

ADVANCED LINUX ADMINISTRATION

Objetivo: Este curso da al alumno el conocimiento para realizar tareas de administración del sistema relacionadas a la administración de sistemas de archivos, incluyendo set uid bit para permisos, manejo de particiones, montado y desmontado, diagnostico de discos, RAID, LVM y discos tipos NFS, y asignación de cuotas de disco. El curso termina con la administración de dispositivos de hardware, conceptos básicos de redes, incluyendo TCP/IP y resolución de problemas.

Audiencia: Administradores que se deseen moverse a una administración de Linux más a detalle.

Prerrequisitos: Administración de Linux.

Contenido

1.- ADVANCED PERMISSIONS

- Special Permission: setuid
- Special Permission: setgid
- Special Permission: sticky bit
- Access Control Lists

2.-ADMINISTERING PARTITIONS

- Device names
- Virtual filesystems vs. physical filesystems
- Why have partitions?
- Which partitions should you create?
- Creating and modifying partitions with fdisk
- Creating and modifying partitions with parted
- The mkfs command
- The mke2fs command
- Create a partition label

3.-MOUNTING FILESYSTEMS

- What is mounting?
- The mount command
- Mount rules
- The umount command
- umount rules
- Mounting automatically at boot
- The mount -a command
- The umount -a command
- Review: the df command
- Mounting CDs and floppy disks
- Swap partitions and files

4.- ADMINISTERING THE FILESYSTEM

- Filesystem details
- The mke2fs command
- The ext2 and ext3 filesystems
- Why filesystems break
- Fixing filesystems with fsck
- fsck examples
- Displaying filesystem attributes
- Modifying filesystem attributes

5.- RAID

- RAID basics
- Hardware & software RAIDs
- RAID levels
- The mdadm command
- RAID disk recovery

6.-LOGICAL VOLUMES

- What is LVM?
- LVM terms
- Initializing hard disks or partitions
- Creating a Volume Group
- Activating and deactivating a Volume Group
- Deleting a Volume Group
- Deleting a Physical Volume from a Volume Group
- Adding a Physical Volume to a Volume Group
- Displaying Volume Group information
- Displaying Physical Volume information
- Creating a Logical Volume
- Displaying Logical Volume information
- Using a Logical Volume
- Extending a Logical Volume
- Reducing a Logical Volume
- Making backups using snapshot
- Deleting a Logical Volume

7.- NETWORK FILESYSTEMS

- What is NFS?
- NFS benefits
- NFS daemons
- Starting server daemons
- Setting up a NFS server
- Setting up a NFS client
- Using automount

8.- DISK QUOTAS

- Configuring a filesystem to support disk quotas
- Initializing the disk quota database
- Assigning quotas to user accounts
- Assigning quotas to group accounts
- Working with soft limits
- Displaying quota information
- Issuing warnings
- Turning quota checking on and off

09.- HARDWARE MANAGEMENT

- Compatibility
- Device Nodes
- Displaying hardware information
- Configuring hardware

10.- ADVANCED X CONFIGURATION

- X Window System components
- The process of starting X Window Server
- X Window security with xhost
- X Window security with xauth
- X Window security with ssh
- X Font Server

11.- SHELL SCRIPTING

- Scripting basics
- Review of Variable Usage
- Review of Quoting
- Arguments
- if statements
- Test conditions
- while loops
- until loops
- The break statement
- The continue statement
- The case statement
- for loops
- Exit Status
- Functions
- Advanced Input/Output
- Signals
- Debugging

12.- FUNDAMENTALS OF TCP/IP

- TCP/IP-based protocols
- IP addresses
- Subnetting
- IP routing
- DNS
- DHCP

13.- TCP/IP CONFIGURATION

- Configuring a network interface
- Global network settings
- DNS client settings
- The Name Service Switch configuration file
- Network configuration utilities

15.- TROUBLESHOOTING

14.-PRINTER MANAGEMENT

- CUPS
 - LPD and LPRng
 - Setting up a CUPS printer
 - Printing Files
 - Monitoring the print queue
 - Canceling print jobs
 - Specifying a default printer
 - Printer classes
 - Checking printer status
 - Managing the print queue
 - Printing with different priorities
 - Controlling printer status
 - Moving print jobs
 - Recovering from printer problems
 - Removing a printer
- User Access Problems
 - System Boot Problems
 - Problems with the X Window System
 - Networking Problems
 - Filesystem Problems
 - Using the Troubleshooting Steps
 - Using Recovery Run Levels
 - The Rescue Environment

Duración aproximada: 35-40 horas (40 cuando se incluye una hora para ir a comer)

Lugar:

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Incluye:

Incluye material original importado del curso en inglés, mochila, descanso de 15 a 20 minutos con galletas, café y refrescos, estacionamiento y diploma de participación en el curso.

Formas de pago:

Este pago puede realizarse de las siguientes maneras:

1. 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)
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