

# **HP-UX Advanced Shell Programming Tools**

Duration: 3 Days Course Code: HASP Delivery Method: Virtual Learning

### Overview:

This Hewlett Packard HP-UX Posix Shell Programming training course is designed to give delegates practical experience using a range of HP-UX tools to manipulate text and incorporate them into HP-UX shell scripts.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

## **Target Audience:**

Programmers, developers and system administrators who need to construct shell scripts and process text files using advanced text handling facilities.

The HP-UX Advanced Shell Programming Tools course assumes knowledge of the HP-UX Operating System to the level covered in the HP-UX Introduction course. Some shell programming experience to the level covered in HP-UX Shell Programming is also necessary.

## Objectives:

To provide the knowledge and skills to make effective use of a wide range of standard HP-UX programming and development tools.

## Prerequisites:

The HP-UX Advanced Shell Programming Tools course assumes knowledge of the HP-UX Operating System to the level covered in the HP-UX Introduction course. Knowledge of HP-UX Shell Programming to the level covered on the HP-UX Shell Programming course is also a requirement. Alternatively, relevant experience of UNIX or Linux servers is required.

## Follow-on-Courses:

- HP-UX System Administration (HSA)
- Oracle SQL (OSP)

#### Content:

HP-UX Advanced Shell Programming Tools Training Course Course Contents - DAY 1

#### Course Introduction

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

# Session 1: 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 2: BACKGROUND JOB SCHEDULING

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

# Session 3: COMMANDS FOR COMPARING FILES

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

#### Session 4: SPLITTING FILES

- The split and csplit commands
- Exercises: Splitting files HP-UX
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# Session 5: IDENTIFYING AND TRANSLATING CHARACTERS

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

# Session 6: REGULAR EXPRESSION NOTATION REVIEW

- Standard regular expressions
- Extended regular expressions

#### Session 7: 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
- Exercises: Text processing with sed

### Session 8: FUNDAMENTALS OF AWK

- Basic AWK usage
- AWK program-files
- AWK scripts
- AWK variables
- Pattern matching with AWK
- AWK extended patterns
- 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 Advanced Shell Programming Tools Training Course Course Contents - DAY 3

# Session 9: 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
- The AWK break, continue and exit statements
- User defined functions
- Exercises: Create AWK scripts and program-files utilising program control structures

#### Session 10: AWK FUNCTIONS

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

### Session 11: AWK ARRAYS

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

### Session 12: 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

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931 <a href="mailto:info@globalknowledge.co.uk">info@globalknowledge.co.uk</a>

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