

# DO371

## Enterprise Kubernetes Storage with Red Hat OpenShift Data Foundation and exam

### Course description

Traditional storage options available to Kubernetes administrators are limited and lack versatility. Red Hat OpenShift Data Foundation provides real advantages, even when backed by cloud storage such as AWS EBS or legacy datacenter storage arrays. Many companies rely on third-party solutions to manage backup and disaster recovery in production. However, proper planning to implement these solutions requires knowledge of the Kubernetes CSI and OAPD APIs. This course walks the student through the recommended steps of configuring and managing storage services for container and Kubernetes services.

[The Red Hat Certified Specialist in OpenShift Data Foundation exam \(EX370\)](#) is included in this offering.

### Recommended Training

- [Take our free assessment](#) to gauge whether this offering is the best fit for your skills.
- [Red Hat Certified Specialist in OpenShift Administration certification \(EX280\)](#) or equivalent knowledge for the roles of Red Hat OpenShift cluster engineer or SRE.
- [Red Hat Certified Systems Administrator certification \(EX200\)](#) or equivalent knowledge of Linux system administration is recommended for all roles.
- While not required, students who have completed [Red Hat OpenShift Administration III: Scaling Kubernetes Deployments in the Enterprise \(DO380\)](#) will have advanced knowledge of the Red Hat OpenShift platform in preparation for implementing and working with Red Hat OpenShift Data Foundation (formerly Red Hat OpenShift Container Storage).
- Basic knowledge of Red Hat Ansible Automation Platform is recommended but not required.
- Basic knowledge of storage technologies, such as disk types, SAN, and NAS is recommended.

## Course Outline

1. Describing Red Hat OpenShift Data Foundation deployment architectures
2. Deploying OpenShift Data Foundation on Red Hat OpenShift using Internal, Converged Mode
3. Configuring Red hat OpenShift Cluster Services to use OpenShift Data Foundation
4. Configuring application workloads to use OpenShift Data Foundation block and file storage
5. Monitoring and expanding OpenShift Data Foundation block and file storage capacity
6. Troubleshooting Ceph components from OpenShift Data Foundation
7. Expanding OpenShift Data Foundation block and file storage volumes
8. Performing backup and restore of OpenShift Data Foundation block and file volumes
9. Configuring application workloads to use OpenShift Data Foundation object storage
10. Monitoring and expanding OpenShift Data Foundation object storage capacity
11. Performing backup and restore of OpenShift Data Foundation object buckets
12. Deploying OpenShift Data Foundation on Red Hat OpenShift using external mode