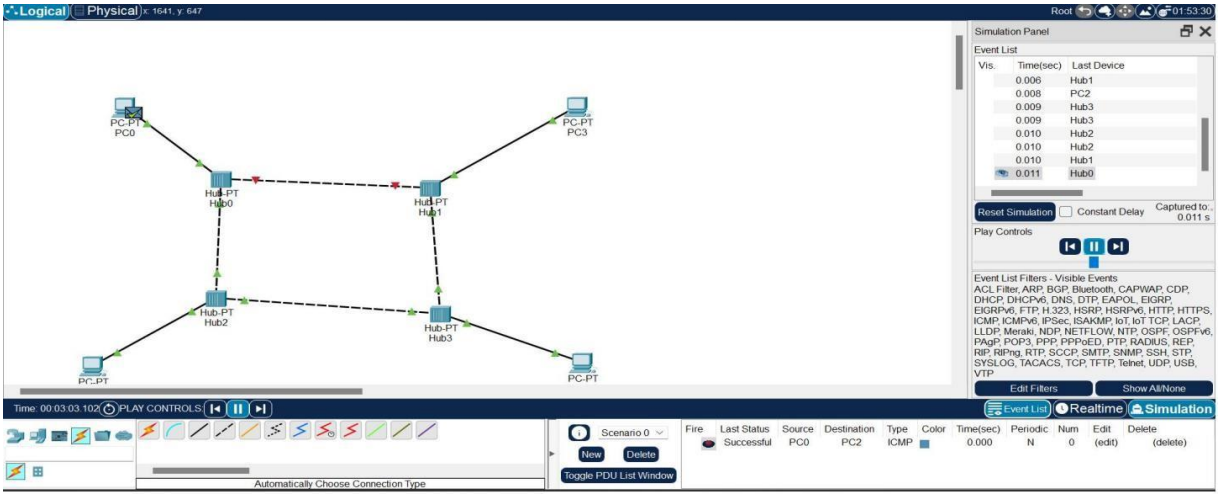


Bus Topology using Switch:

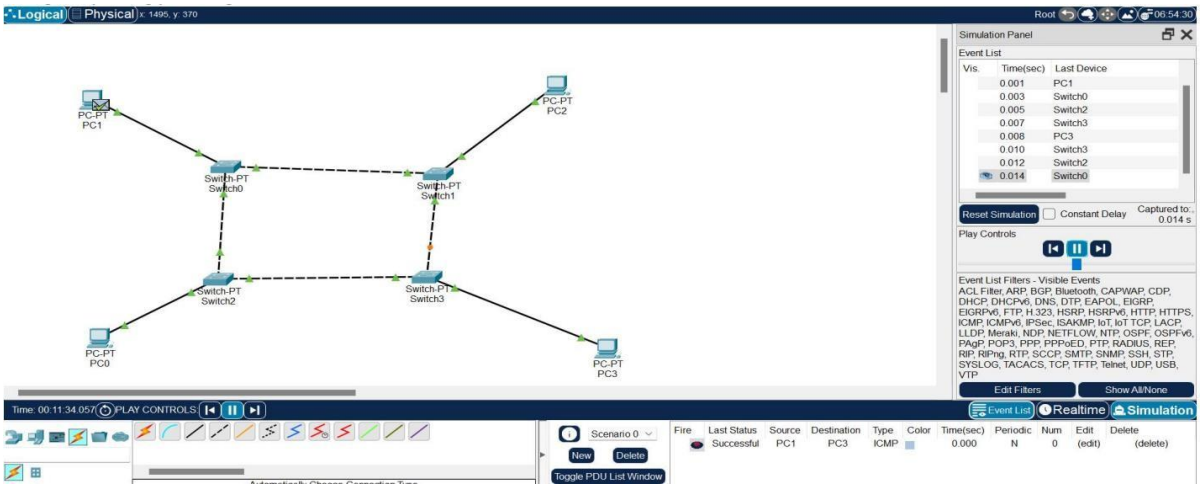


4. Design and Configuration of RING Topologies using Packet Tracer

Ring Topology using Hub:

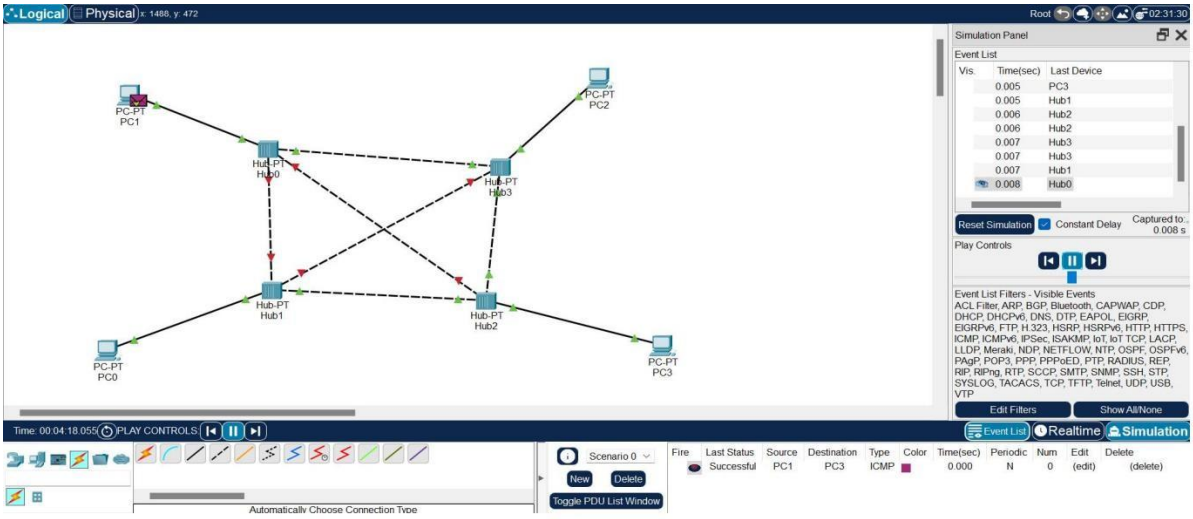


Ring Topology using Switch:

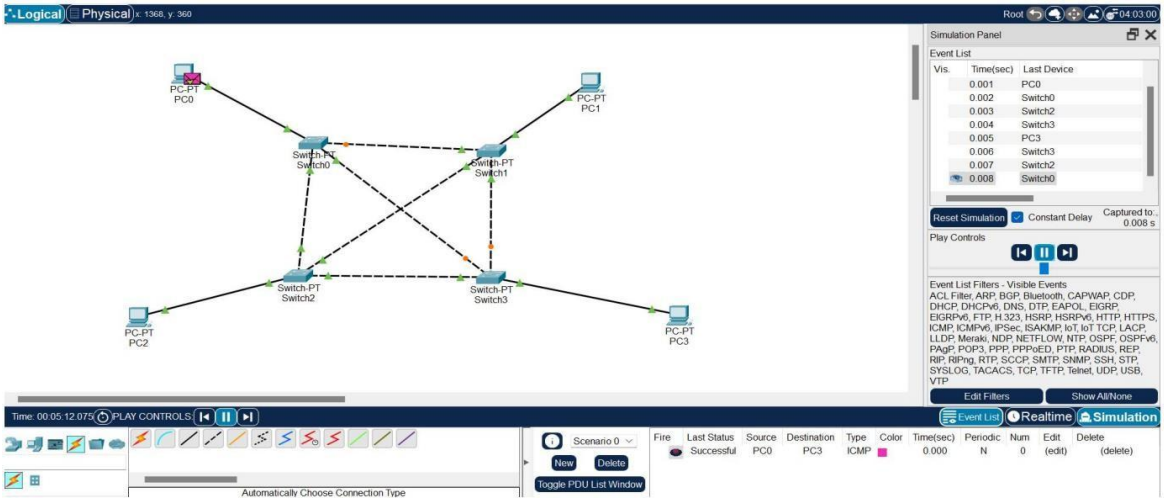


5. Design and Configuration of Mesh Topologies using Packet Tracer

Mesh Topology using Hub:

