Linux, Mastering Tools

Hands-on course of 3 days - 21h
Ref.: LIU - Price 2025: 2 080 (excl. taxes)

THE PROGRAMME

last updated: 02/2024

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

- 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 : 24 sept., 08 déc.