CYBERROOKIE

CyberRookie Project - Learning Cyber Skills By Building A HomeLab

Trevor Shi

Week 2 Lesson - Virtualization

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Overview

1. Virtualization

2. Networking/Network Virtualization

3. LAB Practice

4. Hardening The ESXi

5. Homework Requirements

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Virtualization

1. What is Virtualization

   https://www.vmware.com/ca/solutions/virtualization.html

2. Online Lab

   VMware Virtualization 101 Hands-on Lab

   https://my.vmware.com/en/group/vmware/evalcenter?p=virtualization-hol-20

Network Virtualization

1. What is network virtualization?

   https://www.vmware.com/topics/glossary/content/network-virtualization

2. Online Lab

   VMware Virtualization 101 Hands-on Lab

   https://my.vmware.com/en/group/vmware/evalcenter?p=virtualization-hol-20

LAB Practice
 #1 Lab Design

1. Vmware ESXi
   Deployment/Admin/Hardening
2. Network admin
3. PFsense/Fortigate Firewall
   Admin/Hardening
4. Windows server AD+365
   Deployment/Admin/Hardening
5. Linux +WEB server
   Deployment/Admin/Hardening
6. Security Monitoring and logging
7. Vulnerability Assessment
8. Audit your IT Environment

CyberRookie Project CyberSecurity Lab V1.0

02/25.2021 By Trevor Shi
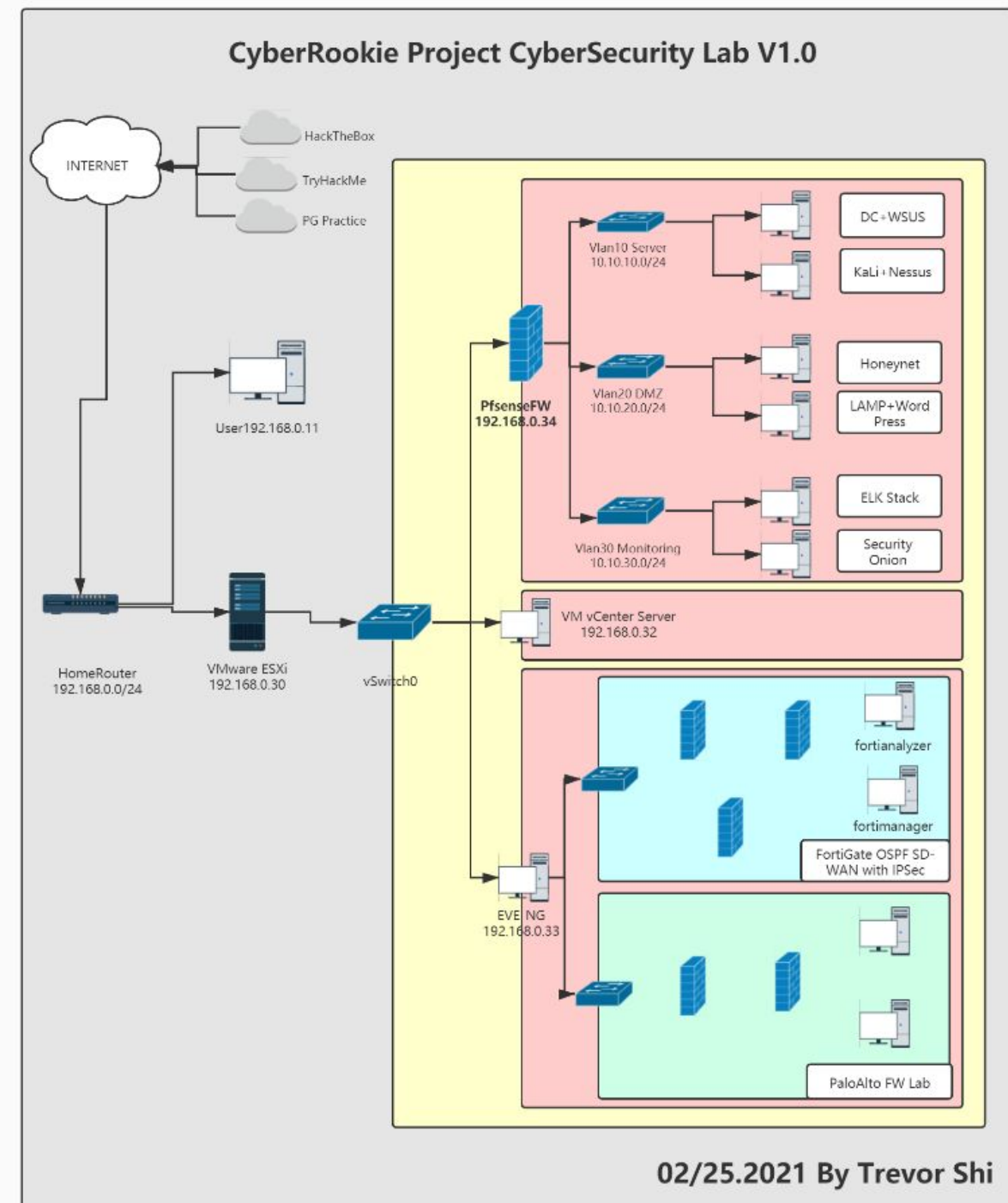
LAB Practice

#2 LAB PC Hardware Requirements

Minimal: i3 + 8G +500G

Recommend: i5 + 16G+ 1TB

LAB Practice

#3 Install ESXi

1. Download ESXi

   Download Vsphere 7.0 iso file from Vmware

   Use RUFUS tool to create USB installer

2. Deploy ESXi

3. ESXi Network Config:

   VLAN 10 - Server Sub - 10.10.10.0/24

   VLAN 20 - DMZ Sub - 10.10.20.0/24

   VLAN 30 - Monitoring - 10.10.30.0/24

4. Additional LAB Practice

   Install the Vmware Vcenter to Vlan0

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LAB Practice

#4 ESXi Hardening

CIS_VMware_ESXi_7.0_Benchmark_v1.1.0

Homework Requirements

1. Understand Virtualization/Networking Virtualization

2. Complete VMware Virtualization 101 Lab

3. Complete Lab requirement, deploy ESXi with 3 vlans on Lab

4. Hardening the ESXi by Using CIS VMware ESXi 7.0 Benchmark

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Thank You