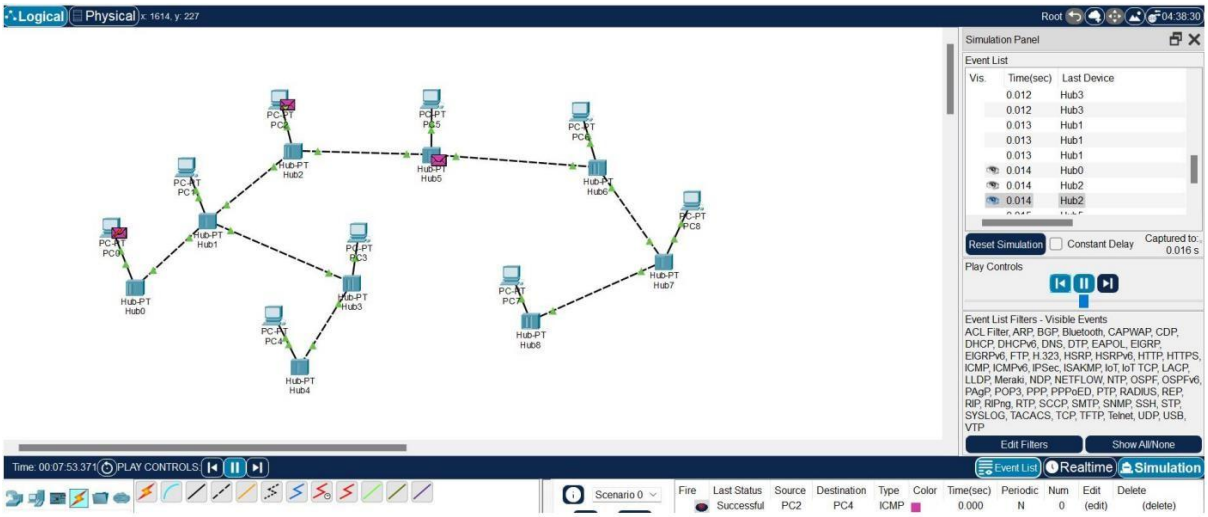


Mesh Topology using Switc

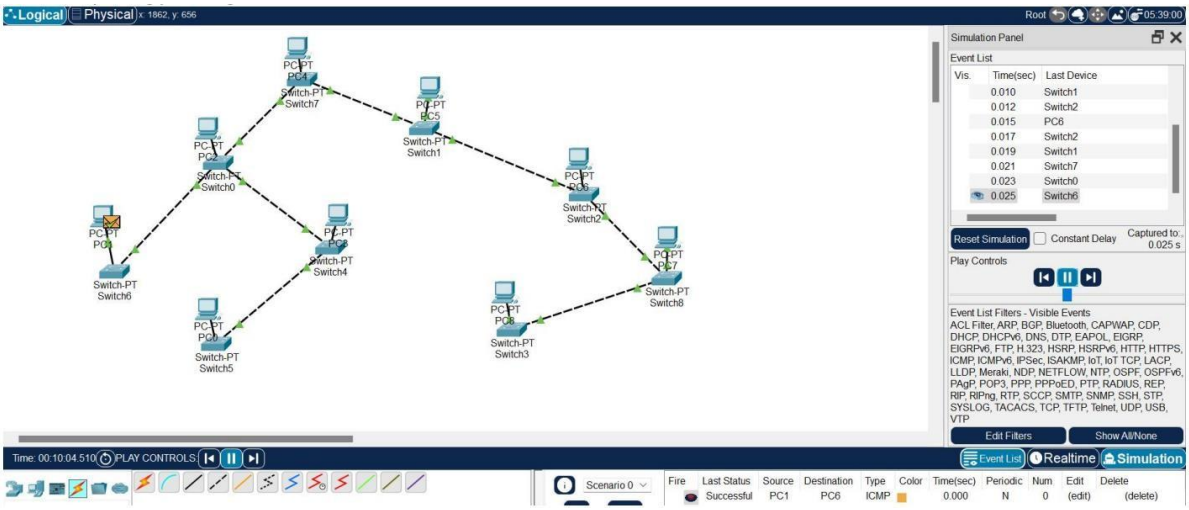


6. Design and Configuration of Tree Topologies using Packet Tracer.

Tree Topology using Hub:

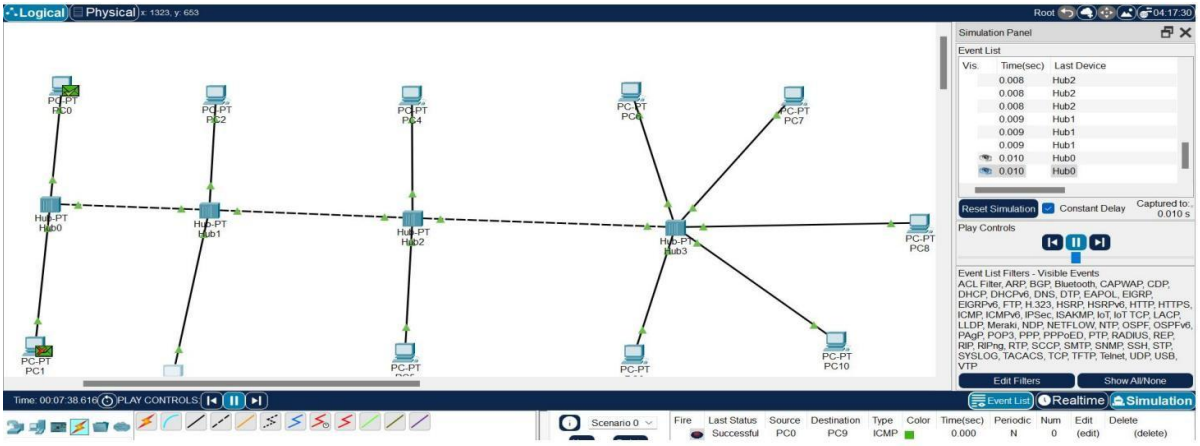


Tree Topology using Switch:

