HP-UX Posix Shell Programming

Cursusduur: 5 Dagen **Cursuscode: HPSP**

Beschrijving:

HP-UX Posix Shell Programming Course Overview

English - Please note this course is only available in English.
Nederlands - Let op: deze training is alleen in het Engels beschikbaar.
Français - Veuillez noter que ce cours est uniquement disponible en anglais.
This Hewlett Packard HP-UX Posix Shell Programming training 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.
The course also gives practical experience using a range of HP-UX tools to manipulate text and incorporate into HP-UX shell scripts.

Doelgroep:

Who will the Course Benefit?

Programmers,developers and system administrators who need to construct shell scripts and process text files using advanced text handling facilities.
The HP-UX Posix Shell Programming course assumes knowledge of the HP-UX Operating System to the level covered in the HP-UX Introduction course. Some programming experience may also prove advantageous.

Doelstelling:

- Course Objectives
- To provide the skills needed to develop and customise shell programs and to make effective use of a wide range of standard HP-UX programming and development tools.

Vereiste kennis en vaardigheden:

- The HP-UX Posix Shell Programming course assumes knowledge of the HP-UX Operating System to the level covered in the HP-UX Introduction course. Some programming experience may also prove advantageous.

Vervolgcursussen:

Further Learning

- HP-UX System Administration
- Oracle SQL

Cursusinhoud:

HP-UX Posix Shell Programming Training Course Course Contents - DAY 1

Course Introduction

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

Session 1: UNIX COMMAND REVIEW

- Basic Unix commands
- General commands
- File and directory handling commands
- Filename generation characters
- I/O Redirection features
- Other commands

Session 2: 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 3: 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 4: INTEGER ARITHMETIC

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

Session 5: HANDLING RUN TIME DATA

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

Session 6: CONDITIONAL EXECUTION

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

Session 7: ADDITIONAL KORN,BASH ; POSIX SYNTAX

Session 8: 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 9: MULTI-BRANCH DECISIONS

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

Session 10: FUNCTIONS

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

Session 11: INTERRUPT HANDLING

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

Session 12: ADDITIONAL FEATURES AND FACILITIES

- The exec commands
- The includes notation
- More about loops
- Arrays
- Here Documents
- Exercise: Create a here script HP-UX Posix Shell Programming Training Course Course Contents - DAY 3

Session 13: BACKUP AND RESTORE UTILITIES

- Backing-up and restoring files
- Basic and advanced use of tar
- Compression utilities gzip,bzip2,zip and compress
- Exercise: Backing up and restoring files using tar
- Exercises: Compressing files

Session 14: BACKGROUND JOB SCHEDULING

- Scheduling jobs with the cron command

Session 17: IDENTIFYING AND TRANSLATING CHARACTERS

- od - octal dump
- Use cat to display non-printing characters
- View and format files with nl
- The expand and unexpand commands to convert between tab and space characters
- The tr command for character translation
- Exercises: Translating characters with tr

Session 18: REGULAR EXPRESSION NOTATION REVIEW

- Standard regular expressions
- Searching with grep
- Metacharacters,positional characters and quantifiers
- Extended regular expressions
- POSIX character classes
- PERL expressions

Session 19: THE STREAM EDITOR sed

- sed command line syntax
- sed script files
- sed command processing
- sed addresses and simple instructions
- sed pattern space and hold space
- Grouping sed commands
- Hold and get functions
- Advanced flow control
- Write output to temporary files
- Exercises: Text processing with sed

Session 20: FUNDAMENTALS OF AWK

- Basic AWK usage
- AWK program-files
- AWK scripts
- AWK variables
- Pattern matching with AWK
- AWK extended patterns

Session 21: AWK OPERATORS

- AWK operators
- AWK arithmetic operations
- AWK output
- Formatting output with printf
- Exercises: Create awk scripts to extract selected data from a file and generate reports HP-UX Posix Shell Programming Training Course Course Contents - DAY 5

Session 22: AWK PROGRAM CONTROL STRUCTURES

- The BEGIN and END functions
- The AWK if construct
- The AWK else if construct
- The AWK while construct
- Other program control statements

- Other test notations
- Default and substitute variables
- Exit status codes
- Exercise HP-UX Posix Shell Programming Training Course Course Contents - DAY 2

- Scheduling jobs with the at command
- Exercises: Running background jobs

Session 15: COMMANDS FOR COMPARING FILES

- Compare files with the cmp command
- Compare and format files with pr
- Compare files with the comm command
- Compare files with the diff and sdiff commands
- Compare large files with the bdiff command
- Exercises: Identifying file differences

Session 16: SPLITTING FILES

- The fold command
- Split files using context and content rules
- Exercises: Splitting files HP-UX Posix Shell Programming Training Course Course Contents - DAY 4

- The AWK break,continue and exit statements
- User defined functions
- Exercises: Create AWK scripts and program-files utilising program control structures

Session 23: AWK FUNCTIONS

- AWK string functions
- AWK length,tolower,toupper,index,sub,gsub,match,substr,split,sprintf,system and getline functions
- Exercises: Generate AWK scripts and program-files to extract and format data using AWK functions

Session 24: AWK ARRAYS

- AWK associative arrays
- Multi-dimensional arrays
- Exercises: Create AWK associative arrays to process text files and generate reports

Session 25: MISCELLANEOUS TOOLS

- bc (calculator)
- fuser (testing for files in use)
- getops (checking options passed to shell scripts)
- printf (formatting screen output)
- logger (script logging)
- xargs (generating arguments for a command)
- eval (re-evaluating variables)
- Exercises: Using tools within a 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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