



RH436-Bundle: Red Hat Enterprise Clustering and Storage Management + EX436

Duration: 5 Days Course Code: RH437

Overview:

Red Hat® Enterprise Clustering and Storage Management with Exam (RH437) provides intensive, hands-on experience with storage management, Red Hat Cluster Suite, and the shared storage technology delivered by Red Hat Global File System (GFS). Created for senior Linux® system administrators, this 4-day course has a strong emphasis on lab-based activities. At the end of the course, students will have learned to deploy and manage shared storage and server clusters that provide highly available network services to a mission-critical enterprise environment.

A Red Hat Certified Engineer (RHCE®) who successfully completes this course is prepared to take the Red Hat Enterprise Clustering and Storage Management Expertise Exam (EX436).

Target Audience:

An experienced Linux system administrator responsible for managing shared storage across 1 or more Linux systems, an experienced Linux system administrator responsible for maintaining a high-availability service using cluster technology, an RHCE interested in earning a Red Hat Certificate of Expertise, a Red Hat Certified Datacenter Specialist (RHCDS) or a Red Hat Certified Architect (RHCA) credential.

Objectives:

- Setup and management of high-availability clustered services with Red Hat Cluster Suite
- Providing iSCSI targets with Red Hat Enterprise Linux
- Customization and control of device files with udev

- Storage I/O multipath with device mapper
- Using cluster Logical Volume Management (LVM)
- Configuration and use of the Red Hat Global File System cluster file

Prerequisites:

RHCE certification or equivalent experience

Testing and Certification

system for shared storage

- Red Hat Enterprise Clustering and Storage Management Expertise Exam (EX436) Hands-on, performance-based, 4-hour exam.
- This course prepares you for these credentials:
- Red Hat Certified Architect RHCA
- Red Hat Certified Datacenter Specialist RHCDS

Certificates of Expertise

Follow-on-Courses:

- RH401, Red Hat Enterprise Deployment and Systems Management
- RHS333, Red Hat Enterprise Security Network Services
- RH442, Red Hat Enterprise Performance Tuning

Content:

Storage technologies

- Storage Requirements
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services

iSCSI

- iSCSI as a shared storage device
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools

- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services

Red Hat Cluster Suite overview

- Design and elements of clustering
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services

Logical Volume Management

- LVM review
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools

Quorum and the cluster manager

- Intracluster communication
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services

Fencing and failover

- Fencing components
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS

Journal configuration and management

- Monitoring tools
- Cluster tools
- Failover domains
- Hierarchical resource orderingHigh-availability services

Quorum disk

Heuristic configuration

Resource Group Manager (rgmanager)

- Resource groups and recovery
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler

- Failover domains
- Hierarchical resource ordering
- High-availability services
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services

Kernel Device Management

- udev features
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering

- Failover domains
- Hierarchical resource ordering
- High-availability services

Global File System (GFS) 2

- Implementation and configuration
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring toolsJournal configuration and management
- Cluster toolsFailover domains
- Hierarchical resource ordering

- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring toolsJournal configuration and management
- Cluster toolsFailover domains
- Hierarchical resource ordering
- High-availability services

- High-availability services
- Device mapper and multipathing
- Mapping targets

- High-availability services
- NAS vs. SAN
- Configuring an iSCSI initiator
- Configuring an iSCSI target
- Authentication
- udev rule configuration
- I/O scheduler
- Multipath device configuration
- Cluster configuration tools
- Setting up clusered logical volumes
- Lock management
- Planning for and growing online GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High-availability services

Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

training@globalknowledge.qa

www.globalknowledge.qa

Global Knowledge, Qatar Financial Center, Burj Doha, Level 21, P.O.Box 27110, West Bay, Doha, Qatar