

Dell ECS

Power object workloads with enterprise-class S3 storage

What's new

ECS Release 3.8

More data flexibility

Place data where it provides the most utility for hybrid cloud, analytics, archiving and more:

- Mobility between all-Flash (EXF900) and hybrid nodes
- Copy to cloud – including AWS S3 buckets and Snowflake Data Cloud

Enterprise readiness

Protect data and meet compliance mandates in the age of greater security standards:

- Air Gap (cyber vault) for ECS as part of a comprehensive cyber protection solution
- External key management with KMIP and expanded ObjectLock support

Added value and performance

Get even more out of your investment with two hardware enhancements for EX500:

- 20TB HDD option for 25% higher capacity per rack
- 192GB memory option – 3X more for ultrafast data access

LEARN MORE >

Check out the [EX-Series Tech Specs](#) for more ECS appliance information

Unstructured data is at the heart of a digital future

Digital and IT modernization are revolutionizing the way organizations across the globe conduct business. From fueling Internet of Things initiatives, to delivering more immersive customer experiences, enterprises are gearing up to embrace a new digital reality. According to IDC, “By 2024, 55% of all ICT investment will be linked to digital transformation,” and “The IT organization as facilitators of technology innovation will play a pivotal role in helping businesses thrive in a digital-first world.”¹

While this digital future 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 means to store, analyze and serve unstructured data to enterprise applications. Due to its massive scalability, simplified architecture and easy-to-use APIs, many are turning to object storage systems to help them achieve their goals.

Organizations need more than the public cloud alone

In the early days of the cloud hype-cycle, countless organizations turned to public clouds, believing them to be the remedy for all their unstructured data storage needs. However, when it comes to data management and storage, making use of cloud object storage platforms such as Amazon S3 or Microsoft Azure Blobs involves navigating fundamental tradeoffs in the areas of data residency, compliance with regulatory standards, as well as unforeseen costs that are often detailed in fine print.

While public clouds inarguably have a central role to play in an organization’s overall IT strategy, they are not without their limitations. In fact, approximately 52% of organizations have reported cloud repatriation activities,² 34% have a higher total cost of service(s) than anticipated² and 35% have repatriated workloads due to data security issues.² This is why establishing sound multi-cloud and private cloud strategies is critical to the future success of organizations across every industry.

Introducing Dell ECS: Enterprise object storage

Dell ECS, an enterprise-grade object storage platform, empowers your organization to flexibly capture, store, protect and manage unstructured data at public cloud-like scale, all within the confines of your organization’s data center.

ECS is the world’s most cyber-secure object storage³, boasting unmatched scalability, performance, resilience, and economics to meet the demands of modern business. As an S3-compatible, globally scalable object store, ECS delivers the capabilities of the public cloud with the command and control of a private cloud infrastructure. Use ECS to develop cloud-native applications, build exabyte-scale archives, fuel strategic analytics initiatives and meet strict regulatory standards, all at a lower total-cost-to-own.

Optimize your cloud	Power modern apps	Secure your object data
Repatriate select workloads for unparalleled economics	Start small, grow to massive, for demanding workloads	Protect, detect and respond with the world’s most cyber-secure object storage



Optimize your cloud: Repatriate select workloads for unparalleled economics

Lower TCO: The enterprise scale, performance, and versatility of ECS delivers greater cost savings—up to 76% lower total-cost-of-ownership—than the leading public cloud provider.⁴ With ECS, 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.

Global accessibility: Using the multi-site federation and copy-to-cloud capabilities of ECS, 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.

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

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. ECS also features numerous REST-based management APIs, allowing your organization to seamlessly plug into existing management and directory solutions.



Power modern apps: Start small, grow to massive, for demanding workloads

All-flash S3: Combining the simplicity of S3 with the lightning-fast performance of the EXF900 all-flash, NVMe-based SSD appliance, ECS is the ideal data store for emerging workloads including Generative AI, data analytics, data lake/lakehouse, IoT storage and media content delivery. Using ECS to fuel GPU servers with throughput-optimized storage rapidly exposes training algorithms and applications to more data than ever before.

Limitless scale: Built with a scale-out, geo-distributed architecture, ECS 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.

