

DO407 Automation with Ansible

Course overview

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.

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.

Audience for this course

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 for this course

- 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

Outline for this course

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.

Recommended next exam or course

Red Hat Certified Specialist in Ansible Automation exam (EX407)

Automation with Ansible II: Ansible Tower (DO409)