

Red Hat Enterprise Storage Management

Duration: 4 Days Course Code: RH436

Overview:

Red Hat® Enterprise Clustering and Storage Management (RH436) 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.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Experienced Linux system administrators responsible for managing shared storage across one or more Linux systems and Experienced Linux system administrators responsible for maintaining a high availability service using cluster technology.

Objectives:

- Review of Red Hat enterprise clustering and storage management technologies
 - Advanced software RAID
-
- Linux dynamic device management
 - Device mapper and multipathing
-
- iSCSI

Prerequisites:

- RHCE certification or equivalent experience

Testing and Certification

- 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 Security Specialist — RHCDSS
 - 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:

1. Review Red Hat® enterprise clustering and storage management technologies

2. 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

3. 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line 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 Clustered Logical Volumes

5. Device mapper and multipathing

■ Mapping targets

- 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

6. 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

7. 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 Clustered Logical Volumes

■ 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

9. 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

10. 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management

- Lock management
- Planning for and growing on-line 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

4. 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line 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 Clustered Logical Volumes
- Lock management

- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

8. Global File System (GFS) 2 (MOVED UP)

- 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

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

11. Quorum disk

- Heuristic configuration

12. 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
- Multipath device configuration
- Cluster configuration tools
- Setting up Clustered Logical Volumes
- Lock management
- Planning for and growing on-line 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 Clustered Logical Volumes
- Lock management
- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

- Planning for and growing on-line GFS
- Monitoring tools
- Journal configuration and management
- Cluster tools
- Failover domains
- Hierarchical resource ordering
- High availability services

- Planning for and growing on-line 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.com/en-qa/

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