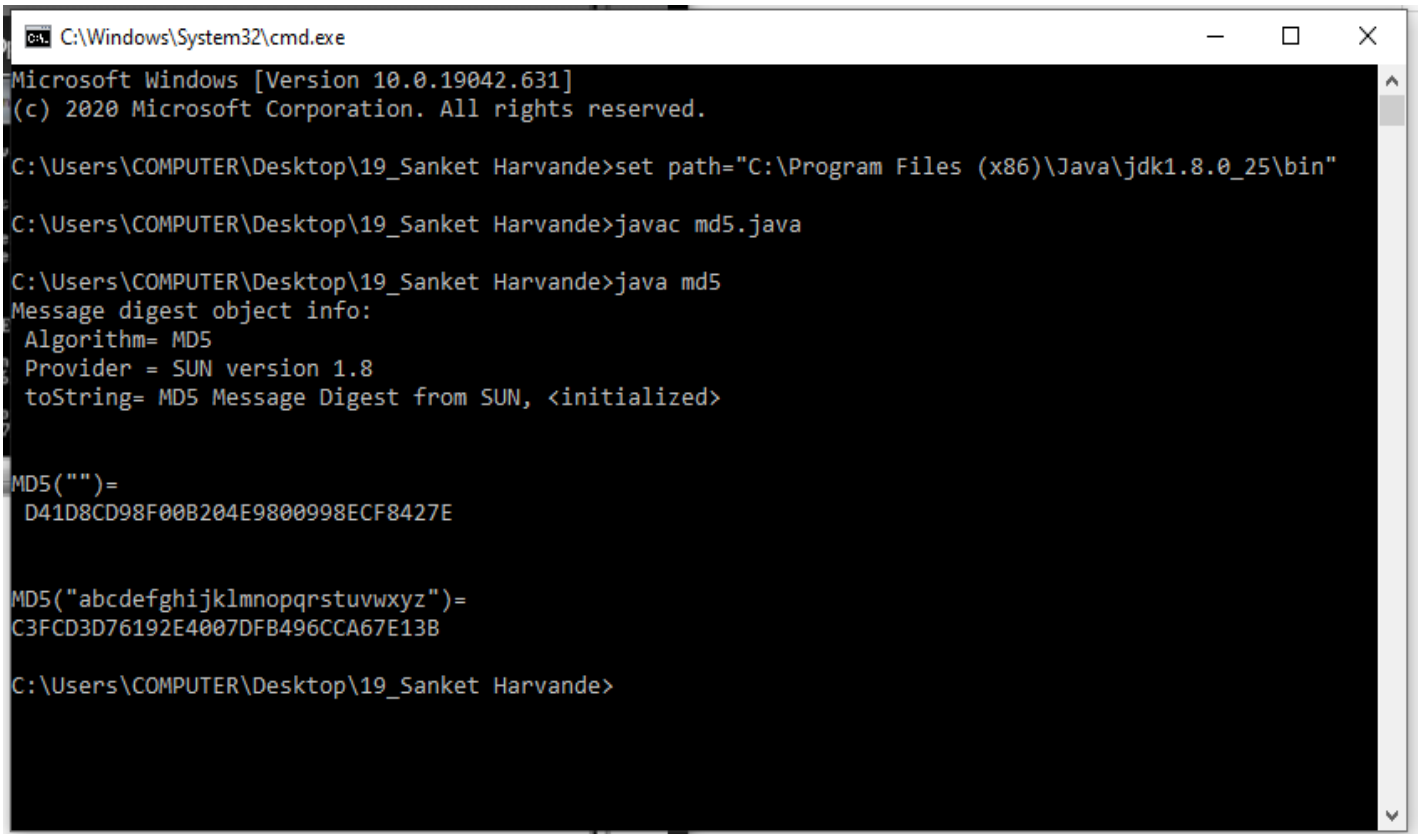
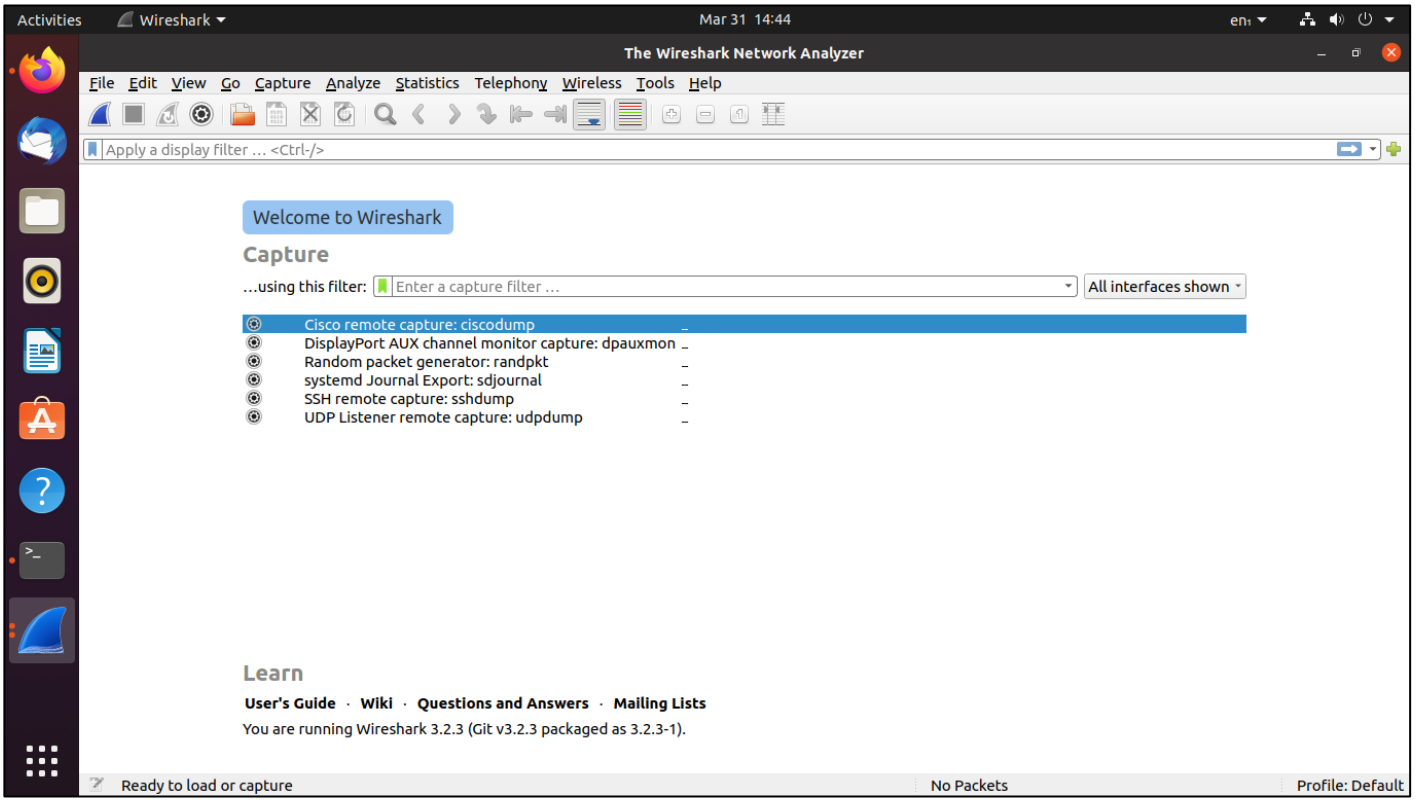
Program and Output

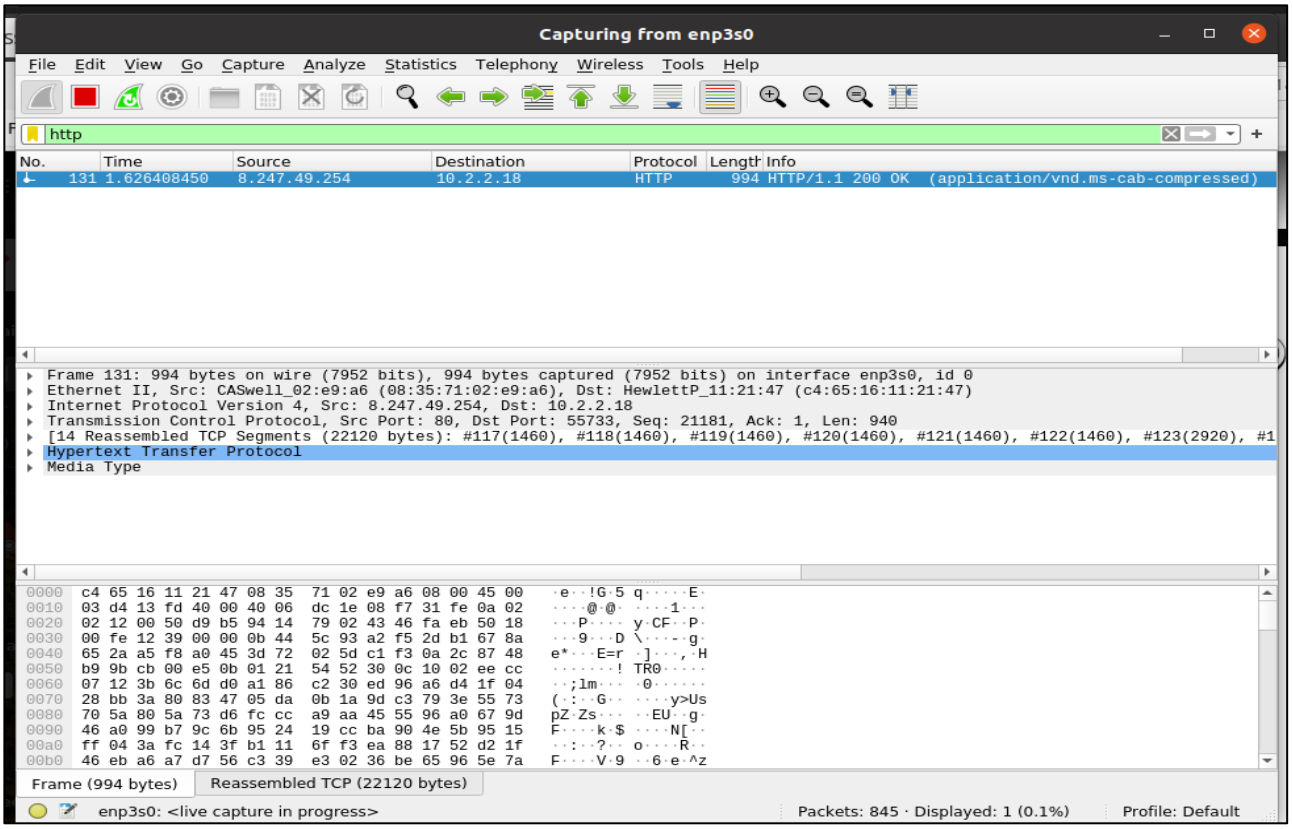
```
import java.security.*;
class md5{
	public static void main(String[]a){
		try{
			MessageDigest md = MessageDigest.getInstance("MD5");
			System.out.println("Message digest object info: ");
			System.out.println(" Algorithm= "+md.getAlgorithm());
			System.out.println(" Provider = "+md.getProvider());
			System.out.println(" toString= "+md.toString());

			String input="";
			md.update(input.getBytes());
				byte[] output =md.digest();
			System.out.println();
			System.out.println("MD5(\""+input+"\")=");
			System.out.println(" "+bytesToHex(output));

			input="The quick brown fox jumps over the lazy dog";
			md.update(input.getBytes());
				output=md.digest();
			System.out.println();


			input="abcdefghijklmnopqrstuvwxyz";
			md.update(input.getBytes());
				output=md.digest();
			System.out.println();
			System.out.println("MD5(\""+input+"\")=");
			System.out.println(""+bytesToHex(output));
		  }catch(Exception e){
			System.out.println("Exception:"+e);
			}
		}
		public static String bytesToHex(byte[] b){
			char
hexDigit[]={'0','1','2','3','4','5','6','7','8','9','A','B','C','D','E','F'};
			StringBuffer buf =new StringBuffer();
			for (int j=0;j<b.length;j++){
			buf.append(hexDigit[(b[j]>>4)& 0x0f]);
			buf.append(hexDigit[(b[j])& 0x0f]);
			}
		return buf.toString();
	}}
```

