CodePath

Week 9 (Cont'd)

CS 4760 F18
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Homework

Week 9 Homework Report 11/11 @ 11:59 PM

- Still **CodePath Week 9**
- Milestones 1 - 5 for CodePath **Assignment**
- Submit on **Collab**

Homework

Week 9 CodePath Assignment 11/11 @ 11:59 PM

- Submit according to CodePath guidelines

Topics

Week 9 (Cont'd)

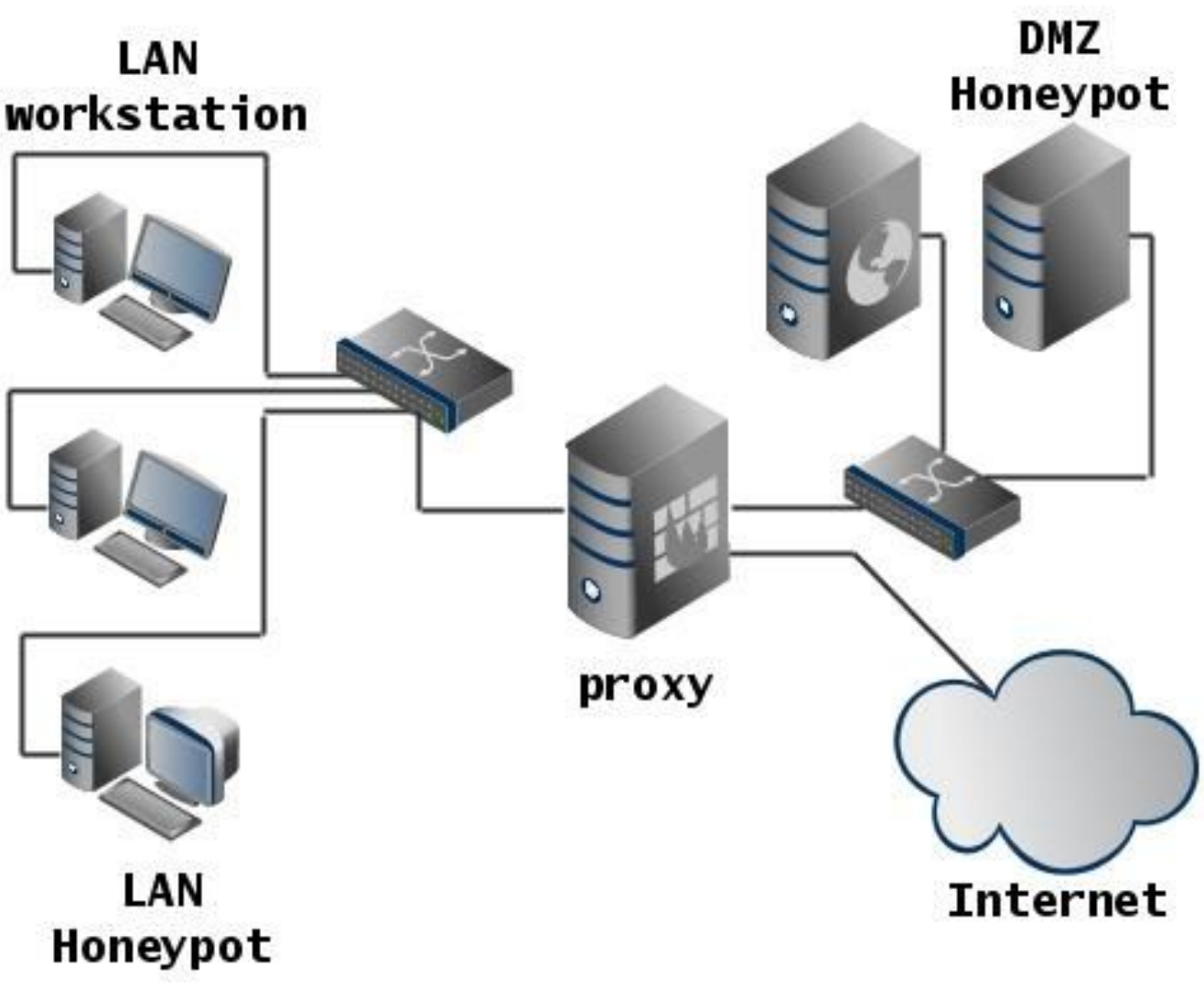
Readings on course website

- NetSec Crash Course
- Firewalls
- Intrusion Detection System
- Risk Assessment
- Penetration Testing
- Threat Monitoring
- Incident Response

Honeypots

- A **honeypot** is a decoy application, server, or other networked resource

- Purpose
  - Attract and trap hackers
  - Learn technique the hacker uses to enter network
    - Allows for a profile to be built
  - Learn new or unconventional hacking methods


LAN
workstation
DMZ
Honeypot
proxy
LAN
Honeypot
Internet

Honeypots

- **Low-interaction honeypots:** Simulation of target resources
  - Usually virtualization
  - Example: Emulated SSH server

- **High-interaction honeypots:** Expose a real target's resources to attract sophisticated attackers
  - Example: Real SSH server with misconfigured settings to be vulnerable on purpose

Goals

- Configure and deploy your own honeypot server
  - Has an attack surface that is vulnerable to a network-based attack
  - Network security feature such as an IDS configured to detect and log such attacks

Modern Honey Network (MHN)

- Open source honeypot you will be using for the assignment
  - Need 2 VM’s
    - Admin VM
      - Used to deploy honeypots
    - Honeypot VM

Google Cloud

- Will need a cloud service provider in order to host the honeypots
- Use Google Cloud platform
- It is free, but you will need to delete and shut down your service by the time you are done with it

Notes

- Read all instruction carefully
- Install all required software/utilities as stated in the directions
- Will be accessing honeypots mainly through a terminal
- Should work on host machine, but if not try a VM
- Can take at least 30-40 minutes so don’t procrastinate

Office Hours

Monday / Thursday / Sunday : 5 - 7 PM @ Rice 226