Solaris Fundamentals

Detailed Course Outline

Overview of the UNIX Operating System

- UNIX features and benefits
- UNIX history and evolution
- UNIX standardization
- The structure of UNIX

Establishing Communication

- Starting a UNIX session
- Using the CDE and Gnome (windows)
- Using basic UNIX commands
- Understanding the UNIX command syntax
- Using the UNIX "help" facility: manual pages

Introduction to the Filing System

- Examining UNIX files and directories
- Moving through the file system
- Using full and partial paths
- Understanding the current and parent directories

File Management

- Creating directories
- Copying files and directories
- Moving and renaming files and directories
- Removing files and directories
- Using shell metacharacters

UNIX Permissions

- Understanding permissions
- File permissions
- Directory permissions
- Change permissions with symbolic mode
- Change permissions with absolute (octal) mode
- Determine and set the umask value

Redirection Filters and Pipes

- Exploring standard input, standard output, and standard error
- Using filters
- Using pipes

Using the vi Editor

- Use various vi modes
- Invoke vi
- Employ input, positioning, and editing commands
- Use advanced editing options
- Create and save a file

Introduction to shell scripts

- Creating simple shell scripts
- Choosing a Shells
- UNIX Shells and Variables

- Understanding the UNIX shells
- Displaying the default variables
- Creating/Removing user variables
- stty to set terminal types (backspace, etc.)

The Korn-shell and BASH User Environments

- .exrc and .profile files
- Modifying the PATH

The C-shell and T-shell User Environments

- .cshrc and .login files
- Modifying the PATH

Using Aliases and Functions

- Introducing the alias concept
- Using functions
- Making your aliases and functions permanent
- Removing aliases and functions

Command Editing and Command History

- Enabling command editing using "fc"
- Using history to recall commands
- Saving your command history to a file

System Status and Command Information

- Determining your system and user status
- Determining command locations

Multitasking Capabilities

- Introduction to multitasking
- Managing jobs and background processes
- Using the process table to manage processes
- Introducing delayed and detached jobs
- Display system processes
- Use processes and process identifiers (PIDs)
- Identify parent and child processes
- Terminate processes using the kill command
- Use the pgrep and pkill commands

Advanced File Management

- Creating links
- Using "find" to locate files
- Using "grep" to search file contents
- Introducing the "egrep" command
- Processing files with "awk", "tr", and "sed"

Command line database processing

- Using awk to display file contents
- Formatting files with the tr command
- Using sed to edit file contents
- Scripting your database reporting
- Editing the contents of a text file from the command line
- Send the results of command-line editing to standard output

- Use regular expression metacharacters to delete lines, add text to lines, or change characters with sed commands
- Use awk to scan text files or standard input to display specific data, change data format, and add text to existing data

Archiving User Data

- Managing file space
- Archiving files and directories
- Compressing files
- Use the tar utility to store files
- Backup files with the tar and compress commands
- Use the jar command
- Use compression tools to save storage space

Printing

- lp, lpstat, cancel

Shell Scripts

- Writing and Running Shell Scripts
- Command Substitution
- Shell Variables and Variable Substitution
- Shell Environment Variables
- Comments
- Getting User Input – Read
- The for Loop and if Statement
- Exit Status or Return Code
- The test Command
- The case Statement
- Simple Conditionals
- The set Command
- Arithmetic with shell variables

Remote Connections

- Connect remotely using telnet
- Remotely access a system using rlogin
- Transfer files with ftp