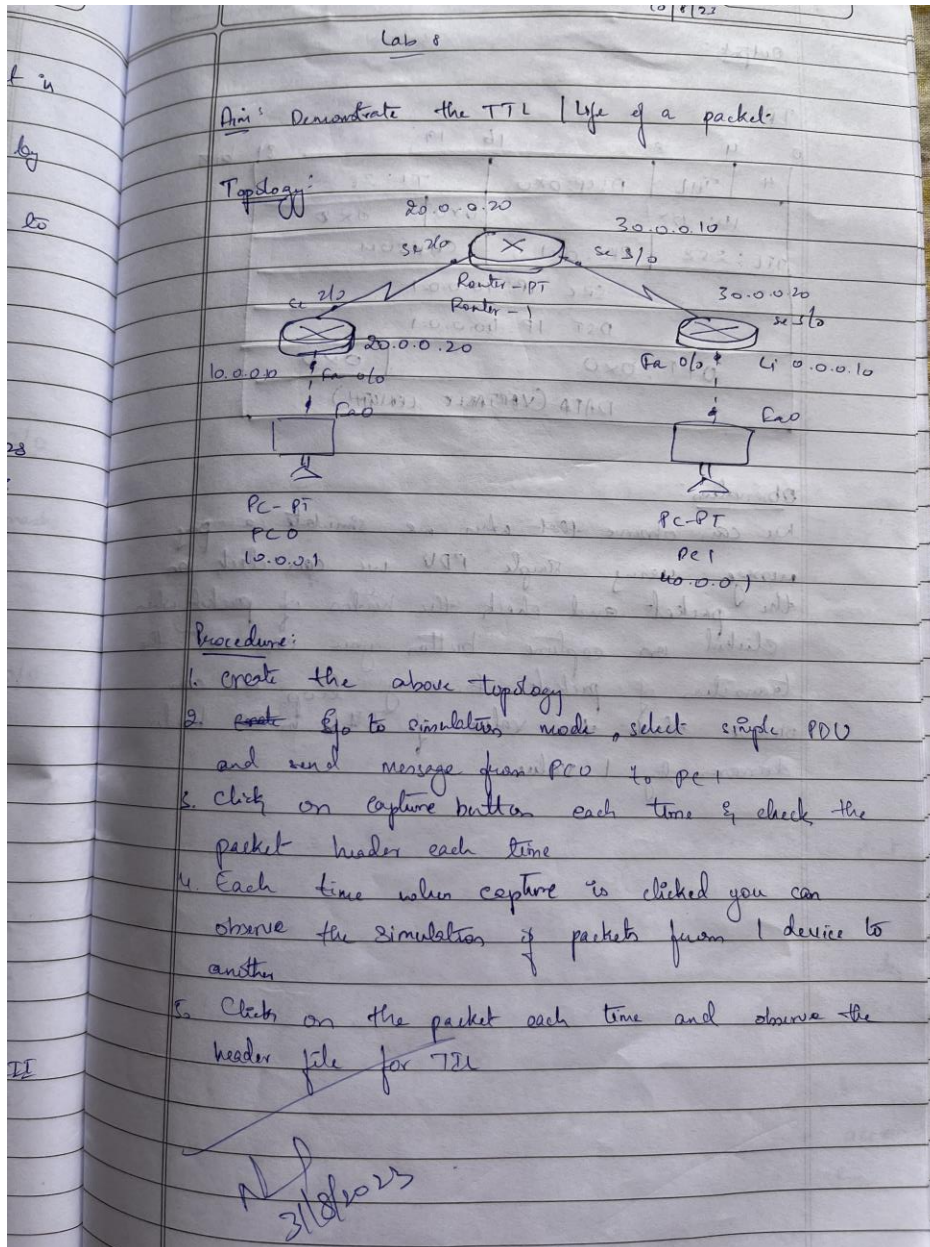


LAB 10

Demonstrate the TTL/ Life of a Packet.

