

Red Hat Certified Specialist in High Availability Clustering

Course Outline

1. Introduction to High Availability Clusters

• Overview of high availability concepts and architecture.

2. Creating a Basic High Availability Cluster

• Steps to set up a foundational high availability cluster.

3. Managing Cluster Nodes and Quorum

- Manage node membership in the cluster.
- Discuss the impact of quorum on cluster operations.

4. Isolating Malfunctioning Cluster Nodes

- Techniques to isolate unresponsive nodes.
- Strategies for protecting data and recovering services post-failure.

5. Creating and Configuring Resources

• Create basic resources and resource groups for high availability services.

6. Troubleshooting High Availability Clusters

- Identify common cluster issues.
- Diagnose problems and implement fixes.

7. Automating Cluster and Resource Deployment

- Deploy a new high availability cluster using Ansible automation.
- Automate resource configuration and management.

8. Managing Two-Node Clusters

- Operate and manage two-node clusters.
- Identify and mitigate specific issues related to two-node configurations.

9. Accessing iSCSI Storage

• Configure iSCSI initiators for block storage access from network storage arrays or Ceph clusters.

10. Accessing Storage Devices Resiliently

• Implement configurations for resilient access to storage devices with multiple access paths.

11. Configuring LVM in Clusters

• Select and manage the appropriate LVM configurations for clustering environments.

12. Providing Storage with the GFS2 Cluster File System

• Use GFS2 to provide tightly coupled shared storage accessible by multiple nodes.

13. Eliminating Single Points of Failure

- Identify and address single points of failure in the cluster architecture.
- Strategies to enhance overall service availability.

14. Conclusion and Future Considerations



Discuss evolving technologies and practices in high availability clustering.