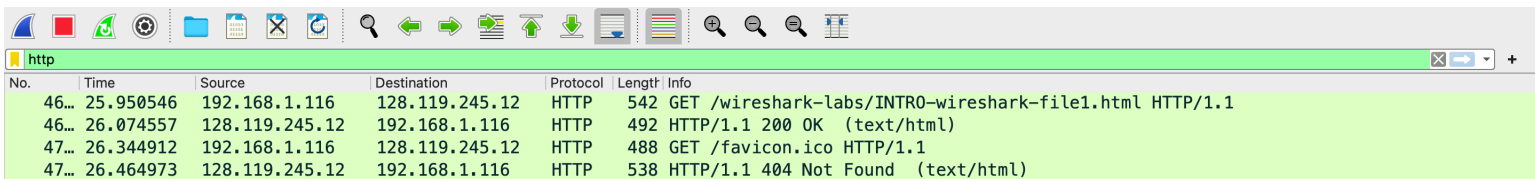


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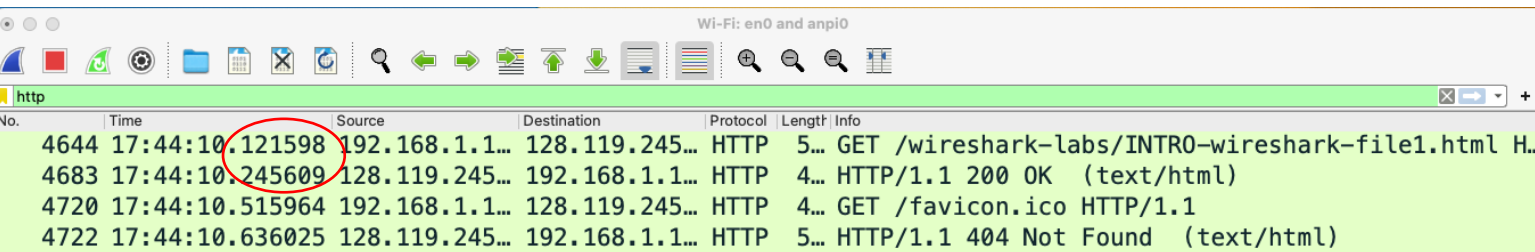
Screen shot of Wireshark after clicking the link to umass



No.	Time	Source	Destination	Protocol	Length	Info
46...	25.950546	192.168.1.116	128.119.245.12	HTTP	542	GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1
46...	26.074557	128.119.245.12	192.168.1.116	HTTP	492	HTTP/1.1 200 OK (text/html)
47...	26.344912	192.168.1.116	128.119.245.12	HTTP	488	GET /favicon.ico HTTP/1.1
47...	26.464973	128.119.245.12	192.168.1.116	HTTP	538	HTTP/1.1 404 Not Found (text/html)

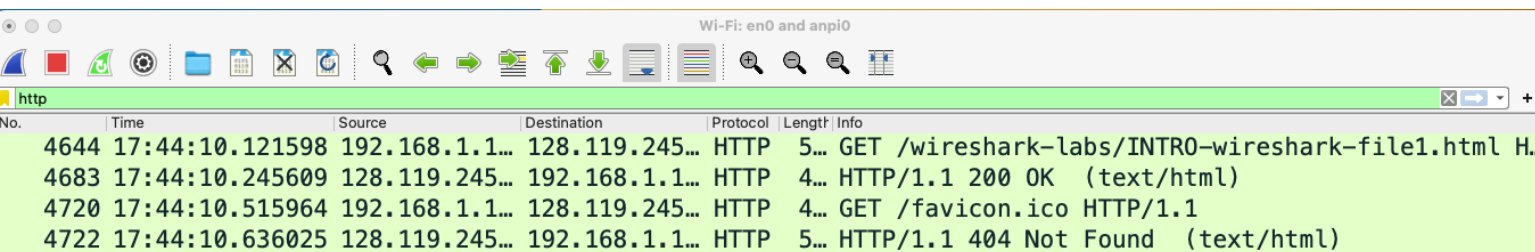
1. The protocols that are shown in the trace file are just HTTP. Since we were instructed to filter HTTP in the previous step. If it wasn't filtered I saw all the protocols listed.