OBSERVATION:



Output:

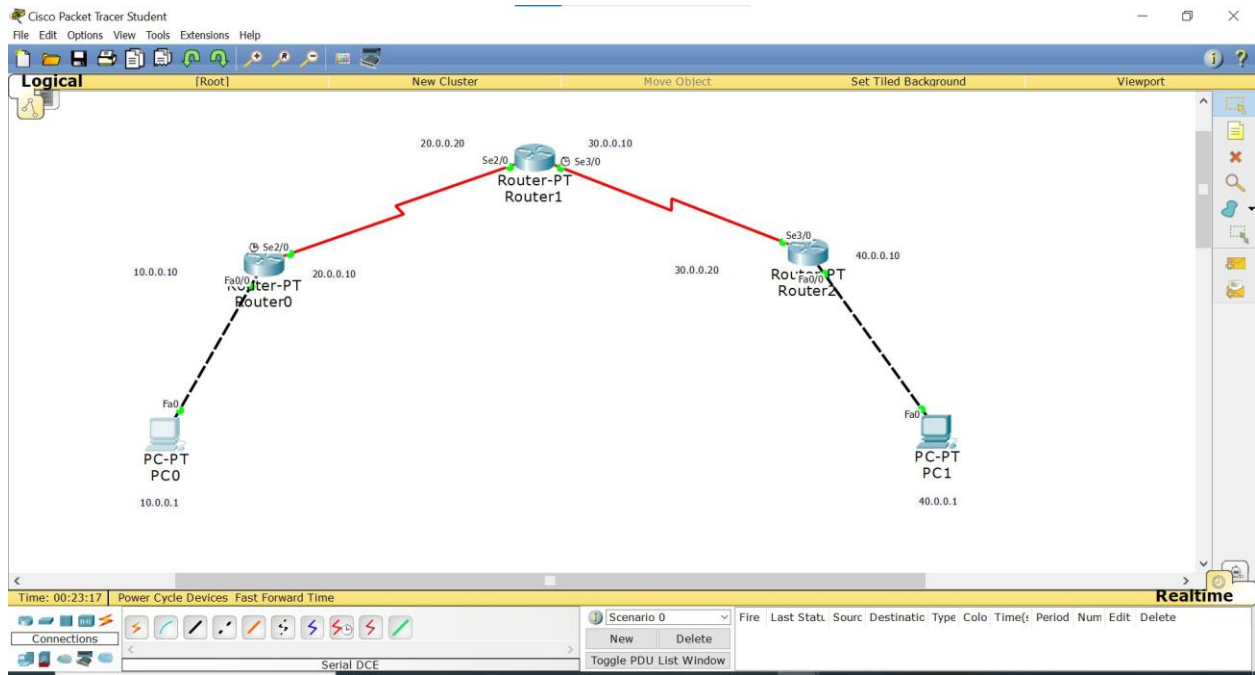
IP

0	4	8	16	19	31 bits
4	IHL	DSCP: 0x0	TOS: 28		
ID: 0x0			0x0	0x0	
TTL: 252		PRO: 0x1	CHECKSUM		
SRC IP: 10.0.0.1					
DST IP: 40.0.0.1					
OPT: 0x0			0x0		
DATA (VARIABLE LENGTH)					

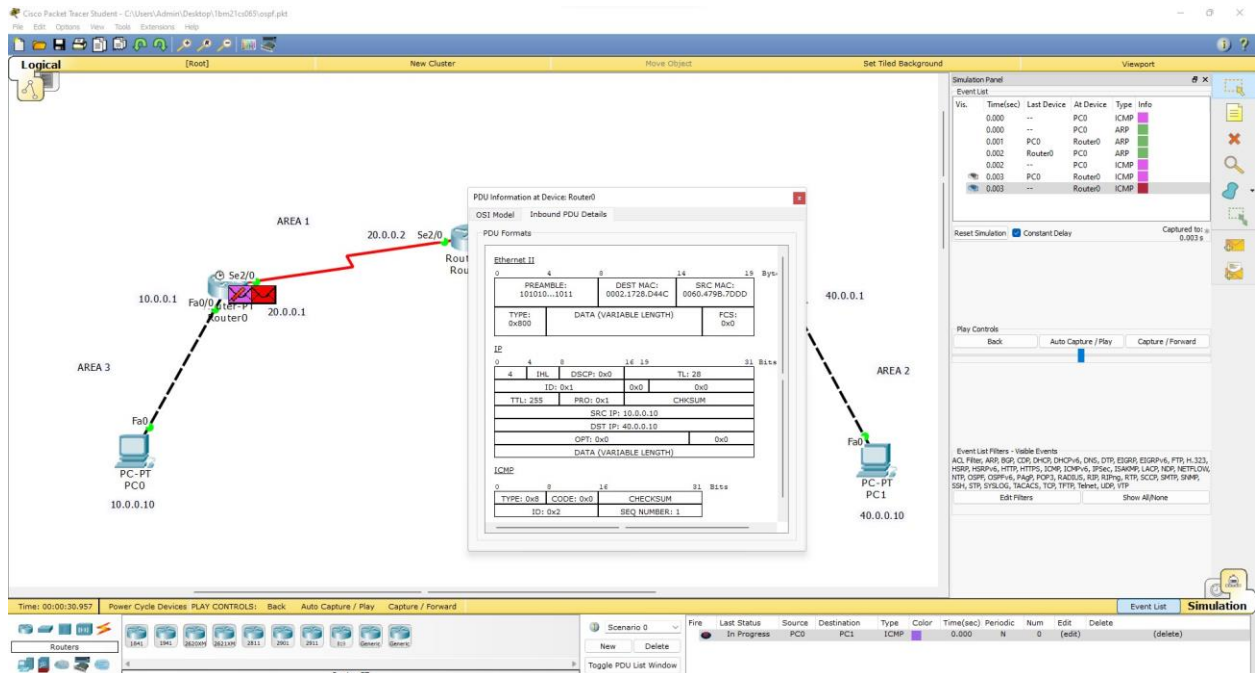
Observation:

We can observe that when we simulate a ping message using single PDU we can click on the packet and check the header of packet when clicked on capture button you can see the transition of packets. For every hop we can observe that the value of TTL in IP header decreases by 1 value.

TOPOLOGY:



OUTPUT:



Cisco Packet Tracer Student - C:\Users\Admin\Desktop\1bm21c065\conf.pkt

File Edit Options View Tools Extensions Help

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

Time: 00:00:57.236 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Scenario 0 Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete (delete)

Simulation Panel

Event List

Time(sec)	Last Device	At Device	Type	Info
0.000	PC0	PC0	ICMP	
0.001	PC0	Router0	ICMP	
0.002	Router0	Router1	ICMP	

Reset Simulation Constant Delay Captured to: 0.002 s

Play Controls: Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL Filter: AND, BGP, CDP, DHCP, DHCPv6, DNS, FTP, ESP, ESPv6, FTP, H.323, HTTP, HTTPv6, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAgg, POP3, RADIUS, RDP, RDPv6, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, Telnet, TFTP, Telnet, UDP, VTY

Edit Filters Show All/None

PDU Information at Device: Router1

OSI Model Inbound PDU Details Outbound PDU Details

PDU Format

0	8	16	24	40	48	56	64	80	96	112
FLG:	ADR:	CTR:	PROT:	LCP:	FCS:	FLG:				
0111	0x11	0x03	0x21	(VARIABLE LENGTH)	0x00	0111				
1110						1110				

IP

0	4	8	16	24	32	40	48	56	64	80	96	112
4	0x0	DISC:	0x0	TL:	28							
ID:	0x0											
TTL:	254	PRO:	0x1	CHKSUM:								
SRC IP:	10.0.0.10											
DST IP:	40.0.0.10											
OPT:	0x0											
DATA (VARIABLE LENGTH)												

ICMP

0	8	16	32	48	64	80	96	112
TYPE:	0x8	CODE:	0x0	CHKSUM:				
ID:	0x4			SEQ NUMBER:	3			

Cisco Packet Tracer Student - C:\Users\Admin\Desktop\1bm21c065\conf.pkt

File Edit Options View Tools Extensions Help

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

Time: 00:00:57.237 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Scenario 0 Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete (delete)

Simulation Panel

Event List

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

Reset Simulation Constant Delay Captured to: 0.003 s

Play Controls: Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL Filter: AND, BGP, CDP, DHCP, DHCPv6, DNS, FTP, ESP, ESPv6, FTP, H.323, HTTP, HTTPv6, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAgg, POP3, RADIUS, RDP, RDPv6, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, Telnet, TFTP, Telnet, UDP, VTY

Edit Filters Show All/None

PDU Information at Device: Router2

OSI Model Inbound PDU Details Outbound PDU Details

PDU Format

0	8	16	24	40	48	56	64	80	96	112
FLG:	ADR:	CTR:	PROT:	LCP:	FCS:	FLG:				
0111	0x11	0x03	0x21	(VARIABLE LENGTH)	0x00	0111				
1110						1110				

IP

0	4	8	16	24	32	40	48	56	64	80	96	112
4	0x0	DISC:	0x0	TL:	28							
ID:	0x3											
TTL:	253	PRO:	0x1	CHKSUM:								
SRC IP:	10.0.0.10											
DST IP:	40.0.0.10											
OPT:	0x0											
DATA (VARIABLE LENGTH)												

ICMP

0	8	16	32	48	64	80	96	112
TYPE:	0x8	CODE:	0x0	CHKSUM:				
ID:	0x4			SEQ NUMBER:	3			

