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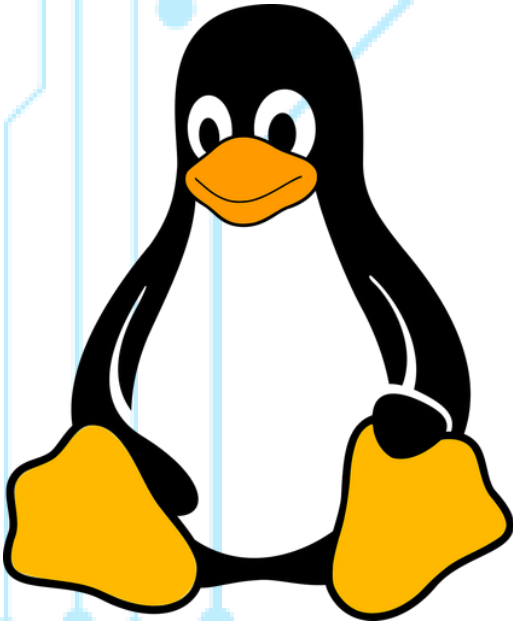
# LINUX ADMIN

**INDUSTRY-ORIENTED | PROJECT-BASED | CAREER-FOCUSED**

## Welcome to Linux Admin

Build strong system administration skills with the Linux Administration course. Learn to install, configure, and manage Linux systems used in modern IT infrastructure. This hands-on program covers user management, file systems, networking, security, and basic server administration.

Through practical labs and real-world scenarios, students gain the knowledge required to manage and troubleshoot Linux environments. Ideal for those who want to start a career in system administration, cloud computing, and IT infrastructure management.



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# WHY QUANTUMAI?

Quantum AI combines advanced computing and artificial intelligence to solve complex problems faster and smarter. We focus on future-ready skills, practical learning, and real-world applications in Data, AI, and emerging technologies. Our industry-oriented training prepares students to lead innovation and build successful careers in tomorrow's technology-driven world.

# COURSE OVERVIEW

The Linux Administration course is designed to build practical skills in managing, configuring, and maintaining Linux-based systems used in modern IT environments. Students learn system installation, user and permission management, file systems, process control, and package management. The course also covers networking basics, shell scripting, server configuration, and system security.

Through hands-on labs and real-world scenarios, learners gain experience in troubleshooting, performance monitoring, and managing enterprise-level servers. By the end of the course, participants can confidently administer Linux systems and support infrastructure in cloud, networking, and system administration roles.



**Get started with Linux**

- Describe and define open source, Linux distributions, and Linux.

**Access the command line**

- Log into a Linux system and run simple commands using the shell.

**Manage files from the command line**

- Copy, move, create, delete, and organize files while working from the bash shell.

**Get help in Linux**

- Resolve problems by using local help systems.

**Create, view, and edit text files**

- Manage text files from command output or in a text editor.

**Manage local users and groups**

- Create, manage, and delete local users and groups, as well as administer local password policies.

**Control access to files**

- Set Linux file system permissions on files and interpret the security effects of different permission settings.

**Monitor and manage Linux processes**

- Evaluate and control processes running on a Linux system.

**Control services and daemons**

- Control and monitor network services and system daemons using systemd.

**Configure and secure SSH**

- Configure secure command line service on remote systems, using OpenSSH.

**Analyze and store logs**

- Locate and accurately interpret logs of system events for troubleshooting purposes.

**Manage networking**

- Configure network interfaces and settings on Linux servers.

**Archive and transfer files**

- Archive and copy files from one system to another.

**Install and update software**

- Download, install, update, and manage software packages from yum package repositories.

**Access Linux files systems**

- Access, inspect, and use existing file systems on storage attached to a Linux server.

**Analyze servers and get support**

- Investigate and resolve issues in the web-based management interface, getting support to help solve problems

**Improve command line productivity**

- Run commands more efficiently by using advanced features of the bash shell, shell scripts, and various utilities provided by Linux.

**Schedule future tasks Schedule**

- commands to run in the future, either one time or on a repeating schedule.

**Tune system performance Improve**

- system performance by setting tuning parameters and adjusting scheduling priority of processes.

**Control access to files with ACLs**

- Interpret and set access control lists (ACLs) on files to handle situations requiring complex user and group access permissions.

**Manage SELinux security**

- Protect and manage the security of a server by using SELinux.

**Maintain basic storage**

- ✓ Certificate provided ✓ Recordings Provided ✓ Classes In Hindi/Urdu ✓ Expert Trainers Create and manage storage devices, partitions, file systems, and swap spaces from the command line.

**Manage logical volumes**

- Create and manage logical volumes containing file systems and swap spaces from the command line.

**Implement advanced storage features**

- Manage storage using the Stratis local storage management system and use VDO volumes to optimize storage space in use.

**Access network-attached storage**

- Use the NFS protocol to administer network attached storage.

**Control the boot process**

- Manage the boot process to control services offered and to troubleshoot and repair problems.

**Manage network security**

- Control network connections to services using the system firewall and SELinux rules.

**Install Linux**

- Install Linux on servers and virtual machines.

**Introduce Ansible**

- Describe Ansible concepts and install Ansible Engine.

**Deploy Ansible**

- Configure Ansible to manage hosts and run ad hoc Ansible commands.

**Implement playbooks**

- Write a simple Ansible Playbook and run it to automate tasks on multiple managed hosts.

**Manage variables and facts**

- Write playbooks that use variables to simplify management of the playbook and facts to reference information about managed hosts.

**Implement task control**

- Manage task control, handlers, and task errors in Ansible Playbooks.

**Deploy files to managed hosts**

- Deploy, manage, and adjust files on hosts managed by Ansible.

**Manage large projects**

- Write playbooks that are optimized for larger, more complex projects.

**Simplify playbooks with roles**

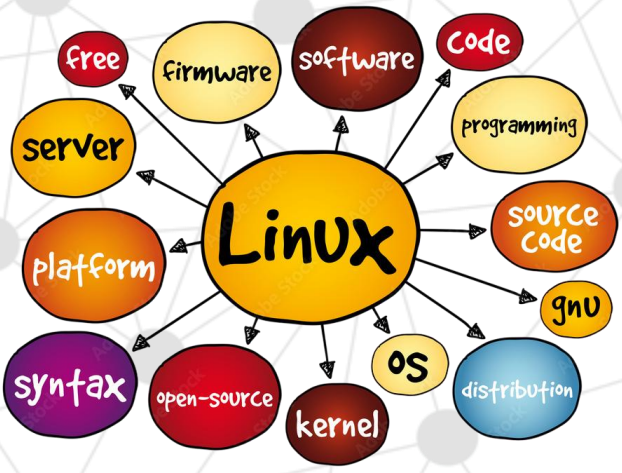
- Use Ansible roles to develop playbooks more quickly and to reuse Ansible code.

**Troubleshoot Ansible**

- Troubleshoot playbooks and managed hosts.

**Automate Linux administration tasks**

- Automate common Linux system administration tasks with Ansible.



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# BUILD SCALABLE APPLICATIONS

## Learn Linux Adi with QuantumAI

## Get In Touch


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