Access Control Environment Installation Lab

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CYB-525

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Screenshots:

A screenshot of a computer

Description automatically generated

Started off the lab by downloading and installing Oracle VM VirtualBox. This will house our virtualization servers.

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Next I downloaded pfSense from the netgate website.

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Following an installation guide to set pfSense up in VirtalBox, set up installation type as BSD using version FreeBSD.

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Before starting the server and starting the installation, I set up the network adapters. Adapter 1 will use my computers internet, adapters 2 and 3 will use the internal network.

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Starting the installation of pfSense.

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Due to not having an active pfSense Plus subscription, I will have to install the CE version.

A screenshot of a computer

Description automatically generated

Beginning the installation of the CE version of pfSense.

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Unmounting the disk image before rebooting the server.

A screenshot of a computer

Description automatically generated

PfSense installed and working.

Now to set up a VM with Kali Linux.

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Set up Kali Linux VM to install a Kali Linux version.

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Description automatically generated

Start VM and start the installation of Kali Linux.

A computer screen with a blue and white text

Description automatically generated

Selecting what software to install as Kali finishes installing.

A computer screen with a blue screen

Description automatically generated

Installation is complete and requesting a reboot.

A computer screen shot of a logo

Description automatically generated

Kali Linux VM booted up and running as it should.

A screenshot of a computer

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Checking the ip address on the Kali VM, we can see that the VM set the ip address. We will now change the network setting for Kali to get the ip from pfSense.

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Description automatically generated

Changing the Kali network settings to internal network.

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After resetting the Kali VM and checking the ip address, we can now see that our ip address is given out from the pfScense firewall.

Issues:

The only issue that I ran into was that I did not have a paid subscription to pfSense. There was an easy work around as they had an option to install the unpaid version. Other than that the install and incorporation of both servers was seamless.

I did find a video walkthrough that was extremely helpful in getting them both set up and working with each other.

<https://youtu.be/LX-Y-99zJ3M?si=xUDgSTBmQ_rK_YSK>