

Name → Shubham Uniyal

Class → MCA - B

Roll no → 2001149

Subject → Computer Networks (TMC-203)

ns1 → Problem statement → There is an organization

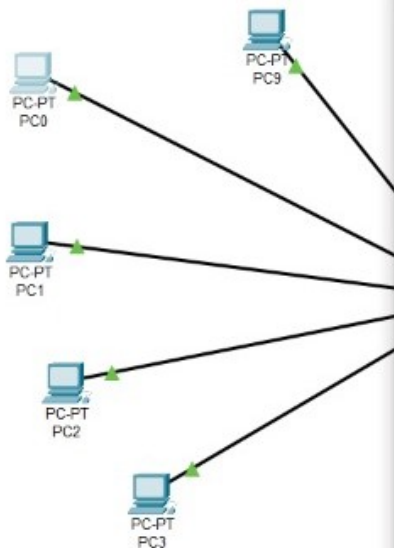
A with multiple departments. Design a network for the HR department and the size of the department is 10 users. Also, show the communication between user number 1 and 5 of the network.

Objective → Design a network of 10 users.

Description → Use packet tracer.

Steps → Shown in the screenshot & below.

- 1) Take the 10 pc, one switch and web server.
- 2) Config the setting of server
- 3) It assign the IP dynamically to the nodes
- 4) Using command format use ping command to communicate between number 1 and 5 user.



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 198.68.10.1

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::200:CFF:FE8B:5635

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

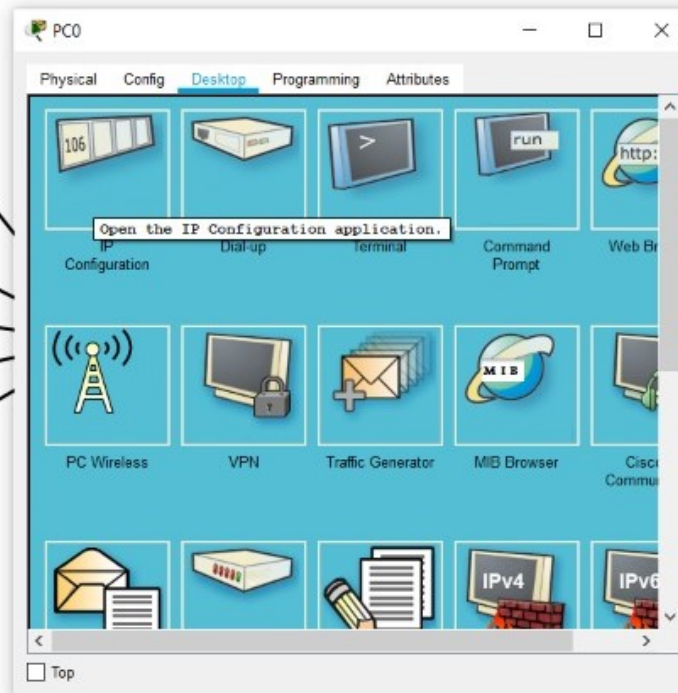
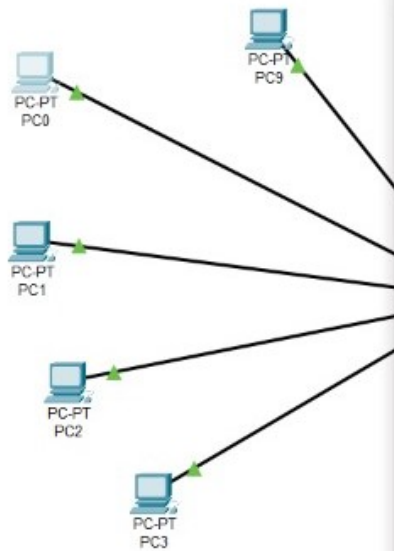
Authentication MD5

☐ Top



Logical Physical x: 647, y: 230

[Root] 06:34:00



Time: 00:13:02



Automatically Choose Connection Type

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC1	PC5	ICMP		0.000	N	0	(edit)	(delete)

