project 3

Network Layer Concepts

1
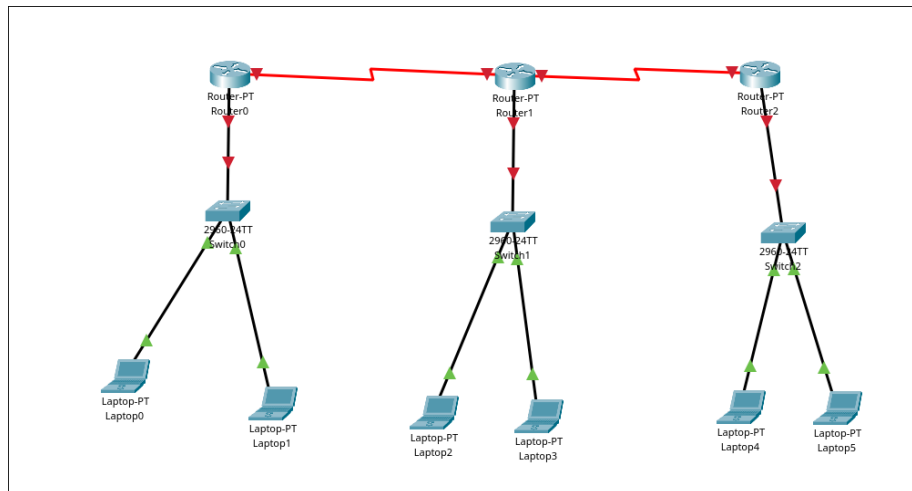

Figure 1: Figure 1

2

(a)

it pinged the other laptop on the same switch and recieved a quick near instant response

(b)

the ping cannot reach the other router

(c)

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num
	Successful	Laptop0	Laptop1	ICMP		0.000	N	0

the pdu can reach the other laptop on the same network

(d)

	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num
	Failed	Laptop0	Laptop5	ICMP		0.000	N	1

the pdu cannot reach the other laptop on a different network

3

(a)

the routers need routing table entries for the other subnets

4

(a)

both PDUs were successful and routed directly to and from laptop 0

(b)

the laptop routes through the two routers and to the other laptop successfully

Transport layer concepts

1

4: source port, destination port, length, checksum

2

they are each wto bytes long

3

the length of the whole UDP datagram. including header

4

65507

5

65535

6

hex: 11 dec: 17

7

the source and destinations of the two packets flip

Open Ended Questions

UDP: short header, simple, no sequencing/ACK

TCP: longer header, more complex, includes ordering/ACK

QUIC: long header, has TCP like qualities, implimented over UDP