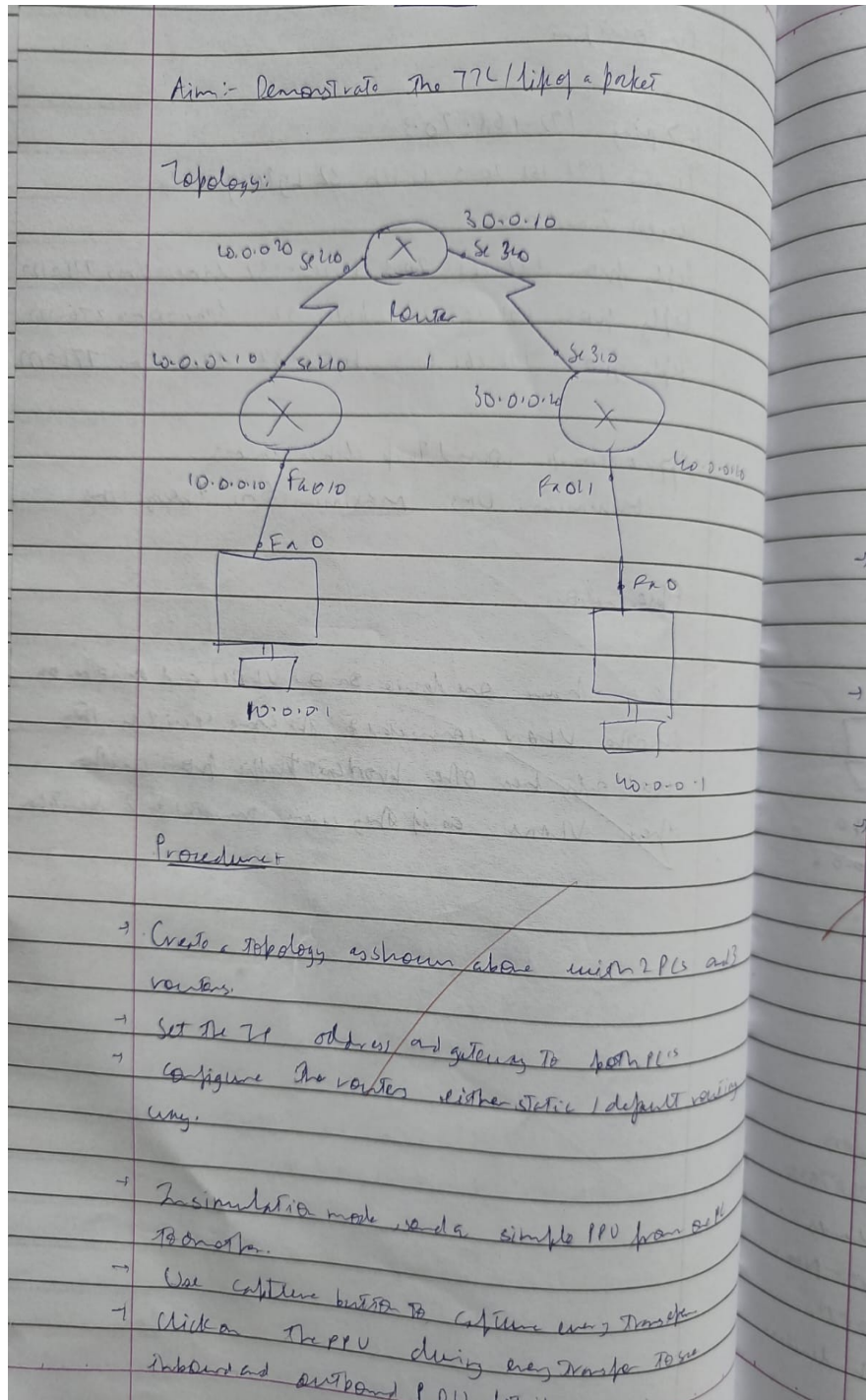


WEEK 10

Demonstrate the TTL/ Life of a Packet.

OBSERVATION:



Output:

0	4	8	16	20	24	31
4	IHL	PSLP	TTL: 255			
10.0.0.6			0x	0x0		
SRC IP: 10.0.0.1						
DST IP: 40.0.0.1						
OPT 0x0				0x0		
PAYLOAD (Variable Length)						

