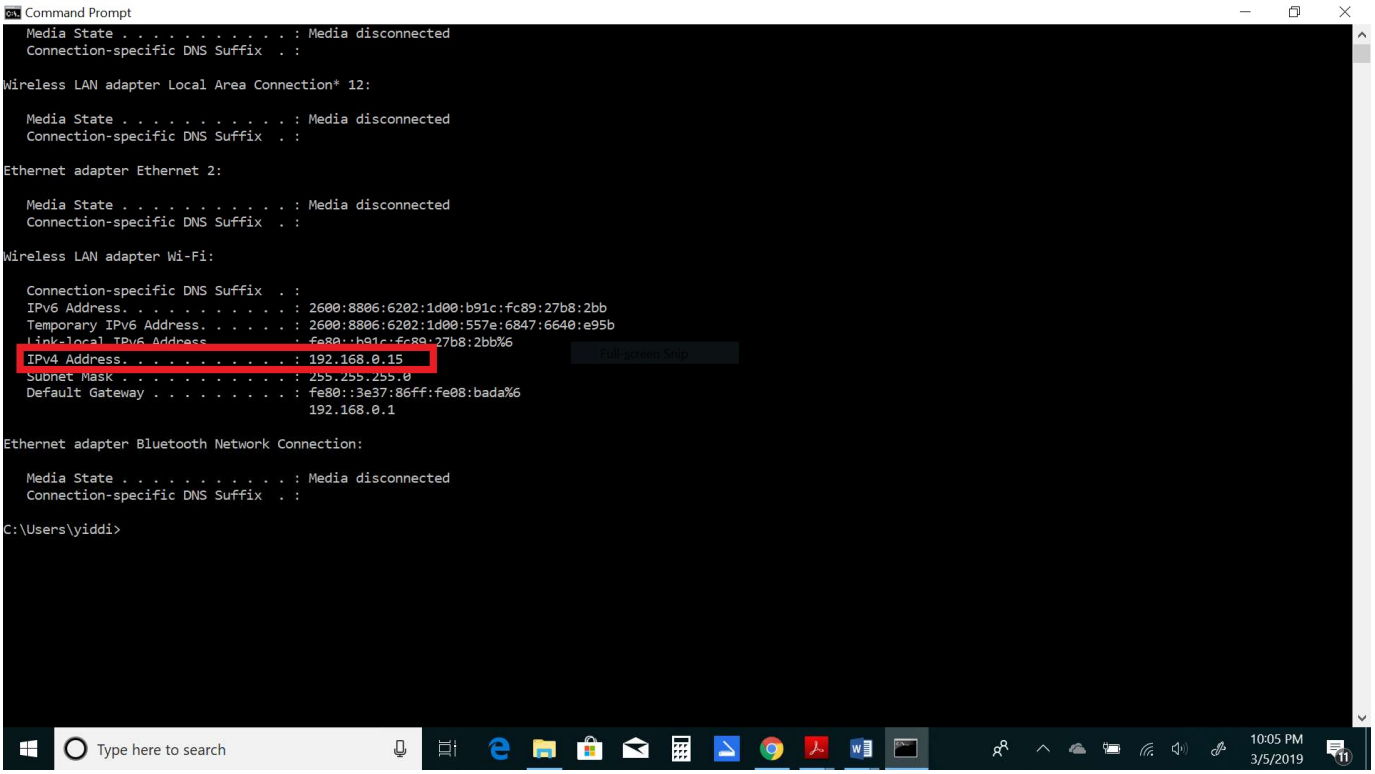
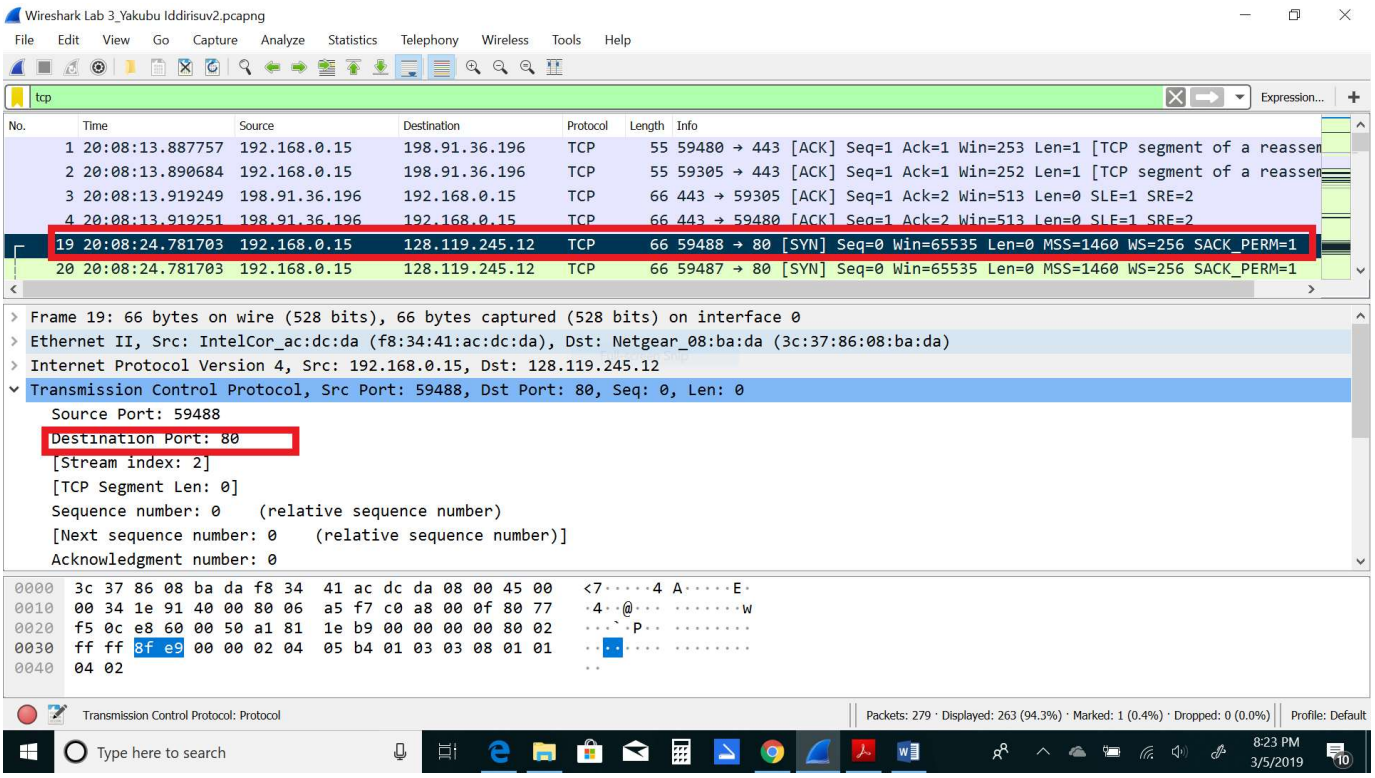
Yakubu Iddirisu
IT520 – Lab 3
February 24th, 2019



Questions:

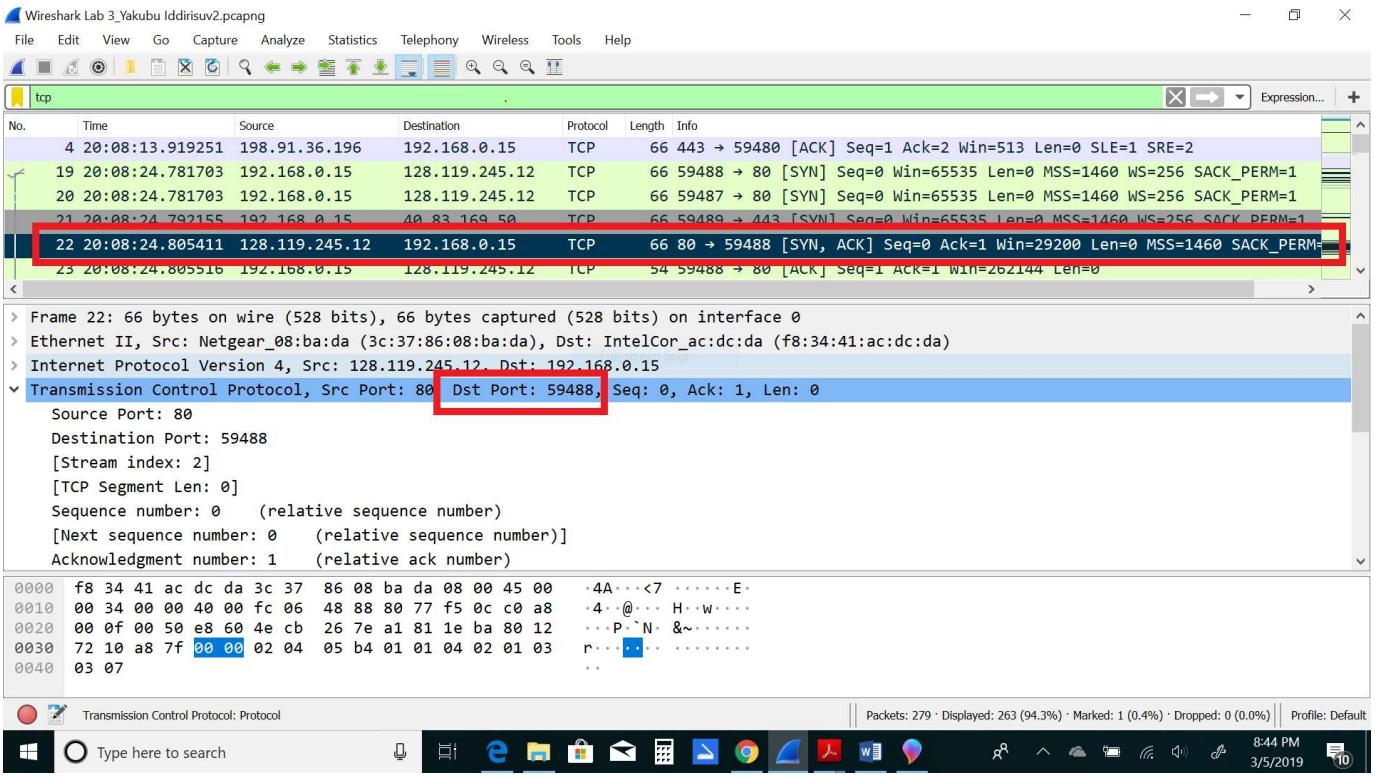