2. The delay was .124011 seconds 17:44:10.245609 - 17:44:10.121598



No.	Time	Source	Destination	Protocol	Length	Info
4644	17:44:10.121598	192.168.1.1...	128.119.245...	HTTP	5...	GET /wireshark-labs/INTRO-wireshark-file1.html H...
4683	17:44:10.245609	128.119.245...	192.168.1.1...	HTTP	4...	HTTP/1.1 200 OK (text/html)
4720	17:44:10.515964	192.168.1.1...	128.119.245...	HTTP	4...	GET /favicon.ico HTTP/1.1
4722	17:44:10.636025	128.119.245...	192.168.1.1...	HTTP	5...	HTTP/1.1 404 Not Found (text/html)

3. The internet address of gaia.cs.umass.edu is 128.119.245.12 and the internet address of my computer is 192.168.1.116



No.	Time	Source	Destination	Protocol	Length	Info
4644	17:44:10.121598	192.168.1.1...	128.119.245...	HTTP	5...	GET /wireshark-labs/INTRO-wireshark-file1.html H...
4683	17:44:10.245609	128.119.245...	192.168.1.1...	HTTP	4...	HTTP/1.1 200 OK (text/html)
4720	17:44:10.515964	192.168.1.1...	128.119.245...	HTTP	4...	GET /favicon.ico HTTP/1.1
4722	17:44:10.636025	128.119.245...	192.168.1.1...	HTTP	5...	HTTP/1.1 404 Not Found (text/html)

```
Hypertext Transfer Protocol
> GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1\r\n
Host: gaia.cs.umass.edu\r\n
Connection: keep-alive\r\n
Upgrade-Insecure-Requests: 1\r\n
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/116.0.0.0 Safari/537.36\r\n
```

4. The browser that issued the request is built with software components of Mozilla and Apple's Webkit and that is Google Chrome.

5. The destination port is port 80

```
> Frame 4644: 542 bytes on wire (4336 bits), 542 bytes captured (4336 bits) on interface en0, id 0
Ethernet II, Src: Apple_d2:e3:78 (d4:57:63:d2:e3:78), Dst: ARRISGro_0b:de:d1 (e0:22:02:0b:de:d1)
> Internet Protocol Version 4, Src: 192.168.1.116, Dst: 128.119.245.12
> Transmission Control Protocol, Src Port: 50645, Dst Port: 80, Seq: 1, Ack: 1, Len: 488
Source Port: 50645
Destination Port: 80
[Stream index: 29]
[Conversation completeness: Complete, WITH_DATA (31)]
[TCP Segment Len: 488]
Sequence Number: 1 (relative sequence number)
Sequence Number (raw): 408215055
[Next Sequence Number: 489 (relative sequence number)]
Acknowledgment Number: 1 (relative ack number)
Acknowledgment number (raw): 274230228
0101 .... = Header Length: 20 bytes (5)
> Flags: 0x018 (PSH, ACK)
Window: 4096
[Calculated window size: 262144]
[Window size scaling factor: 64]
Checksum: 0x0552 [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
> [Timestamps]
```

6. Print the two HTTP messages (GET and OK)

```
/var/folders/58/348fxrmx281cz01js2nqm5kh0000gn/T/wireshark_2_interfacesXGNGB2.pcapng 4787 total packets, 4 shown
```

No.	Time	Source	Destination	Protocol	Length	Info
4644	17:44:10.121598	192.168.1.116	128.119.245.12	HTTP	542	GET /
wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1						
Frame 4644: 542 bytes on wire (4336 bits), 542 bytes captured (4336 bits) on interface en0, id 0						
Ethernet II, Src: Apple_d2:e3:78 (d4:57:63:d2:e3:78), Dst: ARRISGro_0b:de:d1 (e0:22:02:0b:de:d1)						
Internet Protocol Version 4, Src: 192.168.1.116, Dst: 128.119.245.12						
Transmission Control Protocol, Src Port: 50645, Dst Port: 80, Seq: 1, Ack: 1, Len: 488						
Hypertext Transfer Protocol						
No.	Time	Source	Destination	Protocol	Length	Info
4683	17:44:10.245609	128.119.245.12	192.168.1.116	HTTP	492	HTTP/1.1
200 OK (text/html)						
Frame 4683: 492 bytes on wire (3936 bits), 492 bytes captured (3936 bits) on interface en0, id 0						
Ethernet II, Src: ARRISGro_0b:de:d1 (e0:22:02:0b:de:d1), Dst: Apple_d2:e3:78 (d4:57:63:d2:e3:78)						
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.1.116						
Transmission Control Protocol, Src Port: 80, Dst Port: 50645, Seq: 1, Ack: 489, Len: 438						
Hypertext Transfer Protocol						
Line-based text data: text/html (3 lines)						