



## ➤ What is Linux?

Linux is a Unix-like operating system that was designed to provide personal computer users a free or very low-cost operating system comparable to traditional and usually more expensive Unix systems. Linux has a reputation as a very efficient and fast-performing system. Linux's kernel was developed by Linus Torvalds at the University of Helsinki in Finland.

## ➤ Course Description

This is a 4 day course that combines the necessary fundamentals of the Linux operating system with hands-on practical exercises. Various discussions and solutions to the exercises are encouraged using this approach. It is intended to give delegates an excellent grasp of the Linux environment from the basics, to interrogating files and using the network.

## ➤ Course Objectives

On completion of this course delegates will be able to:

- Describe the function of the Linux environment and variants
- Use the user interface (command line and graphical)
- Work with and understand the Linux File system through file manipulation
- Understand what a Shell is and what it does
- Multi-task the system and work with multiple processes
- Use a text editor (VI or dtpad)
- Understand Linux security
- Schedule Jobs
- Use the network utilities
- Print and work with floppy disks/tapes

## ➤ Who should attend?

The course is aimed at the beginner or new comer to the Linux environment, although it will also suit those users who have had some prior exposure, but want to enhance their learning in a more formal, structured manner

## ➤ Prerequisites

There are no prerequisites for this course but previous exposure to another operating or command line system would help.

**DURATION**

**4 DAYS**

## Course Content

### ☒ What is Linux?

An introductory look at where Linux started, what it is used for and the types and flavours that exist.

### ☒ Getting Started

Logging in and out of the system; User types; User interfaces; the Windows environment; Some windows utilities; Command line structure; Some simple commands; Getting help.

### ☒ The File System

A guided tour of the system, file and directory manipulation, viewing files, home directories, help.

### ☒ The Shell Environment

A look how the command line interface works. Wild card expressions, command line history and editing. Variables and the user environment files.

### ☒ Redirection

Working with the shell's file descriptors >, <, >>. How log files are created. Using pipe lines to enhance your commands.

### ☒ Processes

Define program, process and daemons. Listing and signaling processes. Multi-task your environment.

### ☒ Introduction to VI

What is VI, how to get into it, editing a file, inserting, deleting and moving through text.

### ☒ File Security

Users; groups; displaying permissions; how permissions work and how to change them.

### ☒ Job Scheduling

Ad-hoc schedulers (batch, at). Regular scheduler (cron). Enable overnight or specific time of day jobs.

### ☒ Basic Network Utilities

Understand the basics behind networking. Use generic utilities like telnet, ping, ftp. Linux utilities like rlogin, rsh, rcp.

### ☒ Printing

How to print files in the command line and windows environment.

### ☒ Power Tools

Working with sed, awk, find, diff and many other tools to help you interrogate the Linux system and files.

### ☒ Working With Removable Media

Making simple backups to disk or tape using tar, cpio, and dos utilities.

### ☒ More VI

Configure your VI environment, advanced techniques for searching and other tricks.

### ☒ Introduction To Shell Scripting

Learn how to write simple scripts to perform mundane tasks. How to make your script generic to other users, simple loops and conditional testing.