1. What is the TCP port number used by your computer to communicate with gaia.cs.umass.edu?

Destination Port: 80



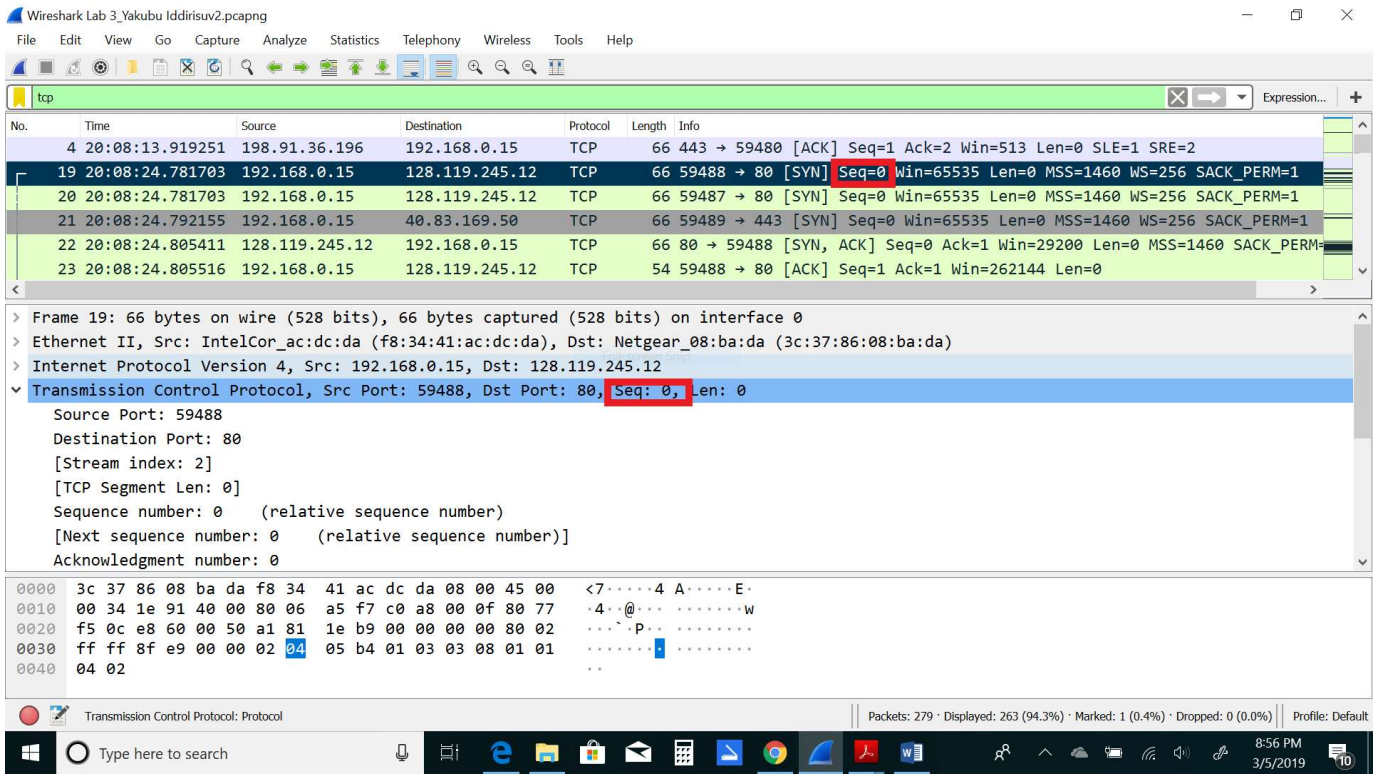
2. What is the TCP port number used by gaia.cs.umass.edu to communicate with your computer?