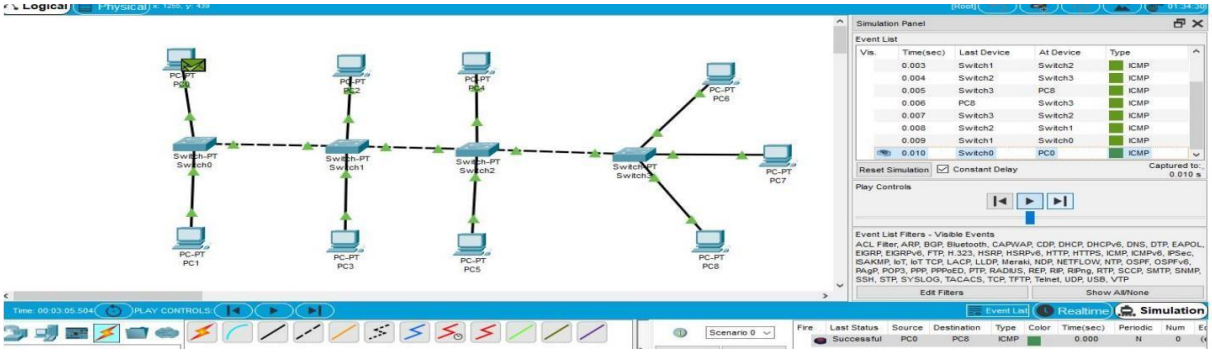


7. Design and Configuration of Hybrid Topologies using Packet Tracer

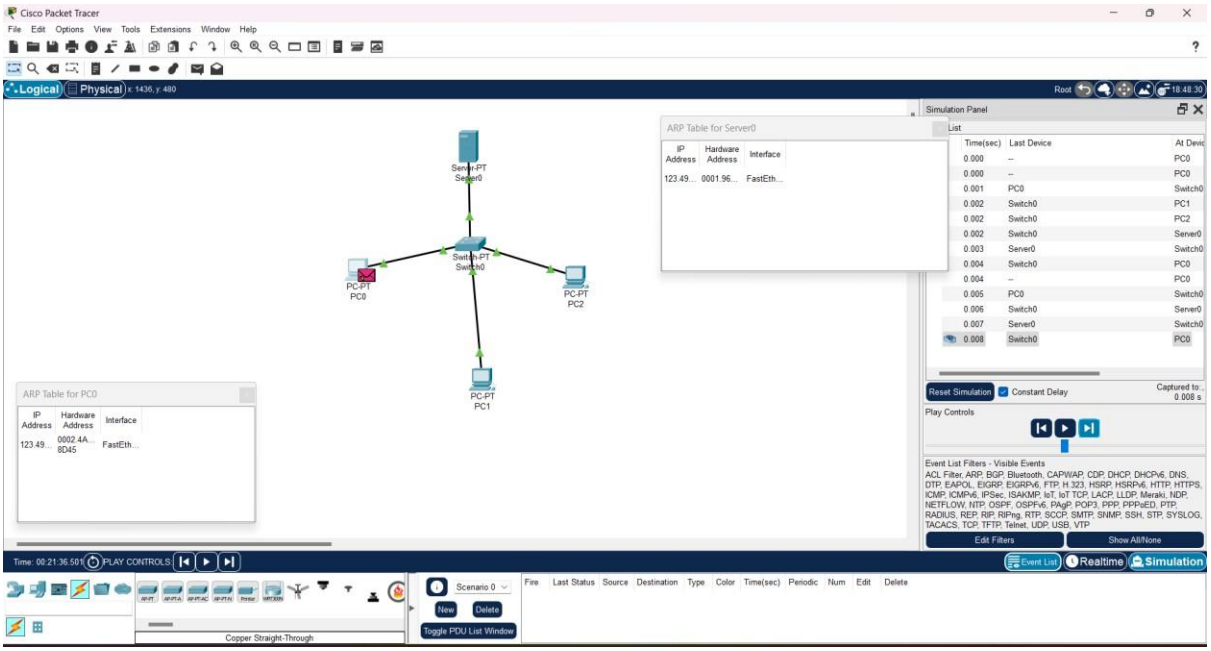
Hybrid Topology using Hub:



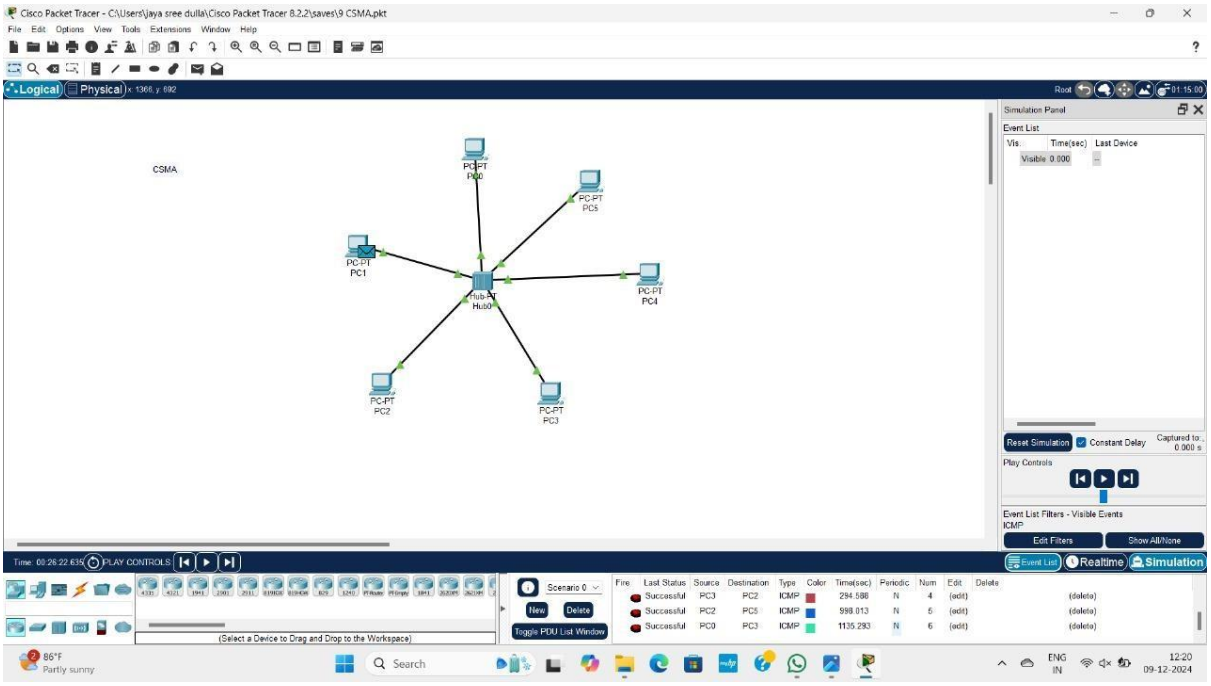
Hybrid Topology using Switch:



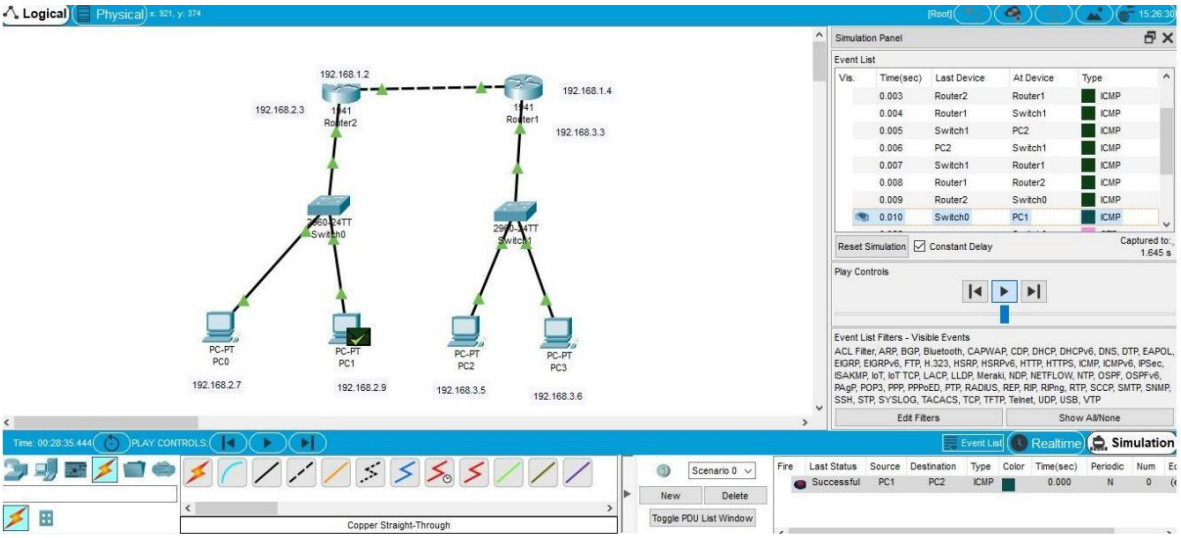
8. Data Link Layer Traffic Simulation using Packet Tracer Analysis of ARP



