



CYBERROOKIE

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CyberRookie Project - Learning Cyber Skills By Building A HomeLab

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Week 2 Lesson - Virtualization

Overview

1. Virtualization
2. Networking/Network Virtualization
3. LAB Practice
4. Hardening The ESXi
5. Homework Requirements

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

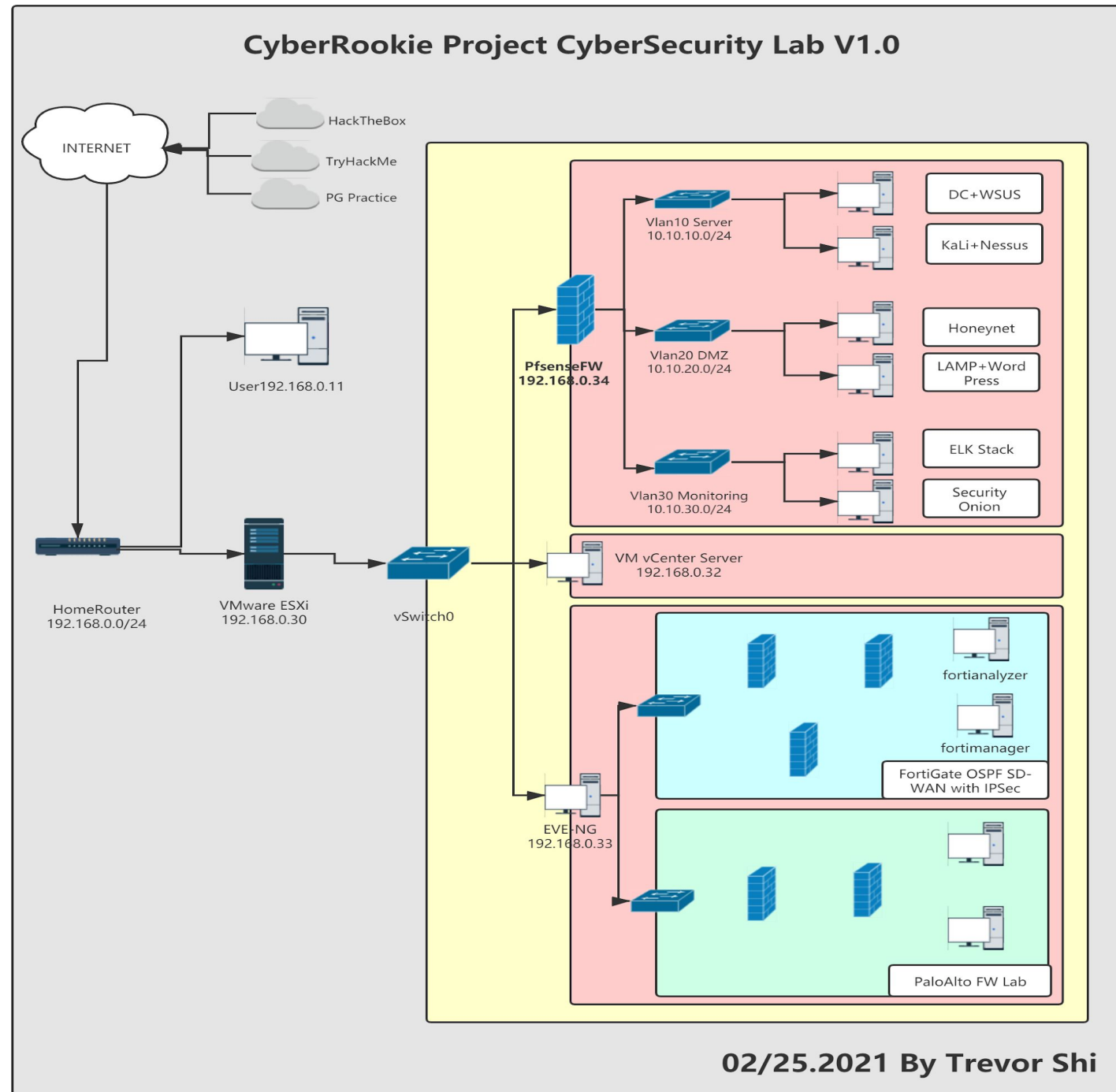
<https://my.vmware.com/en/group/vmware/evalcenter?p=virtualization-hol-20>



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





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



LAB Practice

#4 **ESXi Hardening**

CIS_VMware_ESXi_6.7_Benchmark_v1.1.0

Homework Requirements

1. Understand Virtualization/Networking Virtualization
2. Complete VMware Virtualization 101 Lab
3. Deploy ESXi with 3 vlans on Lab
4. Hardening the ESXi by Using CIS VMware ESXi 6.7 Benchmark

Q&A

**Look forward to your feedbacks and suggestions.
Contact: CyberRookieProject@gmail.com**



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Thank You