Destination Port: 59488



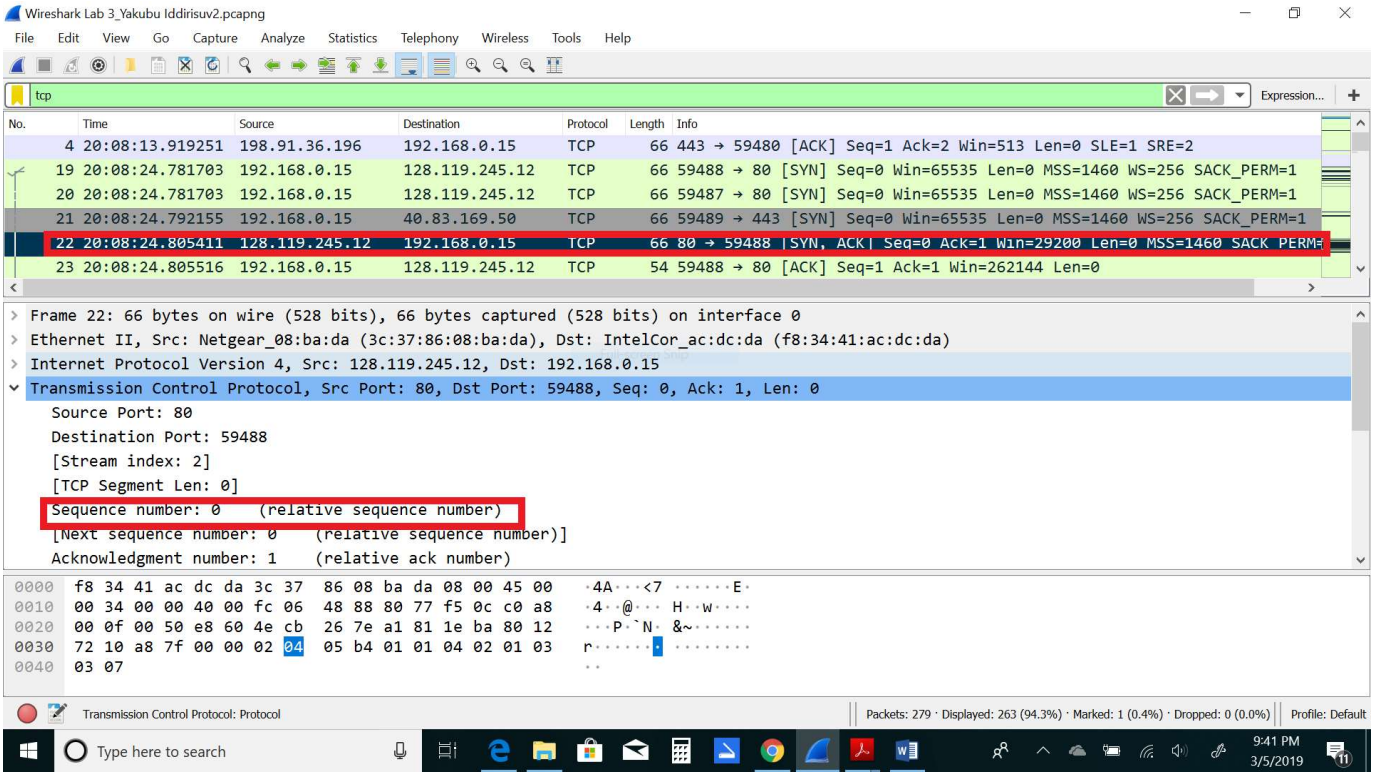
3. What is the sequence number of the TCP SYN segment that is used to initiate the TCP connection between your computer and gaia.cs.umass.edu? What is