



# Course: SLE201v16

## SUSE Linux Enterprise Server 16 Operations



### Training Level:

- ☐ Beginner

### Delivery Method

- ☐ ILT
- ☐ eLearning

### Duration:

- ☐ 5 days ILT

### Course Overview

This course provides a comprehensive foundation in SUSE Linux Enterprise Server (SLES) 16 administration, beginning with the fundamentals: an introduction to SLES 16, the command-line interface, accessing help, and gaining administrative privileges. It then moves to essential management skills, covering the Linux file system hierarchy and command-line file system management, as well as mastering the Vim text editor.

The course next explores remote management, teaching both command-line techniques and the use of the web-based Cockpit interface. Core administration topics follow, including creating and managing users and groups, configuring file system permissions, and handling process management and task scheduling.

Finally, the course addresses advanced configuration and security, covering storage setup, network environment configuration, the SELinux security framework, system log management, and the deployment of a basic SLES 16 system.

By the end of the course, participants will be equipped to perform essential administrative tasks required for a SLES 16 system.

This course helps prepare students for the SUSE Certified Administrator (SCA) in Enterprise Linux 16 certification exam.

### Key Objectives

Attendees will be taught the following concepts and skills:

- ☐ Navigating the Bash shell and executing Linux commands
- ☐ The Linux filesystem hierarchy and managing the file system
- ☐ Using the VIM text editor
- ☐ Performing remote system administration using SSH and Cockpit
- ☐ Administering local users, groups, and standard file system permissions
- ☐ Manage system processes, systemd services, and task scheduling with systemd timers
- ☐ Configuring storage, including partitions and file systems
- ☐ Configuring basic networking, name resolution, and the firewall
- ☐ Implementing Mandatory Access Control using SELinux
- ☐ Analyzing system logs and gather diagnostic information
- ☐ Deploying a basic SLES 16 system

### Audience

This course is primarily designed for system administrators and consultants new to Linux who need to perform day-to-day administration tasks on SUSE Linux Enterprise Server 16.

### Prerequisites

Attendees should have basic computer skills on any operating system. No previous Linux experience is required.



## Course Outline

- ❑ Section 1: Course Introduction
- ❑ Section 2: Overview of SUSE Linux Enterprise Server 16
  - ❑ Overview of SUSE Linux Enterprise Server 16 (SLES)
  - ❑ Introduction to the Features and Components of SLES 16
  - ❑ SLES in the Public Cloud
- ❑ Section 3: Introduction to the Command Line
  - ❑ Logging into the System
  - ❑ Introduction to the Command Line
  - ❑ Getting Help at the Command Line
  - ❑ Executing Linux Commands
  - ❑ Redirection and Piping
  - ❑ Introduction to Environment Variables
  - ❑ Understand How to Obtain root User Privileges
  - ❑ Working with Tab Completion
  - ❑ Use the Shell History
- ❑ Section 4: The Linux File System
  - ❑ File System Hierarchy Standard
  - ❑ The Linux File System Structure
  - ❑ Navigating the File System
  - ❑ Linux File Types
  - ❑ File System Management Commands
- ❑ Section 5: Working with the VIM Text Editor
  - ❑ Introduction to the Vim Editor
  - ❑ Using Vim
  - ❑ Configuring Vim
- ❑ Section 6: Remote System Administration Using SSH
  - ❑ Overview of Remote System Management
  - ❑ Remote Administration Using SSH
  - ❑ Configure Public Key-Based Authentication for SSH
  - ❑ Transfer Files Securely Using SSH Tools
  - ❑ Introduction to GNOME Remote Desktop
- ❑ Section 7: Remote System Administration Using Cockpit
  - ❑ Introduction to Cockpit
  - ❑ Install and Access Cockpit
  - ❑ Configure Cockpit to Use Multi-Factor Authentication
  - ❑ Introduce the Cockpit Features
- ❑ Section 8: Managing Users and Groups
  - ❑ Overview of Users and Groups
  - ❑ Create and Manage Users Using the Command Line
  - ❑ Create and Manage Group Membership Using the Command Line
  - ❑ Create and Manage Users Using Cockpit
- ❑ Section 9: File System Permissions
  - ❑ Introduction to File System Permissions
  - ❑ Configure File System Permissions
  - ❑ Configure the Default File System Permissions
  - ❑ Configure File and Directory Ownership
- ❑ Section 10: Processes, Services and Task Scheduling
  - ❑ Processes
  - ❑ Viewing Processes
  - ❑ Managing Processes
  - ❑ Foreground and Background Processes

## SUSE Training

Information about SUSE Training can be found at:

<https://www.suse.com/training/>



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Contact [suse-training@suse.com](mailto:suse-training@suse.com) with any questions.



- ☐ Services
- ☐ Schedule Tasks
- ☐ Section 11: Introduction to Storage
  - ☐ Introduction to Storage in Linux
  - ☐ Introduction to Disk Partitioning
  - ☐ Persistent Device Naming
  - ☐ Introduction to Creating Linux File System
  - ☐ Making file Systems Accessible
  - ☐ Managing Storage Space
- ☐ Section 12: Basic Networking in SLES
  - ☐ Overview of Networking in SUSE Linux ENTERprise Server 16
  - ☐ View and Manage the Network Configuration
  - ☐ Test the Network Configuration
  - ☐ Network Name Resolution
  - ☐ Overview of the Firewall
- ☐ Section 13: Overview of SELinux
  - ☐ Introduction to SELinux Concepts
  - ☐ SELinux Configuration and Modes
  - ☐ SELinux Contexts and Management
- ☐ Section 14: System Logging
  - ☐ Overview of System Logging in SLES
  - ☐ View Kernel Ring Buffer Data
  - ☐ The System Logging Daemon
  - ☐ Manage Log Lifecycle with Logrotate
  - ☐ The Systemd Journal Service
  - ☐ Supportconfig for Troubleshooting
- ☐ Section 15: Manually Deploy a Basic SLES 16 System
  - ☐ Overview of a Basic Deployment of SLES 16

