

Lab07

Exercise1

Q2. Source IP address: 192.168.1.100

Destination IP address: 64.233.169.104

TCP source port: 4335

TCP destination port: 80

Q3. At time 7.158797.

Source IP address: 64.233.169.104

Destination IP address: 192.168.1.100

TCP source port: 80

TCP source port: 4335

Q7. Source IP address: 71.192.34.104

Destination IP address: 64.233.169.104

Source port:4335

Destination port: 80

Compare with request in NAThomeside, Source IP address is completely different while destination IP address is the same.

Q9. Checksum is different. Since IP address in header is different, the checksum becomes different.

Q11.Source IP address: 64.233.169.104

Destination IP address: 71.192.34.104

Source TCP port: 80

Destination port: 4335

Destination IP address is different. Other fields are the same.

Q13.Source IP address: 64.233.169.104

Destination IP address: 71.192.34.104

Source port: 80

Destination port: 4335

Destination IP address is different. The other fields are the same.

Q14.

Translation table	
WAN side address	LAN side address
71.192.34.104:4335	192.169.1.100:4

Ex2.

Q2. Destination address: 00:06:25:da:af:73

It could be wrong as well. Since it might be the MAC address of router. Since this IP address may own several servers. Router will connect them together then give the MAC address of router.

Q4. 61 Bytes

0000	00	06	25	da	af	73	00	d0	59	a9	3d	68	08	00	45	00	..%..s..
0010	02	a0	00	fa	40	00	80	06	bf	c8	c0	a8	01	69	80	77@...
0020	f5	0c	04	22	00	50	65	14	99	a7	ac	a5	3f	b4	50	18	...".Pe
0030	fa	f0	7e	4f	00	00	47	45	54	20	2f	65	74	68	65	72	...~0..GE
0040	65	61	6c	2d	6c	61	62	73	2f	48	54	54	50	2d	65	74	eal-labs
0050	68	65	72	65	61	6c	2d	6c	61	62	2d	66	69	6c	65	33	hereal-l
0060	2e	68	74	6d	6c	20	48	54	54	50	2f	31	2e	31	0d	0a	..html HT

This is the screenshot of Ethernet frame. It does not include preamble bytes. It includes Dest MAC, Source MAC, Type/length.

Q5. Ethernet source address: 00:06:25:da:af:73

No, this is the MAC address of switch.

Ex3.

Q1. Source address: 00:d0:59:a9:3d:68

Destination address: ff:ff:ff:ff:ff:ff

Destination address is used for broadcasting. All nodes on LAN receive ARP query.

Q6. Target IP address.

Q8. 00 02

Q9. In the sender MAC address field.

Q10. Destination address: 00:d0:59:a9:3d:68

Source address: 00:06:25:da:af:73