Red Hat Certified Engineer (RHCE) RHEL 8

Red Hat System Administration III: Linux Automation (RH294)

Learn how to automate Linux system administration tasks with Ansible

- Red Hat System Administration III: Linux Automation (RH294) 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; prepare managed hosts for automation; write Ansible Playbooks to automate tasks; and run playbooks to ensure servers are correctly deployed and configured.

- This course is based on Red Hat® Enterprise Linux 8 and Red Hat® Ansible Engine 2.8.

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 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 geared toward Linux system administrators, DevOps engineers, infrastructure automation engineers, and systems design engineers who are responsible for these tasks:

Automating configuration management

Ensuring consistent and repeatable application deployment

Provisioning and deployment of development, testing, and production servers

Integrating with DevOps continuous integration/continuous delivery workflows

Prerequisites for this course

Pass the Red Hat Certified System Administrator (RHCSA) exam (EX200), or demonstrate equivalent Red Hat Enterprise Linux knowledge and experience.

Course outline

Introduce 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.

Recommended next exam or course

Red Hat Certified Engineer (RHCE) exam on Red Hat Enterprise Linux 8 (EX294)

Automation with Ansible II: Ansible Tower (DO409)