



Technocation Freelancing Training Institute And Software House

Linux Course Certification Module

MODULE 1: Introduction to Linux

- Learn what Linux is and why it's used worldwide.
- Understand open-source software and distributions.
- Explore Linux features and system structure.
- Learn how Linux differs from Windows and macOS.

MODULE 2: Linux Installation

- Learn how to install Linux on your PC or virtual machine.
- Explore Ubuntu, Fedora, and Debian setups.
- Understand dual boot and live USB methods.
- Practice installation step by step.

MODULE 3: Linux File System Basics

- Learn about folders, paths, and file hierarchy.
- Understand /home, /root, /bin, /etc directories.
- Create, copy, move, and delete files.
- Use commands to manage folders easily.

MODULE 4: Basic Linux Commands

- Learn essential commands like `ls`, `cd`, `pwd`, and `mkdir`.
- Use the terminal to control the system.
- Understand command options and shortcuts.
- Practice navigation and file management.

MODULE 5: User and Permission Management

- Create and manage users and groups.
- Understand file ownership and access control.
- Learn `chmod`, `chown`, and `sudo` commands.
- Secure your files using correct permissions.

MODULE 6: File Editing and Text Tools

- Use text editors like Nano and Vim.
- Learn how to create and edit config files.
- Use cat, grep, sort, and head commands.
- Practice editing system and user files.

MODULE 7: Package Management

- Learn how to install and remove software.
- Use APT, YUM, and DNF package managers.
- Update and upgrade Linux systems.
- Fix common software installation errors.

MODULE 8: Process and Task Management

- Understand processes and system resources.
- Use top, ps, and kill commands.
- Manage background and foreground jobs.
- Monitor CPU and memory usage.

MODULE 9: Networking in Linux

- Learn basic network commands (ping, ifconfig, netstat).
- Configure IP addresses and connections.
- Understand DNS, SSH, and remote access.
- Practice secure file transfer using scp.

MODULE 10: Shell Scripting Basics

- Write simple shell scripts using Bash.
- Use loops, variables, and conditions.
- Automate daily tasks with scripts.
- Test and run scripts step by step.

MODULE 11: System Administration Tools

- Manage services using systemctl.
- Schedule tasks with cron jobs.

- Monitor logs and system performance.
- Backup and restore important data.

MODULE 12: Linux Certification & Final Project

- Review all key Linux concepts and commands.
- Complete a small project (like user setup or script task).
- Take a short practical and theory test.
- Earn your **Linux System Professional Certificate**.

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