

Course Outline



Tel: +44 (0) 118 979 4000 Fax: +44 (0) 118 979 4000

Email: training@ptr.co.uk Web: www.ptr.co.uk

Unix Fundamentals

Course Description:

The objective of this course is to provide a comprehensive introduction to the UNIX operating system.

At the end of the course delegates will have the fundamental skills required to login to a Unix system, manage files and directories, use Unix commands and manage processes, use an editor, access the electronic mail facility and create simple shell scripts.

Pre-requisites:

Delegates should be computer literate and familiar with the basic usage of an operating system, although no prior knowledge of UNIX is required.

Course Content:

- **Introduction to UNIX**
- **Executing UNIX Commands**
- **Using Electronic Mail**
- **The UNIX Filesystem**
- **Accessing Files**
- History of Unix, Unix Features, Unix System V, Standards
- Logging in, The shell prompts, Unix Commands syntax, Arguments and options, Basic Unix commands, Terminal characteristics.
- Reading your mail, Sending mail, Saving mail, Replying and forwarding, Deleting mail messages.
- File system structure, Directories and files, Important Unix directories, The Kernel, User's home directory, Naming convention.
- Wildcards, Pathnames (Absolute & Relative), Changing Directories, Listing files, File details, Sub-directories (making & removing).

21a Peach Street Wokingham Berkshire RG40 1XJ

Tel 0118 979 4000 Fax 0118 979 4035 Email training@ptr.co.uk www.ptr.co.uk

Registered Office: Grenville Court Britwell Road Burnham Bucks SL1 8DF Company Registered No: 2442290 – VAT registration No:532 1929 56

Course Outline



Tel: +44 (0) 118 979 4000

Fax: +44 (0) 118 979 4000

Email: training@ptr.co.uk

Web: www.ptr.co.uk

- **Redirection**
 - Standard input & output devices, redirecting output and appending output, Displaying contents of files.
- **File Management**
 - Copying files, Removing files, (interactively & recursively), Moving files, Managing Multiple files, Removing directories
- **Permissions**
 - Finding User, Group and other permissions, Read, Write and Execute permissions, Effect of permissions on files and directories, The unmask, Changing permissions on files and directories. Changing file ownership and group
- **Linking files**
 - I-nodes, Hard links, Symbolic links
- **Printing**
 - Formatting for printing, Sending files to the printer.
- **Sorting the Contents of Files**
 - ASCII, Normal Sort, Numeric Sort, Merging Sorted Files, Saving the Sorted Output, Sort Keys, Multiple Keys, Field Separators, Duplicated Records, Case Sensitivity.
- **Other Unix File Utilities**
 - Counting words, lines and characters, Looking at the start and end of files, File comparisons Creating ed scripts with diff. Suppressing duplicated output.
- **Combining Unix Commands and Utilities**
 - Piping standard output to new commands, Filtering standard output in a pipeline.
- **Finding Files**
 - The find command syntax, Defining search, Find actions, Executing commands on matched files
- **Finding patterns in files**
 - Grep regular expressions, Special characters

21a Peach Street Wokingham Berkshire RG40 1XJ

Tel 0118 979 4000 Fax 0118 979 4035 Email training@ptr.co.uk www.ptr.co.uk

Registered Office: Grenville Court Britwell Road Burnham Bucks SL1 8DF Company Registered No: 2442290 – VAT registration No:532 1929 56

Course Outline



Tel: +44 (0) 118 979 4000

Fax: +44 (0) 118 979 4000

Email: training@ptr.co.uk

Web: www.ptr.co.uk

- **The Unix editors**
 - Invoking vi, COmmand and edit mode, Moving around, Undo, Deleting, Saving, Pattern searches, Changing text, Replacing text, Moving text, Copying and Pasting, Joining lines, Named buffers, The ed editor, Substitution, Global substitution.
- **Introduction to Bourne & Korn Shells**
 - Different shells and features, Invoking a shell, The PATH, Quotation marks, Variables, Shell variables, Exporting variables, Environment variables, Process variables, User profiles.
- **Processes**
 - Foreground processes, Background processes, Command priority, Process status, Killing processes
- **Shell Script Basics**
 - Creating and executing a script, Script parameters

Course Duration:

3 Days