

SUSE Manager 4.X Operations Course (SMGR201v4.3)

Course Duration: 24 Hours

Course code: SMGR201v4.3

1. Course Overview

This three-day course focuses on the day-to-day operations and management of SUSE Manager 4.x. It provides in-depth knowledge of managing Linux systems at scale, including software lifecycle management, patching, configuration management, and system provisioning. Learners will gain hands-on experience in automating administrative tasks, maintaining system compliance, and managing diverse Linux environments efficiently using SUSE Manager.

2. What you'll learn?

By the end of the course, you will be able to:

- Understand the architecture and components of SUSE Manager 4.x
- Manage and administer client systems using SUSE Manager
- Perform software package management and patching at scale
- Deploy and manage systems using provisioning features
- Implement configuration management using Salt
- Monitor systems and maintain compliance
- Automate administrative and operational tasks
- Troubleshoot issues within SUSE Manager environments

3. Target Audience

- Linux system administrators
- DevOps and infrastructure engineers
- IT operations professionals
- Data center and cloud administrators

4. Pre-Requisites

Before taking this course, you should have:

- Basic knowledge of Linux system administration
- Familiarity with SUSE Linux Enterprise Server (SLES)
- Understanding of networking concepts
- Basic scripting knowledge (recommended)

5. Course content

Module 1: Course Introduction

- Introduction and course logistics
- Overview of SUSE Manager capabilities
- Course objectives and lab setup

Module 2: SUSE Manager Architecture and Components

- Overview of SUSE Manager 4.x architecture
- Key components (Server, Proxy, Clients)
- Role of Uyuni and upstream projects
- Communication protocols and workflows

Module 3: Installation and Initial Configuration

- SUSE Manager installation overview
- Initial setup and configuration
- Synchronizing software channels
- Managing repositories and credentials

Module 4: Client Registration and Management

- Registering client systems
- Managing system inventory
- System groups and organization
- Activation keys and onboarding automation

Module 5: Software Management and Patch Administration

- Managing software channels
- Package installation and updates
- Patch management and scheduling
- Errata handling and compliance

Module 6: Configuration Management with Salt

- Introduction to SaltStack architecture
- Managing configurations using Salt states
- Remote command execution
- Automating configuration tasks

Module 7: System Provisioning and Deployment

- Bare-metal provisioning concepts
- AutoYaST profiles
- Image-based deployment
- Managing system lifecycles

Module 8: Monitoring and Reporting

- System monitoring features
- Performance and health monitoring
- Generating reports
- Compliance and auditing

Module 9: Automation and Scheduling

- Task automation in SUSE Manager
- Scheduling jobs and actions
- Event-driven operations
- Managing recurring administrative tasks

Module 10: Managing Proxies and Scalability

- SUSE Manager Proxy setup and configuration
- Scaling infrastructure
- Load distribution and optimization
- Managing large environments

Module 11: Security and Compliance Management

- User and role-based access control (RBAC)
- Managing security policies
- System compliance and auditing
- Vulnerability management

Module 12: Troubleshooting and Maintenance

- Diagnosing common issues
- Log file analysis
- Debugging client-server communication
- Maintaining SUSE Manager health

Module 13: Integration with Enterprise Environments

- Integration with virtualization platforms
- Cloud and hybrid environment support
- API usage and external integrations
- Managing multi-distribution environments

Module 14: Backup and Disaster Recovery

- Backup strategies for SUSE Manager
- Restoring system configurations
- Disaster recovery planning
- Data protection best practices

Module 15: Capstone Lab and Real-World Use Cases

- End-to-end system management scenario
- Automating patch and configuration workflows
- Troubleshooting real-world issues
- Final assessment and project

