

LINUX SYSTEM ADMINISTRATION

Course Length: 4 days

Course Description: Learn and practice essential Linux system administration tasks. This course is not specific to a particular Linux distribution and presents information about using Linux in a commercial environment.

Audience: System Administrators who want to gain practical, hands-on Linux administration training.

Prerequisites: Fundamentals of Linux. Installation, configuration, and some system administration experience recommended.

Course Contents

OVERVIEW OF SYSTEM ADMINISTRATION

- A Brief History of UNIX
- Linux
- Linux Distributions
- Online Documentation - The man Pages
- Online Documentation - The info Pages

USER ADMINISTRATION

- What is a "user" in Linux?
- The /etc/passwd File
- Passwords
- The /etc/shadow File
- Groups
- The /etc/group File
- Adding Users
- Deleting Users
- Modifying User Attributes
- The Login Process
- /etc/profile and .profile
- The su Command

PERFORMANCE MONITORING AND TUNING

- Swapping and Paging
- Managing Swap Space
- Managing Kernel Resources
- The vmstat Command
- The top Command
- The strace Command

NETWORKING FUNDAMENTALS

- IP Addresses and Netmasks
- Name Resolution
- The /etc/hosts File
- DNS Configuration
- DNS Tools
- Default Route

FILE SYSTEMS AND FILES

- Files and Inodes
- Files
- Directories
- Symbolic Links
- Named Pipes and Sockets
- Device Files
- Character and Block Devices
- A File System Tour
- The find Command

ADVANCED FILE SYSTEM CONCEPTS

- File System Concepts
- Traditional UNIX File Systems
- UNIX File System Advances
- The Virtual File System
- ext2 File System Design
- The Superblock
- Extended File Attributes
- Recovery and Journaling
- Third-Generation File Systems
- The df Command
- The du Command

DISK MANAGEMENT

- Partitions and File Systems
- Making a File System
- The fdisk Command
- The mkfs Command
- The mount Command
- The fstab File
- The fsck Command

ARCHIVING FILES

- Backup Strategies
- Archiving Tools
- The tar Command
- The cpio Command
- The dump Command
- The zip Utility
- The dd Utility
- Compressing Files
- Backup Strategies

CONFIGURING TCP/IP

- Network Interfaces
- The ifconfig Command
- Network Scripts
- The route Command
- The netstat Command
- The traceroute Command
- Ping
- Using Telnet

NETWORK SERVICES

- TCP/IP and Ports
- The /etc/services File
- The xinetd Daemon
- The /etc/xinetd.conf File
- Host-Based Access Control

SERVER CONFIGURATION AND MANAGEMENT

- The Apache Web Server
- Traditional Linux Printing
- CUPS - The Common UNIX Printing System
- webmin - Remote System Administration
- Managing FTP
- Internet Mail Service
- Managing Domain Name Service

SHARING FILESYSTEMS

- File and Print Sharing
- Sharing Filesystems with NFS
- NFS Mounts
- Samba Server Overview
- The smb.conf File
- The smbclient Utility
- Mounting smb Shares

LINUX SYSTEM SECURITY

- Security Overview
- Security Basics
- PAM - Pluggable Authentication Modules
- Configuring PAM
- The Linux Firewall
- Configuring the Firewall with iptables
- Secure networking with ssh
- System Logs
- Security Resources

LINUX PROCESSES

- Overview of Processes
- Process Space
- The fork/exec Mechanism
- Process Table
- The ps Command
- The /proc File System
- Background Processes
- The kill Command

PACKAGE MANAGEMENT

- Software Installation and Management
- The rpm Command
- Installing and Upgrading Software with rpm
- Removing Packages
- The rpm Database
- Building Software from Source

JOB SCHEDULING

- Scheduling Jobs
- The crond and atd Daemons
- The at Command
- The crontab Command
- Format of cron Files
- System crontab Files

SYSTEM STARTUP AND SHUTDOWN

- Overview of the Bootup Sequence
- LILO
- GRUB
- Kernel Startup
- The init Daemon
- /etc/inittab
- The init Command
- The rc Scripts
- The chkconfig Command
- Single-User Mode
- The shutdown Command
- Communicating with Users: The wall Command

DCInternet

Lugar:

Altadena 26. Col. Nápoles, México, D .F.

Formas de pago:

Este pago puede realizarse de cualquiera de las siguientes maneras:

- ❖ Depósito en Banamex cuenta 4923239 Suc. 575 a nombre de Desarrollo y Capacitación en Internet, S. A. de C. V. (CLABE en caso de transferencia electrónica vía Internet 002180057549232394)
- ❖ Cheque a nombre de Desarrollo y Capacitación en Internet, S. A. de C. V.
- ❖ Tarjeta de Crédito Master Card o Visa (Se requiere asistir a las instalaciones para hacer el pago).

Nota: El material está en inglés técnico.

Incluye: Material de los cursos, mochila, diploma de participación, estacionamiento y servicio de cafetería.

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