COMPUTER NETWORKS LAB

Designing and Simulation of Network Topology using Cisco Packet Tracer

WEEK 2

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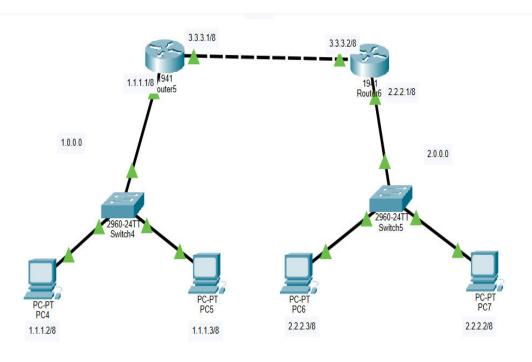
SECTION: F

DATE: 29/01/2022

Objectives:

- To understand the purpose of Cisco Packet Tracer.
- To navigate, choose network and end devices and customize them.
- To interconnect devices and configure them using simple interface.
- To become familiar with building topologies in Packet Tracer.
- To simulate data interactions travelling through a network.

Task 1 (Demo):



Simulation Panel

Event List							
Vis.		Time(sec)	Last Device	At Device	Туре	^	
		0.000		PC4	ICMP		
		0.001	PC4	Switch4	ICMP		
		0.002	Switch4	Router5	ICMP		
		0.003	Router5	Router6	ICMP		
		0.004	Router6	Switch5	ICMP		
		0.005	Switch5	PC7	ICMP		
		0.006	PC7	Switch5	ICMP		
		0.007	Switch5	Router6	ICMP		
		0.008	Router6	Router5	ICMP		
		0.009	Router5	Switch4	ICMP		
		0.010	Switch4	PC4	ICMP		



PC & Router Configuration Details:

PC4:

IP Address ---> 1.1.1.2 Gateway ---> 1.1.1.1

PC5:

IP Address ---> 1.1.1.3 Gateway ---> 1.1.1.1

Router 5:

FastEthernet0/0 ---> 1.1.1.1 FastEthernet0/1 ---> 3.3.3.1

Router 6:

FastEthernet0/0 ---> 3.3.3.2 FastEthernet0/1 ---> 2.2.2.1

PC6:

IP Address ---> 2.2.2.2 Gateway ---> 2.2.2.1

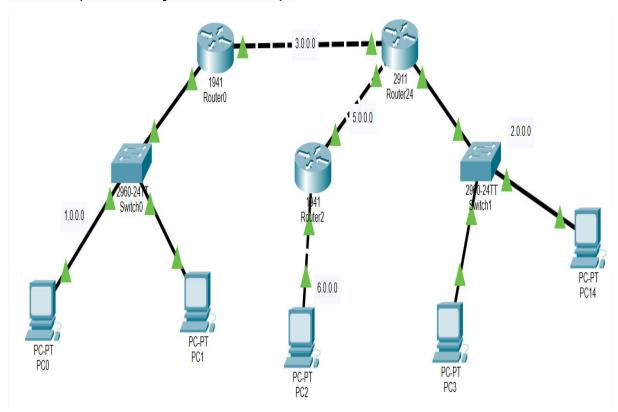
PC7:

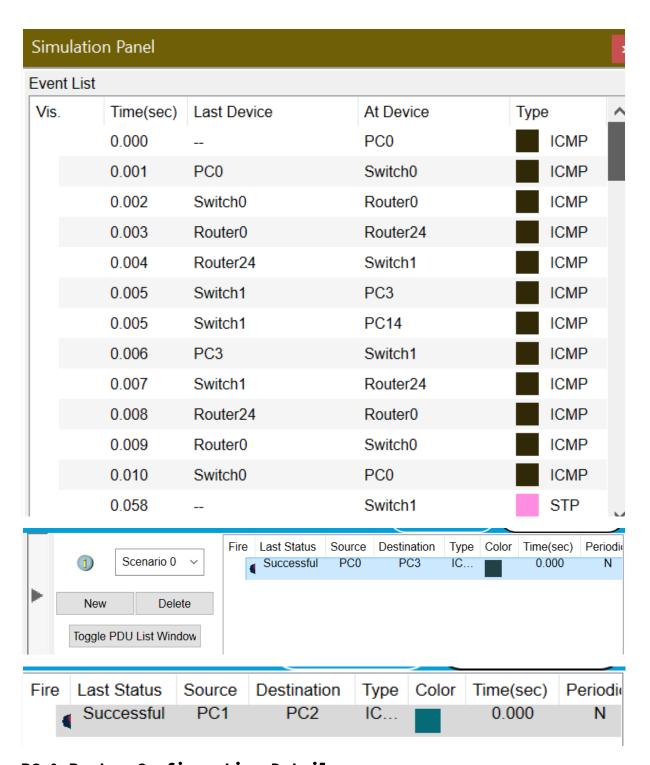
IP Address ---> 2.2.2.3 Gateway ---> 2.2.2.1

Routing Table Entries:

<u>Router</u>	<u>Network</u>	<u>Next Hop</u>
Router5	2.0.0.0	3.3.3.2
Router6	1.0.0.0	3.3.3.1

Task 2 (Mandatory for Week-6):





PC & Router Configuration Details:

PC0:

IP Address ---> 1.1.1.2
Gateway ---> 1.1.1.1

PC1:

IP Address ---> 1.1.1.3
Gateway ---> 1.1.1.1

Router 0:

GigabitEthernet0/0 ---> 1.1.1.1
GigabitEthernet0/1 ---> 3.3.3.1

Router 24:

GigabitEthernet0/0 ---> 3.3.3.2 GigabitEthernet0/1 ---> 5.5.5.2 GigabitEthernet0/2 ---> 2.2.2.1

Router 2:

GigabitEthernet0/0 ---> 5.5.5.1 GigabitEthernet0/1 ---> 6.6.6.1

PC2:

IP Address ---> 6.6.6.2 Gateway ---> 6.6.6.1

PC3:

IP Address ---> 2.2.2.2 Gateway ---> 2.2.2.1

PC14:

IP Address ---> 2.2.2.3 Gateway ---> 2.2.2.1

Routing Table Entries:

<u>Router</u>		<u>Network</u>	Next Hop
Router	Θ	2.0.0.0	3.3.3.2
		6.0.0.0	3.3.3.2
Router	24	1.0.0.0	3.3.3.1
		6.0.0.0	5.5.5.1
Router	2	2.0.0.0	5.5.5.2
Routei	_		
		1.0.0.0	5.5.5.2