

Dell ObjectScale

Redefining performance and scale for the AI era

What's New

Release 4.2 Highlights

- Breakthrough S3 over RDMA technology delivering up to 230% higher throughput than traditional S3¹
- Leaner key-value store increasing global VDC scale by up to 123%²
- Latest AWS SDK 2.30 support and S3 APIs driving innovation of developers and data scientists
- Bucket-level compression backed by calendar-driven space reclamation
- Secure syslog transmission and SHA2 authentication
- Convenient software update for systems running ObjectScale 4.0+

ObjectScale XF960 All-Flash Storage

- Easily add capacity to any current supported ECS or ObjectScale environment
- 61TB QLC drive option
- Up to 8 times greater density than previous-generation all-flash³
- Clusters scale from small to massive, up to 23PB per rack now and up to 47PB per rack in a planned release³
- Up to 2 times greater throughput per node than the closest competitor⁴
- Blazing-fast 100 GB back-end network
- FIPS-certified self-encrypting drive support with Local Key Management

Data is your differentiator

The rich, proprietary data sets and IP of your organization are far more valuable than anything in ChatGPT. When you build artificial intelligence systems based on your unique data, knowledge or IP, you differentiate yourself against competitors as you're using something they can't. While the AI promises to unlock new value for organizations, much of the value is hidden within unstructured data—images, videos, social media data, Internet traffic, etc. Organizations require a cost-effective way to store, analyze and serve that data to enterprise applications.

Object storage for modern workloads

Amid today's rapidly evolving data landscape, enterprises are embracing object storage. That's because object storage supports everything from AI and analytics to archiving, delivering immense scalability and integration with modern applications. It's built for the S3 protocol—a familiar toolset for developers and data scientists. Object storage is also a cornerstone of a robust multicloud strategy, offering unmatched economic benefits.

Future-proof with Dell ObjectScale

The next generation of Dell ObjectScale provides the latest in Dell innovation, blending a cutting-edge operating environment and fresh appliance and software-defined deployment options. It's everything you need to advance the range of modern object workloads for the AI era. ObjectScale is the industry's highest-performing object platform⁴ and is a core Storage Engine in the Dell AI Data Platform.

Control vast amounts of data, from petabytes to exabytes, with a robust enterprise-grade S3 storage solution that supports distributed teams, enabling users to seamlessly share, access and manage data across a unified global namespace. Whether you're training cutting-edge generative AI models, managing extensive data lakes or delivering content to global audiences, ObjectScale empowers your organization to thrive in the AI era with unmatched scale, performance and efficiency, all at a lower total-cost-to-own.

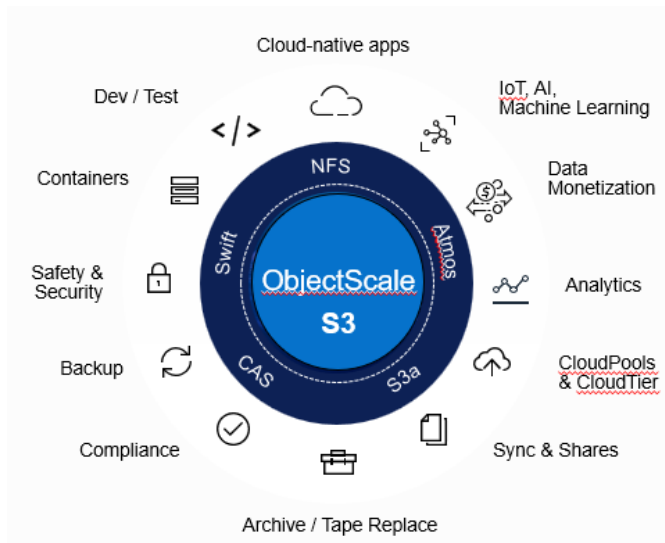
Scale to exabytes	Fast object for AI and more	Extreme efficiency and resilience
Flex enterprise-grade S3 storage across a single globally accessible namespace	Power innovation of distributed teams with a modern, reliable, high-performance object platform	Simplify AI data lake management and protection with versatile, trusted object storage - the world's most cyber-secure ⁵

ObjectScale is designed to fit seamlessly into existing ECS infrastructure. Upgrade your current environment to fourth-generation ObjectScale with convenient software-only updates. Or choose from hardware configurations such as the all-purpose HDD-based ObjectScale X560, the high-performance all-flash ObjectScale XF960 or a software-defined configuration on qualified PowerEdge servers for the demands of Big AI. Organizations of all sizes can find a deployment model tailored to their needs.

