Exercise 0 – Virtual Machine Introduction

Objective

To set up and configure a virtual machine with a Linux OS

1. Review questions
2. What is a virtual machine?

A virtual machine is a software used to create a working environment, it is essentially a computer that uses the host machine’s resources for a virtual machine. It can also create virtual machines locally or through the cloud (E.g. AWS, Azure, Google cloud etc.)

1. VirtualBox is known as a hypervisor – what is a hypervisor?

A hypervisor is the “manager” for a virtual machine, as it allows multiple setups to be installed and run simultaneously, it also manages the resources shared between a host machine and a virtual machine.

1. Login into the Linux workstation provided for you
2. Copy over the Ubuntu virtual disk image from the LocalInstall folder to your desktop. Once this is done, ensure you have VirtualBox installed on your machine. If this is not the case, the installer is found within the LocalInstall folder.
   * 1. Create a Linux virtual machine within VirtualBox. Give it a name, and ensure that is of type “Linux” and it’s Ubuntu 64-bit. It needs to be an Ubuntu image and requires the following specifications:

* Memory Size – 4096 MB
* Create a new virtual hard disk of type VDI
* 50.0 GB hard disk space - dynamically allocated
  + 1. Once this is done, you will need to open the settings for your newly created virtual machine and add the following configurations:
    2. Storage – under the IDE Controller in the Storage Tree, there should be an empty disk – select this, and click the disk image in the right pane. Choose the virtual disk image you copied from the LocalInstall.
    3. Network – ensure that Adapter 1 is enabled and attach it to Bridged Network. Re-initialise the MAC address under the ‘Advanced’ drop down with the green arrows. ***Changed to NAT as Bridged does not work***
    4. Shared Folders – create a folder on your Desktop named ‘shared’. Add the path to this folder and name it ‘shared’ when you click the folder with a green plus sign to add a share.
    5. Once this is done, double-click your machine to run it through the install process. A couple of things to note:
* Ensure you erase the disk on the virtual machine for the install
* Set region to United Kingdom/London
* Set the root user as admin[your initials] with the password of ‘Pa$$w0rd’. For this first logon will use a default GUI (Graphical User Interface) login screen.