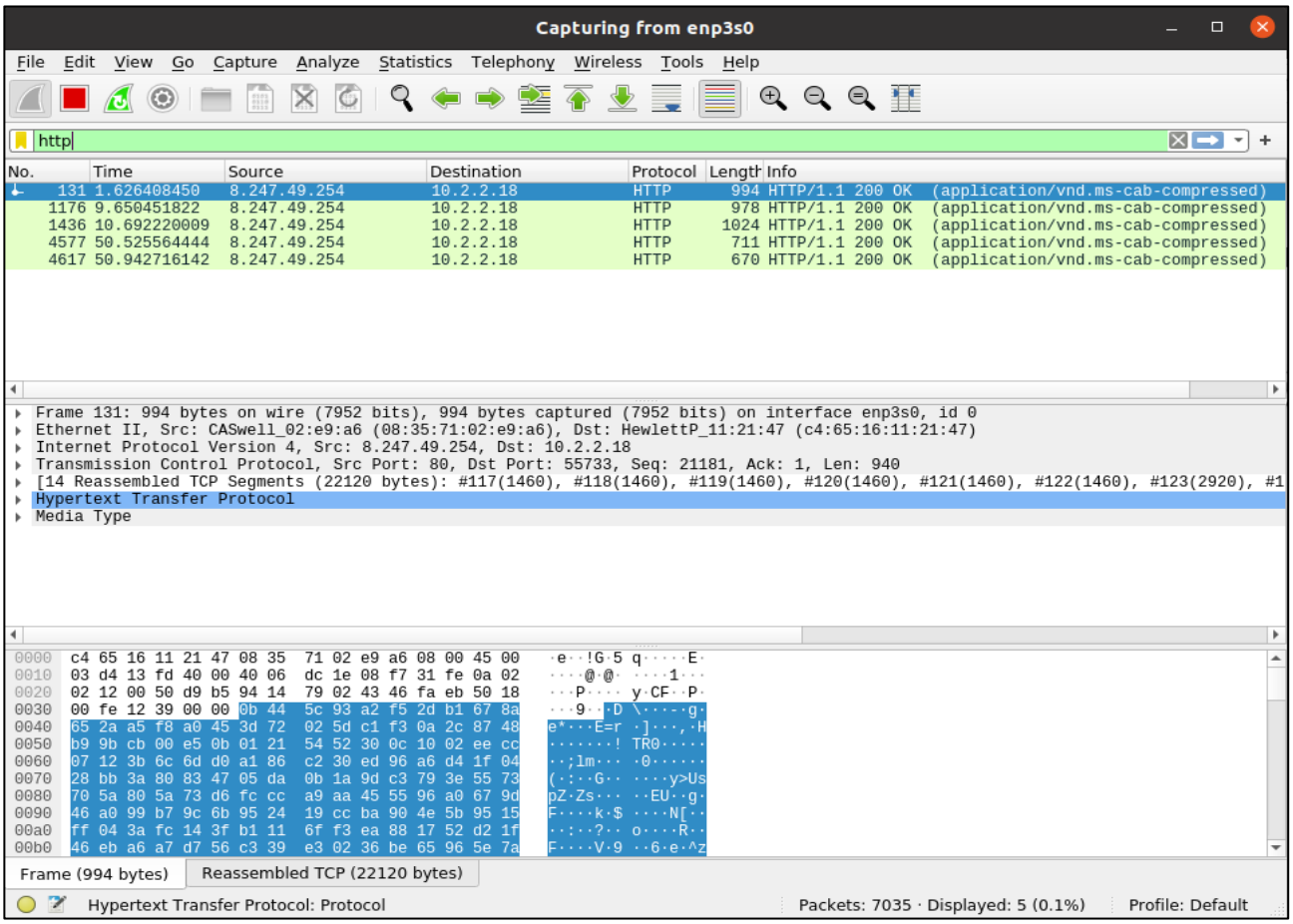
Output :

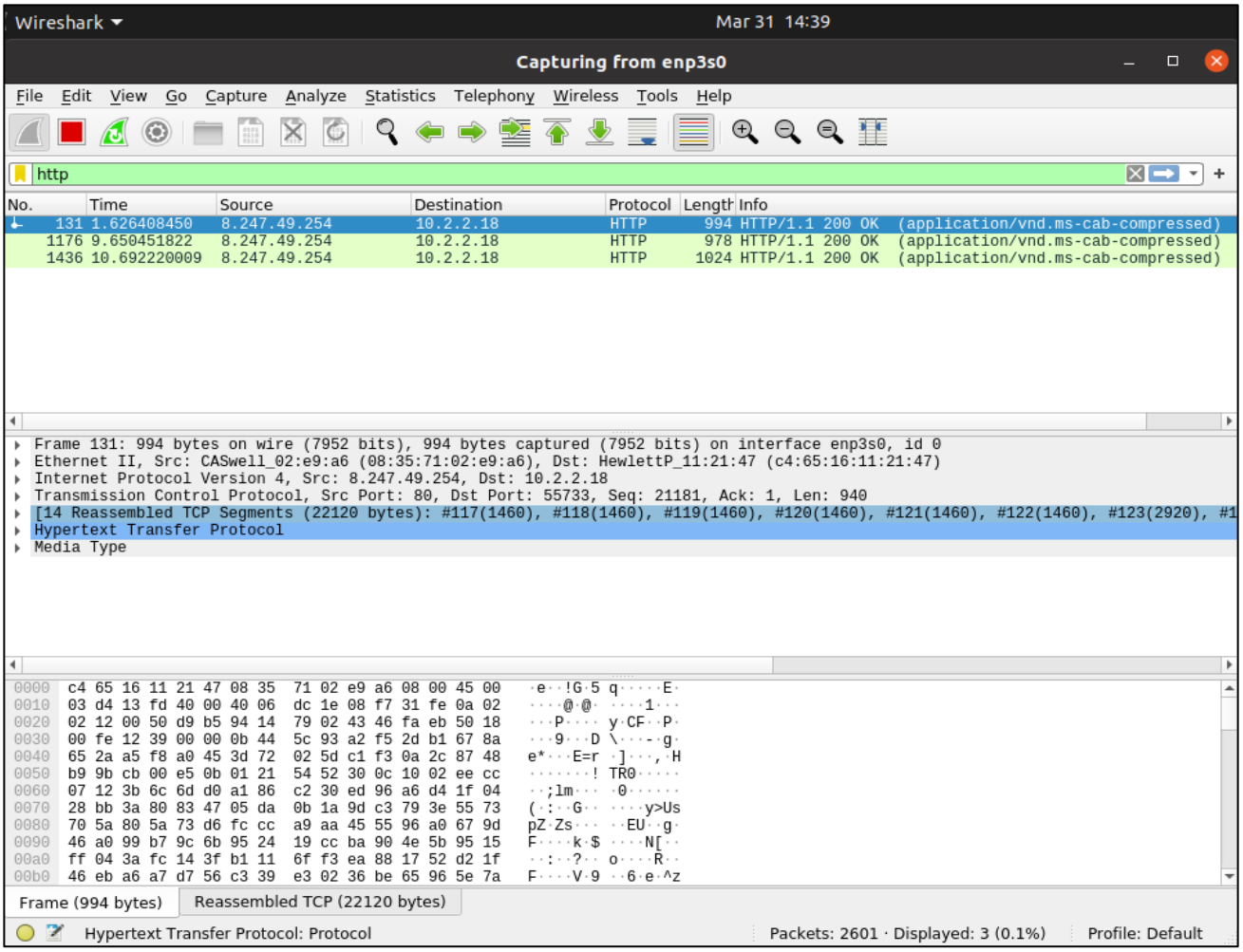

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19042.631]
(c) 2020 Microsoft Corporation. All rights reserved.
C:\Users\COMPUTER\Desktop\19_Sanket Harvande>set path="C:\Program Files (x86)\Java\jdk1.8.0_25\bin"
C:\Users\COMPUTER\Desktop\19_Sanket Harvande>javac md5.java
C:\Users\COMPUTER\Desktop\19_Sanket Harvande>java md5
Message digest object info:
Algorithm= MD5
Provider = SUN version 1.8
toString= MD5 Message Digest from SUN, <initialized>
MD5("")=
D41D8CD98F00B204E9800998ECF8427E
MD5("abcdefghijklmnopqrstuvwxyz")=
C3FCD3D76192E4007DFB496CCA67E13B
C:\Users\COMPUTER\Desktop\19_Sanket Harvande>

