Faculty of Business, IT, and Management
HACK2200 Hacking and Exploits
Environment Setup

In this course we will be using a number of virtual machines:

VM Name	VM	Used in labs	Runs on
KaliVM	Kali Linux	1,3,4,5, and 6	VirtualBox or VMWare
MS3UBUNTU	Metasploitable 3 Ubuntu	3,4,5, and 6	VirtualBox or VMWare
MS3WS2008	Metasploitable 3 Windows Server 2008	3,4,5, and 6	VirtualBox or VMWare
WIN10VM	Windows 10	2	VirtualBox or VMWare
SEEDVM	SEED VM	7,8,9, and 10	VirtualBox or Cloud

Important Note: If you decide to go with VMWare for Kali, you must use VMWare for your Metasploitable boxes. The same applies if you go with VirtualBox for your KaliVM, you must use VirtualBox for your Metasploitable boxes.

KaliVM – Kali Linux

1. Download Kali linux available here: https://www.offensive-security.com/kali-linux-vm-vmware-virtualbox-image-download/
2. To install in VirtualBox click: File ➔ Import appliance ➔select the .ova file you downloaded, and continue with the import wizard steps.
3. Depending on your machine, you may need to install a VirtualBox extension pack available here: https://www.virtualbox.org/wiki/Downloads . To know if you need an extension pack or not, read any error messages you receive while installing Kali, and look up the error online.

MS3UBUNTU & MS3WS2008- Metasploitable 3 Ubuntu and Metasploitable 3 Windows Server 2008

Method 1 - VirtualBox Installation:

1. Build 2 Metasploitable3 boxes following the instructions here
   https://github.com/rapid7/metasploitable3
   - Go the (Quick-start) section, create a new local metasploitable workspace.
   - For Windows: Open Windows PowerShell and execute the commands.
   - For Linux/Mac: run the commands in a terminal window.
2. When building your Metaspoitable3 boxes, if you are getting a vagrant not recognized error as described here: https://github.com/hashicorp/vagrant/issues/11241

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Then you need to install Vagrant vagrant_2.2.6_x86_64.msi available here
https://www.vagrantup.com/downloads.html . If this does not solve the issue, read the error messages, and look them up online. Setting up Metaspoitable3 is different on different platforms and architecture.

Method 2 - VMWare Installation:

1. Follow the instruction available at this link:
   https://www.youtube.com/watch?v=Zd6NFfVsYfc

Environment Setup Test

1. Once you have your 3 VMs up and running, log in to each VM and make sure each VM can ping the other two.
2. Remember that in Virtual Box each VM is NATed into a different subnet, and that 10.0.2.15 is the default IP address Virtual Box assigns to the default NAT. This means all your VMs will end up using this same IP, and they cannot ping each other. You want to create a new Subnet for your VMs, and have them assigned different IPs than the default NAT and default IP. If you are not sure how to do this, follow this video tutorial: How to Make Virtual Machines Talk to Each Other in VirtualBox
3. Take a note of the IP address of each VM, the username and password you used to log in to each, and then shut down the machines properly. To shut down an Ubuntu box use

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$ sudo shutdown -h now
```

Windows 10 VM, and SEED VM

Instructions for your Windows 10 VM and SEED VM will be given within the lab instructions.

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