Università di Perugia
Dipartimento di Matematica e Informatica

Introduzione alla Sicurezza Informatica

HTTP exercise

Autore: Chiara Luchini

Anno Accademico 2022-2023

1 Wireshark lab

1.1 HTTP exercise

This exercise is a part of Brief Networks course made by Omer Rosenbaum. The download of the PCAP file is required for carrying out the exercise link.

1. Answer the following questions:

    1. How many packets were sent to 192.168.1.3?
    2. What frames are ARP frames? Provide the frame numbers.
    3. How many packets have we captured overall?
    4. How many of these packets are TCP (Transmission Control Protocol) packets?

2. In the following you can find the content of an HTTP Request. Answer to the following questions, indicating where (e.g., in which field) in the HTTP Request you can find the answer:

```
1  GET / HTTP/1.1
2  Host: www.unipg.it
3  User-Agent: Mozilla/5.0 (Macintosh; U; PPC Mac OS X; en) AppleWebKit/124 (KHTML, like
   ↪  Gecko) Safari/125
4  Accept: text/html,application/xhtml+xml,application/xml;q=0.9,
   ↪  image/avif,image/webp,image/apng,*/*;q=0.8,
   ↪  application/signed-exchange;v=b3;q=0.9
5  Accept-Language: en-US,en;q=0.9
6  Accept-Encoding: gzip, deflate
7  Keep-Alive: 300
8  Connection: keep-alive
```

    1. What is the requested URL?
    2. Which version of HTTP is used?
    3. Does the browser ask for a persistent or a non-persistent connection?
    4. What is, in your opinion, the utility in indicating the type (and version) of browser used by the client in the HTTP Request?

3. For this exercise it is necessary to download the following pcap file. Answer the following questions:

    1. How many GET requests have been performed?
    2. How many were successful?
    3. Extract and view the png file with your image viewer.