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## Red Hat High Availability Clustering

**Duration: 4 Days**    **Course Code: RH436**

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### Overview:

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.

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### 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.

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### Objectives:

- 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
    - Following completion of this course you will have the knowledge and experience to:
      - Review of Red Hat enterprise clustering and storage management technologies
      - Linux dynamic device management
      - iSCSI
      - Advanced software RAID
      - Device mapper and multipathing
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### Prerequisites:

- RHCE certification or equivalent experience

### Testing and Certification

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### Follow-on-Courses:

- RH442 - Red Hat Enterprise Performance Tuning
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## Content:

Clusters and storage	Troubleshoot high-availability clusters	Logical volume manager (LVM) clusters
Get an overview of storage and cluster technologies.	Identify and troubleshoot cluster problems.	Manage clustered LV.
Create high-availability clusters	Complex resource groups	Global File System 2
Review and create the architecture of Pacemaker-based high-availability clusters.	Control complex resource groups by using constraints.	Create symmetric shared file systems.
Nodes and quorum	Two-node clusters	Eliminate single points of failure
Review cluster node membership and how quorum is used to control clusters.	Identify and work around two-node clusters issues.	Eliminate single points of failure to increase service availability.
Fencing	ISCSI initiators	Comprehensive review
Understand fencing and fencing configuration.	Manage iSCSI initiators for access to shared storage.	Set up high-availability services and storage.
Resource groups	Multipath Storage	
Create and configure simple resource groups to provide high-availability services to clients.	Configure redundant storage access.	

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## Additional Information:

### Red Hat Learning Subscriptions:

The Red Hat Learning Subscription is an exclusive program that provides users with 12-months access to all Red Hat Online Learning and video classroom courses. All subscribers will receive unlimited access to online learning content, up to 400 hours of hands-on lab time and more than 300 recorded instructor videos.

There are two versions available: Basic and Standard. These are also available in an Enterprise variant for large companies. The Standard is the most extensive subscription and offers access to Red Hat exams as an extra.

For more information please see LS120 and LS220 below

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## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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