

# Enterprise Kubernetes Storage with Red Hat OpenShift Data Foundation (DO370)

ID DO370 Price 3,740.— €excl. tax) Duration 3 days

## Course Overview

**Learn the essential skills required to design, implement, and manage a Red Hat OpenShift Data Foundation cluster and perform day-to-day Kubernetes storage management tasks.**

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 OADP APIs. This course walks the student through the recommended steps of configuring and managing storage services for containers and Kubernetes services.

Following course completion, hands-on lab access will remain available for up to 45 days for any live course that includes a virtual environment

## Who should attend

The intended audience for this course includes:

- Primary: Platform Administrators, System Administrators, Cloud Administrators, and other infrastructure-related IT roles who are responsible for managing and maintaining infrastructure for applications
- Secondary: Enterprise Architects, Site Reliability Engineers, DevOps Engineers, and other application-related IT roles who are responsible for designing infrastructure for applications

## This course is part of the following Certifications

Red Hat Certified Specialist in OpenShift Data Foundation (RHCS-OSDF)

## Prerequisites

- Take our free assessment to gauge whether this offering is the best fit for your skills.
- [Red Hat Certified OpenShift Administrator Exam \(EX280\)](#) or equivalent knowledge for the roles of Red Hat OpenShift cluster engineer or SRE.
- [Red Hat Certified System Administrator \(RHCSA\) Exam \(EX200\)](#) 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 Objectives

### Impact on the organization

Enterprise Kubernetes Storage with Red Hat OpenShift Data Foundation supports IT operations teams whose organizations are expanding upon their container adoption journeys. The curriculum enables companies to quickly and automatically provision storage to applications meeting varying requirements crucial to support their organization's digital transformation initiatives and expand their portfolio of containerized applications.

### Impact on the individual

Enterprise Kubernetes Storage with Red Hat OpenShift Data Foundation teaches the essential skills required to provision and manage storage that fits the availability and performance requirements of applications, such as:

- Deploying Red Hat OpenShift Data Foundation on a Red Hat OpenShift cluster using local or cloud storage.
- Selecting and configuring storage classes based on

workload requirements.

- Monitoring and proactively expanding storage capacity.
- Creating and attaching snapshots and clones of persistent volumes.

## Course Content

- Describe the OpenShift Data Foundation (ODF) features, and deployment architectures and their relation to Kubernetes storage APIs, and install an ODF cluster on an OpenShift cluster by using the internal mode
- Select and configure ODF storage classes to meet application requirements
- Configure applications to use object storage from ODF
- Configure OpenShift Monitoring, Registry, and Logging to use storage from ODF
- Back up and restore application data by using Kubernetes CSI APIs
- Monitor the storage health metrics of an ODF cluster
- Identify the Ceph storage components for Red Hat OpenShift Data Foundation and troubleshoot common problems and failure scenarios

## Detailed Course Outline

- Architecture Overview and Deployment of OpenShift Data Foundation by Using Internal Mode
- Configuring Application Workloads to Use OpenShift Data Foundation File and Block Storage
- Configuring Application Workloads to Use OpenShift Data Foundation Object Storage
- Configuring OpenShift Cluster Services to Use OpenShift Data Foundation
- Backing up and Restoring of Kubernetes Block and File Volumes
- Monitoring OpenShift Data Foundation Storage
- Managing Storage Capacity with OpenShift Data Foundation
- Troubleshooting OpenShift Data Foundation

# About Fast Lane



Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.

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