

## Red Hat - Linux

### RH295: Red Hat System Administration III: Linux Automation with Ansible and exam

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- 5 Days

## Upcoming Dates

## Course Description

### Learn how to automate Linux system administration tasks with Ansible

Red Hat System Administration III: Linux Automation with Ansible and exam (RH295) is designed for Linux® system administrators and developers who need to learn and validate how to automate provisioning, configuration, application deployment, and orchestration. You will prove your ability 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.

The Red Hat Certified Engineer (RHCE) exam for Red Hat Enterprise Linux 8 (EX294) exam is included in this offering. This offering 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.

## 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.

**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 training specialists.

## **Audience**

This course and exam are 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**

### **What You Will Learn**

#### **Impact on the organization**

IT automation is key to managing large numbers of systems and applications efficiently and consistently at scale. This offering develops and tests 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.

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 taking this course and exam, you should be able to use Ansible for the purpose of automation, configuration, and management. You should be able to validate these skills:

- Install and configure Ansible or Red Hat Ansible Engine on a control node.
- Create and manage inventories of managed hosts, as well as 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.