Red Hat High Availability Clustering with Expertise Exam (RH437)

ID RH437 **Price** 4,057.— €(excl. tax) **Duration** 4 days

Course Overview

Deploy reliable, available critical production services in a high availability cluster

In the Red Hat High Availability Clustering with exam (RH437) course, you will learn how to provide highly available network services to a mission-critical enterprise environment through the deployment and management of shared storage and server clusters. Created for senior Linux system administrators, this 4-day course strongly emphasizes lab-based activities. You will set up a cluster of systems running the Pacemaker component of the Red Hat Enterprise Linux High-Availability Add-On, and deploy Linux-based services such as web servers and databases on that cluster. Cluster storage components from the Resilient Storage Add-On are also covered; installations and applications that require multiple cluster nodes can access the same storage simultaneously. This includes Logical Volume Manager (LVM) Shared Volume Groups, Red Hat Global File System 2 (GFS2), and Device-Mapper Multipath.

This course is based on Red Hat Enterprise Linux 8.3. This version of the course includes the Red Hat Certified Specialist in Clustering and Storage Management Exam (EX436).

Who should attend

Senior Linux system administrators who use high-availability clustering and fault-tolerant shared storage technologies to maximize resiliency of production services.

This course is part of the following Certifications

Red Hat Certified Specialist in High Availability Clustering (RHCOE-HAC)

Prerequisites

- Take our free assessment to gauge whether this offering is the best fit for your skills.
- Red Hat Certified System Administrator (RHCSA) Exam (EX200) and associated courses.
- Red Hat Certified Engineer Exam (EX294) and associated courses.

Course Objectives

Impact on the organization

High availability clustering can improve reliability, availability, and resiliency of your mission-critical services, 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, you will be able to create, manage, and troubleshoot highly available network services and tightly-coupled cluster storage for business-critical applications.

You should have the ability 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 LVM Shared Volume Groups as appropriate, and GFS2 cluster file systems
- Implement strategies to identify and eliminate single points of failure in high availability clusters

Course Content

- 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
- Implement Logical Volume Manager (LVM) in cluster-aware configurations
- Configure GFS2 file systems on storage shared by multiple

nodes

Detailed Course Outline

Creating high availability clusters

Create a basic high availability cluster.

Managing cluster nodes and quorum

Manage node membership in the cluster and describe how it impacts cluster operation.

Isolating malfunctioning cluster nodes

Isolate unresponsive cluster nodes to protect data and recover services and resources after a failure.

Creating and configuring resources

Create basic resources and resource groups to provide highly available services.

Troubleshooting high availability clusters

Identify, diagnose, and fix cluster issues.

Automating cluster and resource deployment

Deploy a new high availability cluster and cluster resources using Ansible automation.

Managing two-node clusters

Operate two-node clusters while identifying and avoiding issues specific to a two-node cluster configuration.

Accessing iSCSI storage

Configure iSCSI initiators on your servers to access block-based storage devices provided by network storage arrays or Ceph storage clusters.

Accessing storage devices resiliently

Configure resilient access to storage devices that have multiple access paths.

Configuring LVM in clusters

Select, configure, and manage the correct LVM configuration for use in your cluster.

Providing storage with the GFS2 cluster file system

Use the GFS2 cluster file system to simultaneously pProvide tightly coupled shared storage that can be accessed by multiple nodes.

Eliminating single points of failure

Identify and eliminate single points of failure in your cluster to decrease risk and increase average service availability.

About Fast Lane

Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.

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