

- What is HTTP?
- Common issues with HTTP
 - Slow response times
 - Error codes (404, 501, etc.)
 - No page returned
- > Using Wireshark to troubleshoot issues
 - You can use Wireshark to find broken websites



```
1434 [TCP segment of a reassembled PDU]
  34 4.496465
                     65, 208, 228, 223
                                            145.254.160.237
                                                                TCP
                                                                                54 tip2 > http [ACK] Seq=480 Ack=17941 Win=9660 Len=0
  35 4.496465
                     145, 254, 160, 237
                                            65, 208, 228, 223
                                                                TCP
  36 4.776868
                     216, 239, 59, 99
                                            145.254.160.237
                                                                TCP
                                                                             1484 [TCP Retransmission] http > 3371 [PSH. ACK] Seq=1 Ack=722 Win=31460
                                                                       Note
                                                                                54 [TCP Dup ACK 28#1] 3371 > http [ACK] Seq=722 Ack=1591 Win=8760 Len=
  37 4.776868
                    145.254.160.237
                                            216.239.59.99
                                                                HTTP/XNChat
                                                                               478 HTTP/1.1 200 OK
  38 4.846969
                     65.208.228.223
                                            145.254.160.237
  39 5.017214
                     145.254.160.237
                                            65.208.228.223
                                                                                54 tip2 > http [ACK] Seq=480 Ack=18365 Win=9236 Len=0
                                                                TCP
                                                                                54 http > tip2 [FIN, ACK] Seq=18365 Ack=480 Win=6432 Len=0
  40 17, 905747
                     65.208.228.223
                                            145, 254, 160, 237
                                                                TCP
                                                                       Chat
  41 17, 905747
                     145.254.160.237
                                                                                54 tip2 > http [ACK] Seq=480 Ack=18366 Win=9236 Len=0
                                            65, 208, 228, 223
                                                                TCP
  42 30,063228
                    145.254.160.237
                                            65.208.228.223
                                                                                54 tip2 > http [FIN, ACK] Seg=480 Ack=18366 Win=9236 Len=0
                                                                TCP
                                                                       Chat
  43 30, 393704
                     65, 208, 228, 223
                                            145, 254, 160, 237
                                                                TCP
                                                                                54 http > tip2 [ACK] Seg=18366 Ack=481 Win=6432 Len=0
                                                             ш
  ICalculated window size: 314601
  [Window size scaling factor: -1 (unknown)]

    ⊕ Checksum: 0xacd9 [validation disabled]

[SEQ/ACK analysis]
    [Bytes in flight: 1430]
 ☐ [TCP Analysis Flags]
    □ [This frame is a (suspected) retransmission]
      □ [Expert Info (Note/Sequence): Retransmission (suspected)]
          [Message: Retransmission (suspected)]
          [Severity level: Note]
          [Group: Sequence]
      [The RTO for this segment was: 0.821180000 seconds]
      [RTO based on delta from frame: 27]

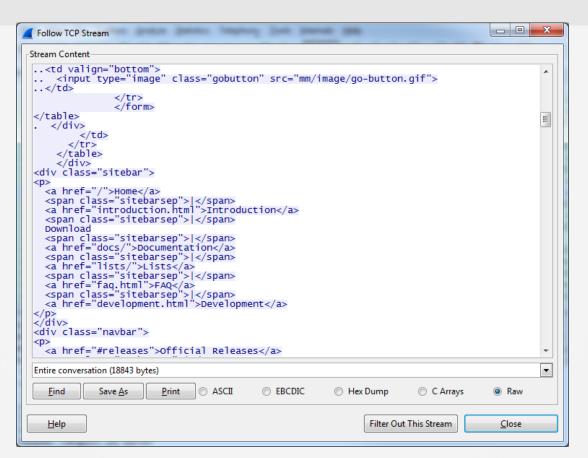
    [Timestamps]

    [Time since first frame in this TCP stream: 1.792577000 seconds]
    [Time since previous frame in this TCP stream: 0.821180000 seconds]
  Retransmitted TCP segment data (1430 bytes)
```



- Using tools to find problems with HTTP
- Following the TCP stream
 - You can filter out the conversation and view the TCP stream
 - Allows you to identify problems with the pages you are viewing







Questions?