

Red Hat Services Management and Automation

Course Duration: 40 Hours

Course Code RH358

1. Course Overview

The **Red Hat Services Management and Automation (RH358)** course equips Linux system administrators with the knowledge and skills to **configure, manage, secure, and automate common network services** on Red Hat Enterprise Linux (RHEL). The training emphasizes both **manual administration** and **Ansible automation**, enabling administrators to efficiently deploy and maintain critical IT services in enterprise environments.

By the end of the course, participants will be able to deliver secure and automated services such as **DNS, DHCP, web servers, SMB/NFS storage, email services, MariaDB, and network-based authentication** across RHEL-based systems.

2. What You'll Learn

- Configure and secure **essential network services** on RHEL.
- Automate services management with **Red Hat Ansible Automation Platform**.
- Manage **DNS, DHCP, web, file sharing, and database services**.
- Implement **Kerberos, LDAP, and other authentication mechanisms**.
- Optimize service delivery with **system roles and best practices**.
- Secure services with **firewall, Selina, and TLS certificates**.

3. Target Audience

- **Linux system administrators** managing enterprise services.
- **DevOps professionals** and **cloud engineers** who need automation skills.
- IT professionals seeking advanced RHEL services knowledge.

4. Pre-Requisites

- Red Hat Certified System Administrator (**RHCSA**) certification or equivalent experience.
- Red Hat System Administration III (RH294) or equivalent **Ansible knowledge** is recommended.

5. Course Content

Module 1: Managing and Automating Network Services

- Overview of RHEL services management
- Automating service configuration with Ansible

Module 2: Securing Services and Network Communication

- Firewall and Selina policies
- TLS certificates and encryption

Module 3: Domain Name Service (DNS) Configuration

- Deploying caching and authoritative DNS servers
- Automating DNS setup with Ansible

Module 4: DHCP and IP Address Management

- Configuring and managing DHCP services
- Integrating with DNS

Module 5: Web Servers and Proxy Services

- Setting up Apache HTTPD and Nginx
- Reverse proxy and load balancing

Module 6: File Sharing Services (NFS and SMB)

- Configuring NFSv4 shares
- Setting up Samba for Windows/Linux interoperability

Module 7: Email and Messaging Services

- Postfix configuration and mail relay
- Securing mail services with TLS

Module 8: Database Services with MariaDB

- Installing and managing MariaDB
- Automating database service deployment

Module 9: Authentication and Identity Management

- Configuring Kerberos and LDAP-based authentication
- Integrating RHEL systems with centralized identity services

Module 10: Automation and System Roles

- Using RHEL system roles to manage and automate services
- Applying automation for repeatable deployments

Module 11: Comprehensive Labs

- Real-world service automation and troubleshooting scenarios