

## Tutorial: Linux shell

<b>Description</b>	All labs in this unit make use of a Linux shell. This tutorial aims to familiarize a learner with shell commands and their actions.
<b>Purpose</b>	Introduce learners to the Linux bash shell which is also available as the Ubuntu shell in Windows 10.
<b>Audience</b>	This module is intended for: <ol style="list-style-type: none"><li>1 The general public</li><li>2 K-12 and college classes on cyber defense</li><li>3 preparation for proficiency in the use of tools and a computing environment suitable for the study of cyber defense</li></ol>
<b>Objectives</b>	After completing the module: <ol style="list-style-type: none"><li>1 Familiarity with the Linux operating system sufficient for running various cyber defense tools</li><li>2 Familiarity with several, specific features of the Linux operating system</li><li>3 Understanding of the benefits of operating in a Virtual Machine</li></ol>
<b>Keywords</b>	shell, tutorial, Linux, Ubuntu, commands, tools
<b>Category</b>	cybersecurity > education
<b>Delivery</b>	java applets and written documentation in pdf format
<b>Team</b>	John Franco and Ethan Link
<b>Assessment</b>	The applets provide the means for experimentation. Questions are asked in the documentation that help with the set up of experiments. The ideas that learners come up with is evidence that the module was successful.
<b>Workflow</b>	No particular schedule was established
<b>Environment</b>	All materials are contained in a single jar file. The jar file can be run on any computer where java version 14 or higher and some pdf reader such as acroread or evince are available. The jar file may be executed in the cyber range or learners may download the jar file (which is considered to be an executable file) and run it on their personal computers.