

# Intermediate UNIX *(two days)*

Become an advanced UNIX User

## Relevant Platforms

- HP-UX
- FreeBSD
- Solaris
- Dynix
- SCO
- Linux

The course can be run for generic UNIX or the specific platform you are interested in.

## You will learn how to

- Login and logout of UNIX
- Manipulate files and directories in the shell
- Recall and edit commands
- Build several commands into a command line tool
- Use the vi editor (emacs is optional)
- Manage UNIX processes
- Use UNIX tools including sed and awk
- Use networking tools
- Write shell scripts

## Course Benefits

UNIX is recognised as a leading Enterprise server, having a very large market ranging from small to very large businesses. The majority of web-servers in the world run on UNIX platforms.

Using UNIX is becoming increasingly important as the Internet grows and more and more companies implement UNIX or Linux systems.

This course is generic, and the skills learnt apply equally to HP-UX, Sun Solaris, ICL DRS/NX, Linux, Dynix, SCO or other versions of UNIX.

## Who Should Attend

This course is designed for the first time or basic UNIX user. The course is ideally suited for those who are currently using UNIX but wish to know how it works and to extend their knowledge. It is also suitable for those with no UNIX experience.

Optionally, the course can cover common tools used by developers such as make and SCCS, please contact us for further details.

## Course Contents

### Introduction

- Recap the basics
- History of UNIX
- Unique features of UNIX
- Login & Logout
- The structure of UNIX

### The Shells

- sh, ksh, csh, bash
- The command line
- Running commands
- File wildcards
- Aliases
- Command substitution
- Shell variables
- Special shell variables
- Command history
- Input and Output
- stdin, stdout, stderr
- redirecting output, errors, input
- combining output
- Pipes & filters

### Editing in UNIX

- UNIX editors genealogy
- Ed, ex, vi and emacs
- vi tutorial
- emacs (optional)

### Files

- The file system
- File names and extensions
- Directories
- Moving around directories
- Files - where are things?
- File devices
- Listing files
- Looking at file contents
- Manipulating files
- Finding files
- Comparing files

### Processes

- What are Processes?
- Viewing Processes
- ps and top
- signals & kill
- Controlling Jobs
- Scheduling

### UNIX tools

- Filters & tools
- cat, tee, grep
- Regular expressions
- tr, cut, sort, uniq
- sed and awk
- od, strings

### Shell Scripts

- The basics
- Comments
- Creating output

- Interactive input
- I/O
- Script arguments
- Special variables
- Permissions & PATH
- Return codes
- Conditional tests
- Conditional statements
- Loops
- The case command
- Shell functions
- Options
- Debugging

### Networking

- TCP/IP
- Generic Applications
- FTP
- telnet
- The "r" commands

### System Administration

- A brief introduction

### Conclusion

- Opportunity for review, final questions and further hands-on

## Hands-On

During the course there will be extensive opportunities for hands-on work. Each module has detailed exercises associated with it. Every delegate has at least one server provided for his or her own use during the course.

Hands-On includes:

- Logging in and out
- Using the UNIX shell
- Starting stopping and managing processes
- Creating files with vi
- Managing files and directories
- Creating shell scripts
- Using network tools

## The Trainers

All our trainers are practising Linux Consultants with extensive experience with UNIX in large commercial environments. They are ideally suited to bringing you the highest quality of training.

## The Trainers

For further information about the company see our web-site at: [www.erion.co.uk](http://www.erion.co.uk)