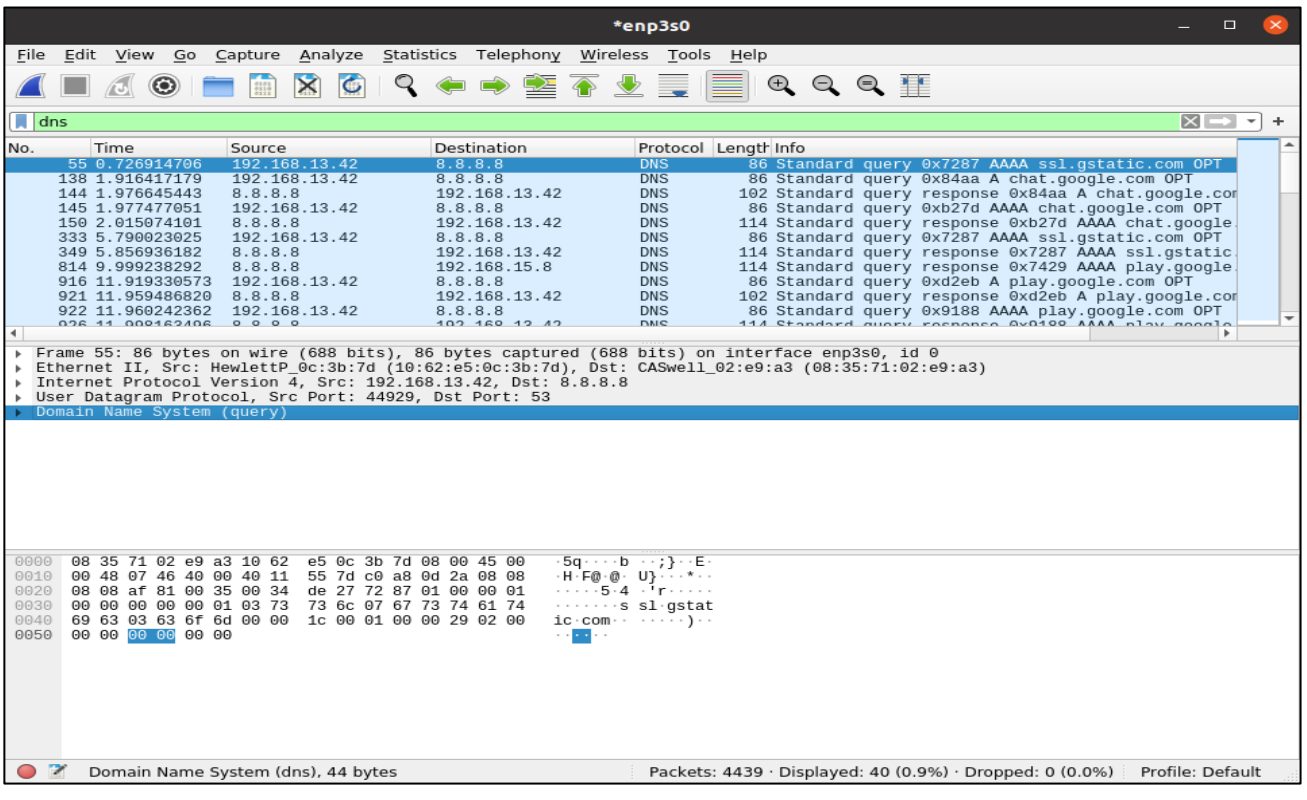
```
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo apt-get install wireshark
Reading package lists... Done
Building dependency tree
Reading state information... Done
wireshark is already the newest version (3.2.3-1).
0 upgraded, 0 newly installed, 0 to remove and 261 not upgraded.
cnl@cnl-HP-280-G4-MT-Business-PC:~$ wireshark --version
Wireshark 3.2.3 (Git v3.2.3 packaged as 3.2.3-1)

Copyright 1998-2020 Gerald Combs <gerald@wireshark.org> and contributors.
License GPLv2+: GNU GPL version 2 or later <https://www.gnu.org/licenses/gpl-2.0.html>
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

Compiled (64-bit) with Qt 5.12.8, with libpcap, with POSIX capabilities (Linux),
with libnl 3, with GLib 2.64.2, with zlib 1.2.11, with SMI 0.4.8, with c-ares
1.15.0, with Lua 5.2.4, with GnuTLS 3.6.13 and PKCS #11 support, with Gcrypt
1.8.5, with MIT Kerberos, with MaxMind DB resolver, with nghttp2 1.40.0, with
brotli, with LZ4, with Zstandard, with Snappy, with libxml2 2.9.10, with
QtMultimedia, without automatic updates, with SpeexDSP (using system library),
with SBC, with SpanDSP, without bcg729.

Running on Linux 5.11.0-27-generic, with Intel(R) Core(TM) i5-8500 CPU @ 3.00GHz
(with SSE4.2), with 3769 MB of physical memory, with locale en_IN, with libpcap
version 1.9.1 (with TPACKET_V3), with GnuTLS 3.6.13, with Gcrypt 1.8.5, with
brotli 1.0.7, with zlib 1.2.11, binary plugins supported (0 loaded).

Built using gcc 9.3.0.
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo wireshark
QStandardPaths: XDG_RUNTIME_DIR not set, defaulting to '/tmp/runtime-root'
cnl@cnl-HP-280-G4-MT-Business-PC:~$
```

