G53SEC MANUAL: GETTING STARTED

INTRODUCTION

This document is the first thing you should look at in the labs, it will get your VMs up and running.

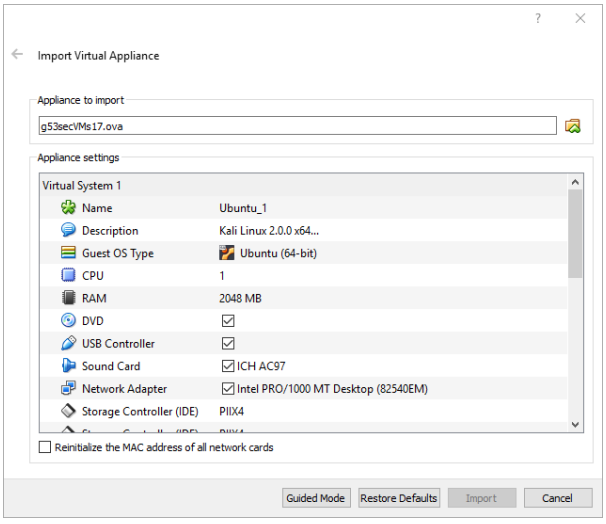
As well as a virtual disk, the VM will have settings for its CPU, RAM and graphics RAM. These are usually easy to set up, but to save time I've done this for everyone already. The VMs for the labs are combined into a single portable Open Virtualization Archive (OVA) file.

IMPORTING THE VIRTUAL MACHINE

Virtualbox has been pre-installed on the A32 machines. If you're using your own device, you can install it from www.virtualbox.org. Once installed, you need to find and start the Kali VM. Within VirtualBox, click File -> Import Appliance. You will be presented with an import wizard, begin by clicking the folder icon and locating the OVA file. You will find the OVA file in the public documents folder, C:\Users\Public\Documents\g53secVMs17.ova. For users who have their own machine, a download link to the OVA will be on moodle.

g53secVMs17.ova

You will then be presented with a view of the virtual machines stored in this archive. There are two; Kali Linux 64-bit, and an Ubuntu server which is only used in Lab 7. Click import, it will take about two minutes. The archive also stores the relevant characteristics for each machine, for example the Kali distribution has access to four cores, Ubuntu only one.



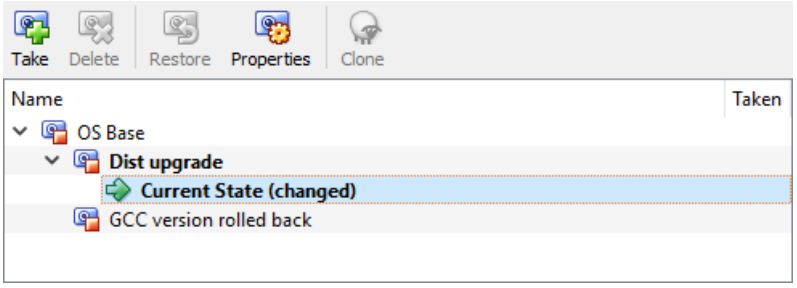
The two machines will now be listed within VirtualBox. You can boot these up by

UBUNTU ONLY – FOR LAB 7

This Ubuntu server does not like having its MAC address changed! It will rename eth0 to eth1, DHCP will break and you won't get a network connection. This is easily fixed; we just make sure the MAC in Settings->Network->Advanced is set to 0800279E0E21. This shouldn't happen, but if you find the server is slow to boot waiting for a network connection, ask for help!

clicking each and clicking start. Using the VMs is covered in the lab documents.

Snapshots



Snapshots can be useful if you want to save, and possibly restore the exact state of a machine. It's a little like committing in git, in which each change builds upon the ones before. For the labs, you might like to perform a snapshot at the start, and then you can reset the machine if anything goes wrong (it probably won't, though!). One nice feature is that snapshots don't duplicate the disks, they only store the changes from the disk at the point of the previous snapshot.

To create a snapshot, select a VM and browse to the snapshots tab. From there you can restore to any snapshot, or create new ones. You can also delete snapshots, which has the effect of merging change files into one disk image.

Cleaning Up

The imported disks for each VM are stored locally in C:/Users/username/VirtualBox VMs/. This is great for speed, but takes up a lot of space over all the machines in A32. Once the lab is finished, right click each VM, click remove and then opt to also delete the local files – this will not touch the original OVA. If you want to save your VM then it's better to move it over to a portable drive and then import from there each week. If you simply move all of the files in each directory, you can load the .vbox file each week.