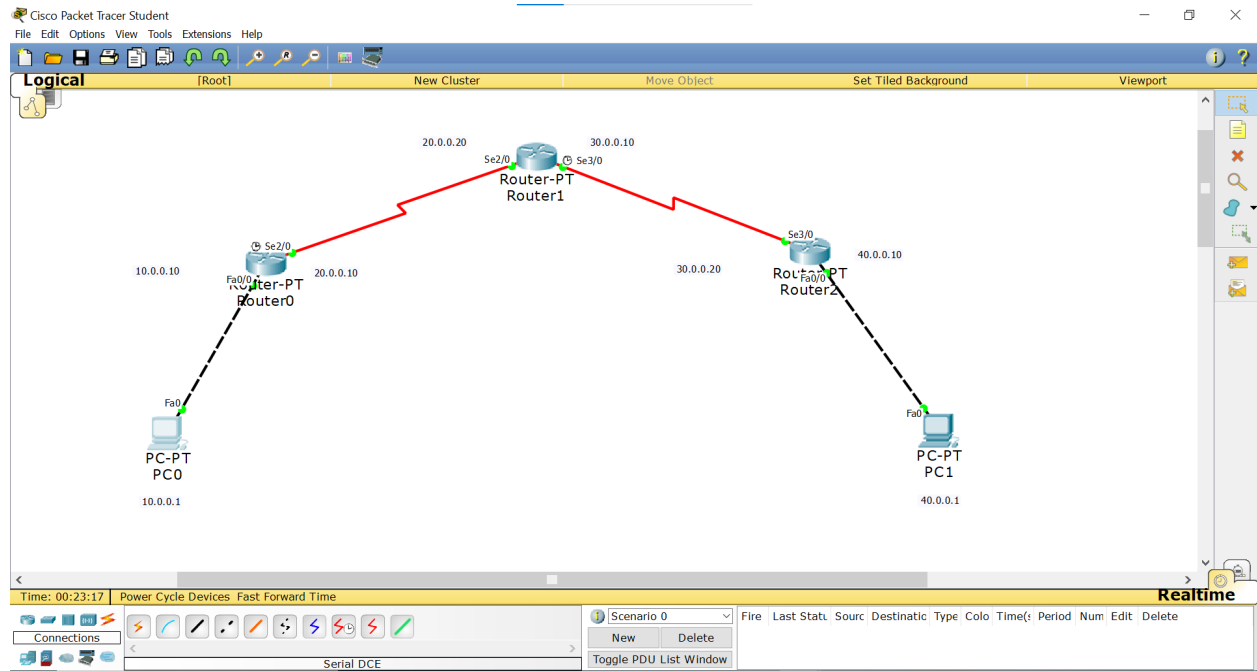
Observation:

→ The host hops the packet travels before being discarded as TTL

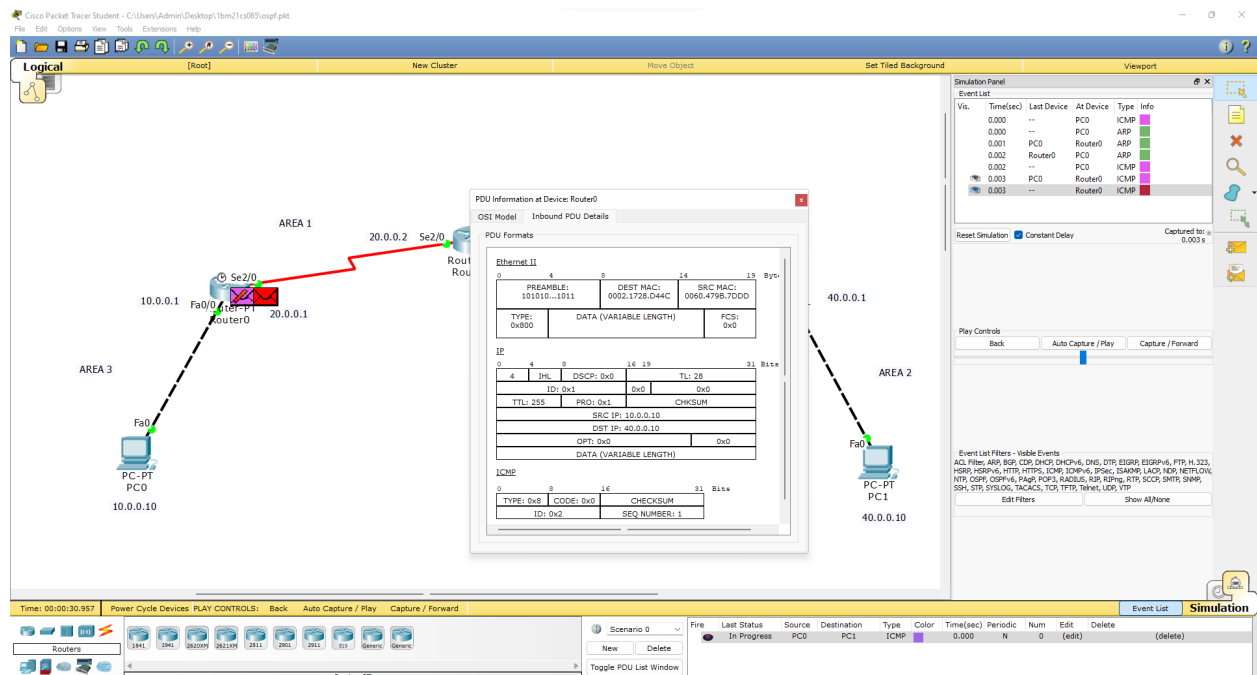
→ Destination TTL field is set by sender and reduced by each router along path towards destination.