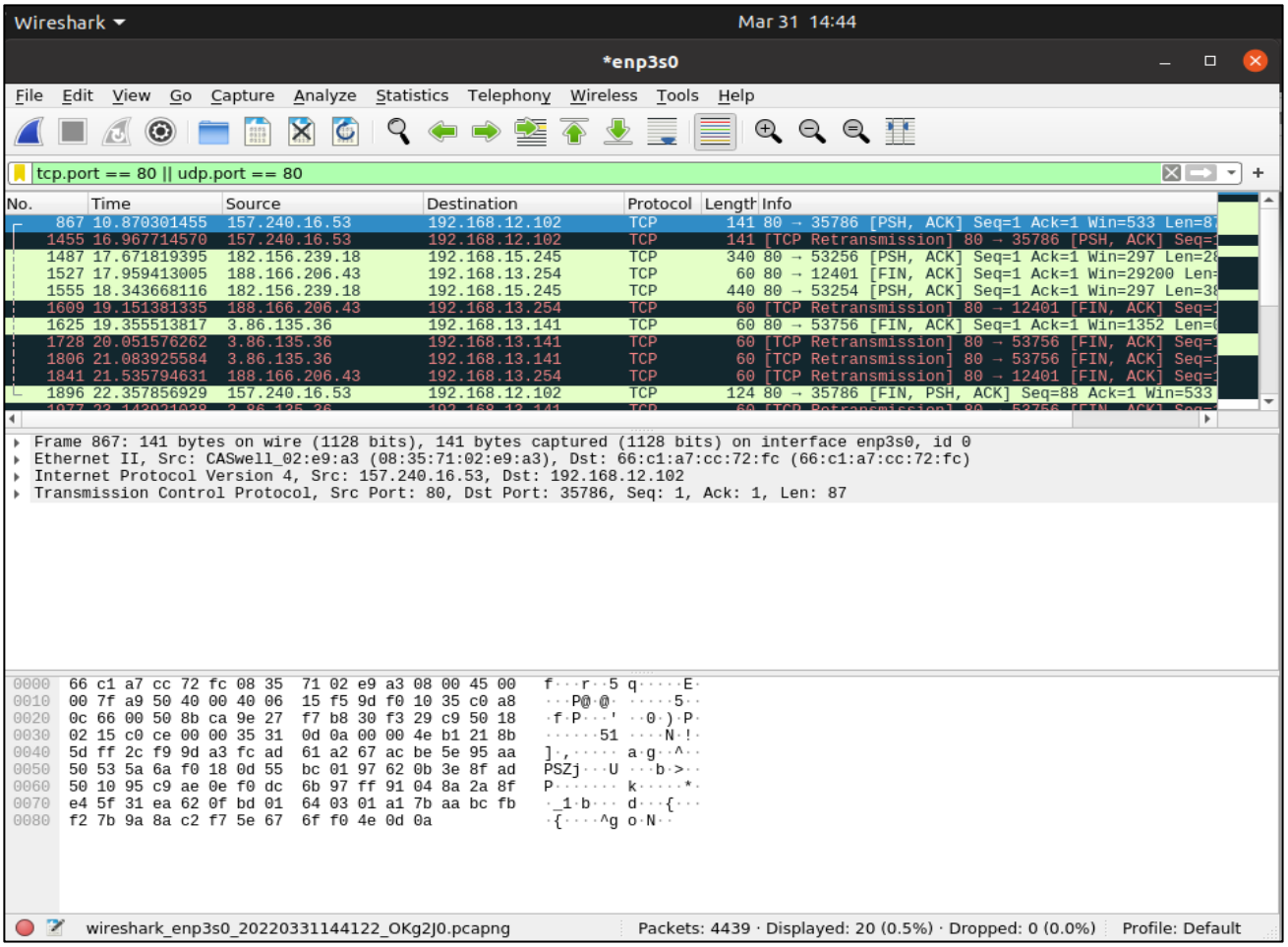


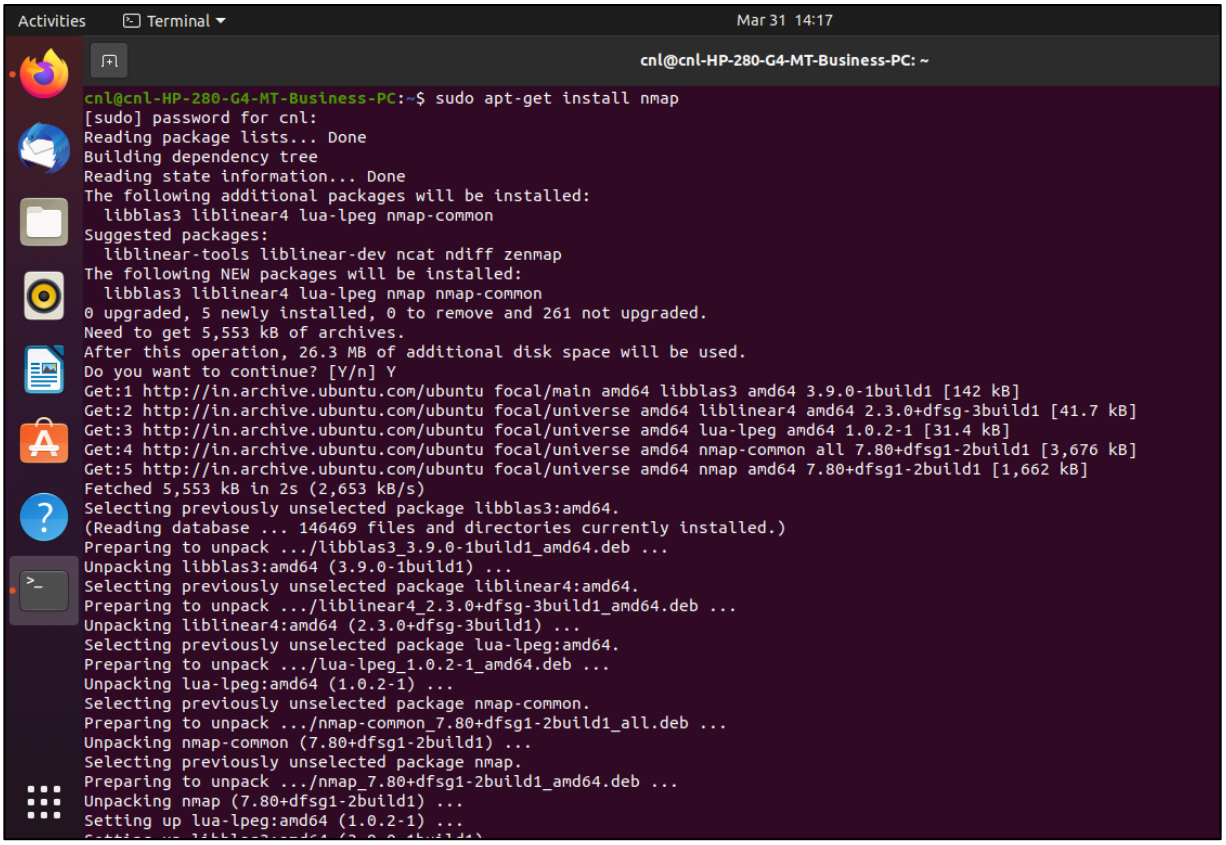

Capturing from enp3s0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
131 1.626408450 8.247.49.254 10.2.2.18 HTTP 994 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
Frame 131: 994 bytes on wire (7952 bits), 994 bytes captured (7952 bits) on interface enp3s0, id 0
Ethernet II, Src: CASwell_02:e9:a6 (08:35:71:02:e9:a6), Dst: HewlettP_11:21:47 (c4:65:16:11:21:47)
Internet Protocol Version 4, Src: 8.247.49.254, Dst: 10.2.2.18
Transmission Control Protocol, Src Port: 80, Dst Port: 55733, Seq: 21181, Ack: 1, Len: 940
[14 Reassembled TCP Segments (22120 bytes): #117(1460), #118(1460), #119(1460), #120(1460), #121(1460), #122(1460), #123(2920), #1
Hypertext Transfer Protocol
Media Type
0000 c4 65 16 11 21 47 08 35 71 02 e9 a6 08 00 45 00
0010 03 d4 13 fd 40 00 40 06 dc 1e 08 f7 31 fe 0a 02
0020 02 12 00 50 d9 b5 94 14 79 02 43 46 fa eb 50 18
0030 00 fe 12 39 00 00 0b 44 5c 93 a2 f5 2d b1 67 8a
0040 65 2a a5 f8 a0 45 3d 72 02 5d c1 f3 0a 2c 87 48
0050 b9 9b cb 00 e5 0b 01 21 54 52 30 0c 10 02 ee cc
0060 07 12 3b 6c 6d d0 a1 86 c2 30 ed 96 a6 d4 1f 04
0070 28 bb 3a 80 83 47 05 da 0b 1a 9d c3 79 3e 55 73
0080 70 5a 80 5a 73 d6 fc cc a9 aa 45 55 96 a0 67 9d
0090 46 a0 99 b7 9c 6b 95 24 19 cc ba 90 4e 5b 95 15
00a0 ff 04 3a fc 14 3f b1 11 6f f3 ea 88 17 52 d2 1f
00b0 46 eb a6 a7 d7 56 c3 39 e3 02 36 be 65 96 5e 7a
Frame (994 bytes)
Reassembled TCP (22120 bytes)
enp3s0: <live capture in progress>
Packets: 845 · Displayed: 1 (0.1%)
Profile: Default

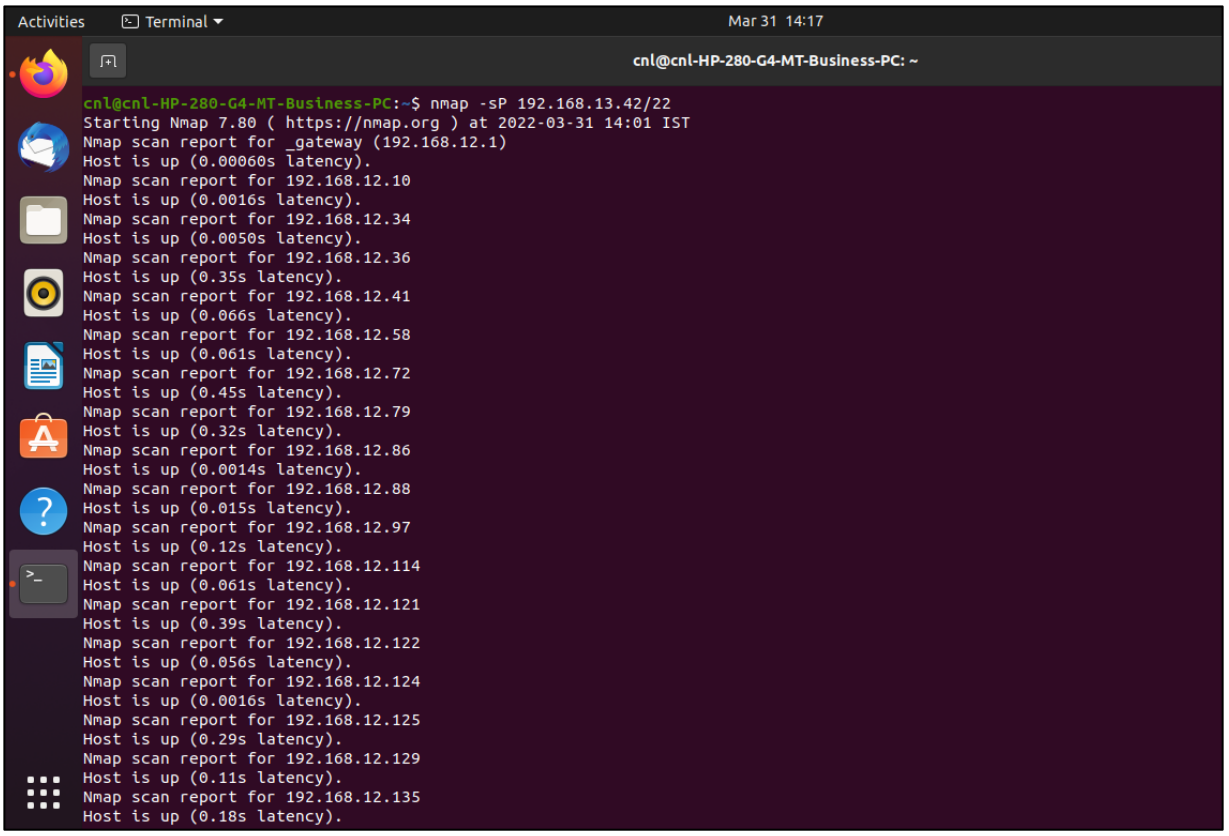

Capturing from enp3s0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
131 1.626408450 8.247.49.254 10.2.2.18 HTTP 994 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
1176 9.650451822 8.247.49.254 10.2.2.18 HTTP 978 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
1436 10.692220009 8.247.49.254 10.2.2.18 HTTP 1024 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
4577 50.525564444 8.247.49.254 10.2.2.18 HTTP 711 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
4617 50.942716142 8.247.49.254 10.2.2.18 HTTP 670 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
Frame 131: 994 bytes on wire (7952 bits), 994 bytes captured (7952 bits) on interface enp3s0, id 0
Ethernet II, Src: CASwell_02:e9:a6 (08:35:71:02:e9:a6), Dst: HewlettP_11:21:47 (c4:65:16:11:21:47)
Internet Protocol Version 4, Src: 8.247.49.254, Dst: 10.2.2.18
Transmission Control Protocol, Src Port: 80, Dst Port: 55733, Seq: 21181, Ack: 1, Len: 940
[14 Reassembled TCP Segments (22120 bytes): #117(1460), #118(1460), #119(1460), #120(1460), #121(1460), #122(1460), #123(2920), #1
Hypertext Transfer Protocol
Media Type
0000 c4 65 16 11 21 47 08 35 71 02 e9 a6 08 00 45 00
0010 03 d4 13 fd 40 00 40 06 dc 1e 08 f7 31 fe 0a 02
0020 02 12 00 50 d9 b5 94 14 79 02 43 46 fa eb 50 18
0030 00 fe 12 39 00 00 0b 44 5c 93 a2 f5 2d b1 67 8a
0040 65 2a a5 f8 a0 45 3d 72 02 5d c1 f3 0a 2c 87 48
0050 b9 9b cb 00 e5 0b 01 21 54 52 30 0c 10 02 ee cc
0060 07 12 3b 6c 6d d0 a1 86 c2 30 ed 96 a6 d4 1f 04
0070 28 bb 3a 80 83 47 05 da 0b 1a 9d c3 79 3e 55 73
0080 70 5a 80 5a 73 d6 fc cc a9 aa 45 55 96 a0 67 9d
0090 46 a0 99 b7 9c 6b 95 24 19 cc ba 90 4e 5b 95 15
00a0 ff 04 3a fc 14 3f b1 11 6f f3 ea 88 17 52 d2 1f
00b0 46 eb a6 a7 d7 56 c3 39 e3 02 36 be 65 96 5e 7a
Frame (994 bytes)
Reassembled TCP (22120 bytes)
Hypertext Transfer Protocol: Protocol
Packets: 7035 · Displayed: 5 (0.1%)
Profile: Default

