

LAB 10

Demonstrate the TTL/ Life of a Packet.

OBSERVATION:

LAB -08 [S.]

Aim: - Demonstrate the TTL / Life of a packet

Topology.

Router 0
Router 1
Router 2

PC-PT
PC0

PC-PT
PC1

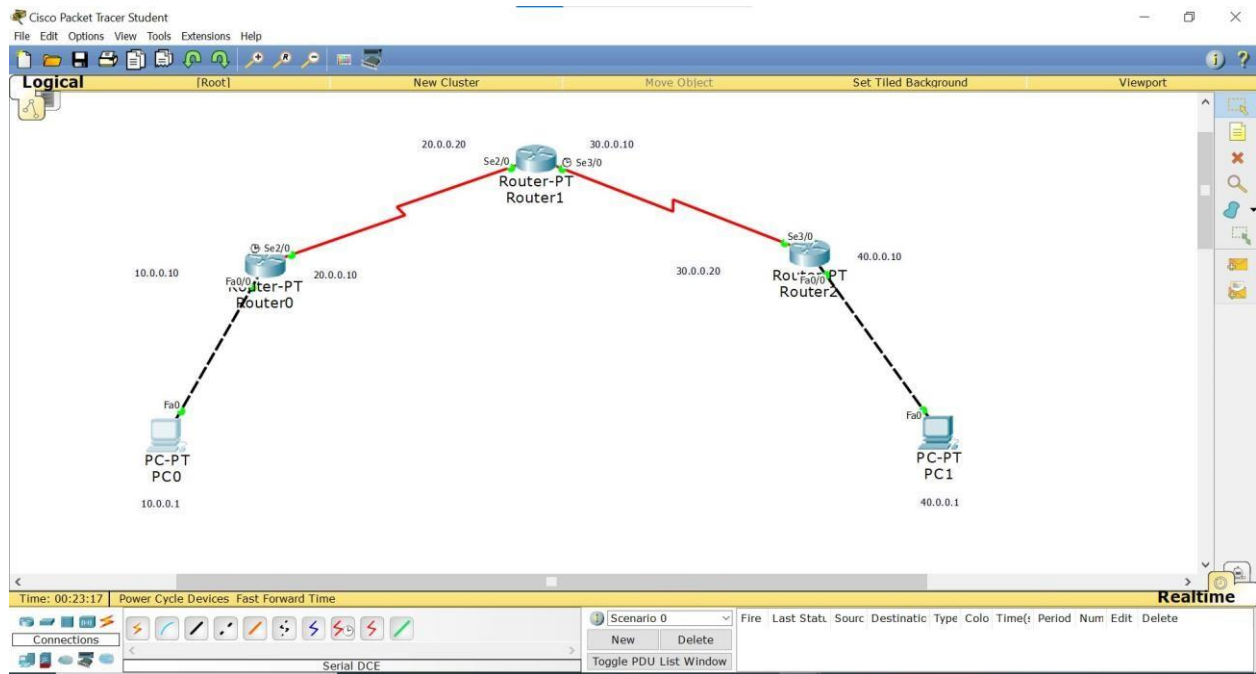
Procedure:-

- Create a topology as shown above and configure the PC's & routers as shown above. Static routing is ~~also~~ done here.
- Goto simulation mode. Send simple PDU from PC0 to PC1.

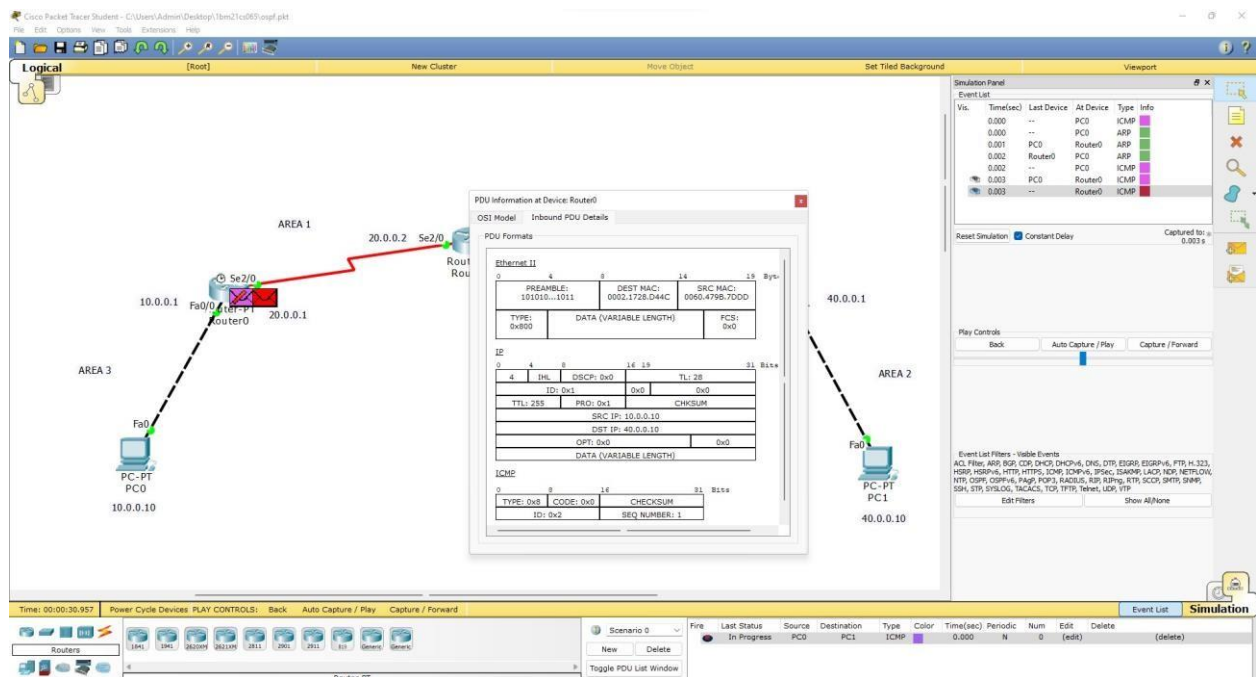
- click on capture / go forward button to run it from one node to other.
- view the inbound and outbound PDU details and on the each step by clicking on PDU observation:-
- The TTL is reduced by one when the packet crosses every router.
- If TTL becomes 0, packet will be dropped.

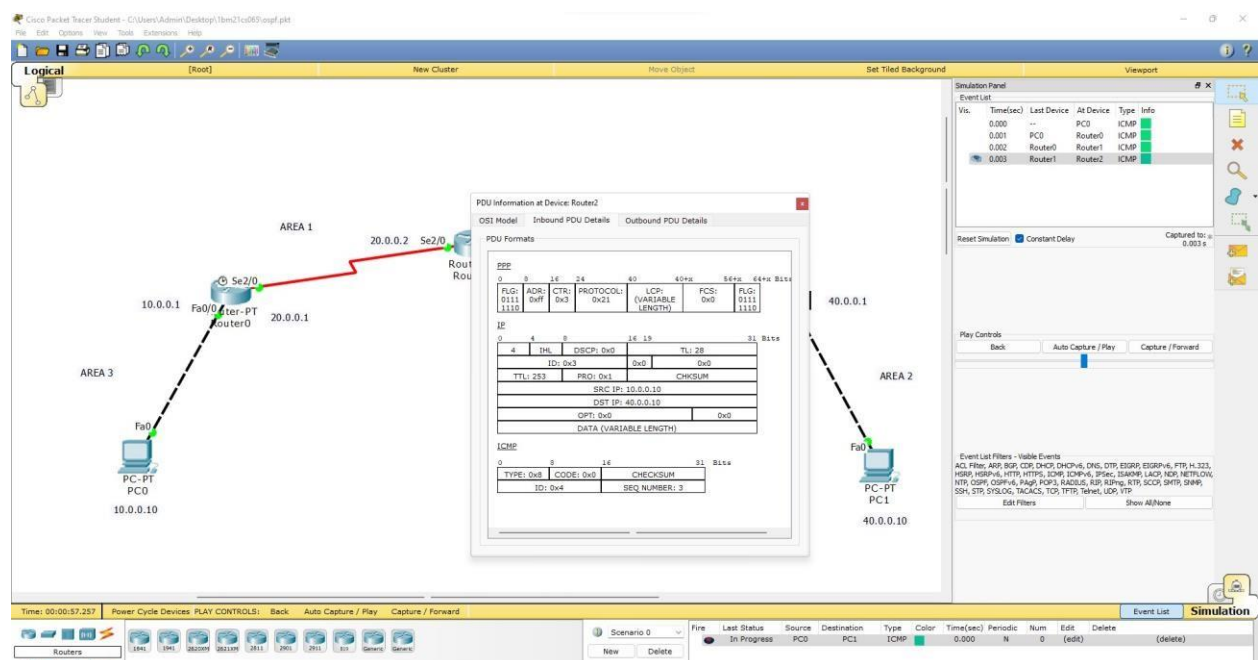
19/9/2023

TOPOLOGY:



OUTPUT:





Cisco Packet Tracer Student - C:\Users\Admin\Desktop\1bm21cs05\cs05.pkt

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

AREA 1

20.0.0.2 5e2/0

10.0.0.1 Fa0/0 Inter-PT Router0

20.0.0.1

AREA 3

10.0.0.10 PC-PT PC0

40.0.0.1 Fa0

AREA 2

40.0.0.10 PC-PT PC1

PDU Information at Device PC1

OSI Model Inbound PDU Details Outbound PDU Details

PDU Formats

Ethernet II

0	4	8	12	16	20	24	28	32	Bytes
PREAMBLE		DEST MAC:		SRC MAC:					
10101010...1011		90A0.47B9.AB50		0009.7C2B.C636					
TYPE: 0x00		DATA (VARIABLE LENGTH)				FCS: 0x00			

IP

0	4	8	12	16	20	24	28	32	Bytes
ID: 0x3		DISCOP: 0x0		TTL: 28					
TTL: 252		PRO: 0x1		CHECKSUM					
SRC IP: 10.0.0.10		DST IP: 40.0.0.10							
OPT: 0x0		DATA (VARIABLE LENGTH)							

ICMP

0	4	8	12	16	20	24	28	32	Bytes
TYPE: 0x8		CODE: 0x0		CHECKSUM					
ID: 0x4		SEQ NUMBER: 3							

Simulation Panel

Event List

Time (sec)	Last Device	All Device	Type	Info
0.000	PC0	Router0	ICMP	
0.001	PC0	Router0	ICMP	
0.002	Router0	Router1	ICMP	
0.003	Router0	Router2	ICMP	
0.004	Router2	PC1	ICMP	

Reset Simulation Constant Delay Captured to: 0.004 s

Play Controls Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

AQ Filter: ARP, RDP, CDP, DHCP, DNS, DTP, EIGRP, ESP, H.323, HSRP, IGMP, IGRP, HTTP, HTTPS, ICMP, ICMPv6, IPsec, IS-IS, LACP, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAgg, POP3, RADIUS, RDP, RDPing, RTP, SCCP, SMTP, SNMP, SSH, STP, STPv6, Telnet, TFTP, VNC, VNCv6, VTY

Edit Filters Show All/None

Time: 00:00:57.258 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Routers

Scenario 0

New Delete

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

In Progress PC0 PC1 ICMP 0.000 N 0 (edit) (delete)