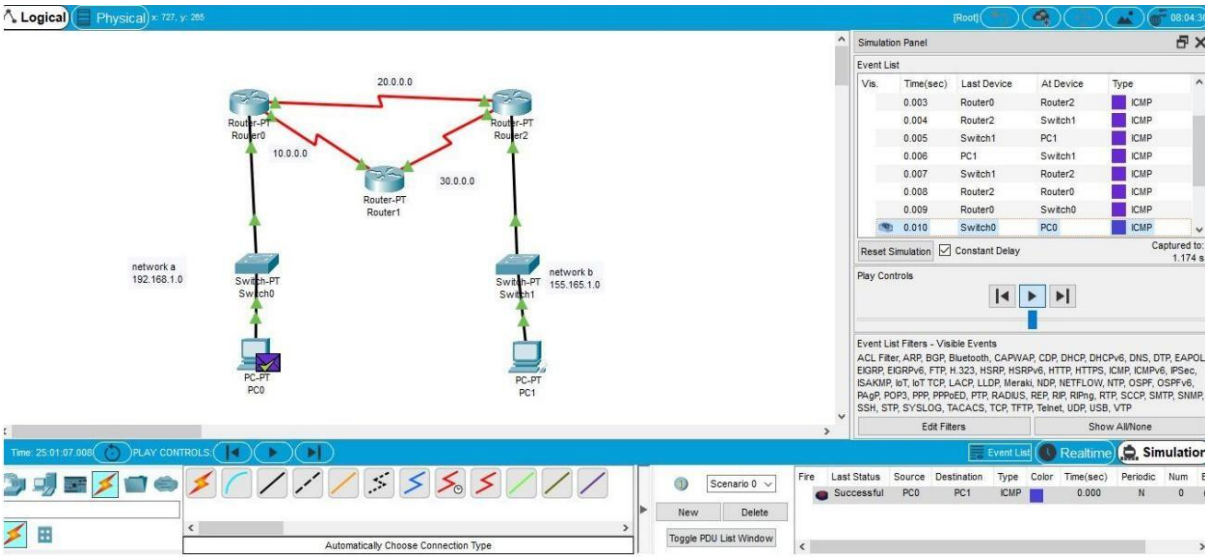
9. Data Link Layer Traffic Simulation using Packet Tracer Analysis of CSMA/CD & CSMA/CA



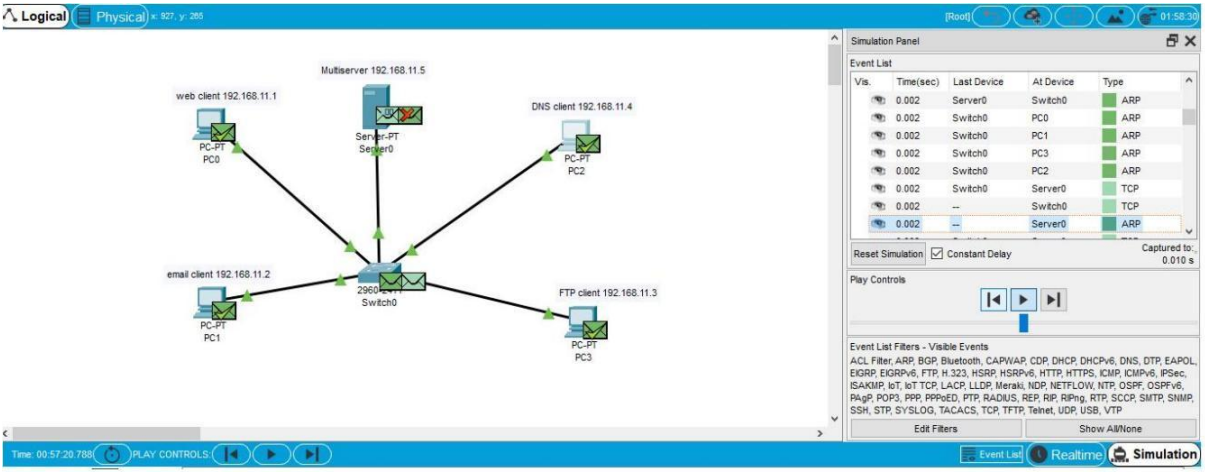
10. Designing two different networks with Static Routing techniques using Packet Tracer.

