

CSCD 434-040 Network Security

Lab 8, Meta-data analysis - Due, March 13, 2024

Mar 7, 2024

Overview

You must use meta-data to figure out what websites someone has visited. You have access to the pcap files of the pages they visited and they have been isolated to some degree, but you need to figure out exactly what pages were visited (if you can).

Objectives

1. Devise a method to match a web page with it's pcap file (TLS is used so you can't see any actual packet consents).
2. Match the pcap files from the `degree_options` folder with the page visited.
 - There will be 2 pcaps that you may not be able to label correctly. For them you can say something like "pcap9429 is either page a or page b."
3. Match the pcap files from the `non_degree_pages` folder with the pages visited.
 - There will be 2 pcaps that you may not be able to label correctly. For them you can say something like "pcap9429 is either page a or page b."

Your Programs

- Your program must have a main function.
- We must be able to run your program from the command line.
- We will not fix/edit code to get your program to run.
- Make sure all files are present that your program needs. It may create those files it needs.

Write up

Write up your methodology and create a program to assist you. There are too many files to sift through by hand, so write a program or two to speed up your analysis. Your write up must explain what your program is doing and how it helps you match up the pcap files with the actual web pages.

Turn in

Turn in a tarball of all your files. This will include your program and anything your program uses to match the pcaps with their actual web-pages.

Extra credit

Bonus points for matching up pcaps with pages that I can't. Guesses won't get any credit, you must explain your methodology fully.