

## Linux System Usage

 Duration: 5 Days

 Available Languages: English

### Audience

Software Developers, System Administrators, Power Users.

### Goals

Know how to get most out of a Linux system.

### Contents

- History and Relevance of Linux
- Comparison of major Linux distributions (Debian, Raspbian, Knoppix, Ubuntu, Gentoo, Chromium OS / ChromeOS, Red Hat / RHEL, Fedora, CentOS, Scientific Linux, Fermi Linux, Oracle Linux, OpenSUSE, SLES, ArchLinux, Android, CyanogenMod)
- Comparison of Linux with other UNIX operating systems (Solaris, IRIX, Mac OS X, BSD)
- Comparison of major Linux Desktops (KDE, Gnome, Unity, Xfce)
- Licensing of Linux (GPL, LGPL, BSD, CC etc.)
- Shell 1x1: Basic Shell Usage (Commands, Arguments, Options, Subcommands); Shell vs Terminal; Launching Commands
- File System Structure
  - The trees under /, /usr/ and /usr/local/
  - Unique directories /boot/, /dev/, /etc/, /home/, /opt/, /proc/, /root/, /var/
  - Duplicate directories bin/, include/, lib/, sbin/, share/, src/
  - procs and sysfs
- File System Navigation Commands pwd, cd, ls, touch, mkdir, rmdir, rm, cp, file, rsync
- File Commands cat, tee, tac, head, tail, more, less, grep
- Basic Usage of sed and awk
- Processes, Pipes and Redirection
  - Job Control
  - fork() and exec() from a user perspective
  - ps, pstree, top, kill
  - mkfifo, stdin, stdout, stderr, Pipes, set -e, set -o pipefail
- File Systems, Mounting and Devices
  - Block devices, Character devices
  - mount, umount, eject, /etc/fstab, /etc/mtab
  - Partitioning, fdisk, parted
  - Loop Devices
  - ext2, ext3, ext4, xfs, jfs, btrfs and other significant file systems
- File Permissions and File Security
  - read/write/execute; setuid, setgid, sticky; chmod, chown; umask
  - ACLs, setfacl, getfacl
  - User and Account Management, /etc/passwd, /etc/group, /etc/shadow, /etc/gshadow

- Package Management rpm, dpkg, apt / aptitude, pacman
- Archives and Compression tar, gzip, bzip2, zip, jar
- Networking Overview: Samba, NFS/NIS, LDAP
- Virtualization Overview: chroot, LXC, LXDM, Docker

## Booking

Contact Siddhesh Nikude, +91-95-52572354, [training@nelkinda.com](mailto:training@nelkinda.com)