How ObjectScale powers innovation

ObjectScale isn't just another storage solution—it's an innovation platform. Its global compatibility with S3 standards and other cloud-native technologies ensures seamless integration across applications and workflows. Industry partnerships, such as with Wasabi, extend its capabilities with scalable hybrid-cloud solutions.

Super-charge AI insights and innovations with ObjectScale XF960, the next leap all-flash object storage. Choose ObjectScale X560, which delivers up to 9PB of all-purpose storage capacity per rack and up to 83% faster read throughput⁶ compared to the earlier generation. Innovate even faster with our next-generation ObjectScale software-defined option, featuring an initial PowerEdge reference design with up to 40 GB/second per node read performance.⁷ Whether you're training complex AI models or managing massive datasets, ObjectScale advancements bring unparalleled speed and efficiency to your AI and data workflows.



Scale to exabytes

Limitless scale: Built with a scale-out, geo-distributed architecture, ObjectScale makes it easy to keep pace with exponential data growth, wherever your data center resides. Simply add new nodes and support workloads at public cloud-scale with the reliability and control of a private cloud infrastructure.

Global accessibility: Using the multi-site federation and copy-to-cloud capabilities of ObjectScale, organizations can create globally accessible content repositories. By deploying storage near the applications and users it supports, you can minimize latency and speed time-to-value. Combined with unique replication capabilities, the same data can be accessed by clients in geographically distributed locales without incurring significant storage overhead.

Modern data lake: With rich multiprotocol support and interoperability—S3, S3a, NFS, etc.—your organization can

establish massively scalable, multi-purpose data lakes to fuel modern app and analytics initiatives. Data ingested through one protocol can be accessed by others, eliminating the need to rearchitect existing applications and speeding time-to-value.

Simplified management: A single administrator can manage billions of objects, hundreds of tenants and petabytes of data with low overhead using a centralized, intuitive GUI and built-in reporting. ObjectScale also features numerous REST-based management APIs, allowing your organization to seamlessly plug into existing management and directory solutions.

Fast object for AI and more

Optimized for AI performance: Accelerate your enterprise's innovation cycle with ObjectScale's high-performance object storage. Purpose-built for AI workloads, it delivers exceptional speed and reliability during resource-intensive processes like model training, checkpointing and inference. By supporting distributed teams with faster data access, ObjectScale enables organizations to push boundaries and achieve breakthroughs faster than ever.

Comprehensive S3/multiprotocol support: ObjectScale offers strong S3 and multiprotocol support, giving data scientists and developers easy, rapid access to the data they need. ObjectScale offers one of the highest S3 compatibility levels on the market.⁸

Power of all-flash: Combining the simplicity of S3 with the lightning-fast performance of available all-flash, NVMe-based SSD appliances, ObjectScale is the ideal data store for modern workloads including Gen AI, data analytics, data lake/lakehouse, IoT storage and media content delivery. Using ObjectScale to fuel GPU servers with throughput-optimized storage rapidly exposes training algorithms and applications to more data than ever before.

Simpler data management, faster insights: ObjectScale is a core Storage Engine in the Dell AI Data Platform. This platform integrates robust data management capabilities to address the demands of AI and analytic workloads, ensuring faster processing and insight discovery backed by the cutting-edge ObjectScale operating system.

Trusted technology

ObjectScale offers enterprise-class security to help you protect, detect and respond at scale. As the world's most cyber-secure object storage, ObjectScale draws on decades of trusted Dell Technologies experience in unstructured data storage. Dell Technologies was the first to deliver a commercial CAS-based system (EMC Centra) and has been recognized as a leader in the 2025 Gartner® Magic Quadrant™ for Enterprise Storage Platforms.

Extreme efficiency and resilience

Unmatched security: Protect your business's most critical data with ObjectScale's advanced security features, including modern encryption, enhanced logging capabilities and built-in ObjectLock technology. Built on a zero-trust architecture, ObjectScale safeguards your information from unauthorized access, ransomware threats, and other cyber risks, giving you peace of mind as you scale operations.