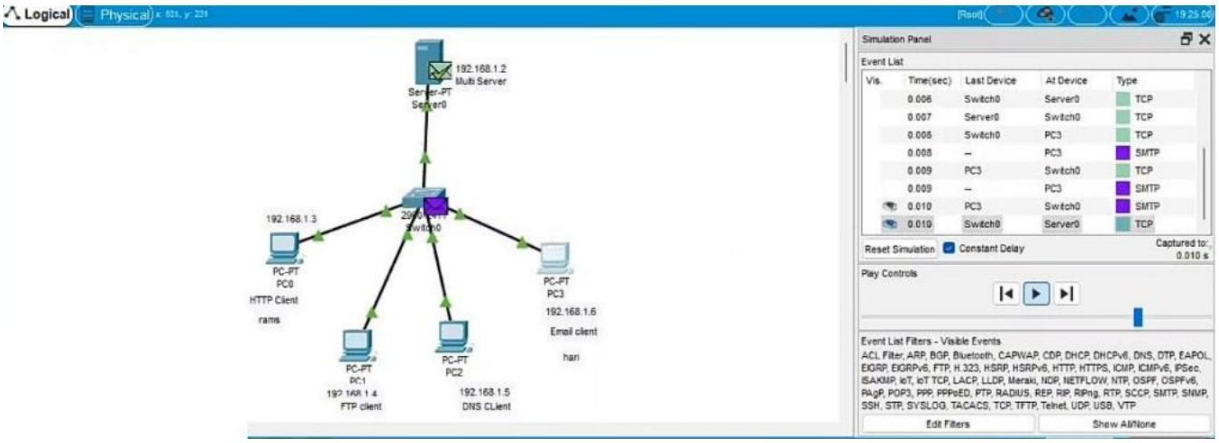


11. Designing two different networks with Dynamic Routing techniques (RIP & OSPF) using Packet Tracer

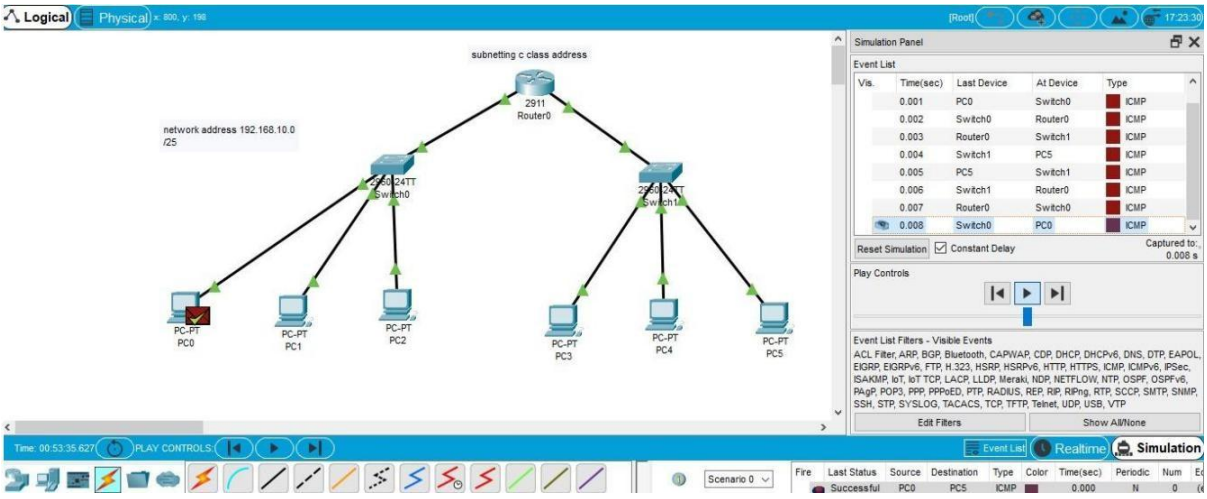


12. Design the Functionalities and Exploration of TCP using Packet Tracer

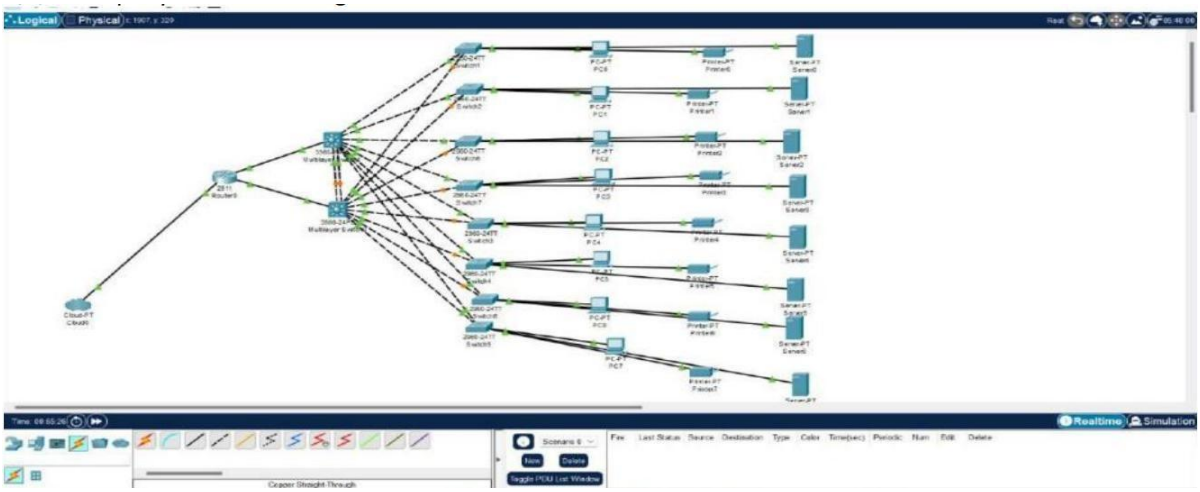

Logical
Physical
Multiserver 192.168.11.5
web client 192.168.11.1
DNS client 192.168.11.4
email client 192.168.11.2
FTP client 192.168.11.3
Server-PT Server0
PC-PT PC0
PC-PT PC2
PC-PT PC1
PC-PT PC3
2960-24TT Switch0
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.002 Server0 Switch0 ARP
0.002 Switch0 PC0 ARP
0.002 Switch0 PC1 ARP
0.002 Switch0 PC3 ARP
0.002 Switch0 PC2 ARP
0.002 Switch0 Server0 TCP
0.002 -- Switch0 TCP
0.002 -- Server0 ARP
Reset Simulation
Constant Delay
Captured to: 0.010 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
Time: 00:57:20.788
PLAY CONTROLS:
Event List
Realtime
Simulation


Logical
Physical
192.168.1.2 Multi Server
Server-PT Server0
192.168.1.3
PC-PT PC0
HTTP Client
rams
PC-PT PC3
192.168.1.6
Email client
hari
PC-PT PC1
PC-PT PC2
192.168.1.4
FTP client
192.168.1.5
DNS CLient
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.006 Switch0 Server0 TCP
0.007 Server0 Switch0 TCP
0.008 Switch0 PC3 TCP
0.008 -- PC3 SMTP
0.009 PC3 Switch0 TCP
0.009 -- PC3 SMTP
0.010 PC3 Switch0 SMTP
0.010 Switch0 Server0 TCP
Reset Simulation
Constant Delay
Captured to: 0.010 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

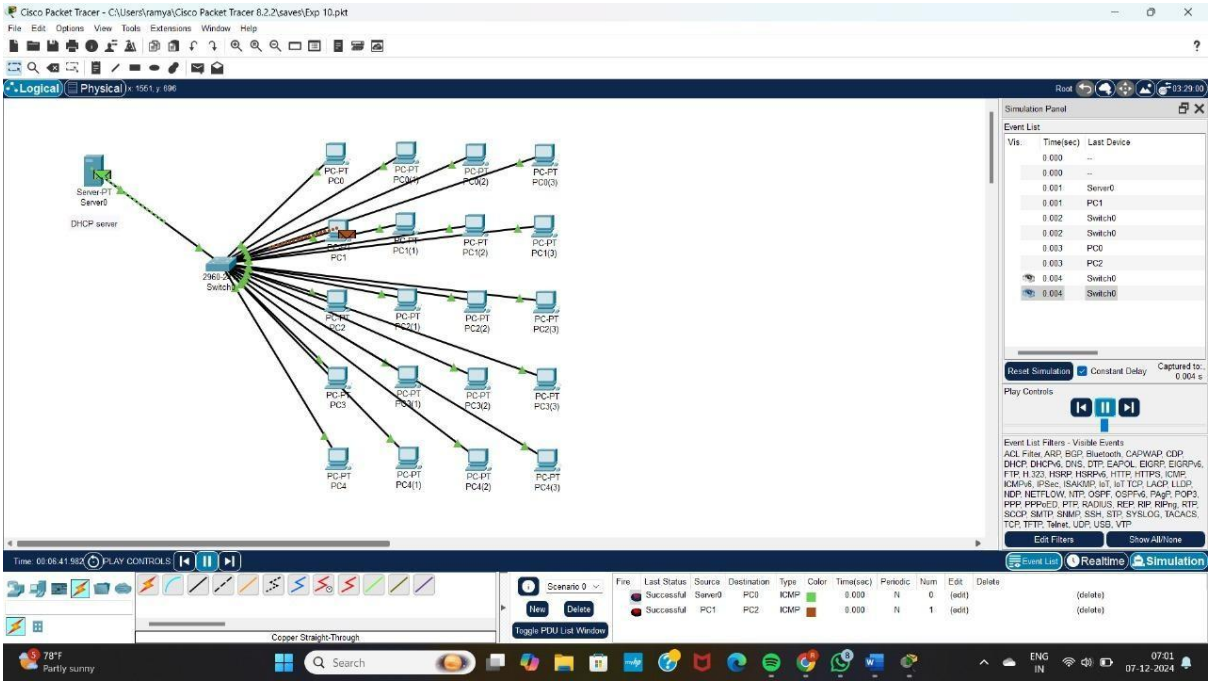
13. Design the network model for Subnetting – Class C Addressing using Packet Tracer.



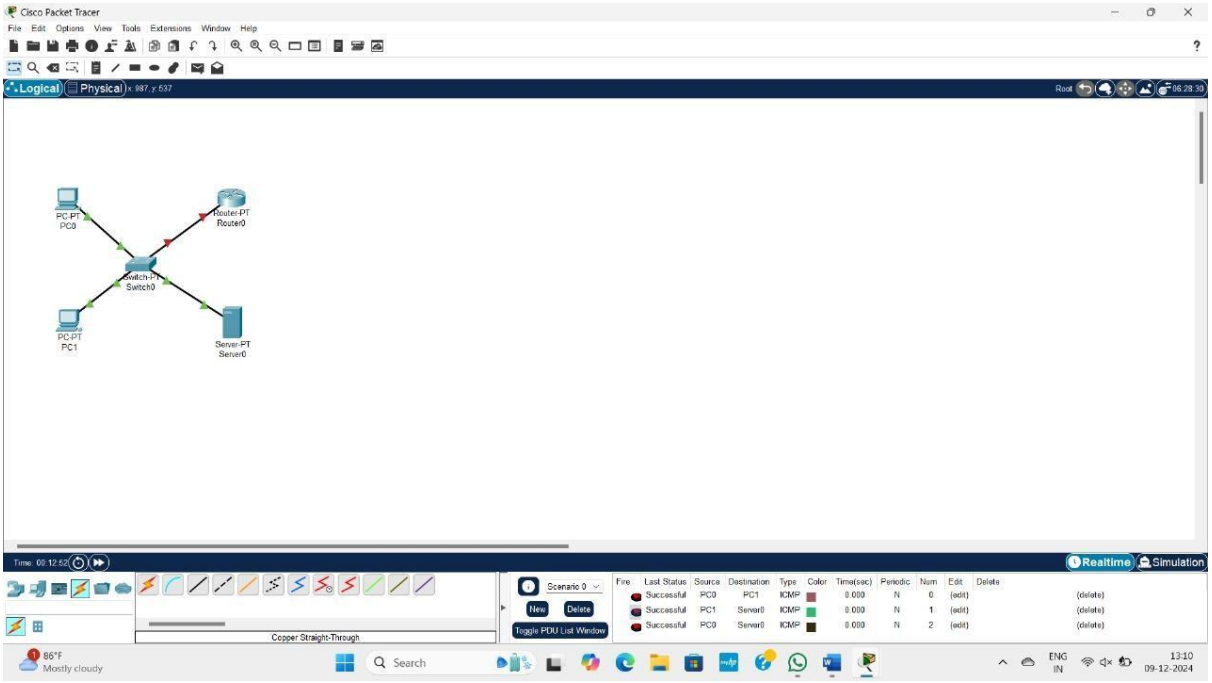
14. Simulating X, Y, Z Company Network Design and simulate using Packet Tracer.



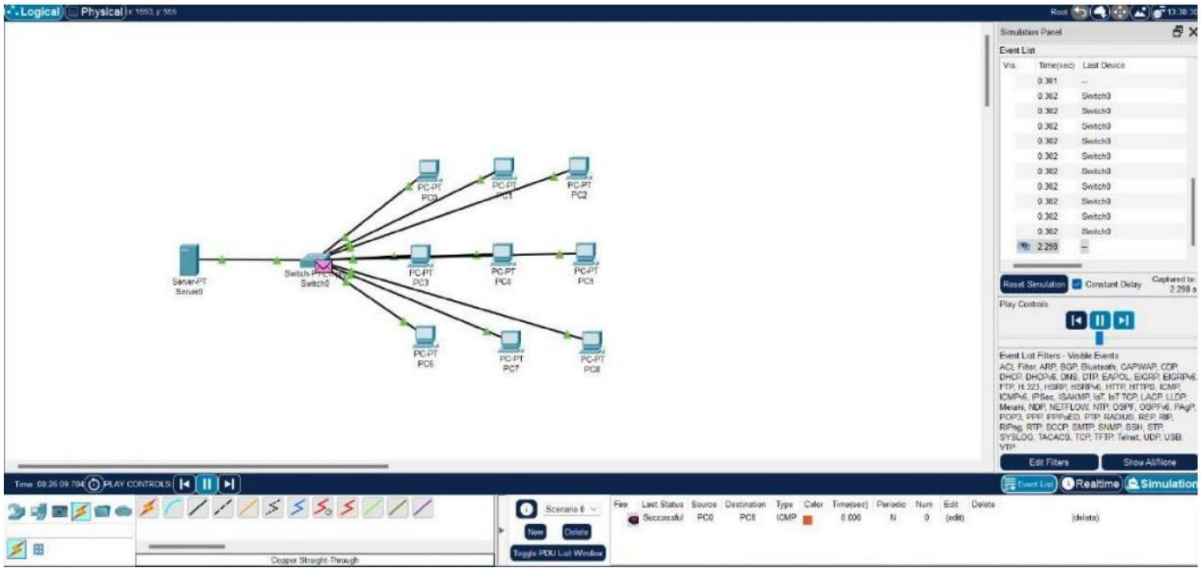
15. Configuration of DHCP (dynamic host configuration protocol) in packet Tracer.



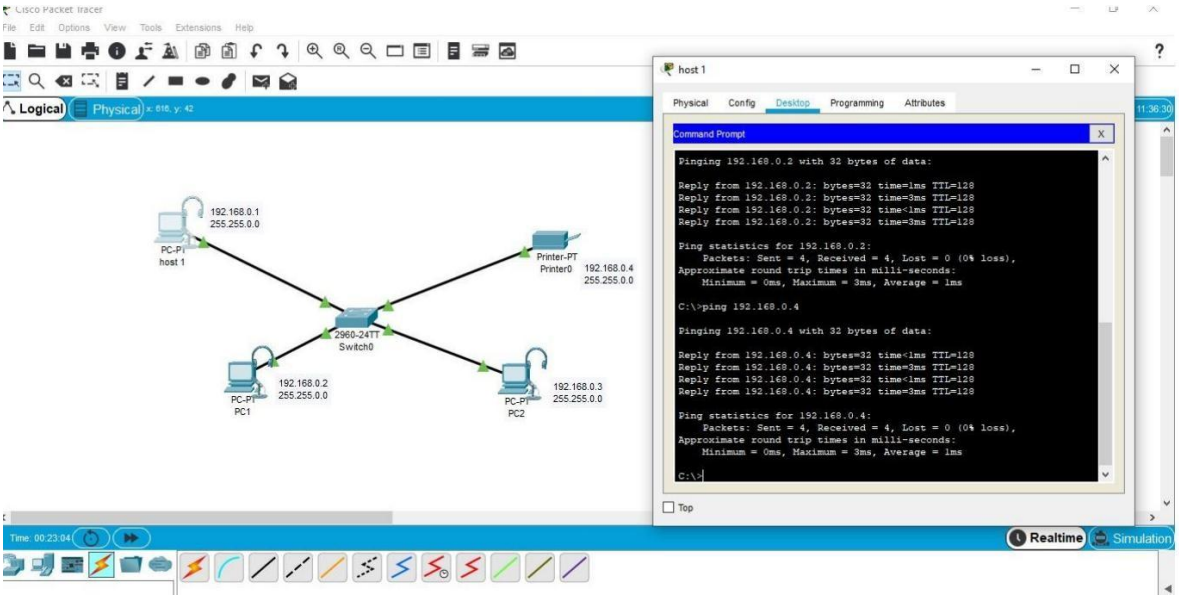
16. Configuration of firewall in packet tracer.



