Course : Puppet, managing software configurations under Linux

Practical course - 2d - 14h00 - Ref. LPP
Price : 1960 CHF E.T.

This course will teach you how to manage your infrastructure centrally with the Puppet application. You'll see how to deploy software with the chosen configuration, keep systems and applications up to date, and use classes and modules to meet your current and future needs.

Teaching objectives

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

- ✔ Understanding how Puppet works
- ✔ Identify automation concepts and principles
- ✔ Software deployment and configuration
- ✔ Install and configure Puppet

Intended audience

System administrators, architects, systems and network engineers, project managers integrating a team already using Puppet or wishing to implement it in a professional context.

Prerequisites

Basic knowledge and experience of Unix/Linux administration.

Course schedule

1 Presentation

- Why centralized infrastructure management?
- Pourquoi Puppet ?
- Puppet versions and distributions.
- How Puppet works in general.

PARTICIPANTS

System administrators, architects, systems and network engineers, project managers integrating a team already using Puppet or wishing to implement it in a professional context.

PREREQUISITES

Basic knowledge and experience of Unix/Linux 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.

(2) Implementation

- Install a Puppet master.
- Configuring a Puppet master.
- Install and configure the Puppet agent.

Hands-on work

Installation and initial configuration of tools. Getting to grips with the environment.

(3) Getting to grips with Puppet's language

- The main types supported by Puppet.
- Language syntax.
- Generate files from templates.
- Relationships between resources.
- Defined resources.
- Information feedback with Facter.

Hands-on work

Manage users and groups. Deploy and configure software. Manage and monitor services. Describe current configuration with Puppet.

(4) Reusing Puppet modules

- Why reuse existing modules?
- Modules and classes.
- Use an existing module.
- Why structure Puppet code in the form of reusable modules?
- Write a new module.

Hands-on work

Select and install an existing module. Use an existing module. Restructure Puppet code into reusable classes. Write a reusable module.

(5) Connecting agents to Puppet master

- Master-agent architecture.
- Customer authentication.
- SSL certificate management.
- Plan agent launch.

Hands-on work

Integrate a new client into a Puppet infrastructure. Run the agent as a resident service. Run agent with cron.

(6) Best practices for deploying and using Puppet

- Code formatting.
- Use version management and integrate it with Puppet.
- Separate generic code from system-specific parameters.
- Manage private data, such as SSL passwords and private keys.
- Supervise reports.

Hands-on work

Use Puppet-lint to homogenize our code. Extract system-specific parameters to Hiera.

Dates and locations

REMOTE CLASS
2026 : 30 Mar., 15 June, 29 Oct.