

# Red Hat High Availability Clustering (RH436)

#### **Duration: 4 Days**

#### **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 Cerfitied Engineer (RHCE) exam (EX294) and associated courses.

#### **Course Description:**

In the Red Hat High Availability Clustering (RH436) 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.

# **Intended Audience:**

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

#### **Course Outlines:**

# 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 Provide 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.