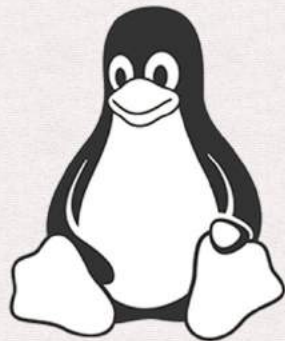


Linux is free to USE, MODIFY & DISTRIBUTE; We have made it Free to Learn.



RHEL-7

Linux

System & Network Administration

“Use Linux feel free and open.”



Navneet Sharma

An Open Source Activist



We are RedHat[®] Authorized
Training & Testing Partner.

Sukrala IT Services Pvt. Ltd.

Please Ignore if you already know

that Linux powers **94%** of the world's supercomputers, most of the servers powering the Internet, the majority of financial trades worldwide and more than 100 billion **Android Devices**.

In short, **Linux is everywhere**.

It appears in many different architectures, from mainframes to server to desktop to mobile and on a staggeringly wide variety of hardware.

Moreover, **97%** of hiring managers reported that they will prioritize hiring **Linux talent** relative to other skills areas in the next six months,

and **44%** of hiring managers saying they're more likely to hire a candidate with **Linux certification**.

Must Read: You are at right place.

CBiss will certainly help you in making your career in [Linux Profile](#).

1 #1 Linux Training Organization in Chandigarh

Being one of the oldest Linux training organization and our unique live assignment based training methodology makes us No. 1 training organization in Chandigarh.

Google keywords planner tool tells that "Linux Training in Chandigarh" is the keyword that is searched in 100-130 times in a month in Google by Linux training aspirants.

www.cbitss.com ranks in first page first number in Google search engine result page which proves that CBitss is the best place to learn linux.

2 Redhat Authorized Training Partner

We are Redhat Authorized Training Partner. All Redhat Exams are conducted in our office. We deliver official Redhat course-ware.

Our online verification can be done via given link: <https://www.redhat.com/en/services/training/locations-facilities>

3 India's First ATP

India's first ATP for scrum & Agile(VMEdu Inc.) under the banner of flexbridge education. Training in: ITIL, PMP, SCRUM, AGILE, SIX-SIGMA. Our online verification can be done via given link: <http://scrumstudy.com>

4 10 million traffic

Being a webhosting company we manage linux servers parsing 10 million traffic load in a day.

5 Technical Consultant

We are technical consultant of various colleges & universities in Himachal & Punjab.

6 Goggle Adwords Certified

We are Google Adwords Certified Company.

7 Web Hosting Company

We are web hosting company providing domain name registration, shared hosting, dedicated servers and AWS cloud services.

8 ISO Certified Company.

We are 9001:2008 certified Company.

Linux

Part 1 Basics of Linux:

- ⊕ Directory Structure
- ⊕ Device Name Convention
- ⊕ **OS Installation:** GUI & CLI, Dual Boot, Kickstart, Tftp Installation, Through Nfs,ftp,http Installation.
- ⊕ **Managing System Behaviour:** Basic Commands, working with /etc/passwd, /etc/shadow, /boot/grub/grub.conf, /etc/inittab, .bash* and some other important system configuration files.
- ⊕ **CentOS, Redhat,** (revised syllabus on **version 7**-System & Network Administration)
- ⊕ **Kali Linux:** an Advanced Penetration Testing Linux distribution used for Penetration Testing, Ethical Hacking and network security assessments
- ⊕ **Arch Linux:** Introduction to working on designing & launching new OS based on your hardware architecture.
- ⊕ **Fedora & Ubuntu:** working with Desktop Linux & all daily required operations in an office.

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Part 2 System Administration-1

- ⊕ **Disk Management:** Practical hands on with LLF, HLF, Sector, Track, Cylinder, MBR,GPT&Inode etc.
- ⊕ **Partitioning & File System:** EXT4,XFS,BTRFS,GFT, Docker with Read, Write, Delete & Recovery operations in a partition (all practicals)
- ⊕ **Logical Volume Manager:** Configuring & troubleshooting LVM, Pre & Post Os Installation LVM setup, snapshot of LVM & graphic Administration of LVM.
- ⊕ **Redundant Array of Independent Disks:** Configuring & troubleshooting RAID (striping(RAID-0),Mirroring(RAID-1),Striping with distributed parity bit(RAID-5)
- ⊕ **HDD as RAM:** Managing Swap (extending swap & reducing swap) [swap=virtual memory]

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Part 3 System Administration-2

