Dell ObjectScale on Red Hat® OpenShift®

Supporting modern apps with Red Hat OpenShift

The Red Hat OpenShift Container Platform enables organizations to implement a DevOps model for building cloud-native applications by providing developers and operations teams with the tools and services required to meet today’s needs and build for the future.

As Kubernetes and containers drive cloud-native application initiatives across the enterprise, organizations need a modern storage infrastructure to support these new app requirements. A long-time strategic partner of Red Hat, Dell Technologies provides organizations with the flexibility to deploy and run S3 compatible object storage on the OpenShift Container Platform to support cloud-native applications directly from an on-premises data center.

Dell ObjectScale: Software-defined object storage

Dell ObjectScale delivers S3 compatible, globally scalable, enterprise-grade object storage from the industry leader, Dell Technologies. Integration of ObjectScale with Red Hat OpenShift® provides developers with the freedom to provision and scale high-performance object storage via Kubernetes APIs while ensuring exceptional simplicity, manageability and reliability for IT.

One key to maximizing business value is deploying ObjectScale with OpenShift alongside traditional applications in a full-stack infrastructure that includes servers, primary storage and supporting software. Additional ObjectScale on OpenShift advantages:

- Designed for scalable data centers – expand clusters to petabyte-scale and 1000+ nodes
- An ObjectScale bare-metal CSI driver maximizes storage efficiency and optimizes performance
- A qualification tool exists to help qualify hardware for ObjectScale deployments
- Features Red Hat OpenShift 4.6 long-term support

ObjectScale Highlights:

- Enterprise-grade object storage
- Starts with three nodes and scales out linearly
- S3 API-compatibility for streamlined application development
- Kubernetes-native containerized architecture
- Global replication for anywhere data access and fault tolerance
- Built-in data protection and security features
- Intelligent workload sizer optimizes the environment
- Custom tagging and search features
- Supports modern and traditional workloads
- Supports and extends the value of existing OpenShift tools
- ProDeploy, ProSupport and Data Migration services available from Dell Technologies
Enterprise-grade object storage

Built with a scale-out architecture, ObjectScale clusters expand from a few terabytes to petabytes and beyond without limits on the number of object stores, buckets or objects stored. Clusters can start as small as three nodes and scale into the thousands. ObjectScale Replication enables objects to be replicated anywhere you have an ObjectScale footprint, from the edge to a core data center. By replicating data across the environment, you can protect workloads from outages and share data with teams anywhere in the world. ObjectScale also features enterprise security and data protection capabilities including D@RE, erasure coding, versioning, resource isolation, IAM, WORM features and more. It’s technology you can trust from the enterprise leader in storage.

Simplified operations

Integration of ObjectScale with Red Hat OpenShift enables you to support modern application initiatives and workflows using the same OpenShift tools you know. By running ObjectScale on OpenShift in your data center, you can control shadow IT while freeing developers to support CI/CD processes and agile methodologies in a self-service manner via Kubernetes APIs. IT operators can provision persistent cloud-scale object storage for modern applications.

Powers modern apps

S3 compatibility provides developers with a familiar set of APIs from which they can modernize existing workloads and design the next generation of enterprise applications. ObjectScale delivers on the latest S3 capabilities with ObjectScale Lock, IAM, Select, Event Notifications and ObjectScale Replication, enabling workloads previously built for the cloud to run seamlessly in your data center. ObjectScale is the ideal data store for emerging workloads including big data analytics, IoT storage, media content delivery, edge, artificial intelligence and machine learning due to its performance, scalability, flexibility, and ease of use. ObjectScale also serves as a cost-effective secondary storage tier, freeing up expensive primary storage and supporting traditional workloads like backups, long-term retention and tape replacement.

Dell Technologies Services for Red Hat OpenShift

Customers can count on several choices to meet their support and deployment needs for ObjectScale.

- **Dell ProDeploy and ProDeploy Plus for Enterprise** offers provide choice in remote or in-person installations.
- **Dell ProSupport and ProSupport Plus for Enterprise** offers provide choice of collaborative or single source of support for eligible 3rd party software.
- **Dell Data Migration Services** include a project manager and design experts who apply tools, methodologies and global best practices to move data securely and efficiently from Dell Technologies and third-party storage to new infrastructure.

Take the next step

Please contact your Dell Technologies sales representative or authorized reseller to learn more about ObjectScale and how it can benefit your organization. Also check out the [ObjectScale website](#) for more information on how ObjectScale unlocks the value of unstructured data.

*Requires Red Hat OpenShift 4.6, Red Hat Enterprise Linux CoreOS (RHCOS) 4.6, Red Hat Enterprise Linux 7.8/7.9 or 8.0*