Red Hat Linux Administration

([RHCSA] Certification Mapped Curriculum)

Basics of Networking

- ➢ IP Addressing, Topology, Protocol,
- ➢ LAN Interface (NIC), Media
- ➢ LAN, MAN, WAN

Introduction to UNIX & LINUX
- History of UNIX and LINUX
- Basic concepts of Operating System, Kernel, Shell & File System structure
- Basic concepts of Linux
- Differences between CentOS, Red Hat Enterprise Linux & Fedora
- Basic commands of Linux
- Advanced Linux Commands

DNS Server
- Configuration of DNS server
- Configuration of primary DNS server
- Configuration of forward lookup zone
- Configuration of reverse lookup zone
- Testing tool of DNS zones

Installation of Linux

- Inter active Installation
- Network Based Installation

Mail Server (SMTP)

- Basics of Mail Servers
- Configuring SMTP service

Introduction to Graphical Environment
Web Server (Apache)
- Basics of Web Service

- Introduction to Apache
- Configuring Apache for main site
- Configuring Apache for multiple sites using IP-based, name-based virtual hosting

Software Package Administration

- Installing and deleting software packages
- Querying and updating software packages

FTP Server (vsftp daemon)

- Basics of File Transfer Protocol
- Configuring vsftpd for anonymous ftp service

User and Group Administration

- Creating and deleting users from the systems
- Modifying users profile
- Creating and deleting groups
- Important system files related to user administration

RAID (Redundant Array of InExpensive Disks) & Logical Volume Manager

- Implementing RAIDon Linux
- RAID levels (0, 1 and 5) configuration using RAID tools
- Resizing the Partition using LVM

Advanced File Permissions

- Assigning advanced files permissions i.e. chmod, chown, chgrp & Sticky bit
- Creating, modifying and deleting ACL's

Disk Partitioning and Mounting File System

- Using fdisk, disk druid utilities for disk partitioning
- Using mkfs, commands to create file systems
- Mounting various file systems
- Auto mounting of file system

Difference between Unix and Linux Flavors

- Live Setup - Demo by Faculty

Disk Quotas

- Enabling Quotas on partitions
- Creating Quotas for users
- Auditing Quotas limit

Designing, Implementing & Maintaining of Corporate Network Backup and Recovery

- Introduction to various types of backup media
- Backup and restoring using tar and cpio commands

NFS

- Configuring NFS server
- Mounting NFS exports on NFS clients

Dynamic Host Configuration Protocol (DHCP)

- Configuring Linux as DHCP Server
- Configuring various clients for DHCP Server (Windows & Linux)

SAMBA
NIS