## Tutorial for 12/01, Virtual Home Lab Setup Basics – Pfsense firewall and Docker.

## **Prerequisites:**

1. Virtual Box installed, installing the extensions is optional but will make your life easier.

https://www.virtualbox.org/wiki/Downloads

2. Image of Kali Linux Vbox Image:

https://www.offensive-security.com/kali-linux-vm-vmware-virtualbox-image-download/GRAB THE ONE FOR VIRTUALBOX, NOT VMWARE!

3. Pfsense ISO:

https://www.pfsense.org/download/

4. Linux of your choice installed in VirtualBox (optional, debian based will be easiest if you want to follow along)

## **Tutorial Phase:**

- **Step 1:** Set up and install Pfsense with two network adapters.
- **Step 2:** Configure Pfsense to bridge traffic from WLAN to internal LAN for lab network.
- **Step 3:** Install Docker
- **Step 4:** How to install virtualbox extensions in Ubuntu.
- **Step 5:** Brief intro to what docker is using Nginx container and a simple web site.
- **Step 6:** Pull and Deploy the DVWA from docker.
- **Step 7:** Perform basic file inclusion.
- **Step 8:** Answer questions.