Hp Unix Level_1 & Level_2 & 3

Fees: 18,000 Rs Duration: 60 Days

Batch Slots : Total -2

Timings Regular : 4 days Per Week (2 Hrs Per day)

Timings Weekend : 2 days (Sat-Sun) Per Week (4 Hrs Per day)

HP-UX Introduction Part-1

Synopsis

This course introduces the delegate to the main concepts of the HP-UX Operating System. The most commonly used commands are described in detail, as are the command line wildcard and redirection facilities. The mechanisms by which a user acquires a login environment are discussed and the main features of the Bourne, Korn and Posix Shells are introduced.

Delegates will practise:

- Creating, copying, renaming, moving and deleting files and directories
- Using the shell's redirection and pipe facilities
- Editing text files using the vi editor
- Setting and changing access permissions on files
- Monitoring and controlling their own processes
- Using the basic file and text searching utilities
- Customising their own login environment

Course Objectives

On completion of the course the delegate will have a good practical knowledge of the HPUX Operating System, the command structures and the editor facilities.

Suitable for

- Personnel who require a good working knowledge of the HPUX Operating System and the vi editor.

Prerequisites

- None, but an understanding of and exposure to information technology is advantageous

Contents:

Introduction to the HP-UX Operating System

- A brief history of Unix
- The Unix kernel
- Overview of commands and utilities
- The user interface
- A Unix login session

The HP-UX File System

- The file system structure
- Directories and files
- Pathnames
- Navigating the file system

Basic Commands

- Command line syntax
- Basic file handling commands
- Directory handling commands
- Filename wildcard characters

Redirection and Pipes

- Input redirection
- Output redirection
- Pipes

The vi Editor

- Introduction to text file editing
- How to use the vi editor
- Copying, moving, editing and deleting text
- Search and replace features
- Reading and writing files

File Access Control

- Users and user groups
- File access permissions
- Changing file attributes
- Switching users and user groups
- Linking files

Processes

- What is a process?
- System and user processes
- Monitoring processes
- Killing processes
- Background processes

More Basic Commands

- The file command
- The wc (word count) command
- The find command
- The grep command
- The sort command

The User Environment

- What is an environment?
- The Korn Shell environment
- Environment variables and aliases
- The system profile
- The user's profile
- Command line history and editing
- Job control

HP-UX Introduction Part-2

Synopsis

This course is designed to give delegates practical experience in the administration of an HP-UX Unix System. Reference will be made to the HP-UX commands required to administer the system, although practical work will concentrate on using the System Administration Manager (SAM) to achieve the course objectives.

The delegates will have knowledge and practise in:

- The Role of the System Administrator
- System Administration Manager (SAM)
- File Systems and Storage
- System Startup and Shutdown
- Interacting with IPL
- Booting from Alternate Media
- User Account Administration
- Access Control Lists
- Trusted Security Features
- Terminal and Printer Configuration
- Logical Volume Manager (LVM)
- Create, Modify & Delete Logical Volumes
- Important LVM Commands
- Mount/Unmount Filesystems
- Filesystem Layout
- Using Swap Space
- Backup and Restore Facilities
- Using tar and cpio
- Using fbackup & frecover
- Incremental Backups
- System Recovery Using Ignite-UX
- Background Jobs and Scheduling
- Kernel Configuration
- Software Installation
- Software Distribution
- Using SD Commands
- General Housekeeping

Course Objectives

On completion of the course the delegate will have practical experience of the System Administration Manager (SAM) allowing them to administer an HP-UX 11 system.

Suitable for

- The course is designed for System Administrators and Programmers and other Technical IT staff who require a full working knowledge of how to administer an HP-UX system.

Prerequisites

- Completion of HP-UX Introduction Part-1 and HP-UX Shell Programming courses(Optional), or equivalent knowledge

Contents:

The Systen Administrator's Role

- Role of a Systems Administrator
- Directory Overview
- The root login and the su command
- Tracking the Use of su

System Administration Menu

- Key Movement
- SAM Menu Structure
- SAM Main Screen
- SAM Logging Options
- Log File Viewer
- Files and Directories
- Add Custom Commands to SAM
- Non-Root SAM Access

