

Course Overview

Red Hat Certified Specialist in Advanced Automation: Ansible Best Practice exam

Overview

The Red Hat Certified Engineer Specialist in Advanced Automation: Ansible Best Practices exam EX447 is a performance-based test of your knowledge and skill in managing multiple systems using Red Hat® Ansible® Engine and Red Hat Ansible Tower.

By passing this exam, you become a Red Hat Certified Specialist in Advanced Automation: Ansible Best Practices, which also counts toward becoming a Red Hat Certified Architect RHCA®.

This exam is based on Red Hat Enterprise Linux 8.0, Red Hat Ansible 2.8, and Red Hat Ansible Tower 3.5.

Target Audience

The Red Hat Certified Specialist in Advanced Automation: Ansible Best Practices exam will be of interest to anyone seeking to demonstrate a broader knowledge and understanding of Ansible best practices, applying Ansible in larger and more complex projects, and using Ansible Tower, including those in these roles:

- Experienced Linux system administrators
- DevOps engineers
- Cloud administrators
- Other IT professionals

Delegates will learn how to

You should be able to accomplish the following grouped tasks without assistance:

Understand and use Git

- Clone a Git repository
- Update, modify and create files in a Git repository
- Add those modified files back into the Git repository

Manage inventory variables

- Structure host and group variables using multiple files per host or group
- Use special variables to override the host, port, or remote user Ansible uses for a specific host
- Set up directories containing multiple host variable files for some of your managed hosts
- Override the name used in the inventory file with a different name or IP address

Manage task execution

- Control privilege execution
- Run selected tasks

Transform data with filters and plugins

- Populate variables with data from external sources using lookup plugins
- Use lookup and query functions to template data from external sources into playbooks and deployed template files
- Implement loops using structures other than simple lists using lookup plugins and filters
- Inspect, validate, and manipulate variables containing networking information with filters

Delegate tasks

- Run a task for a managed host on a different host, then control whether facts gathered by that task are delegated to the managed host or the other host

Install Ansible Tower

- Perform basic configuration of Ansible Tower after configuration

Manage access for Ansible Tower

- Create Ansible Tower users and teams and make associations of one to the other

Manage inventories and credentials

- Manage advanced inventories
- Create a dynamic inventory from an identity management server or a database server
- Create machine credentials to access inventory hosts
- Create a source control credential

Manage projects

- Create a job template

Manage job workflows

- Create a job workflow template

Work with the Ansible Tower API

- Write an API scriptlet to launch a job

Back up Ansible Tower

- Back up an instance of Ansible Tower

As with all Red Hat performance-based exams, configurations must persist after reboot without intervention.

Course Outline

Preparation

Red Hat encourages you to consider taking Advanced Automation: Ansible Best Practices DO447 to help prepare for the exam.

Attendance in these classes is not required; students can choose to take just the exam.

While attending Red Hat classes can be an important part of your preparation, attending class does not guarantee success on the exam. Previous experience, practice, and native aptitude are also important determinants of success.

Many books and other resources on system administration for Red Hat products are available. Red Hat does not endorse any of these materials as preparation guides for exams. Nevertheless, you may find additional reading helpful to deepen your understanding.

Exam format

This hands-on, practical exam requires you to undertake real-world tasks. You will be provided with one or more virtual systems and required to perform tasks similar to those you would perform on the job. Internet access is not provided during the exam, and you are not permitted to bring any hard copy or electronic documentation into the exam. This prohibition includes notes, books, or any other materials. For most exams, the documentation that ships with the product is available during the exam.

Scores and reporting

Official scores for exams come exclusively from Red Hat Certification Central. Red Hat does not authorize examiners or training partners to report results to candidates directly. Scores on the exam are usually reported within 3 U.S. business days.

Exam results are reported as total scores. Red Hat does not report performance on individual items, nor will it provide additional information upon request.

Prerequisites

- Take Advanced Automation: Ansible Best Practices DO447, or possess comparable work experience with Red Hat Enterprise Linux®, Ansible, and Ansible Tower
- Take Red Hat System Administration III: Linux Automation RH294, or possess comparable work experience with Red Hat Enterprise Linux and Ansible
- Review the exam objectives

Special Notices

In order to attend any Red Hat course or exam, you will need to provide us with your unique Red Hat Network ID. Bookings will not be confirmed without this. If you do not have a Red Hat Network ID you can create one online. If you attend a virtual event, Red Hat will email you directly a Connectivity Test link one week before the course starts to ensure you have the correct access for the training.