

# **DO417**

# Microsoft Windows Automation with Red Hat Ansible Automation Platform

Introduction to performing core system administration tasks by creating and running automation for a Windows Server using Red Hat Ansible Automation Platform.

Microsoft Windows Automation with Red Hat Ansible Automation Platform (DO417) is designed for System administrators, DevOps engineers, and developers who want to learn how to automate the deployment and management of Microsoft Windows servers and applications hosted on them using Red Hat Ansible Automation Platform.

This course is based on Red Hat® Ansible Automation Platform 2.4.

# **Course content summary**

- Writing Ansible Playbooks that automate tasks on Microsoft Windows servers
- Managing Ansible Playbooks stored in a Git-based version control system
- Running Ansible Playbooks by using the automation controller web-based UI
- Managing and ensuring software and Windows features are installed and up-to-date using Ansible automation
- Writing efficient tasks in Ansible Playbooks by using loops, conditional tests, and handlers
- Writing Ansible Playbooks that ensure plays can recover when tasks fail
- Deploying, modifying, and managing files with Ansible on your Windows servers, using completed files and Jinja2 templates
- Managing local and domain users, managing Active Directory domains, and generating dynamic inventory of managed hosts in automation controller based on domain membership
- Automating specific, common Windows Server administration tasks
- Reusing existing automation code by using Ansible Content Collections, Ansible Roles, and Ansible integration with PowerShell Desired State Configuration (DSC) resources

### Audience for this course

 System administrators, DevOps engineers, and developers who are responsible for automating the deployment and management of Microsoft Windows servers and applications hosted on them using Red Hat Ansible Automation Platform

# Recommended training

- A basic understanding of Windows Server administration is expected
- Students do not need any previous experience with Ansible or Linux
- There are no prerequisites for this course

#### Outline for this course

## **Introducing Red Hat Ansible Automation Platform**

 Describe the fundamental concepts of Ansible and how it is used, and install development tools from Red Hat Ansible Automation Platform

# **Preparing for Ansible Operations**

 Prepare Microsoft Windows hosts for Ansible automation and automation controller to run automation on those hosts

# Implementing Ansible Playbooks

• Write a simple playbook to automate tasks on multiple Microsoft Windows-based hosts, and then run the playbook with automation controller

# **Managing Variables and Facts**

 Write playbooks that use variables to simplify management of the playbook and facts to reference information about managed hosts

# **Installing and Configuring Software**

• Install, manage, and ensure software is up to date using Ansible Playbooks.Install, manage, and ensure software is up to date using Ansible Playbooks

# **Implementing Task Control**

Manage task execution using loops, conditional tests, and handlers, and recover when tasks fail

# **Deploying Files to Managed Hosts**

• Deploy, modify, and manage files on your managed hosts

#### Reusing Code with Ansible Roles and Ansible Content Collections

• Write playbooks that are optimized for larger and more complex projects and that reuse existing automation code

## **Interacting with Users and Domains**

 Manage local and domain users and Active Directory domains on managed hosts, and generate a dynamic inventory of managed hosts in automation controller based on domain membership

#### **Automating Windows Administration Tasks**

Automate common Windows Server administration tasks

#### **Comprehensive Review**

Review tasks from Microsoft Windows Automation with Red Hat Ansible Automation Platform

#### As a result of attending this course,

- you will be able to use the concepts in this course to simplify and more Students learn how to create and run automation for Windows Server using Red Hat Ansible Automation Platform, in order to perform core system administration tasks
- Students can use automation to perform their tasks consistently, repeatably, and automatically, saving time and avoiding errors that might be caused by performing these tasks manually

