

AU457

Network Automation with Red Hat Ansible Automation Platform

Course Description

Network Automation with Red Hat Ansible Automation Platform (AU457) 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 2.6

Course Outline

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.
- Developing Automation Content
 - Develop Ansible inventories for network devices, explore dynamic inventory concepts, and develop and run network automation playbooks.
- Running Network Automation Playbooks
 - Manage automation code in a version control system, run Ansible Playbooks from the centrally managed Ansible Automation Platform web UI, and troubleshoot common issues.
- Managing Variables and Facts
 - Develop playbooks that use variables and facts to simplify network automation, protect sensitive network data with Ansible vault, use surveys in Ansible Automation Platform to supply runtime values, and transform data with filters.
- Implementing Task Control
 - Develop efficient playbooks using loops and conditionals, handle task failures with automated recovery strategies, validate pre- and post-change network state, and orchestrate multijob automation workflows using Ansible Automation Platform.

- Simplifying Playbooks with Roles and Ansible Content Collections
 - Use Ansible Roles and Ansible Content Collections to develop reusable, scalable network automation playbooks with included or imported tasks, structured roles, and external content sources.
- Automating Network Administration Tasks
 - Automate common network administration tasks by using validated network content, Jinja2 templates, and platform-independent modules, and perform rolling configuration updates with automated error recovery.