

Lab #7

Class: CECS 303 – Networks and Network Security

Instructor: Chris Samayoa

Due Date: April 29, 2022 by 9pm PST

Objective: This week we will be revisiting Wireshark and learning to use the password cracking tool Hashcat.

Sam Bowne is an instructor at City College San Francisco and maintains a website to help teach various computer networking and security courses. As part of this website, he hosts labs that either need to be configured using virtual machines or are hosted by him.

Legend:

- *Server*: refers to the two Ubuntu Server VMs that were created in Lab 1
 - *Apache Server*: refers to the server VM with Apache installed on it
- *Workstation*: refers to the Ubuntu Desktop VM that was created in Lab 2

Links

- Wireshark Exercise: <https://bowneconsultingcontent.com/pub/EH/proj/H420.htm>
- Hashcat Exercise: <https://bowneconsultingcontent.com/pub/EH/proj/H520.htm>

Wireshark Exercise

Navigate to the exercise for Wireshark listed in the 'Links' section above (H 420: Wireshark). For this exercise you will be using either your Ubuntu Workstation VM or you can run Wireshark directly on your laptop (recommended).

The goal is to complete flags 'H 420.1: John's Password', 'H 420.2 Finding an HTTP Password', 'H 420.3: HTTP Basic Authentication', and 'H 420.4: Encrypted Transmission' successfully.

1. Follow the instructions on the webpage until you complete the assigned flags. (H 420.1 thru H 420.4)

- a. Optional: You can verify your answers on this page before submitting to BeachBoard: <https://bowneconsultingcontent.com/pub/CTF-A2020/index2.php?type=H>

Hashcat Exercise

Navigate to the exercise for Hashcat listed in the 'Links' section above (H 520: Hashcat). You will need to use one of your Ubuntu Server VMs to complete this exercise.

The goal is to complete flags 'H 520.1: Status', 'H 520.2: P-Password' and 'H 520.3: S-Password' successfully.

1. Beginning from the section 'Getting Hashcat' on the webpage, follow the instructions until you complete the assigned flags. (H 520.1 thru H 520.3)
 - a. Optional: You can verify your answers on this page before submitting to BeachBoard: <https://bowneconsultingcontent.com/pub/CTF-A2020/index2.php?type=H>

Deliverables (submit via BeachBoard)

1. Compile the answers for all of the assigned flags into a .doc, .docx, or .pdf file. This should include the answers for the following flags:
 - a. H 420.1
 - b. H 420.2
 - c. H 420.3
 - d. H 420.4
 - e. H 520.1
 - f. H 520.2
 - g. H 520.3