

# DO467 Managing Enterprise Automation with Red Hat Ansible Automation Platform

Manage complex Red Hat Ansible automation workflows at scale and prevent single points of failure.

Managing Enterprise Automation with Red Hat Ansible Automation Platform (DO467) is for experienced Ansible automation engineers, DevOps practitioners, and Linux system administrators seeking to deploy, control, and support centralized automation execution on a large scale. Students will use Red Hat Ansible Automation Platform 2 to scale up Ansible automation. They will deploy automation controller to centrally manage automation workflows, automation mesh to scale up and distribute execution capacity, and private automation hub to manage Ansible Content Collections and automation execution environments for use by automation developers. Large scale automation cluster design and approaches to ensure high availability of Ansible Automation Platform will also be discussed.

This course is based on Red Hat Ansible Automation Platform 2.2.

## **Course content summary**

- Discussion of the architecture of Red Hat Ansible Automation Platform 2.
- Installation and configuration of automation controllers and private automation hubs to centrally coordinate and scale Red Hat Ansible Automation.
- Integration of Red Hat Ansible Automation Platform with centralized Git repository services such as GitLab.
- Management of users, teams, and access permissions in Red Hat Ansible Automation Platform services.
- Creation and management of workflows that execute automation based on the success or failure of previous jobs.
- Configuration and management of automation mesh to distribute execution between automation controller and remote execution nodes.
- Troubleshooting and maintenance of Red Hat Ansible Automation Platform services.
- Discussion of recommended practices to ensure high availability and scalability of a large automation cluster.

#### Audience for this course

This course is designed for users who need to provide, manage, and maintain Ansible automation infrastructure for their organizations, including these roles:

- Ansible automation engineers and architects
- Linux system administrators supporting automation operations
- DevOps engineers

# Prerequisites for this course

- Be a <u>Red Hat Certified Engineer (RHCE®)</u> on Red Hat Enterprise Linux 8, or demonstrate equivalent Ansible experience
- Complete Developing Advanced Automation with Red Hat Ansible Automation Platform (DO374).
- Complete EX374 to achieve <u>Red Hat Certified Specialist in Developing Automation with Ansible</u> <u>Automation Platform</u> on Red Hat Ansible Automation Platform 2.

#### Outline for this course

#### Install Red Hat Ansible Automation Platform

Explain what Red Hat Ansible Automation Platform is and perform a basic installation of automation controller and automation hub.

## Manage user access

Create user accounts and organize them into teams/groups in automation controller and automation hub, and assign them permissions to administer and access resources in each service.

## Manage inventories and machine credentials

Create inventories of machines to manage, and configure credentials necessary for automation controller's execution nodes to log in and run Ansible jobs on those systems.

## Manage projects and launch Ansible jobs

Create projects and job templates in the web UI, using them to launch Ansible Playbooks that are stored in Git repositories, in order to automate tasks on managed hosts.

## Configure advanced job configuration

Configure advanced features of automation controller in order to more effectively and efficiently implement jobs.

#### Construct job workflows

Use advanced features of job templates to improve performance, simplify the customization of jobs, launch multiple jobs, schedule automatically recurring jobs, and provide notification of job results.

## Manage advanced inventories

Manage inventories that are generated dynamically from scripts or the automation controller smart inventory feature.

## • Automate configuration of Ansible Automation Platform

Automate the configuration and deployment of Red Hat Ansible Automation Platform services by using Ansible Content Collections, the automation controller API, and Git webhooks.

## Maintain Red Hat Ansible Automation Platform

Perform routine maintenance and administration of Red Hat Ansible Automation Platform.

## • Get insights into automation performance

Get information from Red Hat Insights for Red Hat Ansible Automation Platform to evaluate the performance of your Ansible automation and identify possible ways to improve it.

# • Build a large scale Red Hat Ansible Automation Platform deployment

Use high availability techniques and automation mesh to scale up your Red Hat Ansible Automation Platform deployment.

# • Comprehensive review

Demonstrate skills learned in this course by configuring private automation hub and by configuring and operating a new organization in automation controller using a provided specification, Ansible projects, and hosts to be provisioned and managed.

#### Impact of this training

As a result of taking this course, you will learn how to install and manage automation controller, private automation hub, and automation mesh components of Red Hat Ansible Automation Platform 2 in order to deploy and operate Ansible automation services for your organization that you can extend to a larger scale.