

## Linux Automation with Ansible

**Cursusduur: 4 Dagen    Cursuscode: LANS    Trainingsmethode: Maatwerk**

---

### Beschrijving:

#### Linux Automation with Ansible Course Overview

This highly practical instructor led Linux Automation with Ansible training course is designed to give delegates practical experience in the concepts and use of Linux Ansible Automation. With a strong emphasis on practical hands-on training using the command line, this course will teach Ansible automation techniques to perform remote administration of Linux based systems.

This Linux Automation with Ansible course is based on the Red Hat-based distribution, the delegate will be able to apply the concepts covered on this course to other Linux based distributions.

Similarly, the course is targeted to closely follow the official Red Hat Linux curriculum for certification.

Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

#### Maatwerk

Global Knowledge biedt zowel standaard- als maatwerk cursussen die zijn afgestemd op uw wensen en die als besloten cursus op uw eigen locatie of onze locatie gevolgd kunnen worden.

---

### Doelgroep:

#### Who will the Course Benefit?

This Linux Automation with Ansible course is suitable for Linux System Administrators, DevOps teams, Managers and Systems Support personnel who need to understand how to automate, deploy, configure and maintain system configurations from a single point of control.

---

### Doelstelling:

#### ■ Course Objectives

- On completion of this Linux Automation with Ansible course the delegate will have gained practical experience of the skills required to install, configure and use Ansible for the purpose of enterprise orchestration, automation, configuration and management.
- 

### Vereiste kennis en vaardigheden:

- Delegates attending this course should have experience of administering Linux in an Enterprise environment to the level covered in the pre-requisite courses.

The requirements for this course can be met by any one of the pre-requisite courses listed.

Where Red Hat 9 courses are listed in the Pre-Requisite Courses section equivalent Red Hat 7 or Red Hat 8 courses would also suffice.

---

## Vervolg cursussen:

### Further Learning

- Linux Networking
  - Linux System Security
  - Linux Shell Programming
  - Linux Advanced Shell Programming Tools
  - Apache Web Server
-

## Cursusinhoud:

### Linux Automation with Ansible Training Course Course Contents - DAY 1

#### Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

#### Session 1: INTRODUCTION TO ANSIBLE

- Ansible in steps
- Ansible Overview

#### Session 2: DEPLOYING ANSIBLE

- Installing Ansible on RHEL-based systems
- Installing Ansible on Debian-based systems
- Authenticating Ansible with SSH keys
- Ansible configuration
- Creating the Ansible Inventory
- Ansible client configuration
- Exercise

#### Session 3: AD-HOC COMMANDS

- Generating an ad-hoc command
- Command line options
- Module documentation
- Using modules with ad-hoc commands
- Verifying Ansible syntax
- stat and shell modules
- Specifying an alternate Inventory
- Exercise

#### Session 4: YAML

- YAML basics
- Common YAML syntax errors
- Writing YAML with vim
- Installing and configuring code editors
- Exercise Linux Automation with Ansible Training Course Course Contents - DAY 2

#### Session 5: PLAYBOOKS AND TASKS

- What is a playbook
- Playbook header
- Tasks within a playbook
- Importing items and playbooks
- Playbook best practices
- Exercise

#### Session 6: SIMPLE PLAYBOOKS

- Basic Ansible modules
- file module
- lineinfile module
- copy module
- archive module
- Exercise

#### Session 7: SYSTEM ADMINISTRATION PLAYBOOKS

- Playbook command line options
- Playbook tags
- System administration modules
- service module
- firewalld module
- user module
- Exercise

#### Session 8: FURTHER ANSIBLE PLAYBOOKS

- Further Ansible modules
- parted module
- mount module
- cron module
- Security related modules
- seboolean module
- SELinux module
- seport module
- Exercise Linux Automation with Ansible Training Course Course Contents - DAY 3

#### Session 9: VARIABLES AND FACTS

- Simple variables
- List and Dictionary methods
- Defining variable locations
- Variables within external files
- Command line variables
- Ansible prompts
- Registering variables
- Using module return values
- Capturing Ansible failures
- Iteration using lists
- Ansible facts
- Commonly used Ansible facts
- Using facts within a task
- Using conditional statements with Facts
- Exercise

#### Session 10: ROLES AND TEMPLATES

- Ansible roles
- Ansible Galaxy command
- Role directory structure
- Constructing an Ansible Role
- Constructing a File Template
- Ansible Galaxy repository
- Downloading and executing Roles
- Exercise Linux Automation with Ansible Training Course Course Contents - DAY 4

#### Session 11: FURTHER CONFIGURATION

- Ansible Parallelism and Forks
- Fact Caching
- Ansible Vault
- Creating and accessing the Vault
- Encrypting variables
- Ansible client and server logging
- Omitting and redirecting log output
- Error handling and ignoring failed commands
- Handlers and failures
- Exercise

#### Session 12: LOOPS AND SCRIPTING

- Ansible loops
- Looping through variables
- Number sequencing
- Random values
- Retries
- Ansible within shell scripts
- Menu driven and copy scripts

## Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

[info@globalknowledge.nl](mailto:info@globalknowledge.nl)

[www.globalknowledge.com/nl-nl/](http://www.globalknowledge.com/nl-nl/)

Iepenhoeve 5, 3438 MR Nieuwegein