System Startup and Shutdown

- System Startup Process
- ISL (Initial Systems Loader}
- Manually Booting HP-UX in Single User-Mode
- Booting from Another Disk
- The Init Procedure
- The /etc/inittab File
- Reading the /etc/inittab File
- System run states
- Using Unique Keywords
- System Startup Procedures
- The rc Process
- Sequencer Directories
- Execution Scripts
- Contents of the Template File

- Configuration Files
- Changing the /etc/inittab Files
- Shutdown and rc
- Kill Scripts
- Steps to Add Your Own Start-up Scripts
- Shutdown Permissions
- Recovering from a Lost root Password
- The Reboot Command

Account Management

- Adding a New User
- Adding an Entry to the /etc/passwd File
- Password Ageing
- Adding an Entry to the /etc/group File
- Customising a Users Environment
- The Default Login Shell
- The Login Prompt
- Managing User Accounts
- Listing Users
- Restricting root Login
- Removing a User Registration from The System
- Setting up Users Through SAM
- Removing Users Through SAM
- Access Control Lists
- Trusted Security Features
- Converting to a Trusted System
- Reverting to a Non-Trusted System
- Password Files
- The Protected Password Database
- Password Ageing
- Time Based Access Control
- Device Based Access Control

Peripheral Configuration

- Terminal Configuration
- The /etc/inittab File
- The /etc/gettydefs File
- Terminal Configuration
- Using the stty Command
- Terminfo Setup
- The untic Command
- The tic Command
- Printer Configuration
- Printer Glossary
- Printer Commands
- The lpadmin Command
- The lpfence Command

- The lpshut Command
- The lpsched Command
- The accept Command
- The reject Command
- The lpmove Command
- The lpana Command
- The lpstat Command
- The lp Command
- The lpalt Command
- The enable Command
- The disable Command
- The cancel Command
- Printer Configuration
- Printer Configuration Files and Directories

Filesystem Configuration

- Filesystem Configuration
- Traditional Filesystem Configuration
- Traditional Filesystem Problems
- The Logical Volume Manager (LVM)
- Benefits of LVM
- An introduction to Mirroring and Disk Striping
- Quorum
- Important LVM Commands
- File System Structure
- Creating Filesystems
- Special newfs Arguments
- Mounting Filesystems
- Checking the Filesystem Table
- Using the /etc/fstab File
- The lost+found Directory
- Unmounting Filesystems
- Checking and Repairing Filesystems
- Using the fsck Command
- Common Errors Found by fsck
- Using the df Command
- Making Device Nodes
- Device Naming Conventions
- Card Instance Numbers and Device Naming Conventions
- File System Organisation
- Static and Dynamic Files
- General Rules
- Using SwapSpace
- What is Swap Space?
- Types of Swap Space
- Creating Swap Space
- Enabling Swap Space
- File System Types

- Supporting File Systems
- The VxFS File Systems

Backup and Restore

- Using the cpio Command
- Using the cpio -o Command
- Using the find Command with cpio
- Using the ls command with cpio
- Using the cat Command with cpio
- Using the cpio -I Command
- Using the cpio -p Command
- Creating a tar Archive
- Reading/Verifying a tar Archive
- Restoring from a tar Archive
- Using the dd Command
- The fbackup Command
- The frecover Command
- Incremental Backups
- Creating an Incrementail Backup
- Recovering from an Incremental Backup
- System Recovery Using Ignite-UX
- Creating a Recovery Tape
- Updating a Recovery Tape

Background Jobs

- Starting Background Jobs
- The nohup Command
- The nice Command
- Using cron Processes
- Creating cron Processes
- Creating crontab Entries
- Using the crontab Command
- The at Command
- Authorisation for the at Command

Kernel Configuration

- Reconfiguring the Kernel
- Creating a New Configuration File
- Compiling the Kernel
- Installing the new Kernel Configuration files
- Rebooting the System
- Verifying the Changes
- Kernel Tunable Parameters

Software Installation

- Installing HP-UX
- Beginning the Install
- Software Distribution
- SD Commands
- Glossary of Terms
- SD Structure
- SD Database
- Using the SD Commands
- SD Command List
- The swpackage Command
- The Product Specification File
- Differences Between swcopy and swpackage

General Housekeeping

- Large Files
- Files
- Directories
- Core Files
- Saving Disk Space
- Sizing Commands
- Increasing Speed of Access
- Helping Hints

Workshops

- HP-UX 11 System Administration Course Workshops