it in the segment that identifies the segment as a SYN segment?
Seq. 0

It is the Sequence number that identifies the segment as a SYN segment. The SYN segment does not include an ACK. It is the initial communication between the source IP address and the destination IP Address. And requests for permission to establish initial connection between the source IP and destination IP.



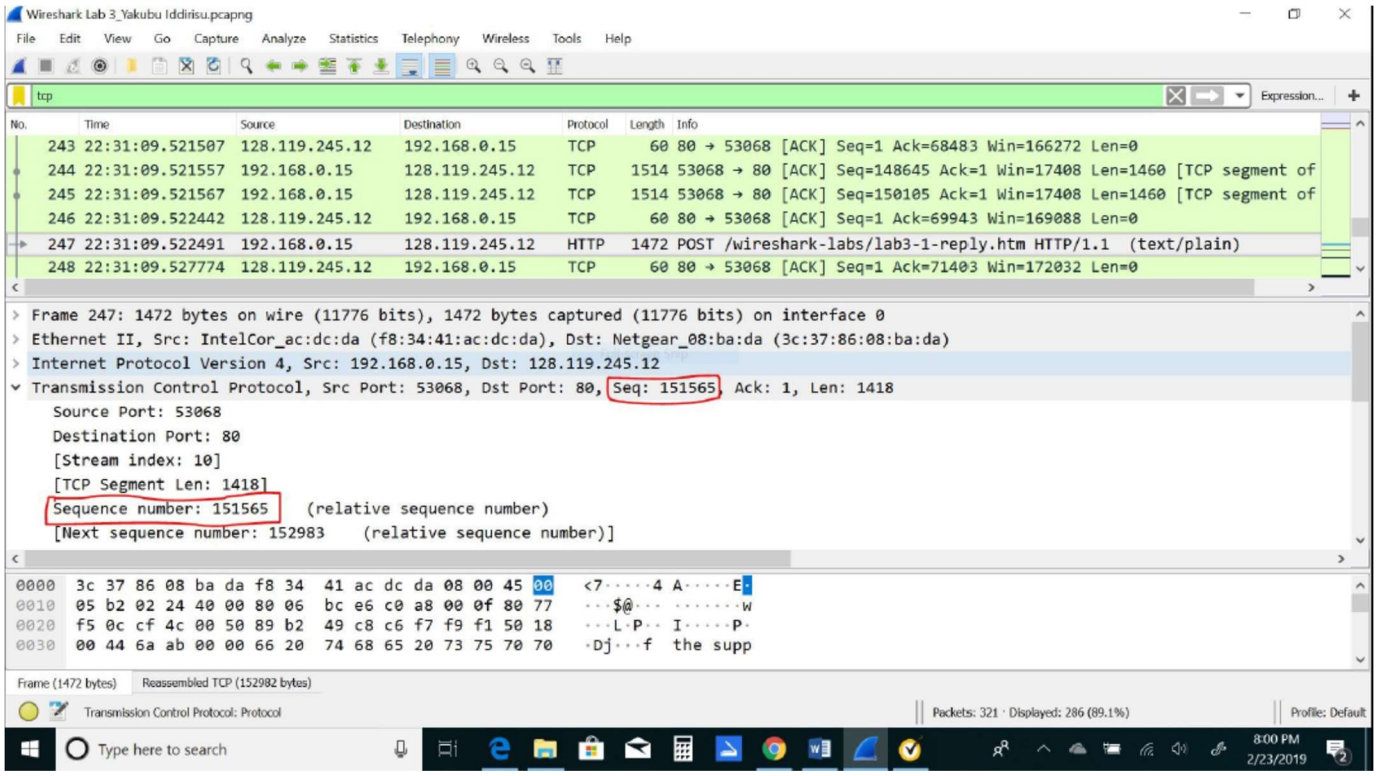
