

EXPERIMENT: 6

AIM: Demonstrate the TTL/ Life of a Packet

PDU Information at Device: Router0

OSI Model Inbound PDU Details Outbound PDU Details

PDU Formats

Ethernet II

0	4	8	14	19	Bytes
PREAMBLE: 101010...1011			DEST MAC: 000D.BD27.5B45		SRC MAC: 00D0.979D.D00C
TYPE: 0x800		DATA (VARIABLE LENGTH)		FCS: 0x0	

IP

0	4	8	16	19	31	Bits
4		IHL	DSCP: 0x0		TL: 28	
ID: 0xa			0x0		0x0	
TTL: 255		PRO: 0x1		CHKSUM		
SRC IP: 10.0.0.1						
DST IP: 40.0.0.2						
OPT: 0x0				0x0		
DATA (VARIABLE LENGTH)						

ICMP

0	8	16	31	Bits
TYPE: 0x8		CODE: 0x0		CHECKSUM
ID: 0x8		SEQ NUMBER: 10		

PDU Formats

HDLC

0	8	16	32	32+x	48+x	56+x
FLG: 0111 1110	ADR: 0x8f	CONTROL: 0x0	DATA: (VARIABLE LENGTH)	FCS: 0x0	FLG: 0111 1110	

IP

0	4	8	16	19	31 Bits
4	IHL	DSCP: 0x0	TL: 28		
ID: 0xa			0x0	0x0	
TTL: 254		PRO: 0x1	CHKSUM		
SRC IP: 10.0.0.1					
DST IP: 40.0.0.2					
OPT: 0x0				0x0	
DATA (VARIABLE LENGTH)					

ICMP

0	8	16	31 Bits
TYPE: 0x8		CODE: 0x0	CHECKSUM
ID: 0x8		SEQ NUMBER: 10	

PDU Formats

HDLC

0	8	16	32	32+x	48+x	56+x
FLG: 0111 1110	ADR: 0x8f	CONTROL: 0x0	DATA: (VARIABLE LENGTH)	FCS: 0x0	FLG: 0111 1110	

IP

0	4	8	16	19	31 Bits
4	IHL	DSCP: 0x0	TL: 28		
ID: 0xe			0x0	0x0	
TTL: 254		PRO: 0x1	CHKSUM		
SRC IP: 10.0.0.1					
DST IP: 40.0.0.2					
OPT: 0x0				0x0	
DATA (VARIABLE LENGTH)					

ICMP

0	8	16	31	Bits
TYPE: 0x8		CODE: 0x0	CHECKSUM	
ID: 0xc		SEQ NUMBER: 14		

PDU Formats

HDLC

0	8	16	32	32+x	48+x	56+x
FLG: 0111 1110	ADR: 0x8f	CONTROL: 0x0	DATA: (VARIABLE LENGTH)	FCS: 0x0	FLG: 0111 1110	

IP

0	4	8	16	19	31 Bits
4	IHL	DSCP: 0x0	TL: 28		
ID: 0x12			0x0	0x0	
TTL: 253		PRO: 0x1	CHKSUM		
SRC IP: 10.0.0.1					
DST IP: 40.0.0.2					
OPT: 0x0				0x0	
DATA (VARIABLE LENGTH)					

ICMP

0	8	16	31 Bits
TYPE: 0x8		CODE: 0x0	CHECKSUM
ID: 0x10		SEQ NUMBER: 18	