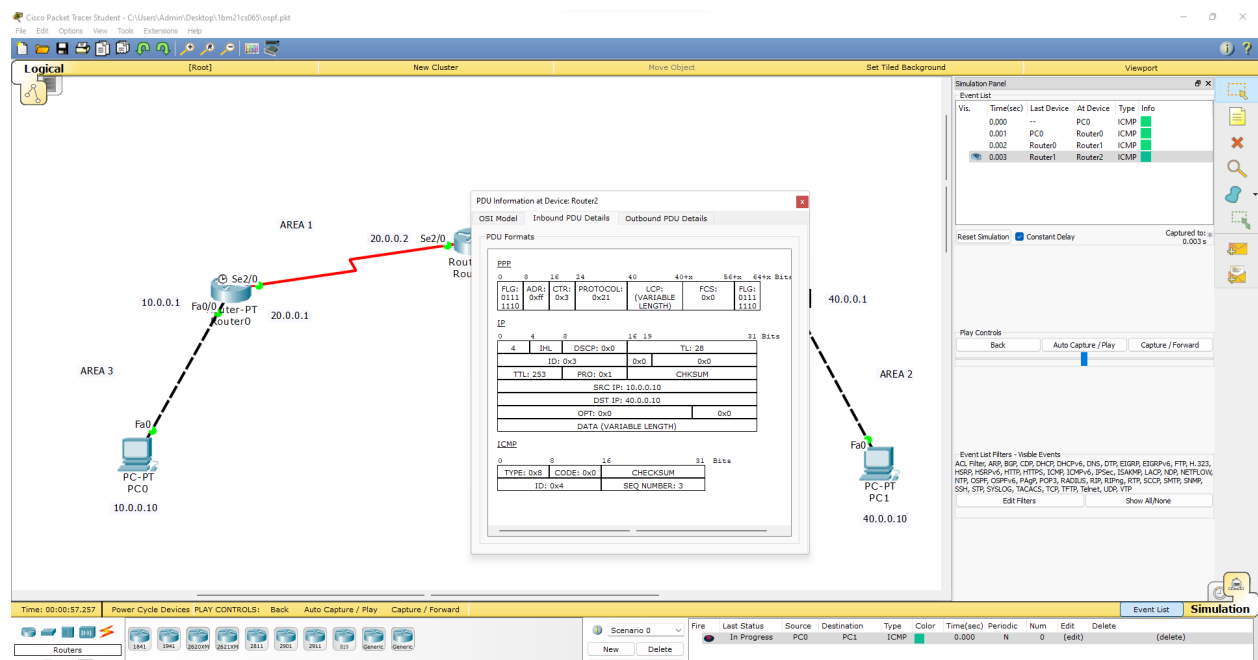
→ When TTL = 0, router discards and sends an ICMP message.

TOPOLOGY:



OUTPUT:





Cisco Packet Tracer Student - C:\Users\Admin\Desktop\1bm21cd09\ospf.plt

File Edit Options View Tools Extensions Help

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

AREA 1: 20.0.0.0/24, Router0 Se2/0 20.0.0.2

AREA 2: 40.0.0.0/24, PC1 40.0.0.10

AREA 3: 10.0.0.0/24, PC0 10.0.0.10, Router0 Fa0/0 10.0.0.1

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			
PREAMBLE: 101010101011								SRC MAC: 0009.7C28.C636			
TYPE: 0x00								DATA (VARIABLE LENGTH)		FCS: 0x0	

IP

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

ICMP

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

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.000	-	PC0	ICMP	
	0.001	PC0	Router0	ICMP	
	0.002	Router0	Router1	ICMP	
	0.003	Router1	Router2	ICMP	
	0.004	Router2	PC1	ICMP	

Reset Simulation Constant Delay Captured to: 0.004s

Play Controls: Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL, Filter, ARP, BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, IGMPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NTP, NETCONF, NTP, OSPF, OSPFv6, PAgP, POP3, RADIUS, RDP, RDPv6, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TFTP, TFTPv6, Telnet, UDP, 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

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)

New Delete

Simulation