Linux Fundamentals

Duración: 5 Días Código del Curso: LF

Temario:

English - Please note this course is only available in English.
Español - Por favor, tenga en cuenta que esta formación solo está disponible en inglés.
Linux Fundamentals Course Overview
This Linux Operating System and Bash Shell Programming training course introduces the delegate to the main concepts of the LINUX Operating System.

Dirigido a:

Who will the Course Benefit?

There are no formal pre-requisites for the Linux Fundamentals course,although an understanding of and exposure to information technology is advantageous.
Programmers,administrators and support personnel who need to understand the LINUX Operating system,existing shellscripts,automate procedures and write their own utilities.

Objetivos:

- Course Objectives
- To provide the skills needed to work productively in a LINUX environment to develop and customise shell programs.

Prerequisitos:

- There are no formal pre-requisites for this Linux Fundamentals training course,although an understanding of and exposure to information technology and an understanding of operating systems is required.

Siguientes cursos recomendados:

Further Learning

- Linux System Administration (LPI)
- Oracle SQL
- Linux Advanced Shell Programming Tools
- Linux Networking

Contenido:

Linux Fundamentals Training Course Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: INTRODUCTION TO THE LINUX OPERATING SYSTEM

- A brief history of UNIX / Linux
- The UNIX / Linux kernel
- The UNIX / Linux file system structure
- File and directory management commands
- Absolute vs Relative Pathnames
- Further basic commands
- Exercise: Navigating the file system

Session 2: BASIC COMMANDS

- Command line syntax
- Basic file handling commands
- Basic Directory handling commands
- Filename wildcard characters
- Using commands with logical AND and OR
- Sequential command execution
- Exercise: Manipulating files and directories

Session 3: REDIRECTION AND PIPES

- Input and Output redirection
- Redirecting errors
- Piping commands
- Exercise: Using redirection and pipe facilities Linux Fundamentals Training Course Course Contents - DAY 2

Session 4: INTRODUCTION TO THE vi/Vim EDITOR

- Overview of the vi/Vim editor
- The language of vi
- Undoing and Redoing changes
- Input Mode and Last Line Mode
- Further vi functions
- Executing commands within vi / Vim
- Customising the vi / Vim Environment
- Getting Help
- Exercises: Using the vi editor

Session 5: SEARCHING AND REPLACING TEXT

- Searching and replacing text using the vi/Vim editor
- Using regular expressions (regex)
- Using sed for search and replace
- Searching for text with grep,egrep and fgrep
- Exercises: Searching and Replacing Text

Session 9: PROCESSES

- What is a process?
- Monitoring processes
- Killing processes
- Background processes
- Job Control
- Grouping commands
- Exercise: Monitoring and controlling processes

Session 10: THE USER ENVIRONMENT

- Customising the .profile or .bash_profile
- Customising the .kshrc or .bashrc
- Exercise: Setting up an environment

Session 11: MORE BASIC COMMANDS

- The find command
- Using xargs command
- The locate command
- The df command
- The cut command
- The sort command
- Finding duplicate content
- Number sequencing
- Exercise: More Basic Commands Linux Fundamentals Training Course Course Contents - DAY 4

Session 12: UNIX COMMAND REVIEW

- Basic Unix commands
- General commands
- File and directory handling commands
- Filename generation characters and regular expressions (regex)
- I/O Redirection features
- Other commands

Session 13: GETTING STARTED

- What is a shell script?
- Development guidelines
- Creating and editing shell scripts
- Naming and storing shell scripts
- Executing shell scripts
- Exercise: Write a simple shell script

Session 14: USING VARIABLES

- Environment variables
- Local variables
- Assigning values to variables
- Assessing variable values
- Using quotes
- Delimiting variable names
- Echo control sequences
- Exercise: Add variables to a script

Session 15: INTEGER ARITHMETIC

Session 19: LOOP CONSTRUCTS

- The while loop
- The until loop
- The for loop
- The while true and until false loops
- Loop control commands
- Exercise: Enhancing the previously written scripts
- Exercise: Writing a script to copy files using a 'for' loop
- Exercise: Writing a script to generate numbers with the 'while' loop

Session 20: MULTI-BRANCH DECISIONS

- The case statement
- Menu driven applications
- Exercise: Developing and writing a menu system

Session 21: SCRIPTING WITH AWK

- Fundamentals of AWK
- Basic AWK scripts
- AWK within Bash constructs
- Exercise: AWK scripts

Session 22: FUNCTIONS

- What is a function?
- Syntax
- Examples
- Exercise: Add a function to a script

Session 23: INTERRUPT HANDLING

- Interrupt signals
- Trapping interrupts
- Exercise: Adding traps to the menu script

Appendix A: ADDITIONAL FEATURES AND FACILITIES

- The exec commands
- The includes notation
- More about loops
- Arrays

Appendix B: VIM QUICK REFERENCE

Appendix C: UNIX COMMANDS QUICK REFERENCE

Appendix D: ADDITIONAL EXERCISES

Session 6: RECALLING AND EDITING COMMANDS

- Overview
- The bash shell
- The korn shell
- Exercises: Recall and Edit Commands

Session 7: FILE PERMISSIONS AND ACCESS CONTROL

- Users and user groups
- File access permissions
- Changing file attributes
- Switching users and user groups
- Linking files
- Exercise: Setting and access permissions
  Linux Fundamentals Training Course
  Course Contents - DAY 3

Session 8: FILTERING AND FORMATTING TEXT

- Overview
- The paste command
- The cut command
- An introduction to awk
- The nl command
- Exercises: Filtering Text

- Using the expr command
- Using the (( )) notation
- Exercise: Add integer arithmetic to a shell script

Session 16: HANDLING RUN TIME DATA

- The read command
- Command line arguments
- Exercise: Writing a generic shell script
- Exercise: Writing an interactive shell script

Session 17: CONDITIONAL EXECUTION

- The if statement
- The test command
- Exercise: Adding validation to previous scripts

Session 18: ADDITIONAL KORN,BASH ; POSIX SYNTAX

- Other test notations
- Default and substitute variables
- Exit status codes
- Exercise Linux Fundamentals Training Course Course Contents - DAY 5

Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

info.cursos@globalknowledge.es

www.globalknowledge.com/es-es/

Global Knowledge Network Spain, C/ Retama 7, 6ª planta, 28045 Madrid