

F20FO/F21FO - Digital Forensics

Lab 01: Introduction to Linux and VirtualBox

Lab 1: Objectives

1. Understand the fundamentals of the Linux environment and practise with command line
2. Practise with Oracle VM VirtualBox

The objectives of the lab, Lab 01, is to provide students an introduction to the Linux environment that will be used for the subsequent labs and the coursework assessments for the course. Students are expected make use of virtual machines (VM) to complete the practical part of the course and the second part of this practical is to introduce students to the Oracle VirtualBox VM and to install a Linux distribution in a VirtualBox VM. There is nothing to submit at the end of this lab, however students are encouraged to log and record their certificate and results in a document. There are some questions **coloured in blue** that you can use as indication to record in your logbook (e.g. lab01_logbook).

Lab 1.1: Fundamentals of Linux environment

This task is to get familiarised with the basics of the Linux environment, putting emphasis on the Linux command line. As part of the Digital Forensics course, students will need to be familiar with executing Linux commands at the command line. The LinkedIn learning site has some courses and videos that introduces Linux. You should use your Heriot-Watt student credentials to sign-in. Follow the link for the course “*Learning Linux Command Line*” on LinkedIn learning or click on this link:

<https://www.linkedin.com/learning/learning-linux-command-line-14447912>

Go through the course by watching the videos and attempting the Chapter quizzes. Once you complete the full course you will be eligible for a “Certificate of Completion” of the course. **Download your certificate and save a screenshot of your certificate in your logbook.**

If you want more practise or a more in-depth introduction to Linux, check this page by Dr Loidl:

<http://www.macs.hw.ac.uk/~hwloidl/Courses/LinuxIntro/t1.html>

Lab 1.2: Practise with Oracle VM VirtualBox

Follow the link for the course “*Learning VirtualBox*” on LinkedIn learning or click on this link:

<https://www.linkedin.com/learning/learning-virtualbox-19862434/>

At the end of the course, you should have a better understanding of how to use a virtual machine with Linux.

Lab 1.3: Install a Linux distribution on VirtualBox

The last section of the lab session is to install a Linux distribution (distro) on VirtualBox. You can use VirtualBox on the lab machines or download a VirtualBox package from [here](#):

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

Install and run VirtualBox.

Download one Linux distro and create a VM in VirtualBox. Some examples of Linux distros are Ubuntu, openSUSE, Linux Mint, Manjaro. You can select any Linux distro you prefer.

You can check this course for installing Ubuntu on VirtualBox:

<https://www.linkedin.com/learning/learning-ubuntu-desktop-18015807>

Take a screenshot of your VM in your VirtualBox and record in your logbook.

End of Lab sheet