

Training: SUSE  
SLE301 SUSE Linux Enterprise Server 12 Advanced Administration



FORM OF TRAINING	MATERIALS	PRICE	DURATION
Traditional	Hardcopy	850 EUR	5 days
Traditional	CTAB Tablet	950 EUR	5 days
Distance learning	Hardcopy	850 EUR	5 days
Distance learning	CTAB Tablet	850 EUR	5 days

## LOCATIONS

Krakow - 5 Tatarska Street, II floor, hours: 9:00 am - 4:00 pm  
Warsaw - 17 Bielska Street, hours: 9:00 am - 4:00 pm

## TRAINING GOALS:

The course **SUSE Linux Enterprise Server 12 Advanced Administration** builds upon the SUSE Linux Enterprise Server 12 Administration course and teaches advanced system administration tasks on SLES 12.

Attending students should have a good working knowledge of general system configuration and working with the Linux command line. After attending the course, the student should be capable of administering SLES 12 and be able to deal with specialized networking and storage configuration. They should also have a solid understanding of basic Bash scripting.

This course helps prepare students for the SUSE Certified Engineer in Enterprise Linux 12 (2018 Update) certification exam.

### Audience Summary

- The course is designed for those who already have experience with Linux, including general system configuration and using the command line. The course is ideal for those seeking advanced administration skills on SUSE Linux Enterprise Server 12, those who have completed the **SUSE Linux Enterprise Server 12 Administration (SLE201)** course and those preparing to take the SUSE Certified Engineer in Enterprise Linux 12 (2017 Update) certification exam.

## CONSPECT:

- Advanced System Administration
  - YaST Security Module
    - Understand and use the YaST Security Module

- Backup and Recovery
  - Understand and Use Snapper
- Software Libraries
  - Understand Software Libraries in Linux
- General Server Health
  - Gather Server Health and Performance Information
- Monitoring Overview
  - Monitoring Methodology
  - What are Optimization Tools?
  - The Optimization Process
  - System Optimization Tools
- Control Groups
  - Understand Linux Control Groups
- Encryption
  - SSL/TLS
    - Understand SSL/TLS Concepts
    - Create a Certificate Authority
    - Generate and Use Certificates
    - openssl
  - GPG
    - Understand GPG Concepts
    - Perform GPG Key Creation and Management
    - Perform GPG Key Distribution
- Shell Scripting
  - Use Basic Script Elements
  - Use Control Structures
  - Read User Input
  - Use Arrays
  - Use Functions
  - Use Command Options in Scripts
  - Test File Types and Compare Values
- Hardware
  - Hardware Info
    - Display Hardware Information
  - Drivers
    - Understand Linux Drivers

- Use Driver Management Utilities
- Advanced Networking
  - Network Namespaces
    - Understand Linux Network Namespaces
    - Work with Linux Network Namespaces
  - Openvswitch
    - Understand Openvswitch Concepts
    - Install and Configure Open vSwitch
  - IPv6
    - Understand IPv6
    - Configure IPv6
- Storage Administration
  - iSCSI
    - Understand iSCSI Concepts
    - Configure and Manage the LIO Daemon
  - MPIO
    - Understand Mutipath I/O
    - Configure and Manage Device Mapper Multipath I/O
- Centralized Authentication
  - PAM
    - Understand PAM
    - Configure PAM
  - SSSD
    - Understand SSSD
    - Deploy SSSD
- Packaging and Updates
  - RPM
    - Mange RPM Packages
    - Build RPM Packages
    - Understand the RPM spec file
    - Sign RPM Packages with GPG
  - Repositories
    - Understand Software Repository Concepts
    - Create a Software Repository with creatrepo
    - Sign RPM-MD Software Repositories
    - Manage Software Repositories with libzypp

- SMT
  - Understand the Subscription Management Tool (SMT)
  - Install and Configure an SMT Server
  - Manage Software Repositories with SMT
  - Use Repository Staging with SMT
  - Configure SMT Clients
- Advanced Deployment
  - AutoYaST
    - Introduction to AutoYaST
    - Prepare for an AutoYaST Installation
    - Configure and Installation Server
    - Configure PXE
  - Kiwi
    - Overview of KIWI
    - Installing KIWI
    - Basic Workflow
    - Building Images
    - Customizing the Boot Process
    - The KIWI Image Description File
    - Advanced Configuration Options
    - Image Maintenance
    - System Analysis
  - Machinery
    - Overview of Machinery
    - Installation
    - Using Machinery
- Configuration Management with Salt
  - Salt Overview
  - Install and Configure Salt
  - Understand Execution Modules
  - Understand the Salt State System

## REQUIREMENTS:

Before attending this course, it is highly recommended that students have a good working knowledge of Linux and should be able to:

- Perform partitioning and file system setup and maintenance
- Perform system configuration including network setup and user management
- Manage software packages
- Work on the command line including file management and text editing

This knowledge can be gained through the **SUSE Linux Enterprise 12 Administration Course (SLE201)**.

### Difficulty level



### CERTIFICATE:

The participants will obtain certificates signed by SUSE.

### TRAINER:

Certified SUSE Trainer.