

Red Hat High Availability Clustering

Learn via: **Classroom / Virtual Classroom / Online**

Duration: **4 Day**

Overview

Design and deploy a high availability cluster

The intensive, hands-on Red Hat® High Availability Clustering (RH436) course teaches storage management, the Red Hat High Availability Add-On, and the shared storage technology delivered by Red Hat Global File System 2 (GFS2) and Red Hat Gluster Storage.

Created for senior Linux® system administrators, this 4-day course strongly emphasizes lab-based activities. You'll learn how to deploy and manage shared storage and server clusters that provide highly available network services to a mission-critical enterprise environment.

This course also helps you prepare for the Red Hat Certificate of Expertise in High Availability Clustering exam (EX436).

Audience for this course

- Senior Linux system administrators responsible for maximizing resiliency through high-availability clustering services and using fault-tolerant shared storage technologies

Prerequisites

If you want to take this course without the exam (RH436) and have not earned your RHCE® certification, you can confirm that you have the necessary knowledge by passing the online skills assessment.

What You Will Learn

Content summary

- Install and configure a Pacemaker-based high availability cluster
- Create and manage highly available services
- Troubleshoot common cluster issues
- Work with shared storage (iSCSI) and configure multipathing
- Configure GFS2 file systems

Impact on the organization

This course is intended to develop the skills needed to produce highly available, more resilient, mission critical applications, resulting in reduced downtime and easier hardware maintenance.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

Impact on the individual

As a result of attending this course, students should be able to create, manage, and troubleshoot highly available network services and tightly-coupled cluster storage for business-critical applications.

Students should be able to demonstrate the following skills:

- Improve application uptime by using high availability clustering
- Manage storage in an high availability environment using iSCSI initiators, HA-LVM or CLVM as appropriate, and GFS2 cluster file systems
- Implement strategies to identify single points of failure in high availability clusters and eliminate them

Outline

Clusters and storage

Get an overview of storage and cluster technologies.

ISCSI configuration

Set up and manage iSCSI.

UDEV

Learn basic manipulation and creation of udev rules.

Multipathing

Combine multiple paths to SAN devices into one fault-tolerant virtual device.

Red Hat high-availability overview

Learn the architecture and component technologies in the Red Hat® High Availability Add-On.

Quorum

Understand quorum and quorum calculations.

Fencing

Understand Fencing and fencing configuration.

Resources and resource groups

Understand rgmanager and the configuration of resources and resource groups.

Advanced resource management

Understand resource dependencies and complex resources.

Two-node cluster issues

Understand the use and limitations of 2-node clusters.

LVM management

Review LVM commands and Clustered LVM (clvm).

Global File System

Understand the GFS2 file system and use tools to create, maintain, and troubleshoot it.

XFS

Explore the Features of the XFS® file system and tools required for creating, maintaining, and troubleshooting.

Red Hat Storage

Work with Gluster to create and maintain a scale-out storage solution.

Comprehensive review

Set up high-availability services and storage.