

# AUTOMATION WITH ANSIBLE

Learn to write and manage Ansible playbooks and automate system administration tools

DATASHEET



## COURSE CONTENT SUMMARY

- Install and troubleshoot Ansible on central nodes and managed hosts.
- Use Ansible to run ad hoc commands and playbooks to automate tasks.
- Write effective Ansible playbooks.
- Protect encrypted data needed for tasks with Ansible Vault.
- Use Ansible Tower to more easily manage enterprise Ansible deployments.
- Work with Ansible in conjunction with Vagrant in a DevOps environment.

## THIS COURSE IS BASED ON RED HAT® ENTERPRISE LINUX® 7.

Automation with Ansible (DO407) is designed for system administrators who are intending to use Ansible for automation, configuration, and management. Learn how to install and configure Ansible, create and run playbooks to configure systems, and learn to manage inventories.

Through hands-on labs, students will learn to automate system administration tasks on managed hosts with Ansible, learn how to write Ansible playbooks to standardize task execution, centrally manage playbooks, and schedule recurring execution through a web interface with Ansible Tower by Red Hat. Students will also learn to manage encryption for Ansible with Ansible Vault, deploy Ansible Tower and use it to manage systems, and use Ansible in a DevOps environment with Vagrant.

## AUDIENCE

System and cloud administrators who need to automate cloud provisioning, configuration management, application deployment, intra-service orchestration, and other IT needs.

Red Hat recommends having basic Red Hat Enterprise Linux administration skills or having a [Red Hat Certified System Administrator \(RHCSA\) certification](#).

## COURSE OUTLINE

### COURSE INTRODUCTION

Introduce and review the course.

### INTRODUCE ANSIBLE

Describe the terminology and architecture of Ansible.

### DEPLOY ANSIBLE

Install Ansible and run ad hoc commands.

### IMPLEMENT PLAYBOOKS

Write Ansible plays and execute a playbook.

### MANAGE VARIABLES AND INCLUSIONS

Describe variable scope and precedence, manage variables and facts in a play, and manage inclusions.

### IMPLEMENT TASK CONTROL

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

### IMPLEMENT JINJA2 TEMPLATES

Implement a Jinja2 template.

### IMPLEMENT ROLES

Create and manage roles.



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**CONFIGURE COMPLEX PLAYBOOKS**

Configure connection types, delegations, and parallelism.

**IMPLEMENT ANSIBLE VAULT**

Manage encryption with Ansible Vault.

**TROUBLESHOOT ANSIBLE**

Troubleshoot the Ansible control machine and managed nodes.

**IMPLEMENT ANSIBLE TOWER**

Implement Ansible Tower.

**IMPLEMENT ANSIBLE IN A DEVOPS ENVIRONMENT**

Implement Ansible in a DevOps environment using Vagrant.

**COMPREHENSIVE REVIEW**

Review tasks from the Automation with Ansible course.

**AFTER THE COURSE****Red Hat Certificate of Expertise in Ansible Automation (EX407) exam**

The performance-based Red Hat Certificate of Expertise in Ansible Automation (EX407) exam tests your ability to use Ansible to automate the configuration of systems and applications.

**ABOUT RED HAT**

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to provide reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.

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