

Ubuntu 12.04 Sever Administration

Duration:40 Hrs

1. **Introduction to Ubuntu Linux**
 - Ubuntu Server
 - Ubuntu Server 12.04 Server Installation Alternatives and Options
 - Server on the Desktop Installation
 - Desktop on the server Installation
 - minimal GNOME Desktop
 - server install options
 - Ubuntu help and Documentation
2. **Installing the Ubuntu Linux**
 - Upgrading
 - Ubuntu Server CD
 - Getting the Install Server CD
 - Installing Ubuntu from Server CD
 - Installation Overview
 - Stating the Installations Program
 - Starting the Installation Program
 - Language and Keyboard
 - Network Configuration and Cobbler
 - Recovery, Rescue , and Boot loader re-install
3. **Usage Basics: login Interfaces, and Help**
 - Ubuntu server start-up
 - Grub selection and editing
 - the command line interface
 - Accessing Ubuntu from the Command line Interface on a server
 - Using the Ubuntu Desktop Interface
 - Light DM,guest Login,Lock Screen
4. **Managing Software**
 - Ubuntu Packages Management Software
 - Command Line interface tools
 - Desktop Tools
 - Ubuntu Software Repositories
 - repositories Components
 - Software Management with Taskel, DEB, APT and DKPG
 - DEB Software Packages
 - Installing and Removing Software with taskel

- Managing software with aptitude
- manage software with APT
- 5. **Managing Services**
 - Upstart
 - Upstart and Run levels
 - Services: /etc/init.d/
 - The inetd and Xinetd Services
 - NTP
 - AppArmor Security
- 6. **Shells**
 - the Command Line
 - Command Line Editing
 - History
 - Matching Multiple Characters
 - Generating Patterns
 - Pipes
- 7. **Working with file and Directories**
 - Linux files
 - the file structure
 - Home Directories
 - Path Names
 - System Directories
 - Archiving Compress File
 - File Compression
- 8. **Shell Variables and Scripts**
 - Shell Variables
 - Definition and Evaluation of Variables
 - shell Scripts
 - executing a shell scripts
 - shell environments
- 9. **Shell Configuration**
 - shell Initialization and Configurations Files
 - Configuration Directories and Files
 - Alias
 - Shell Parameters Variables
 - Using Initialization Files
 - Configure shell Profile
- 10. **TCP/IP Networks**
 - TCP/IP protocol Suite
 - Zero Configuration Networking: Avahi and link local addressing
 - IPv4 and IPv6
 - TCP/IP Network Address

- Class Based IP addressing
- Net mask
- CIDR
- Broadcast, Gateway, and Name server Address
- IPV6 Addressing
- Unicast, Multicast, Any cast address
- IPV6 and IPv4 Coexistence Methods
- Network Information : ping, finger, trace route, and host

11. Print services

- CUPS
- Printer Devices and Configuration
- system-config-printer
- Printer classes
- adding New Printer Manually
- CUPS Web Browser-based Configuration tools
- Remote Printer on CUPS
- CUPS Printer Classes and Groups

12. FTP

- FTP Servers
- available Servers
- FTP Users
- Anonymous FTP
- Enabling Standalone Access
- vsftpd Access Controls
- rsync Mirroring

13. Mail Servers

- MTA
- Postfix
- POP and IMAP Server: Dovecot
- Spam: Spam Assassin
- Mail Filtering: Amavisd-new
- Mailing Lists: Mailman

14. Web servers

- Apache web server
- LAMP
- Virtual Hosting
- Site level Configuration Directives
- Directory Blocks

15. News and databases services

- News Servers
- Databases Servers: MySQL and PostgreSQL
- MYSQL tools

- MYSQL Management with mysql and mysqladmin
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- 16. **Network File system , Network Information System (NFS, NIS and GFS)**
 - NFS
 - NFSv4
 - NFS Clients
 - NIS
 - /etc/nsswitch.conf file
 - Red Hat Global Filesystem
 - Implementing GFS 2 File System
- 17. **Samba**
 - samba Applications
 - Starting up and accessing Samba
 - Firewall Access
 - SWAT
 - users level Security
 - share Definitions
 - testing samba Configurations
 - Accessing Samba Services with Clients
 - mount.cifs
- 18. **Squid**
 - Configuring Clients Browsers
 - Proxy Security
 - Proxy Caches
 - Logs
- 19. **DNS**
 - DNS address Translations
 - FQDN
 - IPv4 Address
 - IPv6 Address
 - DNS servers
 - DNS Operation
 - Local Area Network Addressing
 - BIND
 - DNS Zones
 - Named Configuration file
 - Resource Records for Zone Files
 - Zone Files
 - Sub domains and Slaves
 - IP Virtual Domains
 - DNS Security: TSIG, Zone keys, Split DNS
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20. DHCP and DHCPv6

- IPv6 Stateless Auto Configuration
- DHCP
- DHCP Fixed Address

21. Firewalls

- IP tables
- TCP wrappers
- Graphical firewall

22. Introduction to Cloud Computing

- Cloud Documentation
- Public Cloud
- Cloud init
- Open Stack