Syllabus

Day 1 – Installation, Configuration, File System and Basic Commands
- Understanding of Linux?
- What is Oracle Virtual Box?
- Downloading and Installing Oracle Virtual Box
- Creating virtual machine
- Linux Distributions
- Downloading and Installing Linux (CentOS)
- Download and install Putty
- Connect Linux VM via Putty
- Changing Password
- Introduction to File System
- File system structure description
- File system navigation commands
- Directory listing overview
- Creating Files and Directories
- File system paths
- Finding Files and Directories (find, locate)
- Wildcard (*, $, ^)
- Quiz and Handouts

Day 2 – Linux System Administration
- File Permissions *(chmod)*
- File Ownership *(chown, chgrp)*
- Getting Help *(man, whatis etc.)*
- Adding text to file
- Pipes *(|)*
- File Maintenance Commands
- File Display Commands
- Filters / Text Processing Commands *(cut, sort, grep, awk, uniq, wc)*
- Compare Files *(diff, cmp)*
- Compress and un-compress files/directories *(tar, gzip, gunzip)*
- Linux File Editors *(vi text editor)*
- User account management
- Switch users and Sudo access
- Monitor users
- System utility commands *(date, uptime, hostname, which, cal, bc etc.)*
- Quiz and Handouts

Day 3 – Advance Linux System Administration

- Processes and schedules *(systemctl, ps, top, kill, crontab and at)*
- System Monitoring Commands *(top, df, dmesg, iostat 1, netstat, free etc.)*
- OS Maintenance Commands *(shutdown, reboot, halt, init etc.)*
- Changing System Hostname *(hostnamectl)*
- Finding System Information *(uname, cat /etc/redhat-release, cat /etc/*rel*, dmidecode)*
- Terminal control keys
- Linux Kernel
- What is Shell?
- Shell scripting
- Basic Shell scripts
- Aliases
- Command **history**
- Enabling Internet in Linux VM
- Network Files and Commands *(ping, ifconfig, netstat, tcpdump, networking config files)*
- Network Interface *(ethtool)*
- System Updates and Repositories *(rpm and yum)*
- System Upgrade and Path Management
- System Run Levels
- File transfer *(ftp, scp, rsync etc.)*
- Message of the Day
- Disk Partition *(df, fdisk, etc.)*
- Quiz and Handouts