Linux Automation with Ansible

Duration: 4 Days   Course Code: LANS   Delivery Method: Virtual Learning

Overview:

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.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

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.

Objectives:

■ 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.

Prerequisites:

■
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.

Follow-on-Courses:

Further Learning

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

Content:

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

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

info@globalknowledge.co.uk

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK