Red Hat - DevOps

DO407VT: Automation with Ansible

$3,600.00

- 5 Days

Upcoming Dates

Course Description

Learn how to automate Linux system administration tasks with Ansible

Automation with Ansible (DO407) is designed for Linux system administrators and developers who need to automate provisioning, configuration, application deployment, and orchestration. You will learn how to install and configure Ansible on a management workstation and prepare managed hosts for automation.

This course is based on Red Hat® Ansible Engine 2.7 and Red Hat Enterprise Linux 7.3.

Incorporating IT automation is key to managing large numbers of systems and applications efficiently and consistently at scale. In this course, you will write Ansible playbooks to automate tasks, and you will run them to ensure servers are correctly deployed and configured. You will also explore examples of how to approach the automation of common Linux system administration tasks.

The material covered in this curriculum is now included within our newly released Red Hat System Administration III: Linux Automation with Ansible (RH294)course, which covers how to use Red Hat Ansible Automation to automate across different functions. If you are interested in learning how to scale infrastructure efficiently, begin your journey with Linux automation today.

Course content summary

- Install Ansible/Red Hat Ansible Engine on control nodes.
- Create and update inventories of managed hosts and manage connections to them.
- Automate administration tasks with Ansible playbooks and ad hoc commands.
- Write effective Ansible playbooks at scale.
- Protect sensitive data used by Ansible with Ansible Vault.
- Reuse code and simplify playbook development with Ansible roles.

Course Outline

Introduction to Ansible

Describe Ansible concepts and install Red Hat Ansible Engine.

Deploy Ansible

Configure Ansible to manage hosts and run ad hoc Ansible commands.

Implement playbooks

Write a simple Ansible playbook and run it to automate tasks on multiple managed hosts.

Manage variables and facts

Write playbooks that use variables to simplify management of the playbook and facts to reference information about managed hosts.

Implement task control

Manage task control, handlers, and task errors in Ansible playbooks.

Deploy files to managed hosts

Deploy, manage, and adjust files on hosts managed by Ansible.

Manage large projects

Write playbooks that are optimized for larger, more complex projects.

Simplify playbooks with roles

Use Ansible roles to develop playbooks more quickly and to reuse Ansible code.

Troubleshoot Ansible

Troubleshoot playbooks and managed hosts.

Automate Linux administration tasks

Automate common Linux system administration tasks with Ansible.

Comprehensive review

Demonstrate skills learned in this course by installing, optimizing, and configuring Ansible for the management of managed hosts.

Note: Course outline is subject to change with technology advances and as the nature of the underlying job evolves. For questions or confirmation on a specific objective or topic, contact one of our Red Hatters.

Audience

This course is designed for Linux system administrators, DevOps engineers, infrastructure automation engineers, and systems design engineers. The curriculum is particularly geared toward those responsible for automation of configuration management; consistent and repeatable application deployment; provisioning and deployment of development, testing, and production servers; and integration with DevOps CI/CD workflows.

Prerequisites

- Be a Red Hat Certified System Administrator (RHCSA), or demonstrate equivalent Red Hat® Enterprise Linux® knowledge and experience
- Being a Red Hat Certified Engineer (RHCE) may be beneficial

What You Will Learn

Impact on the organization

This course is intended to develop the skills needed to efficiently operate and more easily scale the organization's dynamic IT infrastructure, accelerate application time to value, and rapidly adapt and implement needed innovation through DevOps practices. The ability to use Red Hat Ansible Automation more effectively helps improve operational agility while ensuring necessary controls and consistency.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

Impact on the individual

As a result of attending this course, you should be able to use Ansible for the purpose of automation, configuration, and management. You should be able to demonstrate these skills:

- Install and configure Ansible or Red Hat Ansible Engine on a control node.
- Create and manage inventories of managed hosts and prepare them for Ansible automation.
- Run individual ad hoc automation tasks from the command line.
- Write Ansible playbooks to consistently automate multiple tasks and apply them to managed hosts.
- Parameterize playbooks using variables and facts, and protect sensitive data with Ansible Vault.
- Write and reuse existing Ansible roles to simplify playbook creation and reuse code.
- Automate common Red Hat Enterprise Linux system administration tasks using Ansible.