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.

Streaming Data Platform storage: ECS is an ideal persistent data store for streaming data engines such as Dell Streaming Data Platform. With the availability of performance and capacity-optimized storage appliances, ECS can support data streams at scale, without becoming a workflow bottleneck.



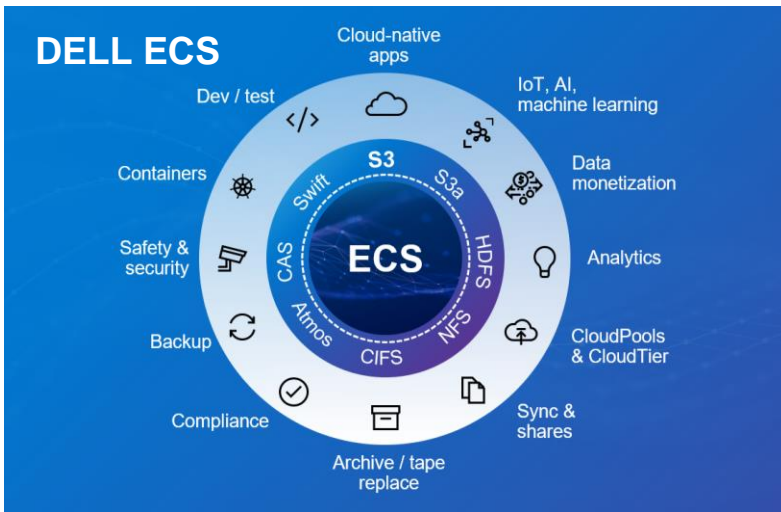
Secure your object data: Protect, detect and respond with the world's most cyber-secure object storage

Trusted technology: ECS provides enterprise-class security to help you protect, detect and respond at scale. As the world's most cyber-secure object storage, ECS draws on decades of trusted Dell Technologies experience in unstructured data storage. In fact, Dell Technologies was the first to deliver a commercial CAS-based system (EMC Centera) and has been recognized as a Leader in Gartner's distributed file systems and object storage Magic Quadrant for the 7th year running.⁵

Built-in data protection: With native protection capabilities—D@RE, erasure coding, strong consistency, fault tolerance, triple mirroring and more—ECS 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.

Helps meet compliance standards: Using advanced retention, indexing, replication and logging features, ECS 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.

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



EX500



EX5000



EXF900

Dell Technologies Services

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 ECS 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 68% faster deployment time.⁶ To identify and resolve issues before they happen, ECS includes your choice of Dell ProSupport or ProSupport Plus, delivering 24x7 predictive support, automated case creation, a 4-hour mission critical onsite hardware response option and operating environment software upgrades. With ProSupport Plus, our most feature-rich offer, organizations experience up to 31% fewer hardware and software issues⁷ and up to 6x faster time to resolution of failed hard drives than the competition.⁸ 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

ECS 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.

Take the next step

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

1. IDC FutureScape: Worldwide IT Industry 2022 Predictions: October 2021, IDC #US48312921.
2. ESG Complete Survey Results: Distributed Cloud Series: Application Infrastructure Modernization Trends, March 2022.
3. Based on Dell analysis comparing cybersecurity software capabilities offered for Dell ECS vs competitive products, September 2022.
4. 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 may vary.
5. Gartner, Inc. "Magic Quadrant for Distributed File Systems and Object Storage" by Julia Palmer, Jerry Rozeman, Chandra Mukhyala, Jeff Vogel, October 19, 2022.
6. Based on "Dell EMC ProDeploy set up a production-ready environment in less time and fewer steps," a Principled Technologies Test Report commissioned by Dell, September 2020.
7. Based on an August 2020 internal analysis of service requests from August 2019 to August 2020 for Dell EMC storage, data protection and hyperconverged products comparing service requests for connected products with ProSupport Plus for Enterprise vs. products without it. Connectivity is via Secure Remote Services. Actual results may vary.
8. Based on a Principled Technologies report, "Diagnose and resolve a hard drive issue in less time with Dell ProSupport Plus," May 2020. Testing commissioned by Dell, conducted in the United States. Actual results may vary.



Learn more about Dell ECS solutions



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