Name: Vikas Bagri

ID: 20561008

Course: MCA-2A

Que: 1

Problem Statement

There is an organization A with multiple departments. Design a network for the HR department and the size of the dept. is 10 users. Also, show the communication b/w user number 1 and user number 5 of the network.

Objective

To understand the network (LAN) for an organization.

Description

Since, we are concerned about an organization only, so we will use LAN for the communication network within the organization

Steps

Step I Adding 10 nodes (PCs) to the LAN of the HR department.

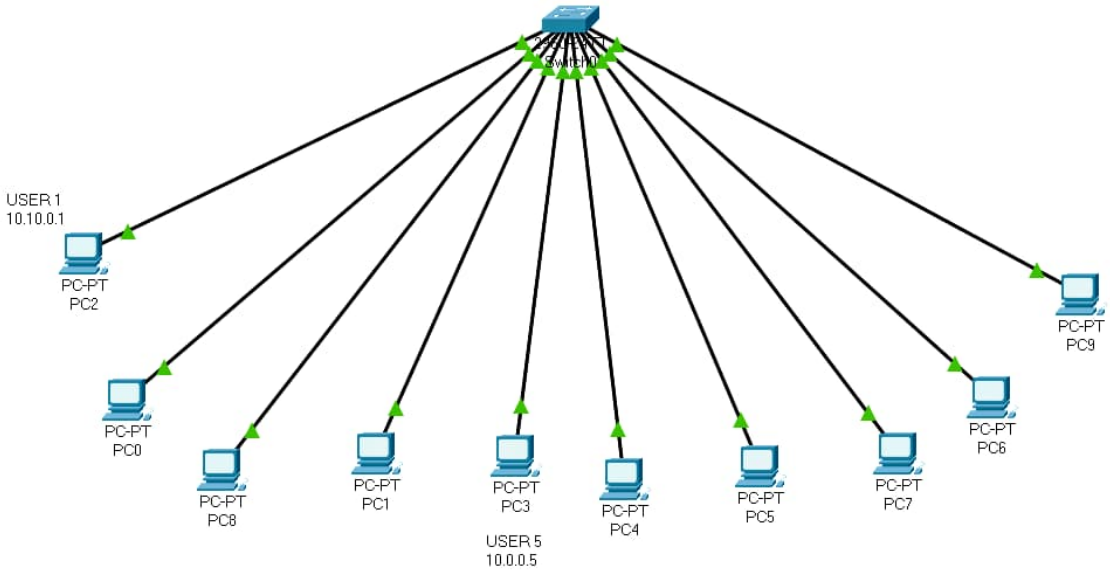
Step II Assigning IP addresses to all PCs; also connection each of the PCs with the help of a switch.

Step III : Then sending a simple PDU from user 1 (i.e. PC#1) to user 5 (i.e. PC#5).

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x: 912, y: 449 [Root] 04:55:30



HR DEPARTMENT

Time: 00:06:44 Realtime Simulation

Automatically Choose Connection Type

Scenario 0 New Delete Toggle PDU List Window

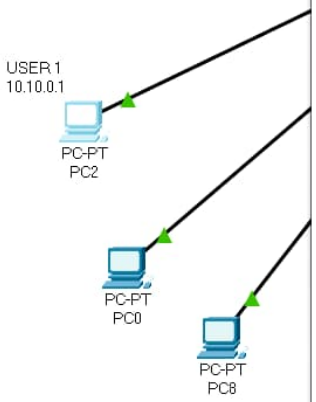
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC2	PC3	ICMP		0.000	N	0	(edit)	(delete)

Type here to search 30°C ENG 09:46 22-06-2021

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x: 967, y: 703 [Root] 05:53:00