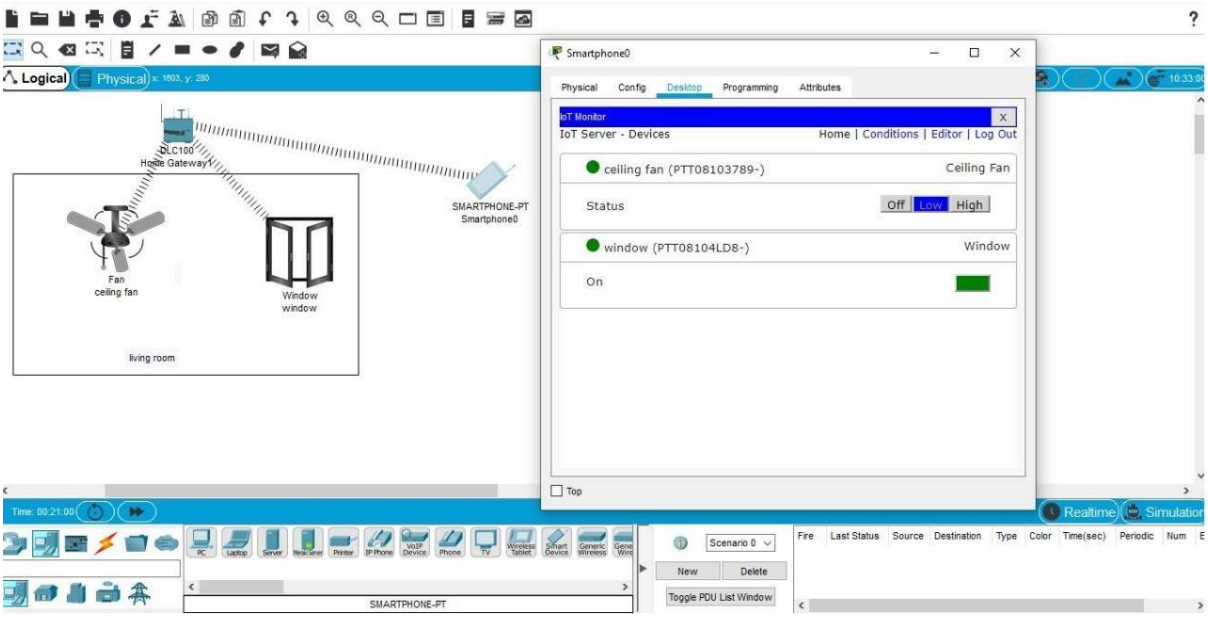
17. Make a Computer Lab to transfer a message from one node to another to design and simulate using Cisco Packet Tracer.



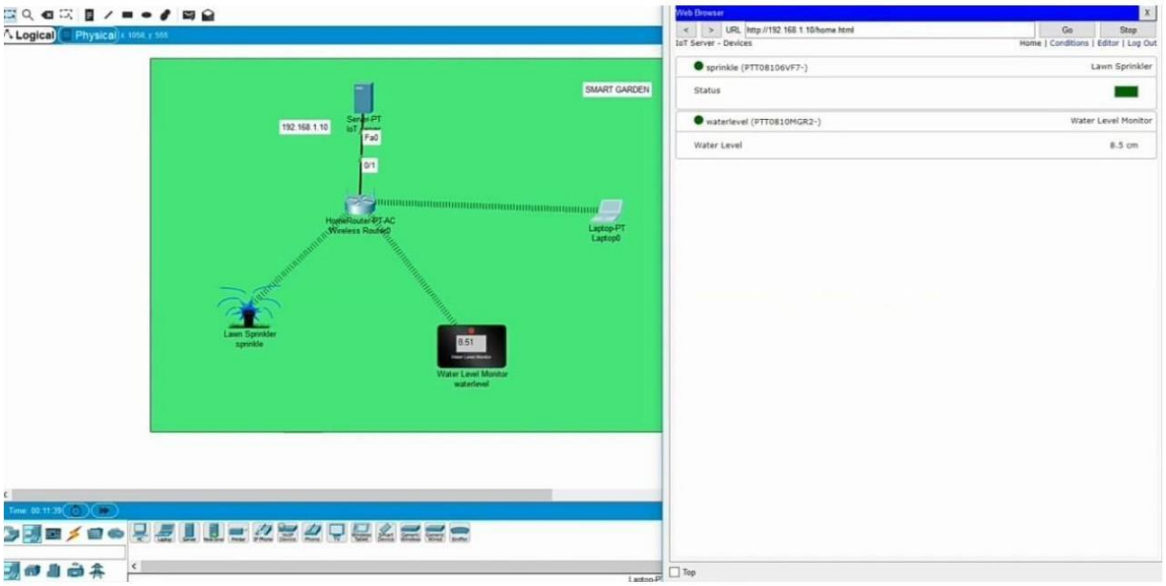
18. Simulate a Multimedia Network in Cisco Packet Tracer.


Cisco Packet Tracer
File Edit Options View Tools Extensions Help
Logical
Physical
192.168.0.1
255.255.0.0
PC-PT
host 1
Printer-PT
Printer0
192.168.0.4
255.255.0.0
2960-24TT
Switch0
192.168.0.2
255.255.0.0
PC-PT
PC1
192.168.0.3
255.255.0.0
PC-PT
PC2
host 1
Physical
Config
Desktop
Programming
Attributes
Command Prompt
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=3ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time=3ms 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 = 3ms, Average = 1ms
C:\>ping 192.168.0.4
Pinging 192.168.0.4 with 32 bytes of data:
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time=3ms TTL=128
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time=3ms TTL=128
Ping statistics for 192.168.0.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 3ms, Average = 1ms
C:\>
Top
Realtime
Simulation

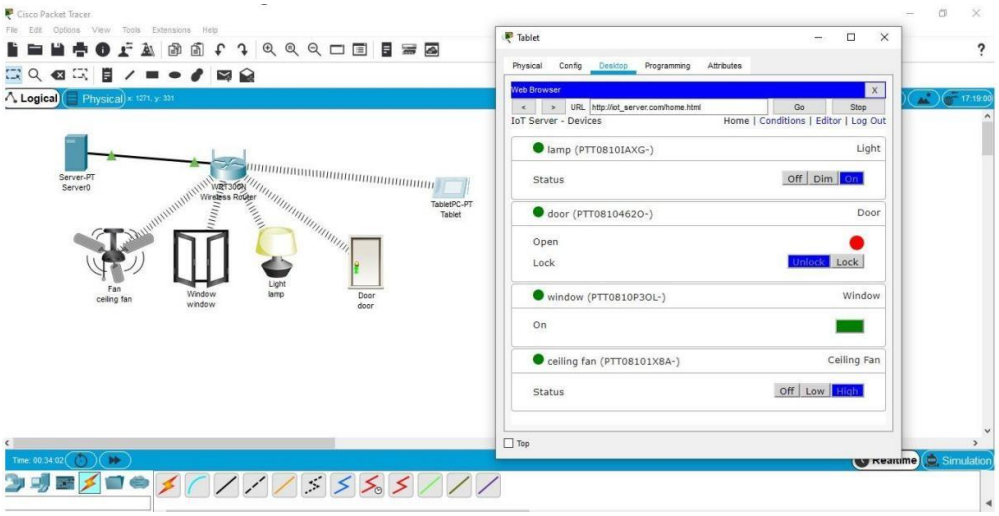
19. IoT based smart home applications.