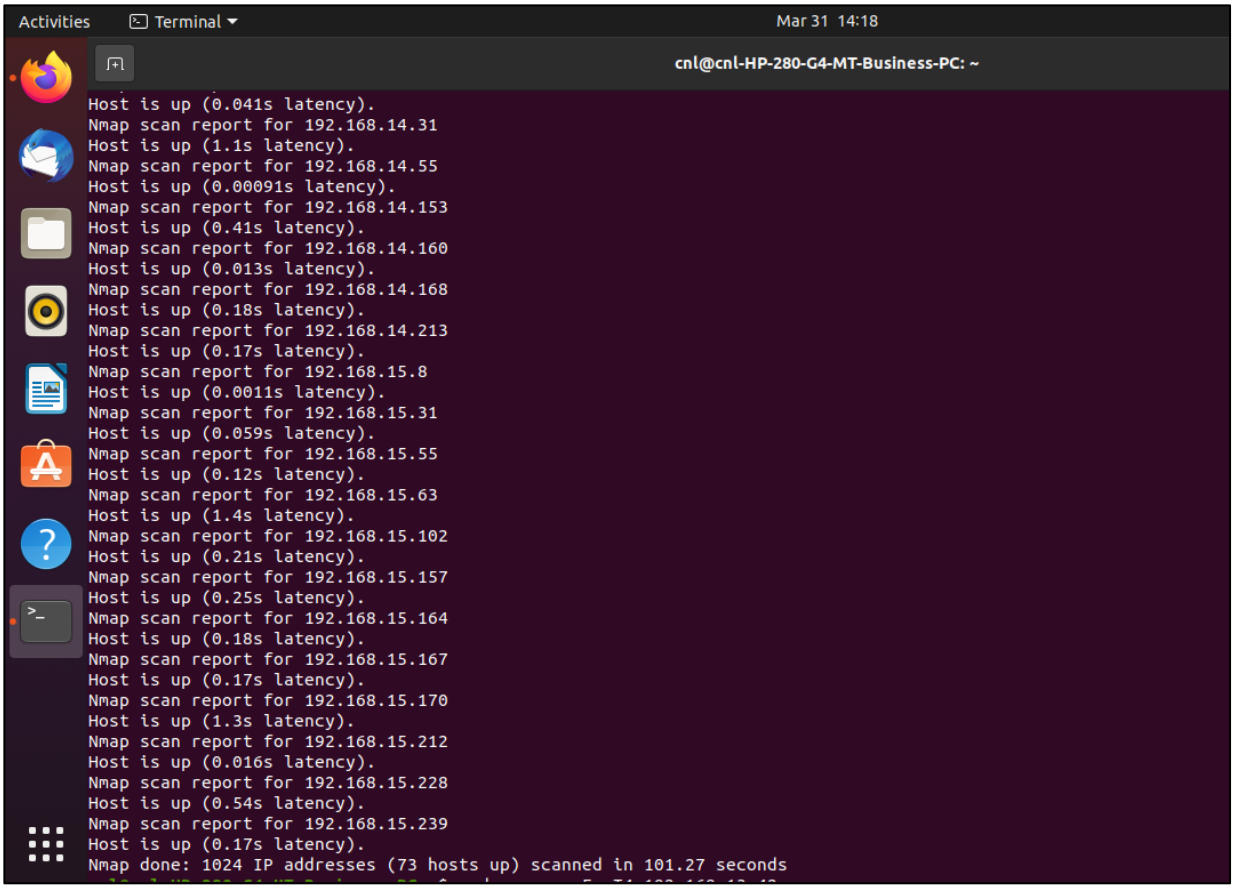

Wireshark
Mar 31 14:39
Capturing from enp3s0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
131 1.626408450 8.247.49.254 10.2.2.18 HTTP 994 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
1176 9.650451822 8.247.49.254 10.2.2.18 HTTP 978 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
1436 10.692220009 8.247.49.254 10.2.2.18 HTTP 1024 HTTP/1.1 200 OK (application/vnd.ms-cab-compressed)
Frame 131: 994 bytes on wire (7952 bits), 994 bytes captured (7952 bits) on interface enp3s0, id 0
Ethernet II, Src: CASwell_02:e9:a6 (08:35:71:02:e9:a6), Dst: HewlettP_11:21:47 (c4:65:16:11:21:47)
Internet Protocol Version 4, Src: 8.247.49.254, Dst: 10.2.2.18
Transmission Control Protocol, Src Port: 80, Dst Port: 55733, Seq: 21181, Ack: 1, Len: 940
[14 Reassembled TCP Segments (22120 bytes): #117(1460), #118(1460), #119(1460), #120(1460), #121(1460), #122(1460), #123(2920), #1
Hypertext Transfer Protocol
Media Type
0000 c4 65 16 11 21 47 08 35 71 02 e9 a6 08 00 45 00
0010 03 d4 13 fd 40 00 40 06 dc 1e 08 f7 31 fe 0a 02
0020 02 12 00 50 d9 b5 94 14 79 02 43 46 fa eb 50 18
0030 00 fe 12 39 00 00 0b 44 5c 93 a2 f5 2d b1 67 8a
0040 65 2a a5 f8 a0 45 3d 72 02 5d c1 f3 0a 2c 87 48
0050 b9 9b cb 00 e5 0b 01 21 54 52 30 0c 10 02 ee cc
0060 07 12 3b 6c 6d d0 a1 86 c2 30 ed 96 a6 d4 1f 04
0070 28 bb 3a 80 83 47 05 da 0b 1a 9d c3 79 3e 55 73
0080 70 5a 80 5a 73 d6 fc cc a9 aa 45 55 96 a0 67 9d
0090 46 a0 99 b7 9c 6b 95 24 19 cc ba 90 4e 5b 95 15
00a0 ff 04 3a fc 14 3f b1 11 6f f3 ea 88 17 52 d2 1f
00b0 46 eb a6 a7 d7 56 c3 39 e3 02 36 be 65 96 5e 7a
Frame (994 bytes)
Reassembled TCP (22120 bytes)
Hypertext Transfer Protocol: Protocol
Packets: 2601 · Displayed: 3 (0.1%)
Profile: Default

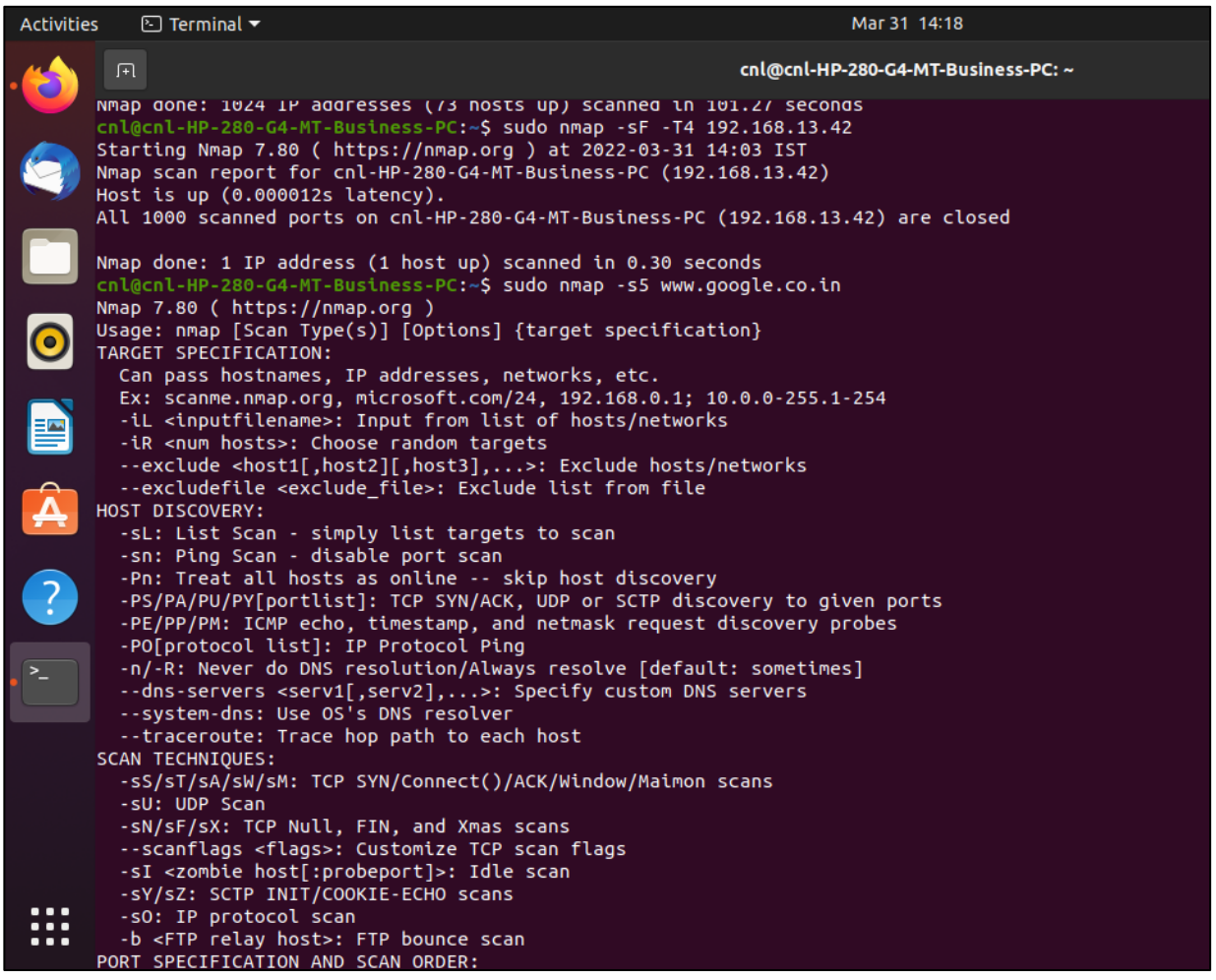

*enp3s0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
dns
No. Time Source Destination Protocol Length Info
55 0.726914706 192.168.13.42 8.8.8.8 DNS 86 Standard query 0x7287 AAAA ssl.gstatic.com OPT
138 1.916417179 192.168.13.42 8.8.8.8 DNS 86 Standard query 0x84aa A chat.google.com OPT
144 1.976645443 8.8.8.8 192.168.13.42 DNS 102 Standard query response 0x84aa A chat.google.com
145 1.977477051 192.168.13.42 8.8.8.8 DNS 86 Standard query 0xb27d AAAA chat.google.com OPT
150 2.015074101 8.8.8.8 192.168.13.42 DNS 114 Standard query response 0xb27d AAAA chat.google.com
333 5.790023025 192.168.13.42 8.8.8.8 DNS 86 Standard query 0x7287 AAAA ssl.gstatic.com OPT
349 5.856936182 8.8.8.8 192.168.13.42 DNS 114 Standard query response 0x7287 AAAA ssl.gstatic.com
814 9.999238292 8.8.8.8 192.168.15.8 DNS 114 Standard query response 0x7429 AAAA play.google.com
916 11.919330573 192.168.13.42 8.8.8.8 DNS 86 Standard query 0xd2eb A play.google.com OPT
921 11.959486820 8.8.8.8 192.168.13.42 DNS 102 Standard query response 0xd2eb A play.google.com
922 11.960242362 192.168.13.42 8.8.8.8 DNS 86 Standard query 0x9188 AAAA play.google.com OPT
Frame 55: 86 bytes on wire (688 bits), 86 bytes captured (688 bits) on interface enp3s0, id 0
Ethernet II, Src: HewlettP_0c:3b:7d (10:62:e5:0c:3b:7d), Dst: CASwell_02:e9:a3 (08:35:71:02:e9:a3)
Internet Protocol Version 4, Src: 192.168.13.42, Dst: 8.8.8.8
User Datagram Protocol, Src Port: 44929, Dst Port: 53
Domain Name System (query)
0000 08 35 71 02 e9 a3 10 62 e5 0c 3b 7d 08 00 45 00
0010 00 48 07 46 40 00 40 11 55 7d c0 a8 0d 2a 08 08
0020 08 08 af 81 00 35 00 34 de 27 72 87 01 00 00 01
0030 00 00 00 00 00 01 03 73 73 6c 07 67 73 74 61 74
0040 69 63 03 63 6f 6d 00 00 1c 00 01 00 00 29 02 00
0050 00 00 00 00 00 00
Domain Name System (dns), 44 bytes
Packets: 4439 · Displayed: 40 (0.9%) · Dropped: 0 (0.0%)
Profile: Default

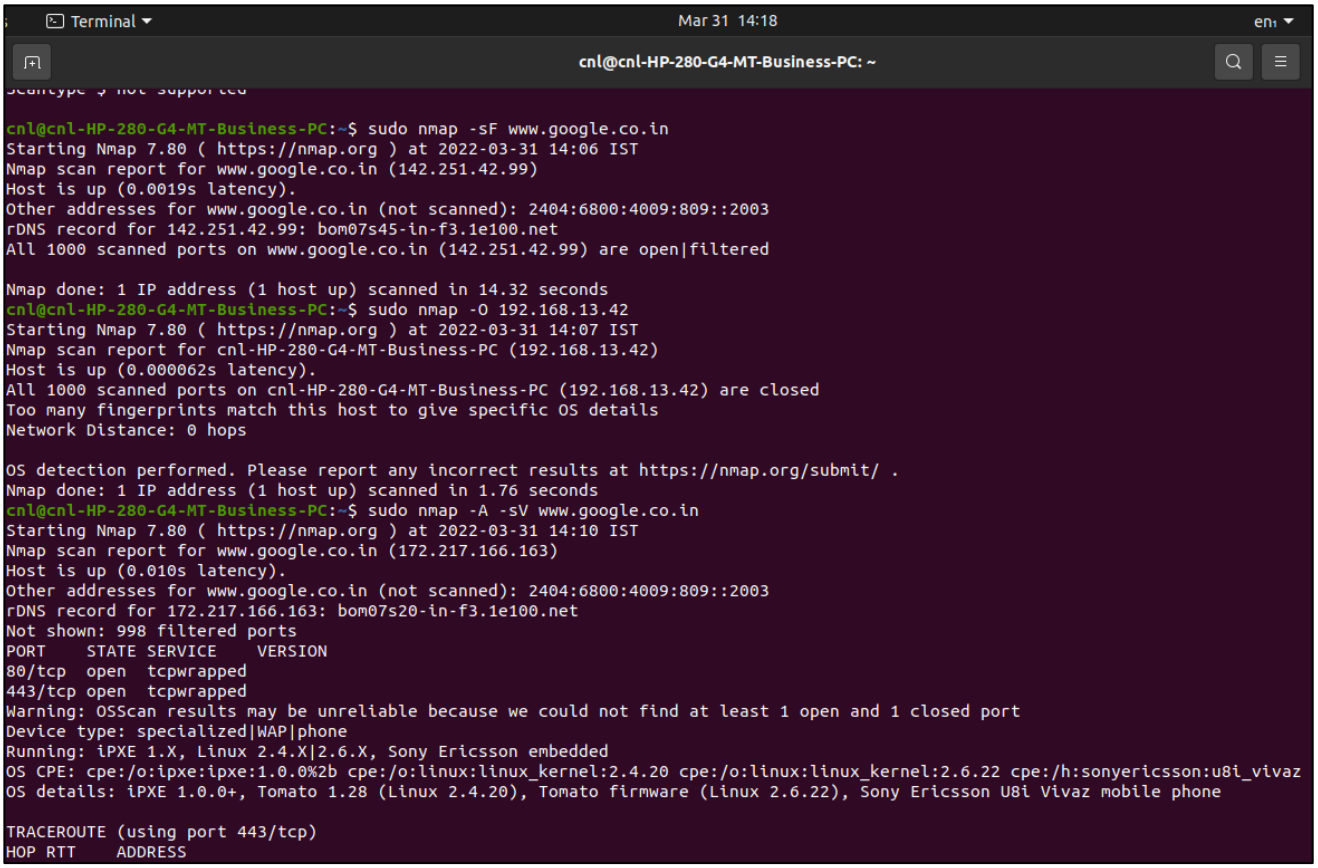

Wireshark
Mar 31 14:44
*enp3s0
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp.port == 80 || udp.port == 80
No. Time Source Destination Protocol Length Info
867 10.870301455 157.240.16.53 192.168.12.102 TCP 141 80 → 35786 [PSH, ACK] Seq=1 Ack=1 Win=533 Len=87
1455 16.967714570 157.240.16.53 192.168.12.102 TCP 141 [TCP Retransmission] 80 → 35786 [PSH, ACK] Seq=1
1487 17.671819395 182.156.239.18 192.168.15.245 TCP 340 80 → 53256 [PSH, ACK] Seq=1 Ack=1 Win=297 Len=28
1527 17.959413005 188.166.206.43 192.168.13.254 TCP 60 80 → 12401 [FIN, ACK] Seq=1 Ack=1 Win=29200 Len=
1555 18.343668116 182.156.239.18 192.168.15.245 TCP 440 80 → 53254 [PSH, ACK] Seq=1 Ack=1 Win=297 Len=38
1609 19.151381335 188.166.206.43 192.168.13.254 TCP 60 [TCP Retransmission] 80 → 12401 [FIN, ACK] Seq=1
1625 19.355513817 3.86.135.36 192.168.13.141 TCP 60 80 → 53756 [FIN, ACK] Seq=1 Ack=1 Win=1352 Len=0
1728 20.051576262 3.86.135.36 192.168.13.141 TCP 60 [TCP Retransmission] 80 → 53756 [FIN, ACK] Seq=1
1806 21.083925584 3.86.135.36 192.168.13.141 TCP 60 [TCP Retransmission] 80 → 53756 [FIN, ACK] Seq=1
1841 21.535794631 188.166.206.43 192.168.13.254 TCP 60 [TCP Retransmission] 80 → 12401 [FIN, ACK] Seq=1
1896 22.357856929 157.240.16.53 192.168.12.102 TCP 124 80 → 35786 [FIN, PSH, ACK] Seq=88 Ack=1 Win=533
Frame 867: 141 bytes on wire (1128 bits), 141 bytes captured (1128 bits) on interface enp3s0, id 0
Ethernet II, Src: CASwell_02:e9:a3 (08:35:71:02:e9:a3), Dst: 66:c1:a7:cc:72:fc (66:c1:a7:cc:72:fc)
Internet Protocol Version 4, Src: 157.240.16.53, Dst: 192.168.12.102
Transmission Control Protocol, Src Port: 80, Dst Port: 35786, Seq: 1, Ack: 1, Len: 87
0000 66 c1 a7 cc 72 fc 08 35 71 02 e9 a3 08 00 45 00 f···r··5 q·····E·
0010 00 7f a9 50 40 00 40 06 15 f5 9d f0 10 35 c0 a8 ···P@·@· ·····5··
0020 0c 66 00 50 8b ca 9e 27 f7 b8 30 f3 29 c9 50 18 ·f·P···' ··0·)·P·
0030 02 15 c0 ce 00 00 35 31 0d 0a 00 00 4e b1 21 8b ·····51 ····N·!·
0040 5d ff 2c f9 9d a3 fc ad 61 a2 67 ac be 5e 95 aa]·,····· a·g··^··
0050 50 53 5a 6a f0 18 0d 55 bc 01 97 62 0b 3e 8f ad PSZj···U ···b·>··
0060 50 10 95 c9 ae 0e f0 dc 6b 97 ff 91 04 8a 2a 8f P····· k·····*·
0070 e4 5f 31 ea 62 0f bd 01 64 03 01 a1 7b aa bc fb ·_1·b··· d···{···
0080 f2 7b 9a 8a c2 f7 5e 67 6f f0 4e 0d 0a ·{····^g o·N··
wireshark_enp3s0_20220331144122_OKg2J0.pcapng
Packets: 4439 · Displayed: 20 (0.5%) · Dropped: 0 (0.0%)
Profile: Default

