

Linux Administration Syllabus

1. COURSE DETAILS Introduction to LINUX
2. Dynamic Host Configuration Protocol (DHCP) ,
3. History of UNIX and LINUX ,
4. Configuring Linux as DHCP Server ,
5. Basic concepts of Operating System, Kernel, Shell & File ,
6. Configuring various clients for DHCP Server (Linux) System structure Mail Server (SMTP, POP3, IMAP) ,
7. Basic concepts of Linux ,Basics of Mail Servers ,
8. Differences between Red Hat Enterprise Linux & Fedora ,
9. Configuring SMTP service using sendmail ,Commands of Linux , Configuring POP3 / IMAP service on Linux Installation of Linux ,
- 10.Integrating Antivirus & Antispam ,
11. Interactive Installation Web Server (Apache) ,
12. Kickstart Installation ,
- 13.Basics of Web Service Startup & Shutdown Scripts ,
14. Introduction to Apache ,
15. Booting Sequence ,
- 16.Configuring Apache for main site , Kernel Initialization , Configuring Apache for multiple sites using IP-based, port- , INIT Process based and name-based virtual hosting FTP Server (vsftp daemon)
- 17.Software Package Administration ,Basics of File Transfer Protocol ,Installing and deleting software packages ,
18. Configuring vsftpd for anonymous ftp service , Querying and updating software packages Proxy Server (Squid) User and Group Administration ,Basics of proxy services ,
- 19.Creating and deleting users from the systems ,Configuring proxy services , Modifying users profile ,
- 20.Creating ACL's for controlling access to internet ,Creating and deleting groups , Important system files related to user administration Samba Service ,
- 21.Creating, deleting and modifying users and group & , Basics of file sharing in Windows policy ,
- 22.Configuring Samba service for file sharing with windows systems Securing your Linux Server by IP Tables & SELinux Advanced File Permissions ,
- 23.Implementing local & network security ,Assigning advanced files permissions SUID, SGID & Sticky bit , Basic elements of Firewall using IP Tables ,

24. Creating, modifying and deleting ACL's , SELinux Overview Disk Partitioning and Mounting File System , Working of SELinux , Using fdisk, disk druid utilities for disk
25. partitioning , Customizing SELinux Policy , Using mkfs, commands to create file systems Troubleshooting your system , Mounting various file systems , Recovering the super user password , Auto mounting of file system , Recovering the boot loader (GRUB) Quotas ,Troubleshooting Xserver problems ,
26. Enabling Quotas on partitions ,Troubleshooting network related problems , Creating Quotas for users RAID (Redundant Array of InExpensive Disks) & LVM , Auditing Quotas , Implementing RAID on Linux , RAID levels (0, 1 and 5)
- 27.
28. configuration using RAID tools Backup and Recovery , Resizing the Partition using LVM , Introduction to various types of backup media ,Backup and restoring data using dump / restore commands Web based Administration , Backup and restoring using tar and cpio commands , Installing Webmin on Linux
- 29., Automation of Jobs , Administrating Linux machine remotely , Using Webmin as a tool for configuring various services on Linux NFS ,
30. Configuring NFS server LDAP , Mounting NFS exports on NFS clients , Configuration of LDAP , Creation of Users / Groups Network Information Service (NIS) Virtualization , Basics of NIS , Managing Virtual machine with xend
- 31., Configuring NIS Servers and client ,Starting & stoping virtual machine
- 32., Creating NIS users ,Virtualization trouble Shooting DNS with BIND 9 , Basics of Internet Diffrence between Unix and Linux Flavors ,
33. Basics of DNS and BIND 9 Installation of Oracle 10g on linux , Configuring DNS primary server and secondary servers , Configuring DNS for multiple domains and sub domains Live Setup – Demo by Faculty Configuring various clients ,Designing, Implementing & Maintaining of Corporate Network