SpiralTrain
developer courses

Puppet Configuration Management

Duration: 2 days   **Price: € 1499**

Open Schedule

Audience Course Puppet Configuration Management
The course Puppet Configuration Management is intended for system administrators and devops engineers who want to automate system management and application deployment with Puppet.
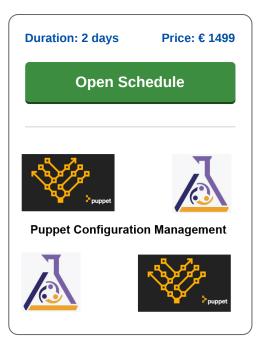
Prerequisites Course Puppet Configuration Management
General experience with system management in an IT infrastructure and knowledge of the Ruby programming language is beneficial for the understanding.

Realization Training Puppet Configuration Management
The subject matter is discussed on the basis of presentation slides and demos. The theory is interchanged with exercises. The course material is in English. Course times are from 9.30 to 16.30.

Certification Puppet Configuration Management
After successful completion of the course the participants receive an official certificate Puppet Configuration Management.

Puppet Configuration Management

Content Course Puppet Configuration Management

In the course Puppet Configuration Management participants learn to use the open source configuration management tool Puppet to manage a complex infrastructure of physical and virtual machines. Puppet uses Ruby to translate the infrastructure into code for easy configuration. Puppet follows the client-server model, where one puppet master machine in a cluster acts as a server and the others as slaves on nodes.

Puppet Architecture
The course starts with a discussion of the Puppet Architecture and the Ruby DSL language. This includes how configurations are defined and how deployment can be automated. The difference between Push Based Deployment and Pull Based Deployment is discussed.

Puppet Components
Subsequently the components of Puppet and how they work together are explained, such as the Puppet Master, Puppet Agents and Puppet Modules. Attention is also paid to the Configuration Catalog and the Config Repository and to the role of the manifest, templates and static files.

Puppet Resources
Then Puppet Resources such as Files, Users, Services and Processes are discussed. The distinction between the various Resource Types such as Built-in Resource Types, Puppet Defined Resources and Custom Resource Types is also treated.

Puppet Configuratie
Also part of the course program are the Puppet configuration file Puppet.conf and the various Puppet Commands such as the commands describe, schedule, service and mount. Working with classes as reusable units in Puppet with implementation hiding, iterator functions and events is discussed afterwards.

Puppet and Containers
Finally the course ends by explaining the use of Puppet in combination with containers. Then Docker, Vagrant, Kubernetes and Docker Swarm are treated.

Modules Course Puppet Configuration Management

Module 1 : Puppet Intro	Module 2 : Puppet Components	Module 3 : Puppet Resources
What is Puppet?	Puppet Master	Resource Types
Managing Infrastructure	Puppet Agents	Built-in Resource Types
Puppet Setup	Puppet Modules	Puppet Defined Resources
Ruby DSL Language	Reusable Units	Files and Users
Deployment Automation	Puppet Resources	Services and Processes
Deployment Models	Configuration Catalog	Packages
Push Based Deployment	Config Repository	Resource Title
Pull Based Deployment	Puppet Classes	Resource Tasks
Resource Abstraction Layer	Providers	Listing Resources
Idempotency	Manifest	Attributes and Values
Cross Platform	Templates	Testing Resources
Puppet Workflow	Static Files	Custom Resource Types
Defining Configurations	Facter and Facts	Resource Parameters
Module 4 : Puppet Commands	**Module 5 : Puppet Classes**	**Module 6 : Puppet and Containerization**
Puppet.conf	Class Syntax	Vagrant and Docker
Settings Lines	Defining Classes	Docker Hub
Setting Variables	Declaring Classes	Docker File
Environment Timeout	Differences with OOP	Automated Builds
Sign Request	Bundling Resources	The Puppet Forge
resource Command	Reusable Units	Creating a puppetfile
describe Command	Implementation Hiding	Puppet Manifest
schedule Command	Passing Events	Puppet Module Generator
service Command	Iterator Functions	Using .erb Files
mount Command	Parameterized Classes	Containers Schedulers
cron Command	include Keyword	Kubernetes and Docker Swarm