# Red Hat High Availability Clustering (RH436)

Red Hat

- **Nível:**
- **Duração:** 27h

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## Sobre o curso

**Design and deploy a high availability cluster**

Red Hat® High Availability Clustering (RH436) provides intensive, hands-on experience with the Pacemaker component of the Red Hat Enterprise Linux High-Availability Add-On, as well as cluster storage components from the Resilient Storage Add-On, including Cluster Logical Volume Manager (CLVM), Red Hat Global File System 2 (GFS2), and Device-Mapper Multipath.

This course is based on Red Hat Enterprise Linux 7.1.

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 Certified Specialist in High Availability Clustering exam (EX436).

### Learn to:

- 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

### Objetivos:

**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.

**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

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## Destinatários

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

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## Pré-requisitos

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.

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## Programa

- Clusters and storage
- Create high-availability clusters
- Nodes and quorum
- Fencing
- Resource groups
- Troubleshoot high-availability clusters
- Complex resource groups
- Two-node clusters
- ISCSI initiators
- Multipath Storage
- Logical volume manager (LVM) clusters
- Global File System 2

- Eliminate single points of failure
- Comprehensive review

**Clusters and storage**

Get an overview of storage and cluster technologies.

**Create high-availability clusters**

Review and create the architecture of Pacemaker-based high-availability clusters.

**Nodes and quorum**

Review cluster node membership and how quorum is used to control clusters.

**Fencing**

Understand fencing and fencing configuration.

**Resource groups**

Create and configure simple resource groups to provide high-availability services to clients.

**Troubleshoot high-availability clusters**

Identify and troubleshoot cluster problems.

**Complex resource groups**

Control complex resource groups by using constraints.

**Two-node clusters**

Identify and work around two-node clusters issues.

**ISCSI initiators**

Manage iSCSI initiators for access to shared storage.

**Multipath Storage**

Configure redundant storage access.

**Logical volume manager (LVM) clusters**

Manage clustered LV.

**Global File System 2**

Create symmetric shared file systems.

**Eliminate single points of failure**

Eliminate single points of failure to increase service availability.

**Comprehensive review**

Set up high-availability services and storage.