4. What is the sequence number of the SYNACK segment sent by gaia.cs.umass.edu to the client computer in reply to the SYN? - You must dig deep and find the ACK from gaia.cs.umass.edu.

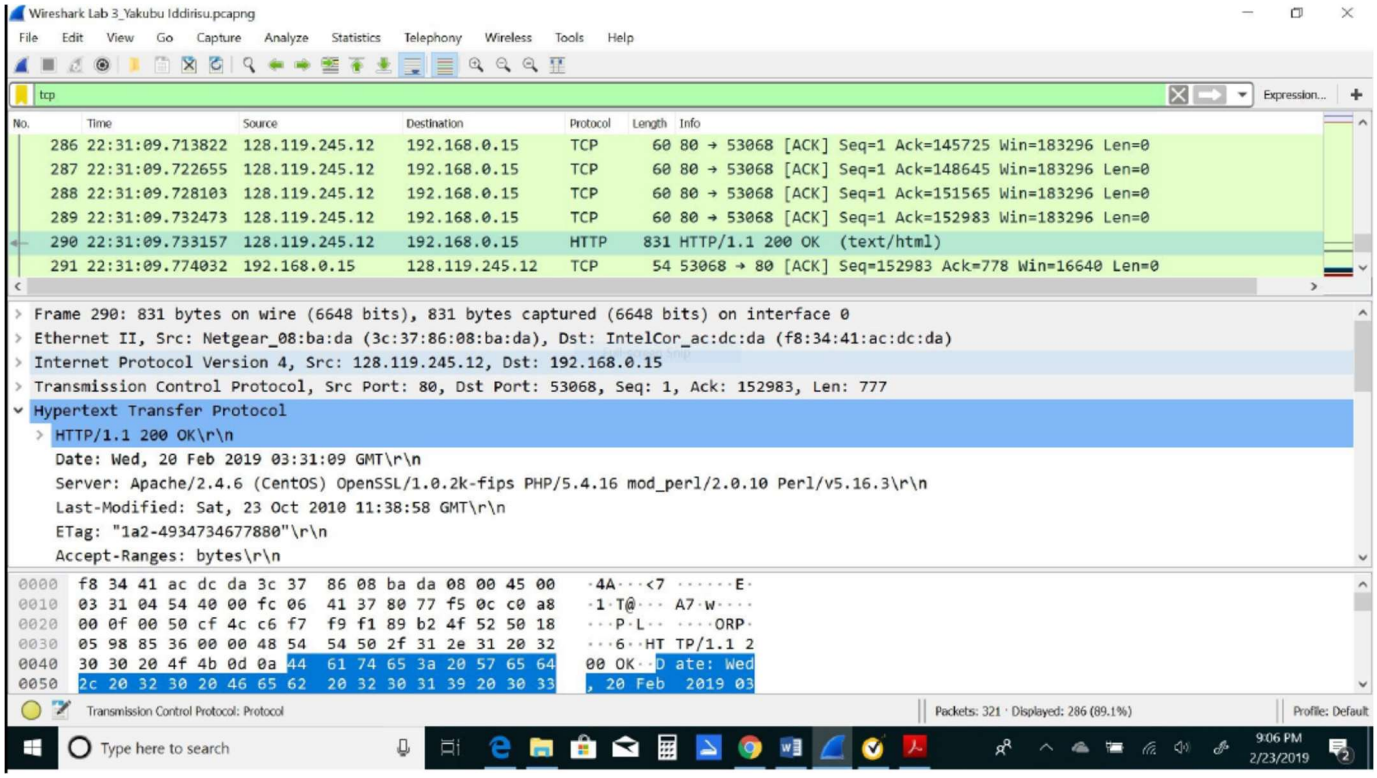
Seq 0.



