

CSC 361, Spring 2020
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Assignment - 1, document

All packets captured (first 3 images), total packets: 60

No.	Time	Source	Destination	Protocol	Length	Info
1	0.0000000000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover
2	3.340354000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover
3	8.229045000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover
4	9.082841000	10.0.0.2	10.0.0.1	TCP	74	36596 > i
5	9.082950000	10.0.0.1	10.0.0.2	TCP	74	irdmi > 36596
6	9.084752000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
7	9.086507000	10.0.0.2	10.0.0.1	HTTP	94	GET /hello
8	9.086562000	10.0.0.1	10.0.0.2	TCP	66	irdmi > 36596
9	9.087530000	10.0.0.1	10.0.0.2	HTTP	85	HTTP/1.1 2
10	9.087572000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
11	9.087614000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
12	9.087629000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
13	9.087740000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
14	9.087754000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
15	9.087768000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
16	9.087780000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
17	9.087793000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
18	9.087805000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
No.	Time	Source	Destination	Protocol	Length	Info
22	9.087854000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
23	9.087867000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
24	9.087878000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
25	9.087891000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
26	9.087903000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
27	9.087916000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
28	9.087927000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
29	9.087940000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
30	9.087952000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
31	9.087965000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
32	9.087976000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
33	9.087990000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
34	9.088002000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
35	9.088016000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
36	9.088027000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
37	9.088041000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
38	9.088052000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
39	9.088066000	10.0.0.1	10.0.0.2	TCP	67	[TCP segme
40	9.088078000	10.0.0.2	10.0.0.1	TCP	66	36596 > i
41	9.088093000	10.0.0.1	10.0.0.2	HTTP	67	Continuati
42	9.089207000	10.0.0.1	10.0.0.2	HTTP	611	Continuati
43	9.089310000	10.0.0.2	10.0.0.1	TCP	66	36596 > i



Wireshark interface showing network traffic capture. The packet list shows various TCP and HTTP connections between hosts 10.0.0.1 and 10.0.0.2, along with DHCP discoveries from other hosts.

No.	Time	Source	Destination	Protocol	Length	Info
39	9.088066000	10.0.0.1	10.0.0.2	TCP	67	[TCP segment of a connection from 10.0.0.1 to 10.0.0.2]
40	9.088078000	10.0.0.2	10.0.0.1	TCP	66	36596 > ir
41	9.088093000	10.0.0.1	10.0.0.2	HTTP	67	Continuation of previous connection
42	9.089207000	10.0.0.1	10.0.0.2	HTTP	611	Continuation of previous connection
43	9.089310000	10.0.0.2	10.0.0.1	TCP	66	36596 > ir
44	9.102125000	10.0.0.2	10.0.0.1	TCP	66	36596 > ir
45	9.102166000	10.0.0.1	10.0.0.2	TCP	66	irdmi > 36
46	14.096828000	46:6e:d0:ae:42:5d	42:a5:23:4b:e6:8d	ARP	42	Who has 10.0.0.1 i
47	14.096857000	42:a5:23:4b:e6:8d	46:6e:d0:ae:42:5d	ARP	42	10.0.0.1 i
48	15.607442000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
49	25.083452000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
50	39.549403000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
51	48.975104000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
52	51.957647000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
53	59.915964000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
54	74.682640000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
55	86.202861000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
56	98.007288000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
57	101.219137000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
58	106.671048000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
59	114.771996000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov
60	130.835133000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discov

Capturing from s1-eth1: <live capture in progress...> Packets: 60 · Displayed: 60 (100.0%) Profile: Default

2 client tests, when file was present:



Wireshark interface capturing traffic on interface s1-eth1. The packet list shows an HTTP GET request from host 10.0.0.2 to host 10.0.0.1, followed by responses and continuations.

