

Red Hat OpenStack Administration II: Day 2 Operations for Cloud Operators

Course Duration: 40 Hours

Course code: CL210

1. Course Overview

The Red Hat OpenStack Administration II: Day 2 Operations for Cloud Operators (CL210) course focuses on advanced operational skills for managing a production-grade Red Hat OpenStack Platform environment. It covers performing routine maintenance, scaling resources, troubleshooting issues, and ensuring high availability. Participants learn to monitor performance, secure the environment, and optimize cloud operations for efficiency and reliability.

2. What you'll learn?

By the end of this course, learners will:

This course is designed to equip participants with the skills and knowledge required to operate in high-velocity IT environments where change is rapid, innovation is critical, and digital products and services are delivered at speed. Learners will gain a deep understanding of digital transformation, high-velocity IT concepts, and the practices needed to co-create value through IT-enabled services in a fast-paced world. The course focuses on how to balance velocity with resilience, ensuring that service delivery remains reliable, secure, and

customer-centered.

3. Target Audience

- IT managers and team leaders
- IT service management professionals
- DevOps professionals
- Agile and Lean practitioners
- Professionals involved in digital transformation initiatives
- Individuals pursuing the ITIL® Managing Professional (MP) designation

4. Pre-Requisites

Participants should have:

- Cloud operators and system administrators
- Infrastructure engineers
- Cloud support engineers
- IT professionals managing private or hybrid cloud environments
- Red Hat Certified System Administrators aiming to expand their skills
- Professionals responsible for OpenStack-based cloud operations

5. Course content

Module 01 – Advanced OpenStack Architecture and Services

- Review of Core and Supporting Services
- Service Dependencies and High Availability Architecture
- Understanding Advanced Integration Points

Module 02 – Day 2 Compute Operations with Nova

- Managing and Scaling Virtual Machine Resources
- Optimizing Flavors, Images, and Key Pairs
- Advanced Scheduling and Resource Tuning

Module 03 – Advanced Networking with Neutron

- Configuring Complex Network Topologies
- Advanced VLAN, VXLAN, and Provider Networks
- Managing Security Groups, Floating IPs, and Network Policies

Module 04 – Advanced Storage Management

- Scaling Block Storage with Cinder
- Managing Object Storage with Swift in Production
- Storage Optimization and Data Protection Strategies

Module 05 – Identity, Access, and Security with Keystone

- Advanced User, Role, and Project Management
- Implementing Strong Authentication and Authorization
- Multi-Tenant Isolation and Compliance

Module 06 – Monitoring, Troubleshooting, and Optimization

- Monitoring Service Health and Performance Metrics
- Troubleshooting Compute, Network, and Storage Issues
- Operational Best Practices for Performance and Security

Module 07 – Scaling and Lifecycle Management

- Horizontal and Vertical Scaling Strategies
- Patching, Upgrades, and Maintenance Procedures
- Disaster Recovery and Backup Planning

