

HP-UX System Administration

Course Summary

Description

Configure, troubleshoot, and manage an HP-UX server while learning about filesystems, space management, and system performance. Gain real-world experience such as recovering a crashed server and mirroring disks using LVM. Learn and use the command-line interface for each task as well as when it is best to use SAM.

Objectives

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

- Install hardware and kernel drivers
- Stripe and mirror disks using LVM
- Create filesystems
- Upgrade HP-UX to 11.0 / 11i Reconfigure the kernel
- Install software and patches using SD-UX
- Create a bootable backup tape

Topics

- HP-UX Operating System
- System Administration Manager (SAM)
- Account Management
- Peripheral Configuration and Installation
- Storage Structures
- Space Management
- System Backup and Recovery
- Job Automation
- Kernel Configuration
- Printer Management
- Software Distributor (SD-UX)
- OS Sequences
- File Systems
- Performance Monitoring

Audience

This course is designed for administrators and operators.

Prerequisites

Students should take ProTech's HP-UX Essentials for System Administrators or Unix Concepts course, plus have one year of Unix experience. Students must be comfortable using vi.

Duration

Five days

HP-UX System Administration

Course Outline

I. HP-UX Operating system

- A. Login Sequence
- B. OS Layout: /use, /var, /var/adm (Directories)
- C. Common Desktop Environment (CDE)

II. System Administration Manager (SAM)

III. Account Management

- A. Editing /etc/passwd
- B. One-Step Account Creation

IV. Peripheral Configuration and Installation

- A. I/O Convergence and Expansion
- B. Peripheral Addressing and Adapters
- C. Device Files

V. Storage Structures

- A. Whole Disk Partitioning
- B. Logical Volume Partitioning
- C. LVM Device Files
- D. Logical and Physical Extents
- E. Physical volumes, Volume Groups, and Logical Volumes
- F. Disk Striping and Mirroring
- G. PV Links

VI. File Systems

- A. Hard vs. Soft Links
- B. Mounting File Systems
- C. HFS vs. JFS
- D. File System Creation
- E. Editing /etc/fstab
- F. Mounting a CD-ROM File System
- G. File System Management

VII. Space Management

- A. Routine Maintenance: File Clean-up
- B. Memory Allocation
- C. Swap Space

VIII. System Backup and Recovery

- A. cpio, tar, fbackup and frecover
- B. make_recovery

IX. Job Automation

- A. cron and crontab

X. Kernel Configuration

XI. Printer Management

- A. HP Distributed Print Service (HPDPS)
- B. Adding Printers and Plotters

XII. Software Distributor (SD-UX)

- A. SD-UX Command and Syntax
- B. Installing software and Patches
- C. Constructing a Depot Server

XIII. OS Sequences

- A. Standard Boot Sequence
- B. Manipulating the Boot Process
- C. Abnormal Shutdown, Dump Devices, and Crash Events

XIV. Performance Monitoring

- A. Memory Management
- B. Buffer Cache
- C. Disk I/O and SCSI Performance
- D. HP Performance Monitoring