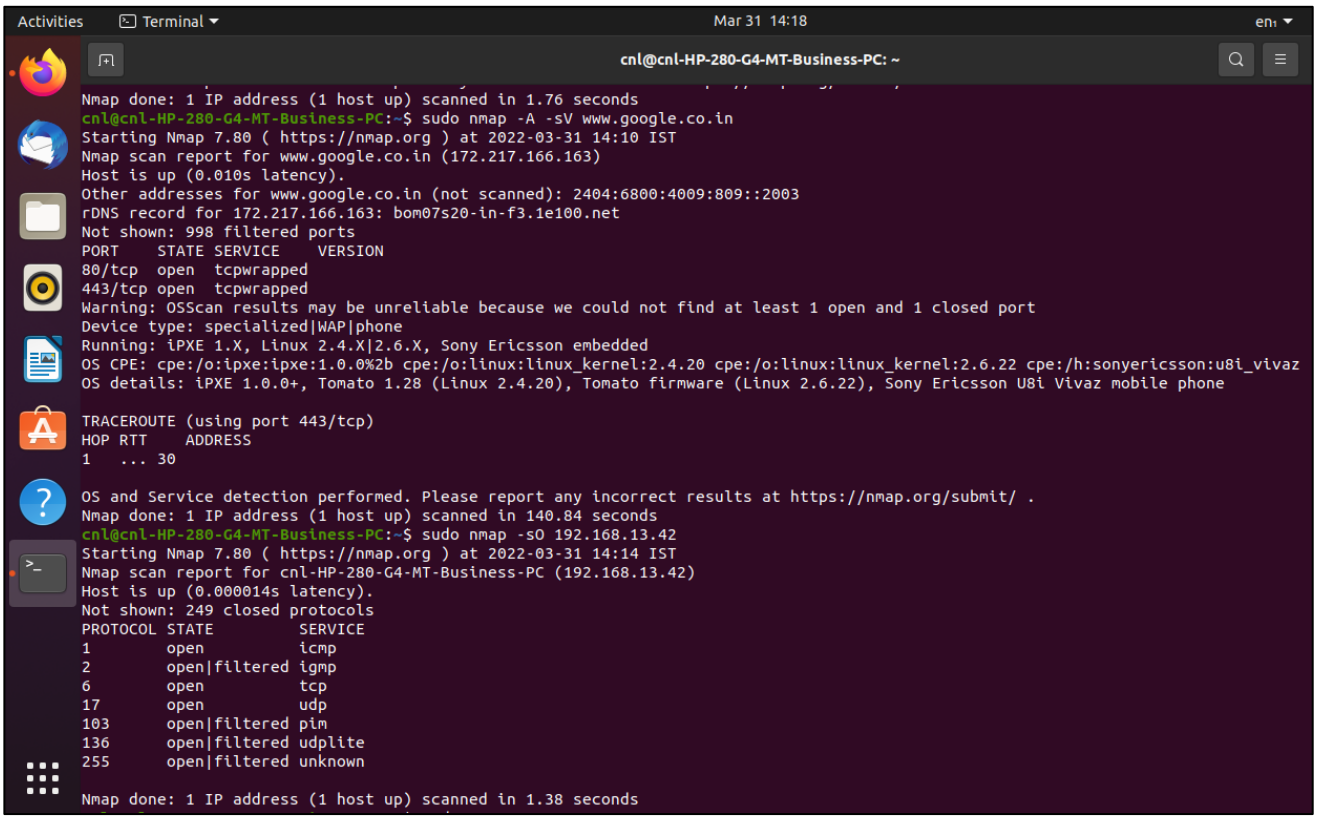

Activities
Terminal
Mar 31 14:17
cnl@cnl-HP-280-G4-MT-Business-PC: ~
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo apt-get install nmap
[sudo] password for cnl:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
libblas3 liblinear4 lua-lpeg nmap-common
Suggested packages:
liblinear-tools liblinear-dev ncat ndiff zenmap
The following NEW packages will be installed:
libblas3 liblinear4 lua-lpeg nmap nmap-common
0 upgraded, 5 newly installed, 0 to remove and 261 not upgraded.
Need to get 5,553 kB of archives.
After this operation, 26.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://in.archive.ubuntu.com/ubuntu focal/main amd64 libblas3 amd64 3.9.0-1build1 [142 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 liblinear4 amd64 2.3.0+dfsg-3build1 [41.7 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 lua-lpeg amd64 1.0.2-1 [31.4 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 nmap-common all 7.80+dfsg1-2build1 [3,676 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 nmap amd64 7.80+dfsg1-2build1 [1,662 kB]
Fetched 5,553 kB in 2s (2,653 kB/s)
Selecting previously unselected package libblas3:amd64.
(Reading database ... 146469 files and directories currently installed.)
Preparing to unpack .../libblas3_3.9.0-1build1_amd64.deb ...
Unpacking libblas3:amd64 (3.9.0-1build1) ...
Selecting previously unselected package liblinear4:amd64.
Preparing to unpack .../liblinear4_2.3.0+dfsg-3build1_amd64.deb ...
Unpacking liblinear4:amd64 (2.3.0+dfsg-3build1) ...
Selecting previously unselected package lua-lpeg:amd64.
Preparing to unpack .../lua-lpeg_1.0.2-1_amd64.deb ...
Unpacking lua-lpeg:amd64 (1.0.2-1) ...
Selecting previously unselected package nmap-common.
Preparing to unpack .../nmap-common_7.80+dfsg1-2build1_all.deb ...
Unpacking nmap-common (7.80+dfsg1-2build1) ...
Selecting previously unselected package nmap.
Preparing to unpack .../nmap_7.80+dfsg1-2build1_amd64.deb ...
Unpacking nmap (7.80+dfsg1-2build1) ...
Setting up lua-lpeg:amd64 (1.0.2-1) ...

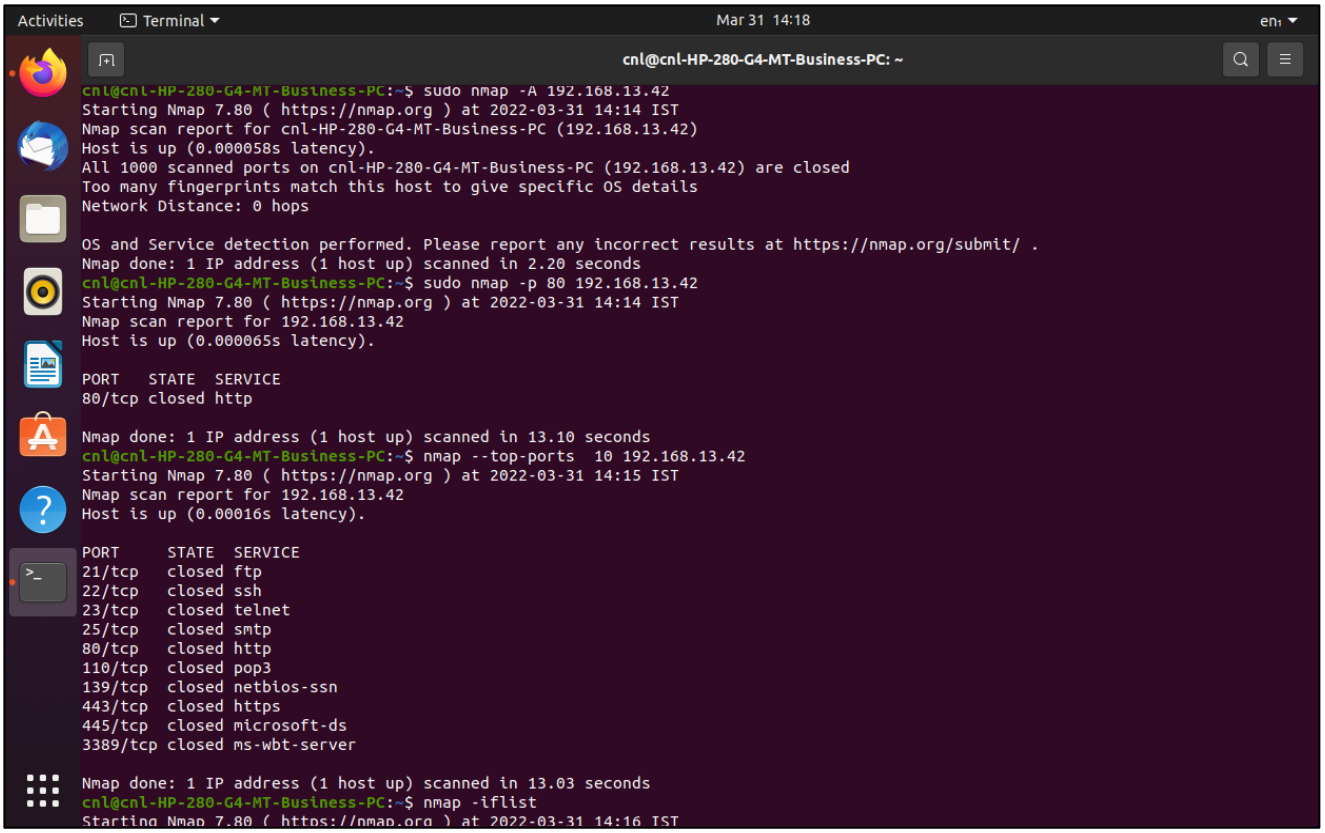

Activities
Terminal
Mar 31 14:17
cnl@cnl-HP-280-G4-MT-Business-PC: ~
cnl@cnl-HP-280-G4-MT-Business-PC:~$ nmap -sP 192.168.13.42/22
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:01 IST
Nmap scan report for _gateway (192.168.12.1)
Host is up (0.00060s latency).
Nmap scan report for 192.168.12.10
Host is up (0.0016s latency).
Nmap scan report for 192.168.12.34
Host is up (0.0050s latency).
Nmap scan report for 192.168.12.36
Host is up (0.35s latency).
Nmap scan report for 192.168.12.41
Host is up (0.066s latency).
Nmap scan report for 192.168.12.58
Host is up (0.061s latency).
Nmap scan report for 192.168.12.72
Host is up (0.45s latency).
Nmap scan report for 192.168.12.79
Host is up (0.32s latency).
Nmap scan report for 192.168.12.86
Host is up (0.0014s latency).
Nmap scan report for 192.168.12.88
Host is up (0.015s latency).
Nmap scan report for 192.168.12.97
Host is up (0.12s latency).
Nmap scan report for 192.168.12.114
Host is up (0.061s latency).
Nmap scan report for 192.168.12.121
Host is up (0.39s latency).
Nmap scan report for 192.168.12.122
Host is up (0.056s latency).
Nmap scan report for 192.168.12.124
Host is up (0.0016s latency).
Nmap scan report for 192.168.12.125
Host is up (0.29s latency).
Nmap scan report for 192.168.12.129
Host is up (0.11s latency).
Nmap scan report for 192.168.12.135
Host is up (0.18s latency).

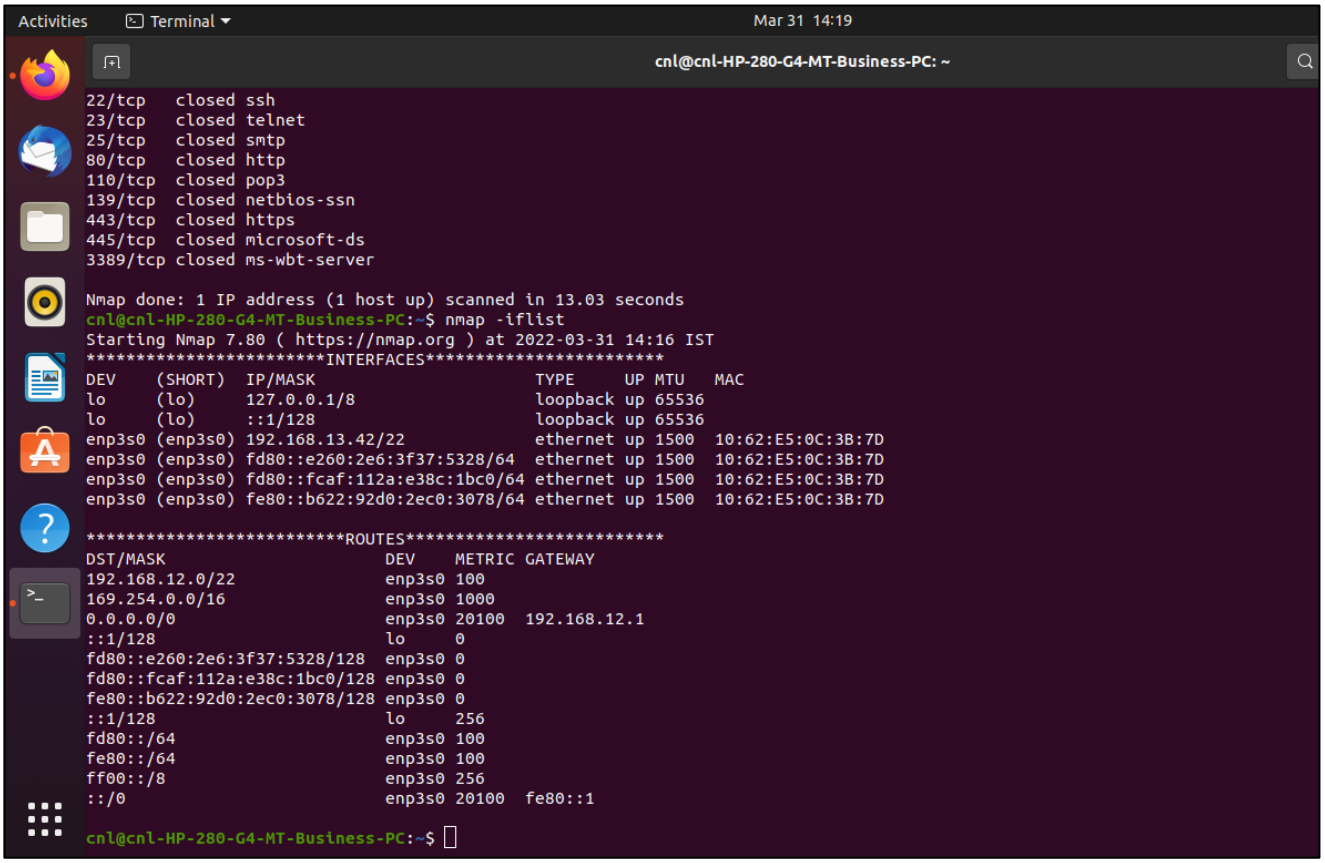

Activities
Terminal
Mar 31 14:18
cnl@cnl-HP-280-G4-MT-Business-PC: ~
Host is up (0.041s latency).
Nmap scan report for 192.168.14.31
Host is up (1.1s latency).
Nmap scan report for 192.168.14.55
Host is up (0.00091s latency).
Nmap scan report for 192.168.14.153
Host is up (0.41s latency).
Nmap scan report for 192.168.14.160
Host is up (0.013s latency).
Nmap scan report for 192.168.14.168
Host is up (0.18s latency).
Nmap scan report for 192.168.14.213
Host is up (0.17s latency).
Nmap scan report for 192.168.15.8
Host is up (0.0011s latency).
Nmap scan report for 192.168.15.31
Host is up (0.059s latency).
Nmap scan report for 192.168.15.55
Host is up (0.12s latency).
Nmap scan report for 192.168.15.63
Host is up (1.4s latency).
Nmap scan report for 192.168.15.102
Host is up (0.21s latency).
Nmap scan report for 192.168.15.157
Host is up (0.25s latency).
Nmap scan report for 192.168.15.164
Host is up (0.18s latency).
Nmap scan report for 192.168.15.167
Host is up (0.17s latency).
Nmap scan report for 192.168.15.170
Host is up (1.3s latency).
Nmap scan report for 192.168.15.212
Host is up (0.016s latency).
Nmap scan report for 192.168.15.228
Host is up (0.54s latency).
Nmap scan report for 192.168.15.239
Host is up (0.17s latency).
Nmap done: 1024 IP addresses (73 hosts up) scanned in 101.27 seconds