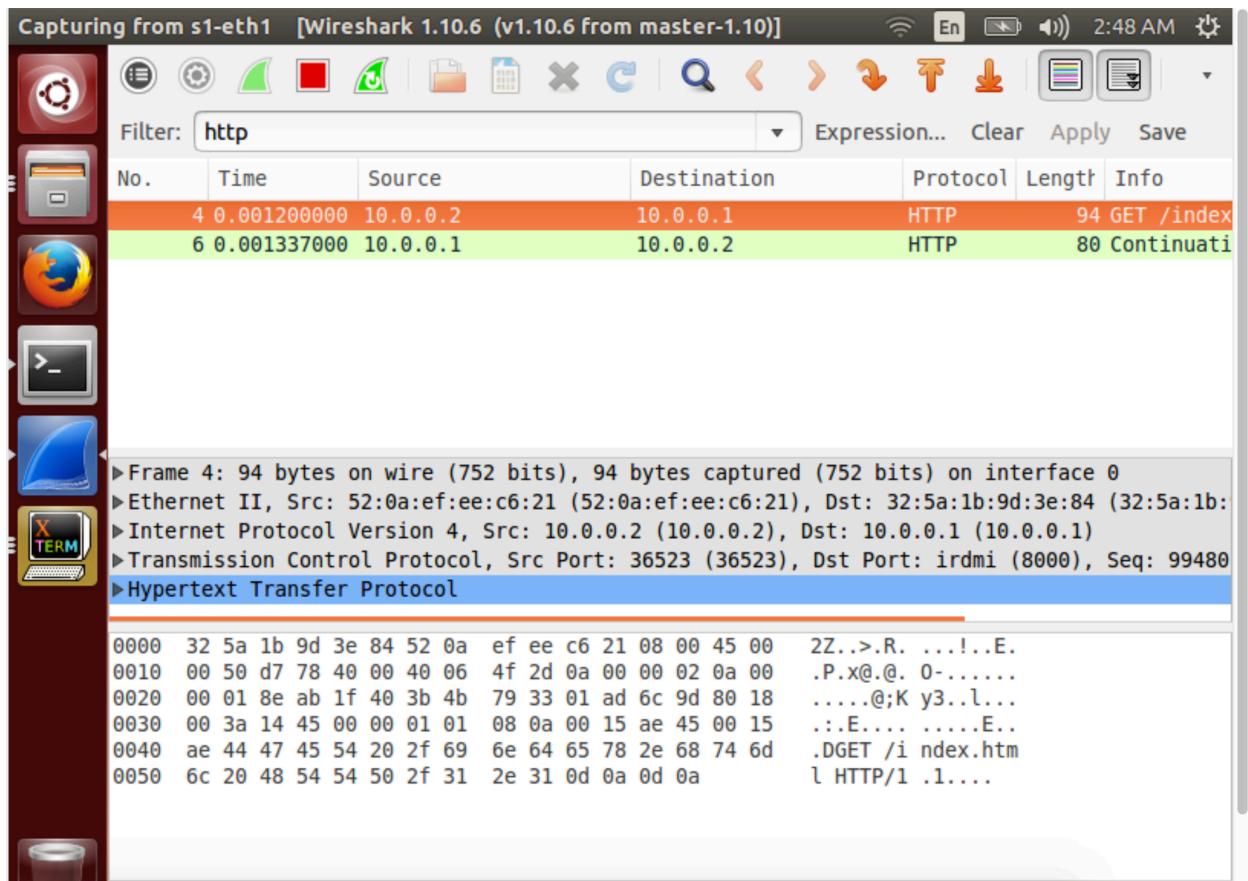
Capturing from s1-eth1 [Wireshark 1.10.6 (v1.10.6 from master-1.10)]						
No.	Time	Source	Destination	Protocol	Length	Info
7	13.777466000	10.0.0.2	10.0.0.1	HTTP	94	GET /hello
9	13.777987000	10.0.0.1	10.0.0.2	HTTP	85	HTTP/1.1 2
41	13.778433000	10.0.0.1	10.0.0.2	HTTP	67	Continuation of previous connection
42	13.778973000	10.0.0.1	10.0.0.2	HTTP	611	Continuation of previous connection

Frame 7: 94 bytes on wire (752 bits), 94 bytes captured (752 bits) on interface 0
 ▶ Ethernet II, Src: 52:0a:ef:ee:c6:21 (52:0a:ef:ee:c6:21), Dst: 32:5a:1b:9d:3e:84 (32:5a:1b:
 ▶ Internet Protocol Version 4, Src: 10.0.0.2 (10.0.0.2), Dst: 10.0.0.1 (10.0.0.1)
 ▶ Transmission Control Protocol, Src Port: 36521 (36521), Dst Port: irdmi (8000), Seq: 37321
 ▶ Hypertext Transfer Protocol

```

0000  32 5a 1b 9d 3e 84 52 0a  ef ee c6 21 08 00 45 00  2Z..>.R. ...!..E.
0010  00 50 39 36 40 00 40 06  ed 6f 0a 00 00 02 0a 00  .P96@. @.0.....
0020  00 01 8e a9 1f 40 de 74  6d 23 26 bc ab ca 80 18  ....@.t m#&.....
0030  00 3a 14 45 00 00 01 01  08 0a 00 14 54 17 00 14  ..:.E.... ....T...
0040  54 17 47 45 54 20 2f 68  65 6c 6c 6f 2e 68 74 6d  T.GET /h ello.htm
0050  6c 20 48 54 54 50 2f 31  2e 31 0d 0a 0d 0a          l HTTP/1.1....

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```
host: h2
root@mininet-vm:~/Desktop/a1# python client.py 10.0.0.1 8000 hello.html
HTTP/1.1 200 OK

<!DOCTYPE html>
<html>
<head>
    <title>Hello World</title>
</head>
<body>
<h1>Hello</h1>
<p>
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,
quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo
consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non
proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
</p>
</body>
</html>

root@mininet-vm:~/Desktop/a1# python client.py 10.0.0.1 8000 h.html
404 NOT FOUND

root@mininet-vm:~/Desktop/a1#
```

