Mastering Linux In Depth

(Course Content)

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Introduction :

This course basically aims towards creation of advanced level System Administrator, who can manage Linux servers and troubleshoot them when required. It is 100% practical oriented course. We conduct this course in practically on live servers so that participants can tackle the real life situations in a more better way.

Course Modules :

This course is divided in three modules.

Module - 1 :
> This is beginner level module. Anybody can go for this course.
> Duration - 20 Days
> Fees - Rs.5000/-

Module 2 :

> This is intermediate module. It is dedicated to Storage Management & System related tasks.
> Duration - 20 Days
> Fees - Rs.5000/-

Module 3 :

> This is advanced module and is entirely dedicated to servers and security.
> Duration - 20 Days
> Fees - Rs.5000/-

Course Content :

Please go through the rest of this document for details of the course. All notes will be in the form of PPT, PDF, Videos, text files etc.

Learning Mode :

Via Online Zoom Meetings. 100% Live Sessions. Recordings will be provided via Google Drive.

Mastering Linux In Depth
Module - 1

(Beginner Level)

Preface :

This is basic course. Anybody who wishes to start Linux, can join this course. It is beginner level course.

Eligibility :

You should have working knowledge of Windows and Networking.

Course Fees :   Rs.5000/-

Duration   **:**   40 Hours (20 Days)

Topics Covered :

1.   Introduction to Operating System.

    a]   Why OS is required?

    b]   How OS works in system?

    c]   Types of OS

    d]   Principles of Unix OS

    e]   Salient features of Linux OS as Open Source OS

2.   Understanding Number System.

    a]   What is Bit & Byte?

    b]   Number System - Binary, Decimal, Octal, Hexadecimal

3.   Linux Installation.

    a]   Installing Virtual Box in Windows Machine

    b]   Understanding Virtual Machine Structure

    c]   Installing Linux in VM

    d]   Difference between 32 bit and 64 bit Linux

4.   Connecting Linux Machine from Remote End.

    a]   Using ssh and putty

5.   Linux Commands.

    a]   30 Basic Commands

6.   Networking - IPv4 and IPv6

    a]   Understanding IP Address - IPv4 and IPv6

b] Assigning IP to Linux Machine using DHCP & Static

c] The File - /etc/sysconfig/network-scripts/ifcfg-eth0 explained.

7. Software Installation -

a] Using yum

b] Using rpm

c] Using Source Code

8. More Linux Commands

a] Understanding system daemon

b] systemctl command explained

c] ntsysv and chkconfig

9. Understanding at Server

a] Commands - at, atq, atrm etc

10. Understanding Cron Server.

a] Commands - crontab

b] User Specific Cron Jobs

c] System Specific Cron Jobs

11. Programming Linux - Shell Scripting BASH

a] What is variable?

b] Types of variable

c] Writing First Shell Script - hello.sh

d] Loops - if, for, while

e] Understanding Functions

f] Developing practical utility in BASH

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Mastering Linux In Depth
Module - 2
(Intermediate Level)

Preface :

This is intermediate level course. Those who have successfully completed Module - 1 can opt this course. It is mainly dedicated to Storage, User & Network Management

Eligibility :

You should have working knowledge networking.

Course Fees :   Rs.5000/-

Duration   :   40 Hours (20 Days)

Topics Covered :

1.   User Management :

    a]   Creating user

    b]   Creating groups

    c]   Understanding /etc/passwd, /etc/shadow Files

    d]   Understanding chown, chmod, chgrp, chattr commands

    e]   File Access Control List

    f]   Default files for user management

2.   Disk Quota Management :

    a]   Disk quota on ext4 file system

    b]   Disk quota on xfs file system

    c]   Quota Reports

3.   Linux File System :

    a]   What is File Sytem?

    b]   What is inode?

    c]   File Sytem Explained - Reiser FS, ext2, ext3, ext4 & XFS

    d]   Directory Structure of Linux

    e]   Mounting Devices - cdrom, pendrive, floppy, hard disk etc.

    f]   Understanding LVM - LVM Management

    g]   Understanding Software RAID - mdadm Command

    h]   The /etc/fstab file explained in deep.

    i]   The /etc/rc.d/rc.local file explained.

4.   Advanced Network Management :

a]   Using Network Manager Service

b]   The network management tools

nmap

iptraf-ng

netstat

mtr

ping, ping6

portsentry etc.

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Mastering Linux In Depth
Module - 3
(Expert Level)

Preface :

This is expert level course. Those who have successfully completed Module - 1 & 2 can opt this course. It is mainly dedicated to Servers & Security concerns.

Eligibility :

You should have working knowledge networking.

Course Fees :   Rs.5000/-

Duration   **:**   40 Hours (20 Days)

Topics Covered :

1.   Deep dive into servers -
    a]   Understanding DNS Server
    b]   Understanding Apache Web Server
    c]   Understanding Sendmail Server
    d]   Understanding Samba Server
    e]   Understanding FTP Server
    f]   Understanding NFS Server
    h]   Understanding Syslog & Log Rotation
    j]   Process Accounting
    k]   Understanding AutoFS Server
    l]   Understanding MariaDB Server
    k]   Understanding Java & Apache Tomcat Server

2.   Linux Security -
    a]   Understanding Firewalls - iptables
    b]   Understanding SeLinux
    c]   Deep look in portsentry
    d]   Study of Log Files & /var/log Folder
    e]   Understanding TCP Wrapper & libwarp
    h]   Understanding PAM

3.   Linux Troubleshooting -
    a]   File System related
    b]   Booting related

c]   Network related

d]   Process Management

4.   Linux Booting Process -

a]   /proc explained

b]   Booting & kernel processes

c]   Configuring Kernel Parameters

d]   Updating kernel

e]   Understanding GRUB Boot Loader

5.   Understanding Linux Control Panels -

a]   The Webmin Panel

b]   The Plesk Control Panel

c]   The cPanel

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How To Contact & Register For This Course?

Registration :

Registration Form is located at

https://ssharad.com/reg

Payment Options :

Please visit following Url for various payment options.

https://ssharad.com/pay

Contact Us Options :

1.	By Email	-	srs@ssharad.com
2.	By Phone	-	+91 - 99 22 00 88 71
			+91 - 94 22 07 00 47
3.	By WhatsApp	-	+91 - 99 22 00 88 71

Office Address : (For Postal Communication & Visits)

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******* End of Course Content Document *******