

## **HP-UX Fundamentals**

Cursusduur: 5 Dagen Cursuscode: HF

# Beschrijving:

# **HP-UX** Fundamentals Course Overview

This Hewlett Packard HP-UX Operating System and Posix Shell Programming training course introduces the delegate to the main concepts of the HP-UX Operating System. The most commonly used commands are described in detail as are the command line wildcard and redirection facilities. The mechanisms by which a user acquires a login environment are discussed and the main features of the Korn/Posix/Bash Shells are introduced

The course is designed to give delegates practical experience in developing and writing shell scripts. Most of the built-in shell commands are introduced together with the main program control structures.

Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

## Doelgroep:

### Who will the Course Benefit?

There are no formal pre-requisites for the HP-UX Fundamentals course, although an understanding of and exposure to information technology is advantageous.

Programmers, administrators and support personnel who need to understand the HP-UX Operating system, existing shellscripts, automate procedures and write their own utilities.

Some programming experience may also prove advantageous.

### Doelstelling:

Course Objectives

To provide the skills needed to work productively in an HP-UX environment to develop and customise shell programs.

# Vereiste kennis en vaardigheden:

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

# Vervolgcursussen:

Further Learning

- HP-UX System Administration
- Oracle SQL
- HP-UX Advanced Shell Programming Tools
- Linux Networking

#### Cursusinhoud:

HP-UX 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 HP-UX 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 HP-UX 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 8: FILTERING AND FORMATTING TEXT

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

#### 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 HP-UX Fundamentals Training Course Course Contents - DAY 5

#### 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: FUNCTIONS

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

### Session 22: INTERRUPT HANDLING

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

# Session 23: ADDITIONAL FEATURES AND FACILITIES

- The exec commands
- The includes notation
- More about loops
- Arrays
- Here Documents
- Exercise: Create a here script

# 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 HP-UX Fundamentals Training Course Course Contents - DAY 3

- 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

- 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

### Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

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