Realtime Simulation

Type here to search

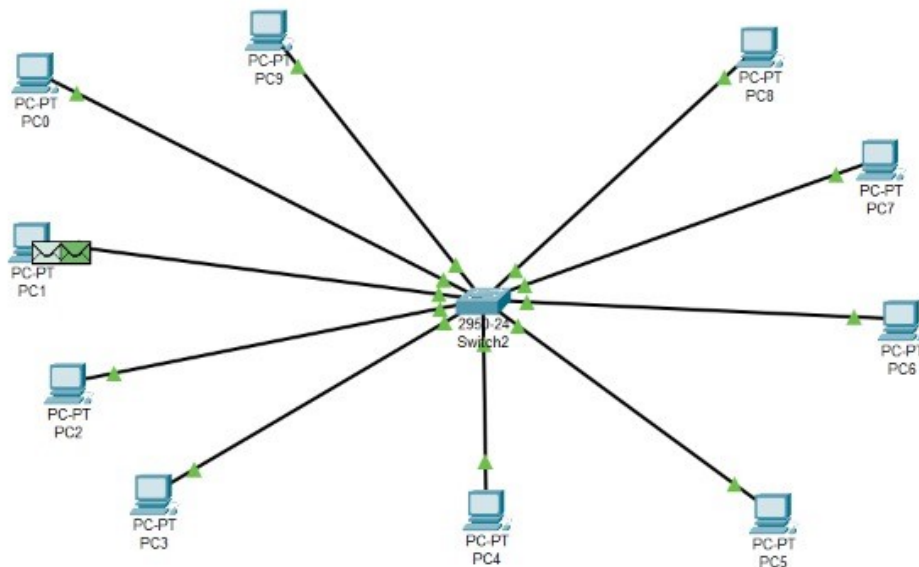


30°C Haze 09:38 22-06-2021



Logical Physical x 1430, y 589

[Root] 07:09:00



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC1	ICMP
	0.000	--	PC1	ARP

Reset Simulation ☒ Constant Delay Captured to: 0.000 s

Play Controls



Play (Alt + P)

Event List Filters - Visible Events

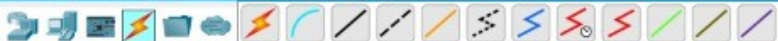
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:14:12.572 PLAY CONTROLS:

Event List Realtime Simulation



Automatically Choose Connection Type

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC1	PC5	ICMP		0.000	N	0	(edit)	(delete)

Type here to search

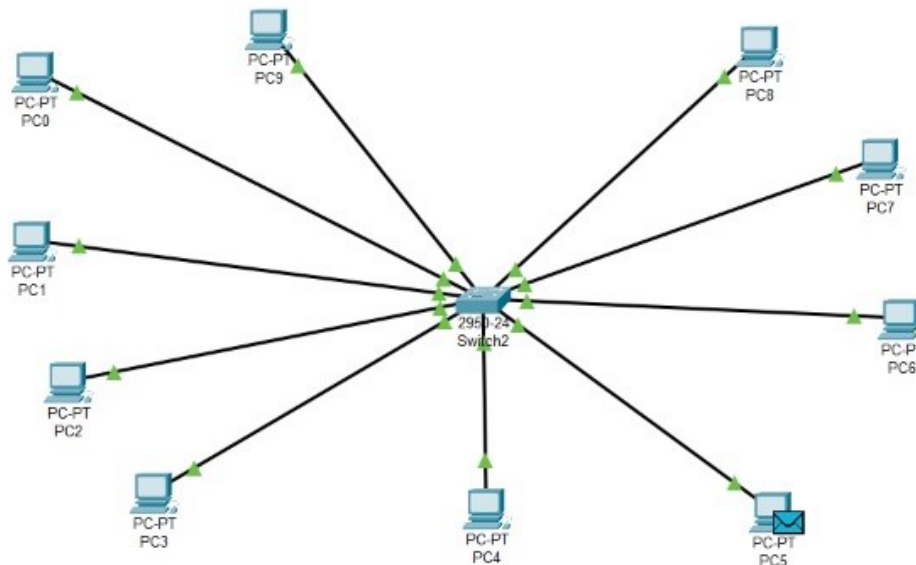


30°C Haze 09:40 22-06-2021



Logical Physical x 1411, y 555

[Root] 07:55:00



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC1	ICMP
	0.001	PC1	Switch2	ICMP
	0.002	Switch2	PC5	ICMP

Reset Simulation ☒ Constant Delay Captured to: 0.002 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, PPPoE, 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: 00:14:23.529 PLAY CONTROLS:



Automatically Choose Connection Type

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC1	PC5	ICMP		0.000	N	0	(edit)	(delete)