5. What is the sequence number of the TCP segment containing the HTTP POST command? Note: that to find the POST command, you'll need to dig into the packet content field at the bottom of the Wireshark window, looking for a segment with a "POST" within its DATA field.

Seq 151565




Wireshark Lab 3_Yakubu Iddirisu.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp
Expression...
No. Time Source Destination Protocol Length Info
286 22:31:09.713822 128.119.245.12 192.168.0.15 TCP 60 80 → 53068 [ACK] Seq=1 Ack=145725 Win=183296 Len=0
287 22:31:09.722655 128.119.245.12 192.168.0.15 TCP 60 80 → 53068 [ACK] Seq=1 Ack=148645 Win=183296 Len=0
288 22:31:09.728103 128.119.245.12 192.168.0.15 TCP 60 80 → 53068 [ACK] Seq=1 Ack=151565 Win=183296 Len=0
289 22:31:09.732473 128.119.245.12 192.168.0.15 TCP 60 80 → 53068 [ACK] Seq=1 Ack=152983 Win=183296 Len=0
290 22:31:09.733157 128.119.245.12 192.168.0.15 HTTP 831 HTTP/1.1 200 OK (text/html)
291 22:31:09.774032 192.168.0.15 128.119.245.12 TCP 54 53068 → 80 [ACK] Seq=152983 Ack=778 Win=16640 Len=0
Frame 290: 831 bytes on wire (6648 bits), 831 bytes captured (6648 bits) on interface 0
Ethernet II, Src: Netgear_08:ba:da (3c:37:86:08:ba:da), Dst: IntelCor_ac:dc:da (f8:34:41:ac:dc:da)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.15
Transmission Control Protocol, Src Port: 80, Dst Port: 53068, Seq: 1, Ack: 152983, Len: 777
Hypertext Transfer Protocol
HTTP/1.1 200 OK\r\n
Date: Wed, 20 Feb 2019 03:31:09 GMT\r\n
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod_perl/2.0.10 Perl/v5.16.3\r\n
Last-Modified: Sat, 23 Oct 2010 11:38:58 GMT\r\n
ETag: "1a2-4934734677880"\r\n
Accept-Ranges: bytes\r\n
0000 f8 34 41 ac dc da 3c 37 86 08 ba da 08 00 45 00 ·4A···<7 ·····E·
0010 03 31 04 54 40 00 fc 06 41 37 80 77 f5 0c c0 a8 ·1·T@··· A7·w····
0020 00 0f 00 50 cf 4c c6 f7 f9 f1 89 b2 4f 52 50 18 ···P·L·· ····ORP·
0030 05 98 85 36 00 00 48 54 54 50 2f 31 2e 31 20 32 ···6··HT TP/1.1 2
0040 30 30 20 4f 4b 0d 0a 44 61 74 65 3a 20 57 65 64 00 OK··D ate: Wed
0050 2c 20 32 30 20 46 65 62 20 32 30 31 39 20 30 33 , 20 Feb 2019 03
Transmission Control Protocol: Protocol
Packets: 321 · Displayed: 286 (89.1%)
Profile: Default
Type here to search
9:06 PM
2/23/2019