Built-in data protection: With native protection capabilities—D@RE, erasure coding, strong consistency, fault tolerance, triple mirroring and more—ObjectScale ensures data is always secure and recoverable across all data center geographies. IAM support with object tagging protects data from unauthorized access. Comprehensive cyber resilience capabilities help to isolate data in a cyber vault via an air gap, detect attack events in real-time and recover from cyber-attacks through versioning.

“Dell ObjectScale enables us to quickly recover petabytes of critical and irreplaceable research data in case of a natural disaster or cyber-attack.”

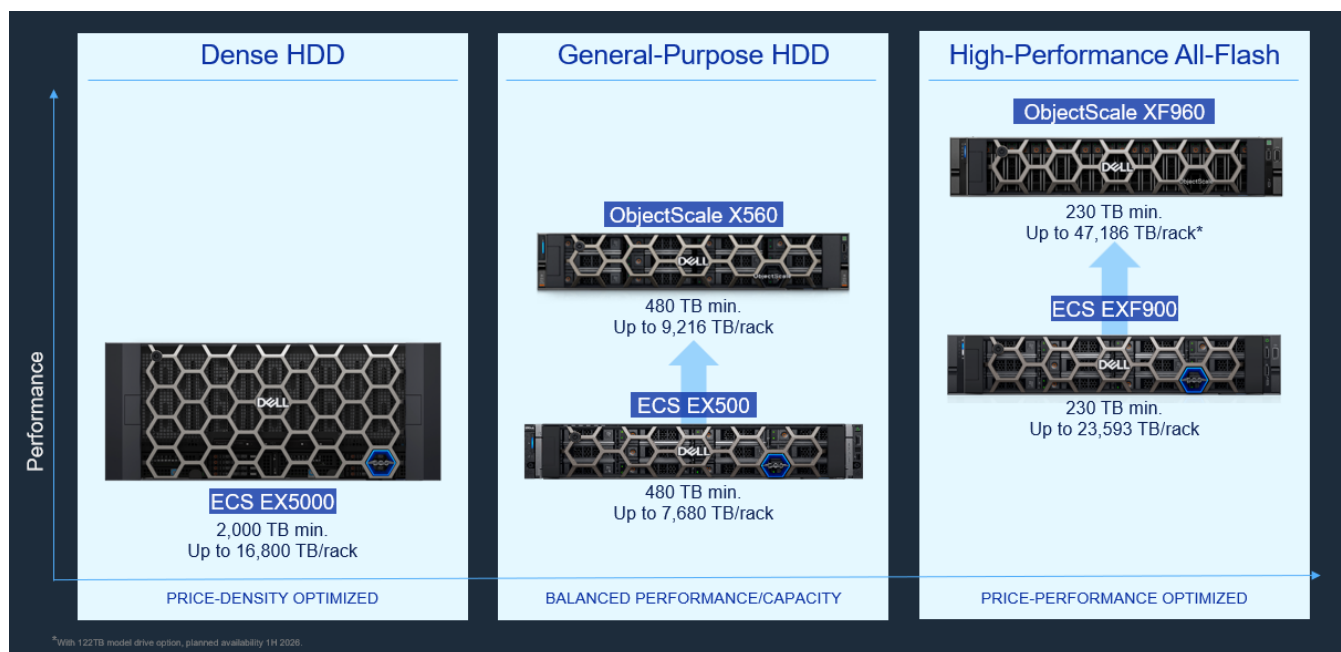
Craig Risien

CI Systems Project Manager, Ocean Observatories Initiative
Oregon State University

Helps meet compliance standards: Using advanced retention, indexing, replication and logging features, ObjectScale can help your organization meet both internal and external compliance requirements including GDPR, SEC, CFTC, and STIG regulations. WORM capabilities ensure sensitive data is protected from tampering.

Lower TCO: The enterprise scale, performance and versatility of ObjectScale delivers greater cost savings—up to 76% lower total-cost-of-ownership—than the leading public cloud provider.⁹ With ObjectScale, your organization can eliminate many public cloud challenges including data migration costs, latency, unpredictability of data access patterns, cloud vendor lock-in, security and compliance issues to name a few.