Type here to search

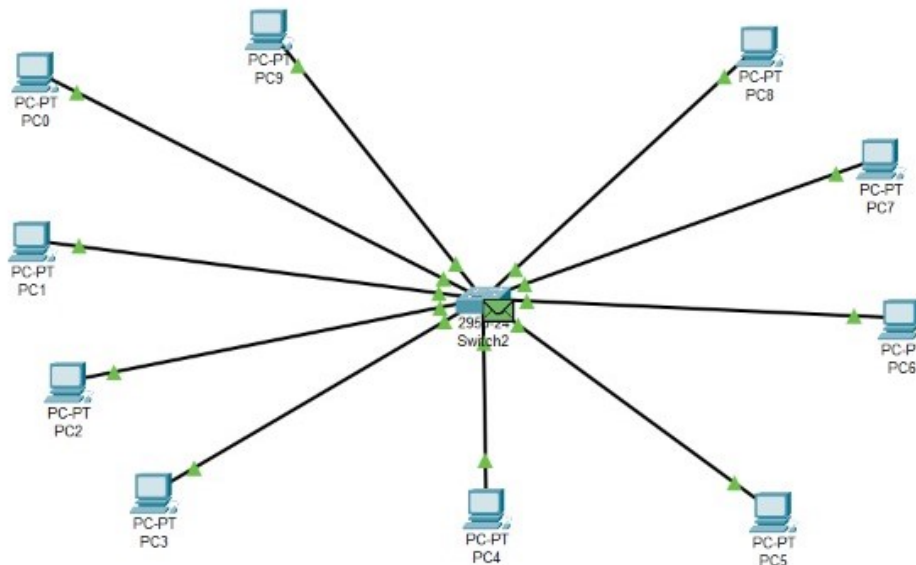


30°C Haze 09:41 22-06-2021



Logical Physical x 1413, y 513

[Root] 07:24:00



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC1	ICMP
	0.000	--	PC1	ARP
	0.001	PC1	Switch2	ARP

Reset Simulation ☒ Constant Delay Captured to: 0.001 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, PPPoE, 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: 00:14:12.573 PLAY CONTROLS:

Event List Realtime Simulation



Automatically Choose Connection Type

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC1	PC5	ICMP		0.000	N	0	(edit)	(delete)

Type here to search

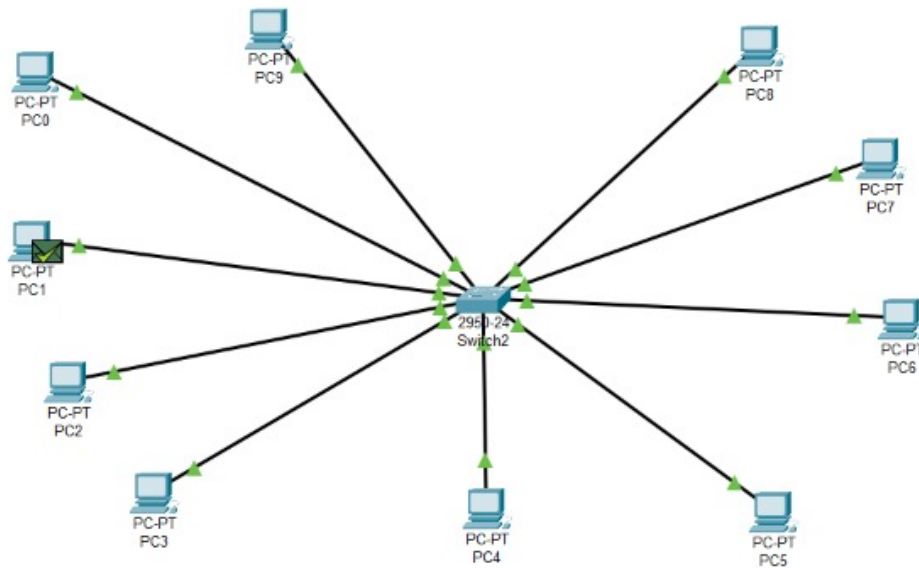


30°C Haze 09:40 22-06-2021



Logical Physical x 1403, y 663

[Root] 08:21:30



Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	PC1	ICMP
	0.001	PC1	Switch2	ICMP
	0.002	Switch2	PC5	ICMP
	0.003	PC5	Switch2	ICMP
	0.004	Switch2	PC1	ICMP

Reset Simulation ☒ Constant DelayCaptured to:
0.004 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, PPPoE, 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: 00:14:35.525 PLAY CONTROLS:



Automatically Choose Connection Type

Scenario 0

New

Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC1	PC5	ICMP		0.000	N	0	(edit)	(delete)

Type here to search



30°C Haze 09:42 22-06-2021