Basic Linux Course Content

Linux Over View

- ➤ Introduction to UNIX/LINUX
- ➤ History of UNIX/LINUX
- ➤ Features and Benefits of UNIX/LINUX
- ➤ Different flavors of UNIX/LINUX
- ➤ Difference between UNIX, DOS, Windows and DINUX
- > Architecture of UNIX

UNIX File System Architecture

- Boot Block
- ➤ Super Block
- ➤ Inode Block
- Data Block

File System of UNIX

- Ordinary Files
- Directory Files
- Device Files
- ➤ The Structure of UNIX File system

Different UNIX Commands

- > pwd, who, whoami
- > exit, date, cal, exit, banner

Links

- ➤ Hard Link
- > Soft link or Symbolic Link
- ➤ Unlink



Working with Files

- > cat, touch, rm
- > cp, mv, ln, wc

Working with Directories

> mkdir, cd, rmdir, rm

Displaying Files

➤ ls, ls with options

Simple Filters

> pg, more, less, head, tail, paste, cut, sort

Zip Files

- > gzip, gunzip, zcat, compress
- Uncompress, pack, unpack and Pcat



Printing Files

► lp, cancel

Finding Files

> find, locate etc.,

Input and Output Redirection

- Redirecting Output
- Redirecting Input
- > Standard error

Shell Meta Characters

- > File substitution
- ➤ I/O redirection
- Process Execution
- Quoting meta characters
- > Positional parameters
- > Special Parameters



More Filters

- > grep, grep with options
- > fgrep, egrep

Regular Expressions and Patterns

- ➤ What is Pattern?
- > Usage of regular expression
- > Different types of patterns

UNIX Commands

- Uniq
- ➤ Diff
- ➤ Cmp



Backup Utilities

> tar, cpio

Piping

- Usage of piping
- > Piping with filters

File Permissions

> chmod, chown, chgrp, umask

Communication Commands

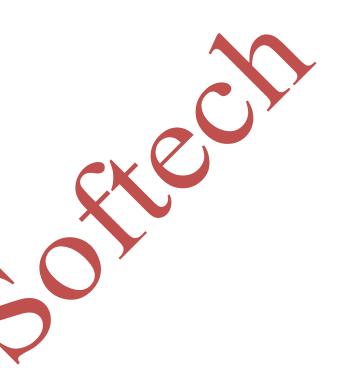
> write, wall, mail, mail with options

Networking commands

> telnet, ftp, rlogin, finger, etc..

Disk Utilities

> df, du, mount, unmount



Job Control

- > Foreground jobs
- Background jobs
- Killing jobs
- > Nohup

Process Status

- > Ps
- ➤ Kill
- > Pkill

Job scheduling

- > At
- Crontab
- > Batch

ed, ex and vi editors

- Command mode
- > Insert mode
- > Ex command mode

Shell Scripting

- ➤ What is shell scripting?
- > Importance of shell scripting
- > Different types of shells
- > Creating Shell script
- > Making shell script executable

Shell Input and Output

> echo, print, read



Variables

- ➤ What is a variable?
- > System defined variables
- > Environment Variables
- > User defined variables
- > Constant variables
- ➤ Local and Global variables
- > Special Variables
- > Comments

Operators

- > Arithmetic Operators
- Relational Operators
- > Relational ASCII operators
- Logical Operators
- > Assignment Operators



Flow Control Structure

- ➤ If, if....else
- ➤ If... elif
- > Case

Looping

> while, until, for, break, continue

Functions

- Defining Function
- ➤ Writing Function
- Calling Function
- > Pass arguments into a function
- ➤ Local variable
- > Returning from a function
- Recursive Function

