

Course : Shell scripting on Unix/Linux, advanced

Practical course - 2d - 14h00 - Ref. ELP

Price : 1610 CHF E.T.

★★★★☆ 4,2 / 5

Optimize task management under Linux with this advanced Shell course. You'll learn about variables, I/O management, string manipulation and library creation.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Master extended shell I/O
- ✓ Handling strings
- ✓ Reinforce a shell script using getopts
- ✓ Create a library of simple functions
- ✓ Analyzing a shell script

Intended audience

Developers, Unix/Linux administrators.

Prerequisites

Good shell knowledge or equivalent of "Shell scripting on Unix/Linux" (ref. SHL). Basic knowledge of a Linux/Unix system. Experience required.

Course schedule

1 Introduction ksh

- Fundamentals: fork/wait and exec/exit.
- The shell, scripts and strings.

PARTICIPANTS

Developers, Unix/Linux administrators.

PREREQUISITES

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TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

2 Korn shell specificity

- Initializing ksh, the command line and vi and emacs modes.
- Function management in ksh.
- Signal management in ksh.
- Ksh builtins.
- traps", exit and debug, debugging a ksh script.
- KSH an Object language: Setter and Getters for shell variables.

Hands-on work

Adapt your environment for ksh, .profile, command editing mode. Use DEBUG trap and setter/getter to analyze a script.

3 Variables, arithmetic and logical expressions

- Differences from Bourne Shell and Bourne again shell.
- Variable types.
- Associative tables.
- Compound, aggregate variable.
- Binary variables.

Hands-on work

Using an associative array (Key/Value) and variable aggregates to manage a ksh database.

4 Extended inputs/outputs

- Co-processes.
- The builtin exec.
- Process substitution.
- Read and write binary in shell.

Hands-on work

Write a shell daemon (exec), use coprocess to create a random number server, write a binary analysis program.

5 Character strings

- Parameter substitution and expansion.
- Ksh getopts to manage command parameters.
- ksh extensions for printf and read, use of select to manage a man-machine interface.

Hands-on work

Strengthen a shell script using getopts, parameter substitution to manage extensions and directories. Use select, read and printf in an interactive shell.

6 Increase korn shell capabilities

- Functions, specificity of varname functions.
- Function libraries.
- Builtins, writing a builtin for KSH, integrating a builtin, builtin libraries.

Hands-on work

Create a library of simple functions, basename, dirname... Add a builtin to ksh to read a timer stamp accurate to the nanosecond.

TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

Dates and locations

REMOTE CLASS

2026 : 15 June, 28 Sep., 23 Nov.