



LINUX TRAINING

Linux Ha Cluster Storage Training Course

Master Linux HA cluster storage for high availability. Learn to design, implement, and manage robust, fault-tolerant Linux storage solutions.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level "Linux HA Cluster Storage Training Course" at Computer Pride is meticulously designed for IT professionals aiming to master the intricacies of building and maintaining highly available Linux systems with robust storage solutions. Over 2 hours, participants will delve into the core concepts of high availability, understanding how to eliminate single points of failure and ensure continuous service uptime critical for modern businesses. The course specifically focuses on integrating shared storage solutions, essential for stateful applications in a clustered environment. You will gain hands-on experience with key technologies such as Pacemaker and Corosync for cluster resource management, learning to configure and manage critical services across multiple nodes. The curriculum also extensively covers shared storage strategies, including DRBD for block device replication and iSCSI for network-attached storage, as well as cluster-aware filesystems like GFS2 and OCFS2. This practical training equips you with the skills to design, implement, and troubleshoot resilient Linux-based infrastructures, significantly enhancing your ability to manage mission-critical applications and services. Upon completion, you will be adept at deploying enterprise-grade high-availability clusters, reducing downtime, and improving system reliability. This expertise is invaluable for organizations that demand maximum uptime, offering a significant professional advantage in roles requiring advanced Linux system administration, infrastructure engineering, and DevOps.

Duration	2 hours
Level	Intermediate
Vendor	Linux

COURSE CURRICULUM

01 Module 1: Fundamentals of Linux High Availability

- Introduction to HA concepts and business continuity
- Understanding single points of failure
- Overview of the Linux HA stack: Pacemaker and Corosync
- Cluster architecture and components

02 Module 2: Shared Storage Solutions for HA Clusters

- Introduction to shared storage concepts
- Configuring DRBD (Distributed Replicated Block Device) for block-level replication
- Setting up iSCSI targets and initiators for shared storage access
- Storage best practices for HA environments

03 Module 3: Pacemaker and Corosync Cluster Management

- Corosync configuration for cluster communication
- Pacemaker architecture and resource management
- Configuring cluster resources: IP addresses, services, and applications
- Resource groups and constraints
- Fencing/STONITH mechanisms

04 Module 4: Cluster Filesystems and Advanced Resources

- Introduction to Cluster Filesystems (GFS2, OCFS2)
- Setting up and managing GFS2/OCFS2
- Integrating database services (e.g., PostgreSQL, MySQL) into an HA cluster
- Configuring virtual machines as cluster resources

05 Module 5: HA Cluster Monitoring and Troubleshooting

- Monitoring cluster health and resources
- Troubleshooting common HA cluster issues
- Performing planned failovers and maintenance
- Performance tuning for HA clusters
- Backup and recovery strategies in an HA environment

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Senior Linux Systems Administrator (High Availability Specialist)**
- > **DevOps Reliability Engineer**
- > **Enterprise Storage and Cluster Engineer**

FREQUENTLY ASKED QUESTIONS

Q: What are the essential prerequisites for enrolling in this Linux HA Cluster Storage Training Course?

To get the most out of this intermediate-level course, participants should have a solid foundation in Linux command-line administration, including experience with package management, network configuration, filesystem management, and basic scripting. Familiarity with virtualization concepts is also beneficial.

Q: How will this course specifically prepare me to manage critical production services in a highly available setup?

This course goes beyond theoretical concepts by providing practical, hands-on labs where you will configure and troubleshoot real-world Linux HA clusters. You will learn to implement shared storage solutions (DRBD, iSCSI), manage cluster resources with Pacemaker and Corosync, and utilize cluster filesystems (GFS2, OCFS2) – all critical skills for ensuring the resilience and continuous uptime of production applications.

Q: Will I gain practical experience with specific shared storage technologies, such as DRBD and iSCSI, during this training?

Absolutely. A significant portion of this course is dedicated to the practical implementation of shared storage. You will engage in hands-on exercises to configure DRBD for synchronous block replication and set up iSCSI targets and initiators to provide network-accessible storage to your high-availability cluster, ensuring you can apply these skills directly in your work.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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