NV 3071 SUSE Linux Enterprise Server 10 Fundamentals

Course Summary

Description

This course guides students who have no experience with Linux through the main concepts of open source software and Linux using the SUSE Linux Enterprise Server 10. Students will learn the concepts of Open Source and Linux as well as the fundamental knowledge necessary to administer SUSE Linux Enterprise Server 10.

Objectives
At the end of this course, students will be able to:

- Install SUSE Linux Enterprise Server 10 and know where to find help when having problems
- Understand the basic concepts of bash and the file system
- Manage users and permissions

Topics

- Understand the Linux Story
- Use the Linux Desktop
- Administer Linux with YaST
- Locate and Use Help Resources
- Manage Directories and Files
- Work With the Linux Shell and Command Line
- Use Linux Text Editors
- Manage User, Groups, and Permissions

Audience
This course is ideal for those who have little or no experience with Linux and who are seeking a fundamental understanding of the SUSE Linux Enterprise Server 10 operating system.

Prerequisites
This course is designed for beginners with the Linux operating system. Attendees are required to have only basic computer skills on any operating system. Knowledge of a desktop operating system is sufficient.

Duration

Three days

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Course Outline

I. Understand the Linux Story
A. The History of Linux
B. The Historical Development of UNIX
C. The Development of Linux
D. The Software Differences Between SUSE Linux and SUSE Linux Enterprise Server
E. Understand the Multiuser Environment
F. Perform a Simple Installation of SUSE Linux Enterprise Server 10
G. Pre-Installation Requirements and Guidelines Installation Options
H. Basic Installation
I. Configuration

II. Use the Linux Desktop
A. Overview of the Linux Desktop
B. Use the GNOME Desktop Environment
C. Log In
D. Log Out and Shutdown
E. Identify GNOME Desktop Components
F. Manage Icons in GNOME
G. Use the GNOME File Manager (Nautilus)
H. Access the Command Line Interface From the Desktop

III. Administer Linux with YaST
A. Get to Know YaST
B. Understand the Role of SuSEconfig
C. Manage the Network Configuration Information from YaST
D. Install Software Packages
E. Manage Installation Sources

IV. Locate and Use Help Resources
A. Access and Use man Pages
B. Use info Pages
C. Access Release Notes and White Papers
D. Release Notes
E. Manuals
F. Help for Installed Packages
G. How tos
H. Use GUI-Based Help
I. Find Help on the Web

V. Manage Directories and Files
A. Understand the File System Hierarchy Standard (FHS)
B. The Hierarchical Structure of the File System
C. FHS (Filesystem Hierarchy Standard)
D. Root Directory /
E. Essential Binaries for Use by All Users (/bin)
F. Boot Directory (/boot)
G. Other Partitions (/data)
H. Device Files (/dev)
I. Configuration Files (/etc)
J. User Directories (/home)
K. Libraries (/lib)
L. Mountpoints for Removable Media (/media/*) Application Directory (/opt)
M. Home Directory of the Administrator (/root)
N. System Binaries (/sbin)
O. Data Directories for Services (/srv)
P. Subdomain for AppAmor (/subdomain)
Q. Temporary Area (/tmp)
R. The Hierarchy Below /usr
S. Variable Files (/var)
T. Windows Partitions (/windows)
U. Process Files (/proc)
V. System Information Directory (/sys)
W. Mountpoint for Temporarily Mounted File Systems (/mnt)
X. Directories for Mounting Other File Systems
Y. Identify File Types in the Linux System
Z. Normal Files
AA. Directories
BB. Device Files
CC. Links
DD. Sockets
EE. FIFOs
FF. Change Directories and List Directory Contents
GG. cd
HH. ls
II. pwd
JJ. Create and View Files>
KK. Create a New File with touch
LL. View a File with cat

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Course Outline (cont'd)

MM. View a File with less
NN. View a File with head and tail
OO. Work with Files and Directories
PP. Copy and Move Files and Directories
QQ. Create Directories
RR. Delete Files and Directories
SS. Link Files
TT. Find Files on Linux
UU. Graphical Search Tools
VV. find
WW. locate
XX. whereis
YY. which
ZZ. type
AAA. Search File Content
BBB. How to Use the Command grep
CCC. How to Use Regular Expressions

VI. Work With the Linux Shell and Command Line

A. Get to Know the Command Shells
B. Types of Shells
C. bash Configuration Files
D. Completion of Commands and File Names
E. Execute Commands at the Command Line
F. History Function
G. Switch to User root
H. Get to Know Common Command Line Tasks
I. Variables
J. Aliases
K. Understand Command Syntax and Special Characters
L. Select your Character Encoding
M. Name Expansion Using Search Patterns
N. Prevent the Shell from Interpreting Special Characters
O. Use Piping and Redirection

VII. Use Linux Text Editors

A. Get to Know Linux Text Editors
B. Use the Editor vi to Edit Files
C. Start vi
D. Use the Editor vi
E. Learn the Working Modes

VIII. Manage User, Groups, and Permissions

A. Manage User and Group Accounts With YaST Basics About Users and Groups
B. User and Group Administration With YaST
C. Describe Basic Linux User Security Features
D. File System Security Components
E. Users and Groups
F. Manage User and Group Accounts From the Command Line
G. Manage User Accounts From the Command Line
H. Manage Groups From the Command Line
I. Create Text Login Messages
J. Manage File Permissions and Ownership
K. Understand the File Permissions
L. Change the File Permissions With chmod
M. Change the File Ownership With chown and chgrp
N. Modify Default Access Permissions
O. Configure Special File Permissions
P. Ensure File System Security
Q. The Basic Rule for User Write Access
R. The Basic Rule for User Read Access
S. How Special File Permissions Affect the Security of the System

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