Ansible Configuration Management

Duration: 2 days **Price: € 1299**

Open Schedule

Ansible Configuration Management

Audience Course Ansible Configuration Management

The course Ansible Configuration Management is intended for system administrators and devops engineers who want to automate system administration and application deployment with Ansible.

Prerequisites Course Ansible Configuration Management

General experience with system management in an IT infrastructure is beneficial for the understanding.

Realization Training Ansible 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 up and to 16.30.

Certification Ansible Configuration Management

After successful completion of the course participants will receive an official certificate Ansible Configuration Management.

Content Course Ansible Configuration Management

In the course Ansible Configuration Management participants learn to use Ansible to automate the management of the IT infrastructure. Ansible is a simple open source IT engine that provides application deployment, intra service orchestration, cloud provisioning and many other IT tools. Ansible uses playbooks to describe automation tasks in the easy-to-understand configuration language YAML.

Ansible Architectuur

The course starts with an explanation of Ansible's multi-tier architecture that does not describe just one system, but how all systems are interrelated. Ansible does not use agents but connects to the nodes via SSH or other protocol and puts code in the form of Ansible Modules on the nodes to execute.

YAML Syntax

Next the YAML syntax is discussed. It is explained how Ansible groups the hosts with YAML in the hosts files. The joint hosts files then form the Ansible inventory.

Ansible Playbooks

Also attention is paid to Ansible playbooks that describe the commands, modules and tasks that are executed on a specific group of hosts from hosts files.

Task Automation

The precise details of automating tasks are also part of the course program. The parallelization of tasks, loops and conditional execution are treated and the use of environment variables is discussed as well.

Advanced Ansible

Finally attention is paid to a number of Ad-hoc Ansible commands such as shell commands and commands for managing files and directories and Advanced Ansible topics such as Playbook Includes, Custom Modules and Plugins are discussed.

Modules Course Ansible Configuration Management

Module 1 : Ansible Intro	Module 2 : YAML Syntax	Module 3 : Playbooks
What is Ansible?	Understanding YAML	Target Section
Configuration Management	YAML Start String	Variable Section
Connecting Node	YAML End String	Task Section
Default SSH Connection	Indentation	Handlers Section
Ansible Modules	Key Value Pairs	template Module
Management Node	List Representation	set_fact Module
Hosts File	Abbreviations	pause Module
Ansible Inventory	Dictionary Representation	wait_for Module
Deployment Automation	List inside Dictionary	assemble Module
Tasks in Playbook	List of Dictionaries	add_host Module
YAML Configuration	Include newlines	group_by Module
Service Orchestration	Suppress newlines	slurp Module
Cloud Provisioning	Booleans	Windows Modules
Multi-tier Deployment	Case Sensitivity	AWS Cloud Module
Module 4 : Controlling Tasks	**Module 5 : Ad-hoc Commands**	**Module 6 : Advanced Ansible**
Operations in Parallel	Parallelism Commands	Playbook Includes
Looping	Shell Commands	Task and Handler Includes
Conditional Execution	Passing Username	Role Metadata
Task Delegation	File Transfers	Role Defaults
hostvars Variable	Secure Copy Protocol	Custom Modules
group_names Variable	Managing Directories	Using Bash or Python
inventory_dir Variable	Managing Packages	External Inventories
Finding Files with Variables	Gathering Facts	Extending Ansible
Environment Variables	Provisioning	Connection Plugins
External Data Lookups	Ansible's Pull Mode	Lookup and Filter Plugins
Storing Results	Storing Secrets	Callback Plugins

SpiralTrain BV
Standerdmolen 10, 2e verdieping
3995 AA Houten

info@spiraltrain.nl
www.spiraltrain.nl
Tel.: +31 (0) 30 – 737 0661

Locations
Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online