Course : Linux server maintenance and troubleshooting

Practical course - 4d - 28h00 - Ref. LMD
Price : 2650 CHF E.T.

★★★★★ **5 / 5**

This training course provides you with the approach and technical knowledge you need to identify the causes of problems encountered on your Linux servers and resolve them effectively.

🎯 Teaching objectives

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

- ✔ Managing system updates
- ✔ Solve major boot, network and disk space problems
- ✔ Manage system bottlenecks
- ✔ Exploit logs and raise alerts
- ✔ Understanding high availability mechanisms

Intended audience
System administrators, system engineers.

Prerequisites
Good knowledge of Linux/Unix administration.

Practical details

Hands-on work
Discussions, experience sharing, demonstrations, tutorials and case studies.

Teaching methods
Active pedagogy based on a range of real-life situations, examples, experience sharing, case studies and assessment of acquired skills throughout the course.

Course schedule

PARTICIPANTS
System administrators, system engineers.

PREREQUISITES
Good knowledge of Linux/Unix administration.

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.

1. Install packages, patches and updates

- Yum configuration, Plug-ins overview.
- Handling Yum's cache.
- System upgrade.
- Package depot and local mirror.
- Patch deployment.

Hands-on work
Set up a package repository. Search for packages and resolve dependencies.

2. Solving start-up problems

- Starter charger.
- Core and initial ramdisk.
- The root-filesystem and its directories.
- /dev and peripherals.
- Take control of a system that doesn't boot.
- Forgot your password?

Hands-on work
Real-life examples of various boot-up and system connection problems. Get to grips with a Disaster Recovery solution.

3. Diagnose network problems

- Identify interfaces and check their settings.
- Routes, routing and host accessibility.
- Link, routing and name problems.

Hands-on work
Full configuration of addressing, routing and name resolution elements to be able to diagnose potential problems at each level.

4. Solve disk space and filesystem problems

- Boot-sector, MBR and partition table.
- Check file system integrity.
- Repair a corrupt file system.
- System and disk image backups.

Hands-on work
Integrity check and file system extension after saturation.

5. Detect bottlenecks and calibrate the system

- Monitor memory and swap usage.
- I/O and disk performance.
- Priority management and CPU load.
- Important kernel parameters.
- Performance analysis tools.

Hands-on work
Identify bottlenecks. Cause a system crash due to memory saturation.

(6) Logs and alerts

- Read and understand error messages.
- Centralize system logs and escalate alerts.

Hands-on work
Implementation of an alert escalation system.

(7) Consider setting up a cluster-HA

- High availability and fault tolerance.
- High availability mechanisms under Linux.

Dates and locations

REMOTE CLASS
2026 : 31 Mar., 9 June, 20 Oct.