

**Module Title : DO409-Automation with Ansible II: Ansible Tower**

**Duration : 2 days**

## Overview

This course will teach students how to deploy and use Ansible Tower by Red Hat to manage their existing Ansible projects, playbooks, and roles, perform basic maintenance and administration of the Ansible Tower installation, and configure users and teams and use them to control access to systems, projects, and other resources through role-based access controls. Students will also learn to use the visual dashboard to centrally launch, control, and monitor Ansible jobs, use the Ansible Tower application programming interface (API) to launch jobs from existing templates, and automatically schedule Ansible jobs and update the host inventory.

### Course summary

- Install Ansible Tower by Red Hat
- Configure users and teams to access Ansible Tower resources using role-based access controls
- Use Ansible Tower to manage shared access to inventories and machine credentials
- Create job templates and workflow job templates to standardize playbook execution
- Launch playbooks and monitor and review job results using Ansible Tower

## Audience

Linux system administrators, cloud administrators, and network administrators interested in centrally managing Ansible projects and playbook execution at scale with Ansible Tower by Red Hat

## Prerequisites

Red Hat recommends these prerequisites:

- Successfully completed Automation with Ansible I (DO407) or equivalent experience with Ansible, Ansible playbooks, and roles
- Have Red Hat Certified System Administrator (RHCSA) certification in Red Hat Enterprise Linux or equivalent Linux system administration skills

### Recommended training

- Ansible Essentials: Simplicity in Automation Technical Overview (DO007)
- Automation with Ansible I (DO407) or Automation with Ansible I with exam (DO408)

## Outline

### **Course introduction**

Introduce and review the course.

### **Install Ansible Tower by Red Hat and describe its architecture**

Explain what Ansible Tower is and demonstrate a basic ability to navigate and use its web user interface.

### **Create users and teams for role-based access control**

Create user accounts and organize them into teams that can be used in conjunction with role-based access control to manage administration and access to organization resources in Ansible Tower.

### **Create and manage inventories and credentials**

Create inventories of machines to manage and set up credentials that will allow Ansible Tower to run jobs on those systems.

### **Manage projects for provisioning with Ansible Tower**

Create basic projects and job templates in Ansible Tower that can be used to run Ansible playbooks in order to provision and configure managed systems.

### **Construct advanced job workflows**

Use additional features of job templates to improve workflows by creating simple job launch forms, templates to launch multiple jobs in sequence, and to report job success or failure through external notification systems.

### **Update inventories dynamically and compare inventory members**

Use advanced techniques to work with inventories, including dynamic generation of inventories from centralized information sources and monitoring of hosts in an inventory for configuration deviations or differences.

### **Maintenance and administration of Ansible Tower**

Perform routine maintenance and administration on Ansible Tower and get a basic familiarity with the command line tools and Ansible Tower API.

### **Comprehensive review of provisioning and managing systems using Ansible Tower**

Demonstrate skills learned in this course by using a provided specification to configure and operate a new organization in Ansible Tower with certain users and teams, an inventory of hosts to manage, and an Ansible project containing playbooks and other supporting files.

## Impact of this training

### Impact on the organization

This course is intended to develop the skills needed to leverage and extend the use of an existing Ansible infrastructure across business units in large enterprise environments. These skills are suitable for organizations seeking to increase cost savings and operational efficiency through wider adoption of Ansible automation in their enterprise.

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 attending this course, students should be able to centrally manage and scale an existing Ansible infrastructure to accommodate use by large teams in complex enterprise installations.

Students should be able to demonstrate the following skills:

- Integrate JBoss Fuse to an existing Java EE web application.
- onfigure users and teams for role-based access control to Tower resources
- Perform basic maintenance and administration of an Ansible Tower installation
- Integrate Ansible playbook execution with other CI/CD tools using the Ansible Tower API