

## **SUSE LINUX ADMINISTRATION**

- Course ID: N3037
- Duration: 60 hours

### **Course Outline:**

#### **Section 1 - Introduction to Managing the SUSE Linux Enterprise Server**

- 1 - Introduction to SUSE Linux Enterprise Server
- 2 - Understanding the Linux Standards Base (LSB)
- 3 - Identify Default Installation of SUSE Linux Enterprise Server  
Novell® Training Services course information
- 4 - Identify Scope of YaST as a System Management Tool
- 5 - Using SUSEconfig
- 6 - Using YaST Online Update
- 7 - Describe System Health Checking Tools

#### **Section 2 - Managing the Linux User Environment**

- 1 - Introduction to Linux Users and Groups
- 2 - Understanding Public versus Private Schemes
- 3 - Understanding Regular versus System Users
- 4 - Managing Linux Users
- 5 - Customizing the Linux User Environment
- 6 - Managing Linux User Passwords
- 7 - Creating Default Linux Groups
- 8 - Managing Linux Groups

#### **Section 3 - Managing User and Group Security**

- 1 - Setting Permissions for Files and Directories
- 2 - Configuring File Attributes
- 3 - Configuring User Authentication Using PAM
- 4 - Implementing Enterprise Security Policies
- 5 - Monitoring Login Activity

#### **Section 4 - Managing the Linux Files system**

- 1 - Describe Linux File systems
- 2 - Implementing Partitions in the Linux Filesystem
- 3 - Making a Filesystem
- 4 - Mounting the Filesystem
- 5 - Understanding Logical Volume Management (LVM)
- 6 - Managing the Filesystem through YaST and the CLI
- 7 - Checking the Filesystem for Errors
- 8 - Performing Backup and Restore Procedures
- 9 - Establishing Disk Quotas

## **Section 5 - Software Management for the SUSE Linux Enterprise Server**

- 1 - Using RPMs to Manage Software
- 2 - Verifying Software Libraries
- 3 - Using Redcarpet for Software Management

## **Section 6 - Understanding System Initialization**

- 1 - Overview of Linux Load Procedure
- 2 - Understanding Runlevels
  - init
  - /etc/inittab
- 3 - Managing the Kernel
  - /proc filesystem
  - Kernel modules
  - Listing modules
  - Loading / unloading modules
  - Understanding the Initialization RAM Disk (initrd)
- 4 - Understanding the GRUB BootLoader
- 5 - Tuning Your System
  - Using sysctl to set kernel parameters
  - Configuring Services with /etc/sysconfig
  - Building Service Environments with SuSEconfig

## **Section 7 - Managing Linux Services**

- 1 - Process Execution (foreground vs. background)
- 2 - Managing Process Priority (nice & renice)
- 3 - Process vs. Service (daemons)
- 4 - Viewing Shell Scripts that Start Services
- 5 - Identifying the Anatomy of a shell scripts
- 6 - Understanding the Basic Decision Structures
- 7 - Scheduling Jobs: Cron vs. at
- 8 - System Logging Services

## **Section 8 - Connecting the SUSE Linux Enterprise Server to the Network**

- 1 - Configuring Your Network with YaST2
  - Network Components and Architecture
  - Sockets
  - Interface configuration
  - Configuration Files
  - Resolver Libs
  - RoutingIP Addressing
  - Routing Configuration
  - DNS and Hostname Configuration

- 2 - Managing Network Interfaces
  - Enabling and Disabling Network Interfaces
  - Monitoring Network Activity
  - Manipulating the Routing Table
  - Viewing the arp Cache
  - Testing DNS Name Resolution

### **Section 9 - Enabling Network Services**

- 1 - Configuring Network Printing Services (CUPS)
- 2 - Configuring Linux Time
  - hwclock
  - NTP
- 3 - Configuring File Systems
  - Network File System (NFS)
  - Samba (CIFS)
- 4 - Managing Resources on the Network
  - Network Information Services (NIS)
  - LDAP (Conceptual Only)
- 5 - Enabling a Web Server on SUSE Linux (Apache)
- 6 - Enabling External Access Services
  - Implementing Extended Internet Server (xinetd)
  - Configuring TCP/IP Wrappers
  - /etc/hosts.allow
  - /etc/hosts.deny
  - Configuring ftp with YaST

### **Section 10 - Configuring Security Services**

- 1 - Using OpenSSH
  - Secure shell (ssh)
  - Secure copy (scp)
  - Secure ftp (sftp)
  - Key-based authentication
  - X-redirection
- 2 - Accessing YaST Remotely

### **Section 11 - Installing SUSE Linux from the Network**

- 1 - Creating an Installation Server
- 2 - Implementing a Configuration Server

### **Section 12 - Live Fire Exercise**

Install and Configure SUSE Linux Enterprise Server to Statement of Work Specifications