Secondary storage: A cost-effective secondary storage tier, ObjectScale frees up expensive primary storage for business-critical apps while keeping long-term data stores readily accessible versus traditional tape archives. ObjectScale is the ideal target for policy-based tiering solutions from Dell Technologies such as ObjectScale GeoDrive, PowerScale CloudPools, Power Protect DD CloudTier and numerous third-party gateways.



ObjectScale Portfolio

Professional services and support

ObjectScale provides a non-disruptive upgrade experience, ensuring continuity of operations, even as the underlying storage hardware evolves over time. As legacy appliances are replaced, ObjectScale protects your investments with data-in-place upgrades delivered by Professional Services experts from Dell Technologies.

For the most demanding workloads, we offer a host of services to maximize productivity across your environment. From planning through deployment and optimization, training and professional certifications—you'll have access to our global team of ObjectScale experts, industry-leading tools and automated, proactive support.

For a faster path to productivity, take advantage of Dell ProDeploy and ProDeploy Plus, delivering up to 3x faster deployments.¹⁰ To identify and resolve issues before they happen, ObjectScale includes your choice of Dell ProSupport and ProSupport Plus services, resulting in up to 58% fewer support calls¹¹ within the first 90 days. The services provide comprehensive 24x7x365 proactive and predictive support for hardware and software, automated case creation, a 4-hour mission critical onsite hardware response option and operating environment software upgrades. Talk to a Dell Technologies representative for details about which services best fit your needs.*

*Services availability and terms of service vary by country

Future-Proof Program

ObjectScale is part of the [Future-Proof Program](#), which is designed to help customers optimize the IT lifecycle through a series of guarantees, offers and assurances. Future-Proof provides support from beginning to end by guaranteeing outcomes, maximizing return on investments and helping customers navigate the future of IT. This program enables organizations to focus on critical business needs while Dell Technologies handles the rest.

Explore what's next

Dell ObjectScale is redefining the possibilities of data storage in the AI era. With its robust performance, unmatched resilience and scalable design, it's the ultimate platform for enterprises aiming to supercharge their AI and data workflows. Whether you're focused on accelerating innovation, enhancing productivity or future-proofing your infrastructure, ObjectScale provides the tools and flexibility to succeed.

Please contact your Dell Technologies sales representative or authorized reseller to learn more about how ObjectScale can benefit your organization. Also check out the [ObjectScale website](#) for more information on how ObjectScale powers innovation for the AI era.

1. Based on Dell internal ObjectScale S3 over RDMA testing, May 2025. Actual results may vary.

2. Based on Dell analysis comparing the Key Value Store of ObjectScale 4.2 to that used in ObjectScale 4.1, Aug. 2025. Actual results may vary.

3. Based on Dell analysis comparing highest planned drive capacity options on ObjectScale XF960 compared to available drive capacity options on ECS EXF900, July 2025.

4. Based on Dell internal analysis of publicly available data as of Mar. 2025. Dell performance is based on large object read throughput per node and cluster configurations configured with ObjectScale XF960 and Ethernet networking. Actual results may vary.

5. Based on Dell analysis comparing cyber-security software capabilities offered for Dell ObjectScale vs. competitive products, Mar. 2025.

6. Based on Dell analysis comparing ObjectScale X560 with 4.0 to ECS EX500 with 3.8 for small-object reads, Mar. 2025. Actual results may vary.

7. Based on Dell analysis comparing ObjectScale 4.2 on PowerEdge R7725xd to ECS 3.8 on ECS EXF900 for object read performance, Sept. 2025. Actual results may vary.

8. Based on Dell internal analysis of publicly available information on S3 API commands supported, Mar. 2025.

9. ESG Economic Validation sponsored by Dell Technologies, "Analyzing the Economic Benefits of Dell ECS: Economic Benefit Analysis of On-premises Object Storage versus Public Cloud," Tony Palmer, July 2022. Cost savings based on ESG comparison of ECS to a leading public cloud in active storage scenarios. Actual results will vary.

10. Based on a May 2023 Principled Technologies study, "Using Dell ProDeploy Plus Infrastructure can improve deployment times for Dell technology".

11. Based on a July 2022 Dell internal analysis of support data from Feb. 2022 through July 2022.



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