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## **Network Traffic Analysis**

## HTTP 2 (Easy)

This challenge evaluates the contestant's ability to understand a packet capture containing network traffic using the HTTP protocol. Use <u>Wireshark</u> to solve the challenge.

Question 1 can be solved by applying the filter below and looking at the Wireshark dissection.

## http.request

```
> Frame 4: 200 bytes on wire (1600 bits), 200 bytes captured (1600 bits)
> Ethernet II, Src: AsustekC_b3:01:84 (00:1d:60:b3:01:84), Dst: Actionte_2f:47:87 (00:26:62:2f:47:87)
> Internet Protocol Version 4, Src: 192.168.1.140, Dst: 174.143.213.184
> Transmission Control Protocol, Src Port: 57678 (57678), Dst Port: 80 (80), Seq: 1, Ack: 1, Len: 134

→ Hypertext Transfer Protocol

  ✓ GET /images/layout/logo.png HTTP/1.0\r\n
     > [Expert Info (Chat/Sequence): GET /images/layout/logo.png HTTP/1.0\r\n]
       Request Method: GET
       Request URI: /images/layout/logo.png
       Request Version: HTTP/1.0
     User-Agent: Wget/1.12 (linux-gnu)\r\n
     Accept: */*\r\n
     Host: packetlife.net\r\n
     Connection: Keep-Alive\r\n
     [Full request URI: http://packetlife.net/images/layout/logo.png]
     [HTTP request 1/1]
     [Response in frame: 36]
```







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Questions 2 - 4 can be solved by applying the filter below and looking at the Wireshark dissection.

## http.response

```
> Frame 36: 391 bytes on wire (3128 bits), 391 bytes captured (3128 bits)
> Ethernet II, Src: Actionte_2f:47:87 (00:26:62:2f:47:87), Dst: AsustekC_b3:01:84 (00:1d:60:b3:01:84)
  Internet Protocol Version 4, Src: 174.143.213.184, Dst: 192.168.1.140
  Transmission Control Protocol, Src Port: 80 (80), Dst Port: 57678 (57678), Seq: 21721, Ack: 135, Len: 325
  [16 Reassembled TCP Segments (22045 bytes): #6(1448), #8(1448), #10(1448), #12(1448), #14(1448), #16(1448),
  Hypertext Transfer Protocol
     HTTP/1.1 200 OK\r\n
      > [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Request Version: HTTP/1.1
        Status Code: 200
        Response Phrase: OK
     Server: nginx/0.8.53\r\n
Date: Tue, 01 Mar 2011 20:45:16 GMT\r\n
     Content-Type: image/png\r\n
   > Content-Length: 21684\r\n
     Last-Modified: Fri, 21 Jan 2011 03:41:14 GMT\r\n
     Connection: keep-alive\r\n
     Keep-Alive: timeout=20\r\n
     Expires: Wed, 29 Feb 2012 20:45:16 GMT\r\n \,
     Cache-Control: max-age=31536000\r\n
     Cache-Control: public\r\n
     Vary: Accept-Encoding\r\n
     Accept-Ranges: bytes\r\n
     [HTTP response 1/1]
     [Time since request: 0.152882000 seconds]
[Request in frame: 4]
> Portable Network Graphics
```

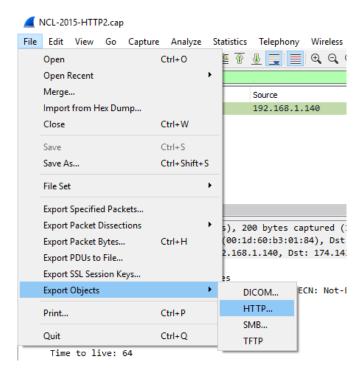






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Question 5 can be solved by selecting the Wireshark option, "File > Export Objects > HTTP" and then using the Linux "md5sum" program to calculate the MD5 sum.



Question	Answer
What Linux tool was used to execute a file download?	wget
What is the name of the web server software that handled the request?	nginx
What IP address initiated request?	192.168.1.140
What is the IP address of the server?	174.143.213.184
What is the MD5 sum of the file downloaded?	966007c476e0c200fba8b28b250a6379
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