- ⊕ **USER Management:** User group policy, default Permissions, Super Permissions(setuid,setgid,sticky bit), UMASK, Soft Link v/s Hard Link & ACL(access control list)
- ⊕ **Disk Quota:** User Quota, Group Quota, knowing limits(Soft Limit & Hard Limit), Inode Based & Block Based & Grace period management.
- ⊕ **Backup:** Regular, Incremental, Rsync, Data Compression & Designing Backup Automation Tool.
- ⊕ **Automated tasks:** Crontab, AT & Anacron (detailed exercises)
- ⊕ **Package Management:** Package installation, querying, removing through rpm, Yum client, APT-GET for Debian (Ubuntu) & make-install (binary compilation).
- ⊕ **SUDO:** Managing Basic user behaviour as root user.
- ⊕ **Process Management:** Booting Sequence, Kernel Initialization, Monitoring Processes, Terminating & Governing Processes, Setting up Priority of the Process(nice,renice)
- ⊕ **Server Load:** server load monitoring and management with TOP command
- ⊕ **Shell Scripting** (basic)

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Part 4 Shell Scripting:

- ⊕ Looping & conditions in Shell scripts
- ⊕ echo, sed, awk, grep
- ⊕ Script Automation & Management
- ⊕ Dialogue Utility & Zenity packages
- ⊕ Designing Backup Scripts
- ⊕ Designing Network Scripts
- ⊕ User management via scripts
- ⊕ Manage complete LAMP via self-designed scripts

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Part 5 Database Administration (MySQL & Maria DB)

- ⊕ Installing Mysql& Maria DB in Linux.
- ⊕ Configuring basic database structure.
- ⊕ Creating Database, table and their connections.
- ⊕ Granting rights for users to access Database over the network.
- ⊕ Backup and Restore database.
- ⊕ DataBase management via PhpMyadmin.
- ⊕ Database administration as LAMP Administrator.

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Part 6 Network Administration

- ⊕ **Basic Networking:** Introduction to networking, OSI Model, IP addressing (IPV4, IPV6) & LAN establishment with unix to unix and unix to window.
- ⊕ **Configuring internet in Linux:** through broadband, dial-up, data card & through mobile(gprs).
- ⊕ **NFS:** network file sharing & resource sharing across unix environment.
- ⊕ **YUM server:** Setting up local YUM, FTP YUM, HTTP YUM, EPEL, REMI & RPM-Forge like YUM configuration,
- ⊕ **DHCP:** Dynamic Host Configuration Protocol setting up, Allocating IP, Subnet mask, default gateway and hostname, communication with DNS and other protocols.
- ⊕ **FTP:** Setting up file transfer protocol, user management for FTP, hands on with ftp clients, **FTP security** (file, user, host, network based).
- ⊕ **Remote Services:** SSH, Telnet & VNC (remote access services) with security (file, user, host, network based).
- ⊕ **Network Installation:** NFS, HTTP, FTP, Kickstart, TFTP
- ⊕ **SAMBA:** Linux to window data sharing along with security (file, user, host, network based) & managing SAMA graphically.
- ⊕ **Ticket Server:** (OS-Ticket & ORTS) installing, configuring and managing.
- ⊕ **SQUID:** Proxy server setup, Blocking Websites, content filtering, Bandwidth Management.
- ⊕ **Web Server:** Apache installation, configuring dedicated server, shared server, user based authentication, load balancing and apache tuning.
- ⊕ **NIS, LDAP:** (user's liberty to sit into remote machine)
- ⊕ **MAIL Server:** knowing MUA, MTA & MDA, setting up and configuring POSTFIX, PO3s v/s IMAPs, Squirrel mail, accessing via Outlook, Thunderbird and evolution. Multi/virtual domain management, email security. Postfix Administration.
- ⊕ **DNS:** mater DNS, slave DNS with forward & reverse zone, one DNS resolving multiple domain, dynamic DNS etc..
- ⊕ **Selinux:** (secure enhanced linux) allowing denying all major practicals.
- ⊕ **FireWall:** TCP Wrapper (/etc/hosts.allow & /etc/hosts.deny), hands on with all TCP wrapped protocols, **Iptables:** Working with all tables, Chains and rules (insert, append, delete modify) with Backup & restore.
- ⊕ **RHCE-7 Exam Preparation Classes.**
- ⊕ **LAMP:** (Linux, Apache, Mysql, PHP) setting up configuration and making it LIVE server.

- ⊕ **WHM:** Web Hosting Server implementation
- ⊕ **Domain Panels:** Cpanel & Kloxo setting up and configuration.
- ⊕ **Live Project.**

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Part 7 Some other important knowledge base:

- Switch on Remote Server from PC or mobile phone.
- making a local machine as a LIVE machine.
- Working with AWS Cloud
- All type of CMS integration in LAMP
- WebMin, UserMin,
- Monitoring Tool: Nagios
- Putty & TeraTerm
- Configuring DiskLess Machine and network
- Working with sync, Wall, MOTD, rsh, rlogin, finger, talk and ntalk.

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HAVE A LOOK ON SERVERS, STORAGE UNITS & RACKS



**YOU ARE GOING TO OPERATE SUCH
TREMENDOUSLY BIG MACHINES SETUP VERY SOON.**