PC2

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

DHCP Static

IPv4 Address 10.0.0.1

Subnet Mask 255.0.0.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

Automatic Static

IPv6 Address /

Link Local Address FE80::20A:41FF:FED2:70D8

Default Gateway

DNS Server

802.1X

Use 802.1X Security

Authentication MD5

Username

Password

Top

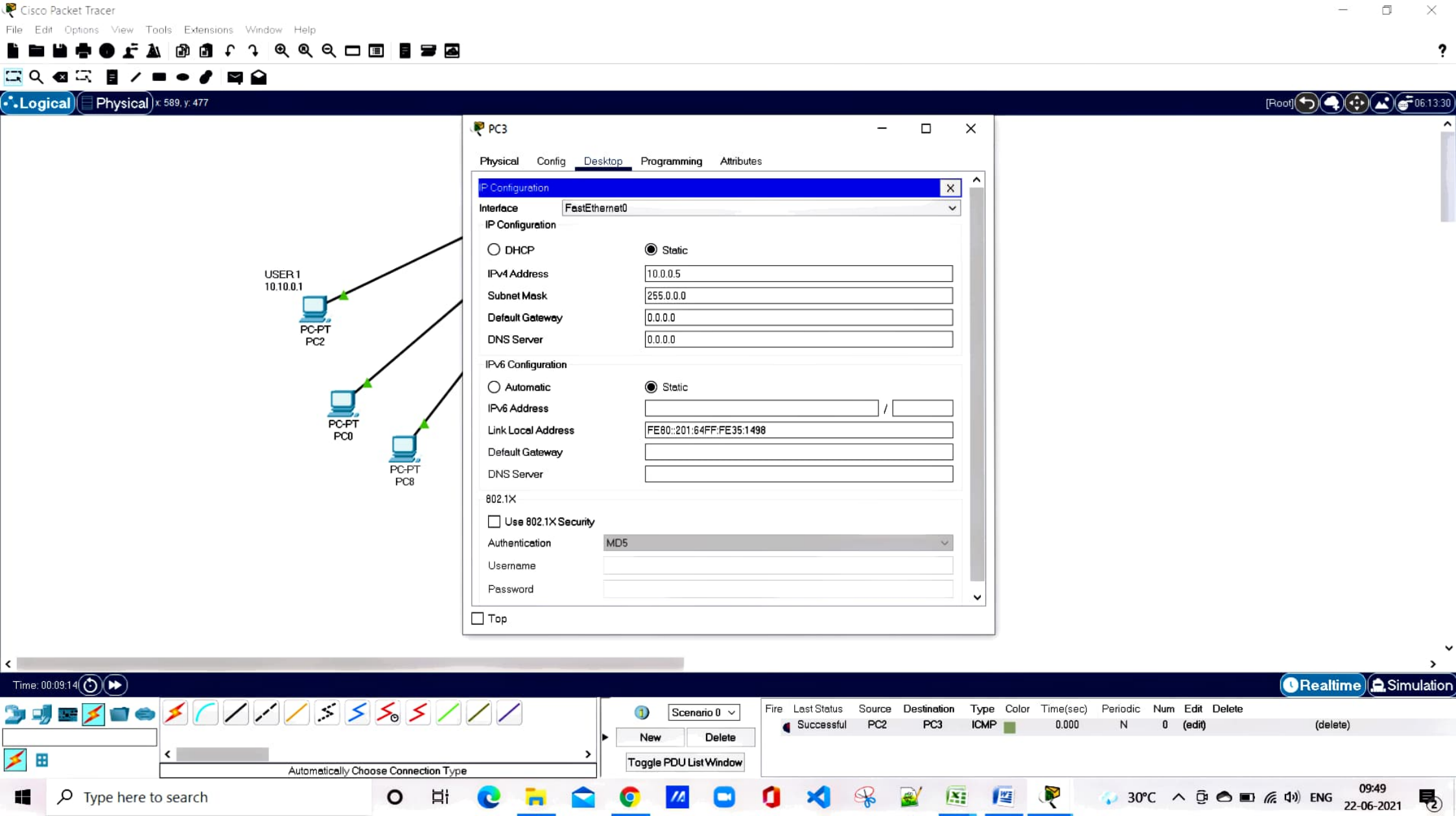
Time: 00:08:35 Realtime Simulation

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
	Successful	PC2	PC3	ICMP		0.000	N	0	(edit)	(delete)

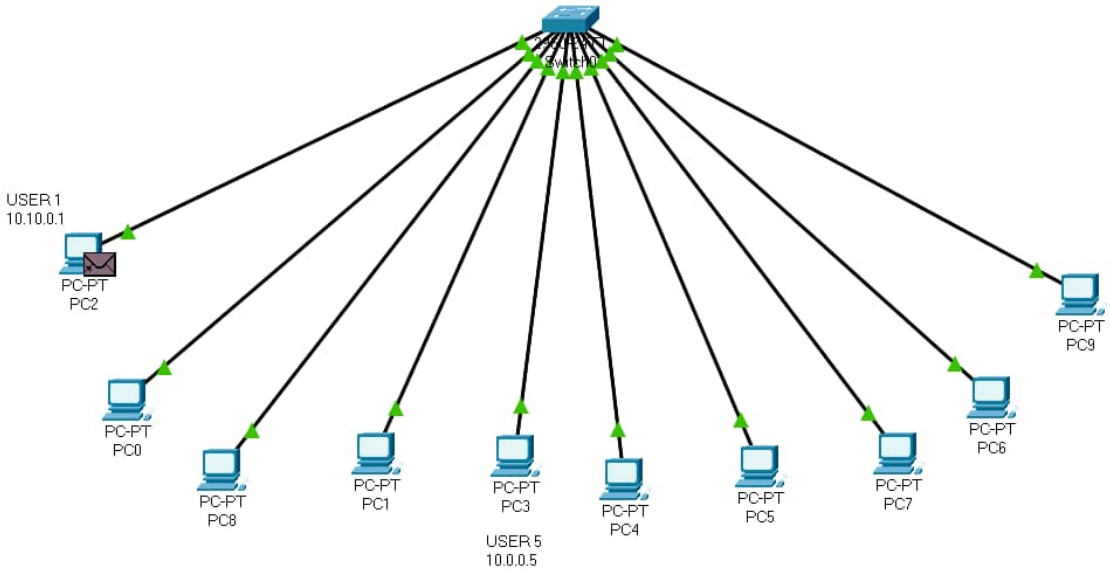
Type here to search 30°C ENG 09:48 22-06-2021


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 589, y: 477
[Root] 06:13:30
PC3
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP Static
IPv4 Address 10.0.0.5
Subnet Mask 255.0.0.0
Default Gateway 0.0.0.0
DNS Server 0.0.0.0
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::201:64FF:FE35:1498
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
USER 1
10.10.0.1
PC-PT
PC2
PC-PT
PC0
PC-PT
PC8
Time: 00:09:14
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
Successful PC2 PC3 ICMP 0.000 N 0 (edit) (delete)
Type here to search
30°C
ENG
09:49
22-06-2021

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x: 923, y: 427 [Root] 06:44:30



HR DEPARTMENT

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
	0.000	–	PC2
	0.000	–	PC2
	0.001	PC2	Switch0
	0.001	–	PC2
	0.002	PC2	Switch0
	0.002	Switch0	PC3
	0.003	Switch0	PC3
	0.003	PC3	Switch0
	0.004	PC3	Switch0
	0.004	Switch0	PC2
	0.005	Switch0	PC2

Reset Simulation Constant Delay Captured to: 0.005 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: 00:09:51.949 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
	Successful	PC2	PC3	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC2	PC3	ICMP		0.000	N	1	(edit)	(delete)

Type here to search 30°C ENG 09:50 22-06-2021