

Linux on a Weekend Syllabus

Saturday – Basic Linux Administration

- Understanding of Linux?
- What is Oracle Virtual Box?
- Oracle Virtual Box Installation
- Creating virtual machine
- Linux Distributions
- Linux Installation
- Download and install Putty
- Connect Linux VM via Putty
- Changing Password (*passwd*)
- Introduction to File System
- File system structure description
- File system navigation commands (*cd, pwd, ls*)
- Directory listing overview
- Creating Files and Directories (*echo, touch, vi, cp, redirects > and >>*)
- File Permissions (*chmod*)
- File Ownership (*chown, chgrp*)
- Getting Help (*man, whatis etc.*)
- Adding text to file
- Pipes (*|*)
- Quiz, Homework and Handouts

Sunday – Advance Linux Administration

- File Maintenance Commands
- File Display Commands
- Filters / Text Processing Commands (*cut, sort, grep, awk, uniq, wc*)
- Finding System Information (*uname, cat /etc/redhat-release, cat /etc/*rel*, dmidecode*)
- Linux File Editors (*vi text editor*)
- User account management (*useradd, groupadd, usermod, userdel, groupdel*)
- Switch users and Sudo access
- System utility commands (*date, uptime, hostname, which, cal, bc etc.*)
- Processes and schedules (*systemctl, ps, top, kill, crontab and at*)
- OS Maintenance Commands (*shutdown, reboot, halt, init etc.*)
- System Monitoring Commands (*top, df, dmesg, iostat 1, netstat, free etc.*)
- Shell scripting
- Basic Shell scripts
- Aliases (*alias and unalias*)
- Command **history**
- Enabling Internet in Linux VM
- Network Files and Commands (*ping, ifconfig, netstat, tcpdump, networking config files*)
- System Updates and Repositories (*rpm and yum*)
- System Run Levels
- Quiz, Homework and Handouts