

CELEBRATING
14 YEARS

QualityThought[®]
Transforming Dreams! Redefining Future!

Linux



Module 1

1. Servers
2. Introduction of Linux
3. Brief intro of Unix
4. Brief intro of Linux and its distributors
Redhat and Ubuntu Versions.
5. Windows vs Linux.
6. Directory Structure and its use (File System hierarchy)
7. Operating System
 - a. Types of Operating System
 - b. History Of Linux Operating System
 - c. Benefits of Linux Operating System
 - d. Linux Flavors
8. IT/Software Business Environment Full Flow
9. Roles of a Linux Administrator
10. Kernel
11. AWS Instance creation with RHEL
Operating System for practicing purpose.
12. Administering Remote Systems
13. Understanding of VMware and related type of Software's
14. Necessity of the Servers
15. Types of servers
16. Components of Server
17. Different Terminal
 - a. 17.1. Putty
 - b. 17.2. MobaXterm
 - c. 17.3. WinScp

Module 2

1. Booting Procedure
2. Linux Installation Procedure
3. Linux basic Commands:
 - 3.1 Basic Commands:
pwd, ls, mkdir, cd, ls, touch, cat, more, sort, sed, cp, mv, rm, cmp, diff, su, clear, eject, history, uptime, fdisk, wc, cal, whoami, date, whatis, --help, man, ctrl+c, q, ps, top, kill, init 6, init 0, reboot, shutdown, find, locate, grep, use of pipe, whereis, du, df, free, mount, umount, hostname, ping, nslookup, passwd, logout, awk etc.
4. Hard Link and Soft Link.
5. Compression-Decompression.
6. Managing services and Process.
7. Working with External storage.
8. Disk Partitioning.

Module 3

1. Users and Group Administration.
2. User accounts and group accounts
 - 2.1 Creating user, setting password, modifying user, deleting user.
 - 2.2 Creating Group, Deleting Group.
 - 2.3 Adding Users in a group.
 - 2.4 Important files for user and group.
 - 2.5 Giving root access to normal users.
 - 2.6 Restrict users to use specific commands only.

Module 4

1. Linux partition.
2. Kernel and Shell.
3. Securing files and directories.
 - 3.1 chmod
 - 3.2 umask
 - 3.3 chown
 - 3.4 acl
4. Booting process
(BIOS-MBR-Grub-Kernel-Init-Runlevel).
5. Recovering root password.

Module 5

1. Managing file system and volumes.
2. LVM Storage.
 - 2.1 Physical volume creation, deletion.
 - 2.2 Volume group creation, deletion.
 - 2.3 Logical volume creation, deletion, resizing.
 - 2.4 Permanently mounting logical volume.

Module 6

1. Install, update, remove packages or applications in Linux using APT and YUM package managers.
- 1.2 Software Management .
 - 1.2.1 Installing Methods .
 - 1.2.2 Uninstalling Methods .

Module 7

- 18.Services and Processes
- 19.Enhanced User Security with SUDO
- 20.Backup and Restore
- 21.Cron jobs scheduling
- 22.FTP (File Transfer Protocol) Server
- 23.NFS (Network File System) Server
- 24.Samba Server.
- 25.Shell Scripting.
- 26.SCP.
- 27.File Transfer Protocol (FTP).
- 28.Apache Web Server.
- 29.Schedule future Linux tasks (at and cron jobs).
- 30.Firewall configuration.
- 31.Controlling multiple servers at a time using Ansible.
- 32.NTP.
- 33.Monitoring Linux Servers using Prometheus.
- 34.DNS (Domain Name System) Server
- 35.Basic understanding of a ticketing tool
- 36.Basic understanding of a messaging tool
- 37.Basic understanding of a supporting project
- 38.Basic SQL Concepts
- 39.Basic Python Data Types
- 40.Real-time Project experience
- 41.Top 100 Linux interview Questions

Module 8

- : 5 – 10 years skills should be known
(a Brief explanation on each topic)
1. Secure Shell Server (SSH)
 - 1.Teletype Network Server (Telnet)
 - 2.File Transfer Protocol Server (FTP)
 - 3.Network File System Server (NFS)
 - 4.Samba server cirs/SMB
 - 5.Domain Name server UNS & Clients
 - 6.Dynamic Host Configuration Protocol Server (DHCP)
 - 7.Network Time Protocol Server {NTP (Chrony)} & Clients
 - 8.MySQL Server
 - 9.MariaDB Server
 - 10.Puppet Server & Clients
 - 11.Ansible Server & Nodes

- 12.Lightweight Directory Access Protocol (LDAP) Server & Clients
- 13.Network Information Service (NIS) Server & Clients
- 14.iSCSI Target & Initiator
- 15.Jenkins Server
- 16.Web Servers HTTP/HTTPS
- 17.Nginx Server & Clients
- 18.Zabbix Server & Clients
- 19.Nagios Server & Clients
- 20.Yum Servers
- 21.Postfix & Sendmail
- 22.Squid Proxy Server & Clients
- 23.Rsyslog Sever & Clients
- 24.Freeipa
- 24.Prometheus/Grafana
- 25.Hadoop cluster
- 26.Varnish Cache Server & Clients.
- 27.High Availability (HA) PCS Cluster
- 28.Kickstart Server
- 29.Raid levels.

Module 9

10+ years skills must be known
(patching, vulnerabilities, scanning, etc)
will be also explained in detail.