Activities
Terminal
Mar 31 14:18
cnl@cnl-HP-280-G4-MT-Business-PC: ~
Nmap done: 1024 IP addresses (73 hosts up) scanned in 101.27 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -sF -T4 192.168.13.42
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:03 IST
Nmap scan report for cnl-HP-280-G4-MT-Business-PC (192.168.13.42)
Host is up (0.000012s latency).
All 1000 scanned ports on cnl-HP-280-G4-MT-Business-PC (192.168.13.42) are closed
Nmap done: 1 IP address (1 host up) scanned in 0.30 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -s5 www.google.co.in
Nmap 7.80 (https://nmap.org)
Usage: nmap [Scan Type(s)] [Options] {target specification}
TARGET SPECIFICATION:
Can pass hostnames, IP addresses, networks, etc.
Ex: scanme.nmap.org, microsoft.com/24, 192.168.0.1; 10.0.0-255.1-254
-iL <inputfilename>: Input from list of hosts/networks
-iR <num hosts>: Choose random targets
--exclude <host1[,host2][,host3],...>: Exclude hosts/networks
--excludefile <exclude_file>: Exclude list from file
HOST DISCOVERY:
-sL: List Scan - simply list targets to scan
-sn: Ping Scan - disable port scan
-Pn: Treat all hosts as online -- skip host discovery
-PS/PA/PU/PY[portlist]: TCP SYN/ACK, UDP or SCTP discovery to given ports
-PE/PP/PM: ICMP echo, timestamp, and netmask request discovery probes
-PO[protocol list]: IP Protocol Ping
-n/-R: Never do DNS resolution/Always resolve [default: sometimes]
--dns-servers <serv1[,serv2],...>: Specify custom DNS servers
--system-dns: Use OS's DNS resolver
--traceroute: Trace hop path to each host
SCAN TECHNIQUES:
-sS/sT/sA/sW/sM: TCP SYN/Connect()/ACK/Window/Maimon scans
-sU: UDP Scan
-sN/sF/sX: TCP Null, FIN, and Xmas scans
--scanflags <flags>: Customize TCP scan flags
-sI <zombie host[:probeport]>: Idle scan
-sY/sZ: SCTP INIT/COOKIE-ECHO scans
-sO: IP protocol scan
-b <FTP relay host>: FTP bounce scan
PORT SPECIFICATION AND SCAN ORDER:


Terminal
Mar 31 14:18
cnl@cnl-HP-280-G4-MT-Business-PC: ~
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -sF www.google.co.in
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:06 IST
Nmap scan report for www.google.co.in (142.251.42.99)
Host is up (0.0019s latency).
Other addresses for www.google.co.in (not scanned): 2404:6800:4009:809::2003
rDNS record for 142.251.42.99: bom07s45-in-f3.1e100.net
All 1000 scanned ports on www.google.co.in (142.251.42.99) are open|filtered
Nmap done: 1 IP address (1 host up) scanned in 14.32 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -O 192.168.13.42
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:07 IST
Nmap scan report for cnl-HP-280-G4-MT-Business-PC (192.168.13.42)
Host is up (0.000062s latency).
All 1000 scanned ports on cnl-HP-280-G4-MT-Business-PC (192.168.13.42) are closed
Too many fingerprints match this host to give specific OS details
Network Distance: 0 hops
OS detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 1.76 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -A -sV www.google.co.in
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:10 IST
Nmap scan report for www.google.co.in (172.217.166.163)
Host is up (0.010s latency).
Other addresses for www.google.co.in (not scanned): 2404:6800:4009:809::2003
rDNS record for 172.217.166.163: bom07s20-in-f3.1e100.net
Not shown: 998 filtered ports
PORT STATE SERVICE VERSION
80/tcp open tcpwrapped
443/tcp open tcpwrapped
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: specialized|WAP|phone
Running: iPXE 1.X, Linux 2.4.X|2.6.X, Sony Ericsson embedded
OS CPE: cpe:/o:ipxe:ipxe:1.0.0%2b cpe:/o:linux:linux_kernel:2.4.20 cpe:/o:linux:linux_kernel:2.6.22 cpe:/h:sonyericsson:u8i_vivaz
OS details: iPXE 1.0.0+, Tomato 1.28 (Linux 2.4.20), Tomato firmware (Linux 2.6.22), Sony Ericsson U8i Vivaz mobile phone
TRACEROUTE (using port 443/tcp)
HOP RTT ADDRESS


Activities
Terminal
Mar 31 14:18
cnl@cnl-HP-280-G4-MT-Business-PC: ~
Nmap done: 1 IP address (1 host up) scanned in 1.76 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -A -sV www.google.co.in
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:10 IST
Nmap scan report for www.google.co.in (172.217.166.163)
Host is up (0.010s latency).
Other addresses for www.google.co.in (not scanned): 2404:6800:4009:809::2003
rDNS record for 172.217.166.163: bom07s20-in-f3.1e100.net
Not shown: 998 filtered ports
PORT STATE SERVICE VERSION
80/tcp open tcpwrapped
443/tcp open tcpwrapped
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: specialized|WAP|phone
Running: iPXE 1.X, Linux 2.4.X|2.6.X, Sony Ericsson embedded
OS CPE: cpe:/o:ipxe:ipxe:1.0.0%2b cpe:/o:linux:linux_kernel:2.4.20 cpe:/o:linux:linux_kernel:2.6.22 cpe:/h:sonyericsson:u8i_vivaz
OS details: iPXE 1.0.0+, Tomato 1.28 (Linux 2.4.20), Tomato firmware (Linux 2.6.22), Sony Ericsson U8i Vivaz mobile phone
TRACEROUTE (using port 443/tcp)
HOP RTT ADDRESS
1 ... 30
OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 140.84 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -sO 192.168.13.42
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:14 IST
Nmap scan report for cnl-HP-280-G4-MT-Business-PC (192.168.13.42)
Host is up (0.000014s latency).
Not shown: 249 closed protocols
PROTOCOL STATE SERVICE
1 open icmp
2 open|filtered igmp
6 open tcp
17 open udp
103 open|filtered pim
136 open|filtered udplite
255 open|filtered unknown
Nmap done: 1 IP address (1 host up) scanned in 1.38 seconds


Activities
Terminal
Mar 31 14:18
cnl@cnl-HP-280-G4-MT-Business-PC: ~
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -A 192.168.13.42
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:14 IST
Nmap scan report for cnl-HP-280-G4-MT-Business-PC (192.168.13.42)
Host is up (0.000058s latency).
All 1000 scanned ports on cnl-HP-280-G4-MT-Business-PC (192.168.13.42) are closed
Too many fingerprints match this host to give specific OS details
Network Distance: 0 hops
OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 2.20 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ sudo nmap -p 80 192.168.13.42
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:14 IST
Nmap scan report for 192.168.13.42
Host is up (0.000065s latency).
PORT STATE SERVICE
80/tcp closed http
Nmap done: 1 IP address (1 host up) scanned in 13.10 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ nmap --top-ports 10 192.168.13.42
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:15 IST
Nmap scan report for 192.168.13.42
Host is up (0.00016s latency).
PORT STATE SERVICE
21/tcp closed ftp
22/tcp closed ssh
23/tcp closed telnet
25/tcp closed smtp
80/tcp closed http
110/tcp closed pop3
139/tcp closed netbios-ssn
443/tcp closed https
445/tcp closed microsoft-ds
3389/tcp closed ms-wbt-server
Nmap done: 1 IP address (1 host up) scanned in 13.03 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ nmap -iflist
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:16 IST


Activities
Terminal
Mar 31 14:19
cnl@cnl-HP-280-G4-MT-Business-PC: ~
22/tcp closed ssh
23/tcp closed telnet
25/tcp closed smtp
80/tcp closed http
110/tcp closed pop3
139/tcp closed netbios-ssn
443/tcp closed https
445/tcp closed microsoft-ds
3389/tcp closed ms-wbt-server
Nmap done: 1 IP address (1 host up) scanned in 13.03 seconds
cnl@cnl-HP-280-G4-MT-Business-PC:~$ nmap -iflist
Starting Nmap 7.80 (https://nmap.org) at 2022-03-31 14:16 IST
**********INTERFACES**********
DEV (SHORT) IP/MASK TYPE UP MTU MAC
lo (lo) 127.0.0.1/8 loopback up 65536
lo (lo) ::1/128 loopback up 65536
enp3s0 (enp3s0) 192.168.13.42/22 ethernet up 1500 10:62:E5:0C:3B:7D
enp3s0 (enp3s0) fd80::e260:2e6:3f37:5328/64 ethernet up 1500 10:62:E5:0C:3B:7D
enp3s0 (enp3s0) fd80::fcaf:112a:e38c:1bc0/64 ethernet up 1500 10:62:E5:0C:3B:7D
enp3s0 (enp3s0) fe80::b622:92d0:2ec0:3078/64 ethernet up 1500 10:62:E5:0C:3B:7D
**********ROUTES**********
DST/MASK DEV METRIC GATEWAY
192.168.12.0/22 enp3s0 100
169.254.0.0/16 enp3s0 1000
0.0.0.0/0 enp3s0 20100 192.168.12.1
::1/128 lo 0
fd80::e260:2e6:3f37:5328/128 enp3s0 0
fd80::fcaf:112a:e38c:1bc0/128 enp3s0 0
fe80::b622:92d0:2ec0:3078/128 enp3s0 0
::1/128 lo 256
fd80::/64 enp3s0 100
fe80::/64 enp3s0 100
ff00::/8 enp3s0 256
::/0 enp3s0 20100 fe80::1
cnl@cnl-HP-280-G4-MT-Business-PC:~$