# DO457

# Network Automation with Red Hat Ansible Automation Platform

**Configure and manage network infrastructure using Red Hat Ansible Automation Platform.**

## Course Description

Network Automation with Red Hat Ansible Automation Platform (DO457) is designed for network administrators or infrastructure automation engineers who want to use network automation to centrally manage the switches, routers, and other devices in the organization's network infrastructure. Learn how to use Red Hat Ansible Automation Platform to remotely automate the configuration of network devices, test and validate the current network state, and perform compliance checks to detect and correct configuration drift.

This course is based on Red Hat® Ansible Automation Platform 2.3

## Course Outline

- **Introducing Red Hat Ansible Automation Platform**
  - o Describe the fundamental concepts of Ansible and how it is used, and install development tools from Red Hat Ansible Automation Platform
- **Implementing an Ansible Playbook**
  - o Create an inventory of managed nodes, write a simple Ansible Playbook, and run the playbook to automate tasks on those nodes
- **Managing and Running Playbooks**
  - o Manage automation code in version control and run Ansible Playbooks from a centrally managed automation controller
- **Managing Variables and Facts**
  - o Write playbooks that use variables to simplify management of the playbook and facts to reference information about managed nodes
- **Implementing Task Control**
  - o Manage task control and task errors in Ansible Playbooks
- **Simplifying Playbooks with Roles and Ansible Content Collections**
  - o Use Ansible Roles and Ansible Content Collections to develop playbooks more quickly and to reuse Ansible code
- **Automating Network Automation Tasks**
  - o Automate common network administration tasks, discussing recommended practices and approaches to cross-vendor automation
- **Comprehensive Review**
  - o Demonstrate skills learned in this course by installing, optimizing, and configuring Ansible for the management of network devices and infrastructure

**Target Audience**

This course is designed for network administrators, network automation engineers, and infrastructure automation engineers who are responsible for deploying, managing, and automating the network infrastructure of their organization or enterprise.

**Prerequisites for this course**

- Experience with network administration, including a solid understanding of TCP/IP, routers, and managed switches
- Familiarity with managing network devices from the command line, preferably with one or more of Cisco IOS, IOS XR, or NX-OS; Juniper Junos; or Arista EOS
- Knowledge equivalent to Red Hat System Administration I (RH124) or better is recommended

- Prior Ansible knowledge is not required