CS426 Computer Security: Lab 4

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1 Deadline

Tue April 27, AoE. (You know the late penalty.)

2 Goal

Kaminsky Attack

3 Description

Follow the Kaminsky attack lab handout at Seed lab. Click "Description" once you are on the site.

The handout there explains how to setup this lab and the tasks you need to accomplish, as well as the files you would need.

You need to set up three VMs, one for the user, one for the DNS server and one for the attacker. All these VMs will run the pre-built Ubuntu 16.04 VM image by Seed lab, which you can find here

This YouTube video is also helpful for installing the three VMs.

Note, before you configure the VM, you should create a NAT network first, like here

4 Deliverable

You need to submit a folder named as [Purdue Username]_lab4 on brightspace. The folder should include your code, a lab report in pdf format and a readme

You need to submit a detailed lab report, with screenshots, to describe what you have done and what you have observed.

The readme should detail how to run your code

Simply attaching code without any explanation will not receive credits

Name your lab report as [Purdue Username]_lab4_report.pdf

For example, if John Smith's Purdue Username is jsmith, then he will submit a folder named jsmith_lab4 and a report as jsmith_lab4_report.pdf

5 Grading

The assignment is 100 points in total

Setup task 4: 10 points. 5 points for each observation

Attack task 4: 15 points Attack task 5: 20 points Attack task 6&7: 40 points.

Screenshot + explanation on why your attack works: 15 points.

6 Useful Resource

Scapy's doc

7 Acknowledgements

This handout is provided by Sihao Yin at Purdue.