Linux, Mastering Tools

Hands-on course of 3 days - 21h
Ref.: LIU - Price 2024: CHF2 030 (excl. taxes)

THE PROGRAMME

last updated: 01/2018

1) Using bash

- Using a shell interpreter.
- Using meta-characters (*, $, [,], …).
- Command line execution, redirecting and pipes (<, <<, >, >>, |).
- Launching a command.
- Common errors.

2) Automating tasks using shell scripts

- Startup and install script.
- Monitoring (connexion, file system, files).
- Creating a script-shell (&, #!, source).
- Variables. Passing arguments.
- Profiling your scripts (2>, script, tee, debug, etc.).
- Using at and crontab to execute delayed commands.
- Shell programming : conditional structures (if, for, while), additions (functions, return value, etc.).

3) Grep, ed, sed and regular expressions

- Regular expressions. Meta-characters.
- Getting lines with grep using simple and complex patterns.
- Grep extensions : egrep, fgrep.
- Editing with sed. Syntax. Simple examples (display, remove, substitute).
- Advanced sed.

Hands-on work : Grep and sed examples.

4) Awk language

- Awk compared to sed and grep.
- Using patterns in awk.
- Variables, records and fields ($0,$1,$NR, etc.).
- Simple and complex patterns.
- Awk as a complete language.
- Essential functions in awk.
- Advanced features.

5) Publishing data

- Converting data (ASCII, MIME). Accents.
- Displaying file contents (od), transform (tr), converting (dos2unix), formatage (tex et latex), publishing (latex2pdf).
- Presenting data : (more or less), concatenate data (fold, pr, col, etc.).

6) Managing files with tools and commands

- File type : file. Read anc concatenate : cat.
- File statistics : wc. Splitting a file : split, csplit

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.

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.

- Comparing files : diff and cmp. Sorting files : sort.
- Searching in files : find. Archiving : tar.
- Compress files : compress, gzip, bzip2, zip, …
- Other tools : patch, strings, uniq, comm, etc.

DATES

REMOTE CLASS
2025 : 26 Feb, 11 Jun, 24 Sep, 08 Dec