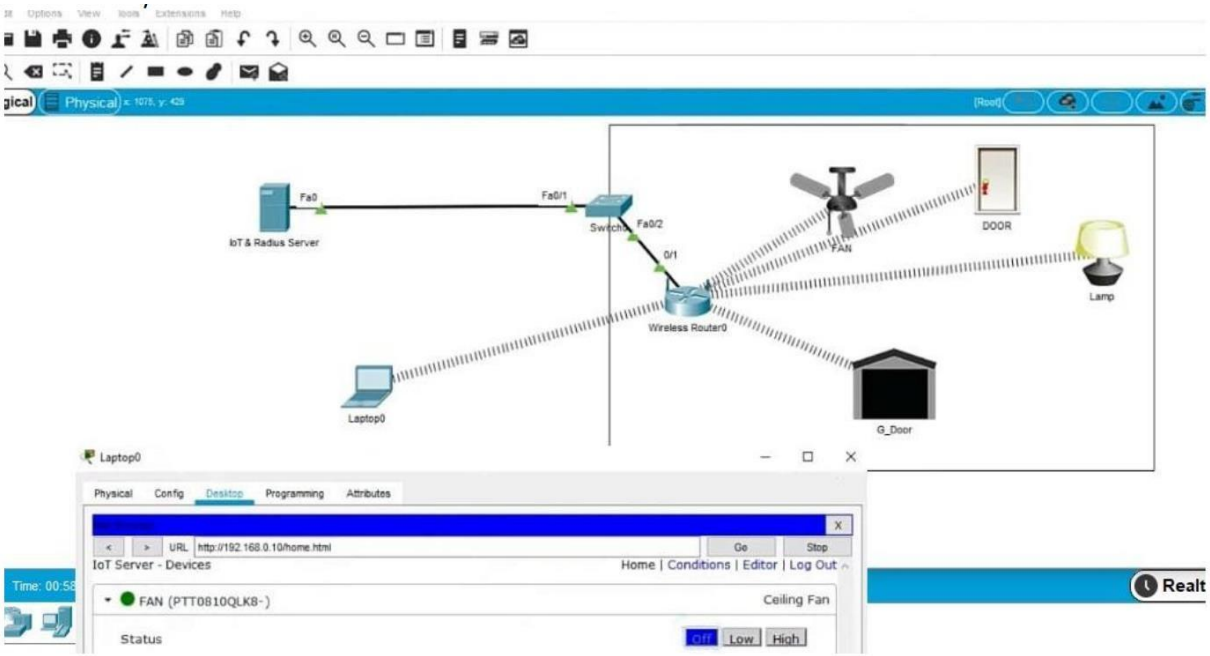
20. Implementation of IoT based smart gardening.



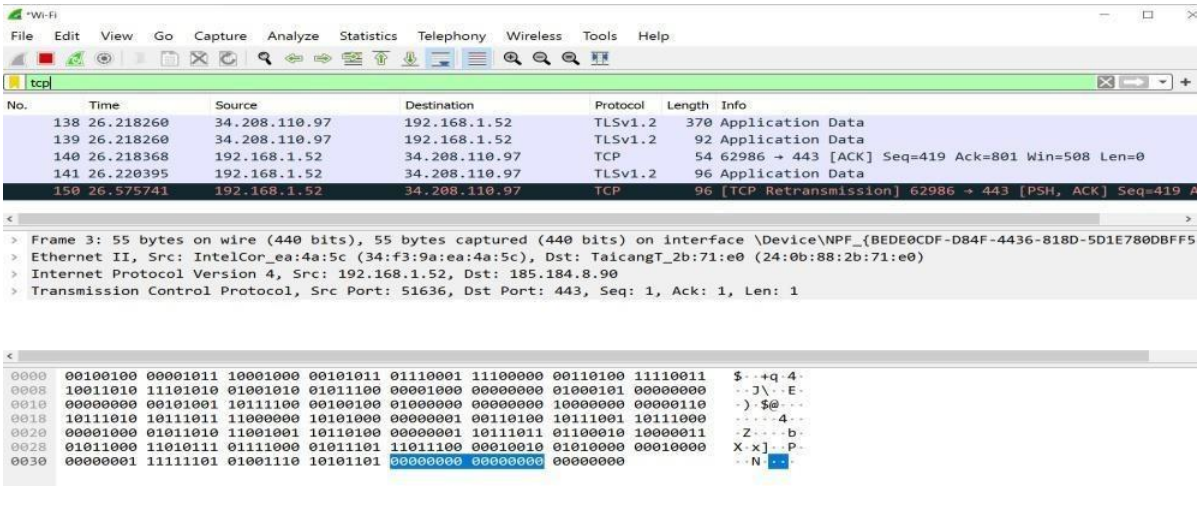
21. Implementation of IoT devices in networking.



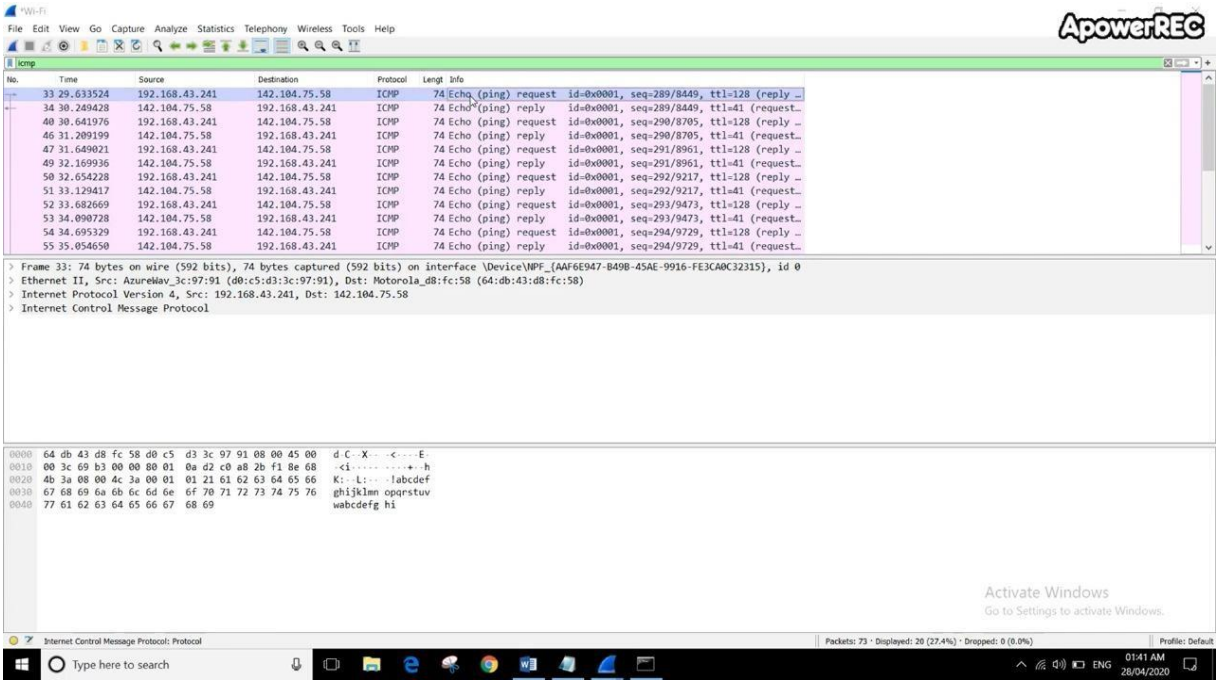
22. IOT Based Smart building using WPA Security & Radius Server.



23. TCP



24. ICMP



25. ARP