

Red Hat System Administration III: Linux Automation (RH294) – RHEL 9

Duration: 40 Hours (5 Days)

Course Overview

The Red Hat System Administration III: Linux Automation (RH294) – RHEL 9 course is designed for Linux system administrators and developers who need to automate provisioning, configuration, application deployment, and orchestration. This course introduces Ansible automation and teaches the core components of Writing and managing Ansible playbooks. It covers various topics, starting with the basic Installation of Red Hat Ansible Engine, Configuring Ansible to manage hosts, and progressing to advanced topics such as Task control, Roles, and troubleshooting. By taking RH294, learners will gain hands-on experience with the practices and tools needed to implement Ansible in their operations. The course culminates with exercises in automating Linux administration tasks, thereby enhancing the efficiency and consistency of the IT environment. Completion of RH 294 can also be a steppingstone towards earning a Red Hat Certified Engineer (RHCE) certification, which is a respected credential in the IT industry.

Audience Profile

The Red Hat System Administration III: Linux Automation (RH294) course is designed for IT professionals aiming to master Ansible automation in RHEL 9.

- System Administrators
- DevOps Engineers
- IT Automation Engineers
- Systems Design Engineers
- Cloud Administrators
- Infrastructure Automation Professionals
- Red Hat Certified Engineers (RHCEs) seeking to update their skills
- Software Developers focusing on automation and deployment
- IT Professionals working with containerization and orchestration
- Network Administrators aiming to automate network tasks
- Security Engineers interested in automating security compliance
- Technical Lead Managers overseeing infrastructure automation initiatives
- Quality Assurance Engineers automating testing and deployment processes

Course Syllabus

Introduction to Ansible

- Understand Ansible concepts and architecture.
- Install and configure Red Hat Ansible Engine.

Implementing an Ansible Playbook

- Create and execute a basic Ansible Playbook to automate tasks across multiple managed hosts.

Managing Variables and Facts

- Write playbooks that utilize variables to streamline playbook management.

- Leverage facts to gather and reference information about managed hosts.

Implementing Task Control

- Manage task execution using task control, handlers, and error handling in Ansible Playbooks.

Deploying Files to Managed Hosts

- Deploy, manage, and modify files on managed hosts using Ansible.

Managing Complex Plays and Playbooks

- Develop optimized playbooks for larger and more complex automation projects.

Simplifying Playbooks with Roles and Ansible Content Collections

- Use Ansible Roles and Content Collections to simplify playbook development and enable code reuse.

Troubleshooting Ansible

- Identify and resolve issues with playbooks and managed hosts.

Automating Linux Administration Tasks

- Automate common Linux system administration tasks using Ansible.

Certifications:

- Red Hat Certified Engineer (RHCE) Exam on Red Hat Enterprise Linux 9 (EX294).

Advanced Courses:

- Developing Advanced Automation with Red Hat Ansible Automation Platform (DO374).
- Managing Enterprise Automation with Red Hat Ansible Automation Platform (DO467).