

Dell ObjectScale on VMware vSphere with Tanzu on Dell VxRail

ObjectScale highlights:

- Software-defined object storage on VxRail HCI
- vSAN Shared-Nothing Architecture and vSAN Direct options
- S3 API-compatibility for streamlined application development
- Scale out architecture without limits on the amount of data stored
- Global replication for anywhere data access and fault tolerance
- Built-in data protection and security features
- Supports modern and traditional workloads
- Consistent infrastructure and consistent management
- Integrated storage stack delivered by a single vendor
- ProDeploy, ProSupport and Data Migration services available from Dell Technologies

Running modern applications in the traditional data center

Containers and Kubernetes are driving modern application initiatives across the enterprise. While cloud-native applications promise to increase development agility and accelerate innovation, many of these next-generation apps require modern S3-compatible storage to function optimally. Additionally, to fully embrace a true DevOps model, IT must provide developers with infrastructure resources, including storage, in a self-service manner, allowing for seamless integration into CI/CD pipelines. Compounding the complexity, IT is often forced to support modern apps and cloud-native initiatives with existing data center resources and expertise.

VMware vSAN Data Persistence platform: Supporting object storage on virtualized infrastructure

VMware has introduced the vSAN Data Persistence platform—a framework which enables modern stateful services, such as object storage, to integrate with the underlying virtual infrastructure. This allows you to run stateful services with high velocity scaling, simplified IT operations, and optimized TCO. You can deploy a stateful service alongside traditional applications on a regular vSAN cluster with vSAN-SNA (vSAN Support for Shared Nothing Architecture) policy or deploy it on a dedicated vSAN cluster with VMware vSAN Direct Configuration, a technology enabling direct access to the underlying direct-attached hardware which can be optimized for specific application needs. Both options benefit from optimal storage efficiency for stateful services by leveraging service-level replication, as well as unified management of services in VMware vCenter.

ObjectScale and VxRail: Better together

By running VMware vSphere with Tanzu and the vSAN Data Persistence platform on Dell VxRail hyperconverged infrastructure (HCI), organizations can support Kubernetes workloads and containers with ObjectScale software-defined object storage.* VxRail is the only fully integrated, pre-configured, and tested HCI system optimized for VMware vSAN, delivering a turnkey experience to enable faster, better and simpler management across workloads, for both private and hybrid cloud environments.

Through integration with the vSAN Data Persistence platform, ObjectScale can be deployed on VxRail, unlocking new modern application opportunities for your business on familiar, hyperconverged infrastructure.



Power modern applications

ObjectScale delivers enterprise-grade storage on VxRail infrastructure, powering new modern applications that require S3. 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 APIs with ObjectScale Lock, IAM, Select, Event Notifications and ObjectScale Replication, enabling workloads previously built for the cloud to run seamlessly on VxRail. ObjectScale is the ideal data store for emerging workloads including big data analytics, IoT storage, media content delivery, 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.

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 out. ObjectScale Replication enables object data 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.

Consistent infrastructure, consistent operations, managed from VMware

ObjectScale's integration with the vSAN Data Persistence platform enables you to support modern application workflows using the same VMware infrastructure and tools you know. By running ObjectScale on VxRail, 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 extend Storage Policy-Based Management (SPBM) from VM volumes to container volumes, allowing for a consistent management approach. Further, VxRail offers 100% native integration between VxRail Manager and vCenter, all VxRail management is done within the familiar vServer interface. Intelligent lifecycle management (LCM) automates non-disruptive upgrades, patches, node addition or retirement while keeping the VxRail infrastructure in a continuously validated state to ensure workloads are running and clusters are optimized. ObjectScale and VxRail combine to deliver persistent cloud-scale object storage for modern stateful applications on a consistent infrastructure with a consistent management experience, lowering TCO.

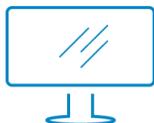
Storage supported by a single vendor: Dell Technologies

With ObjectScale and VxRail, you can take advantage of an integrated storage stack delivered by a single provider, delivering a consistent, unified experience for all your storage support needs. Dell Technologies offers a comprehensive portfolio of deployment, support and advisory services to maximize the value of your environment. Services include Dell ProDeploy, ProSupport and Data Migration services. Flexible consumption models and payment solutions are also available to align with your financial strategy.

Take the next step

Please contact your Dell Technologies sales representative or authorized reseller to learn more about ObjectScale and VxRail and how it can benefit your organization. Also check out the [ObjectScale](#) and [VxRail](#) website for more information on how these solutions unlock new opportunities for your business.

*Requires the VMware vSAN Data Persistence platform, VMware vSphere 7 U3c+. On VxRail systems, this requires VxRail Manager 7.0.320+.



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