Dell EMC ECS

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, “Within the next four years, the global economy will finally reach ‘digital supremacy,’ with more than half of GDP driven by products and services from digitally transformed enterprises.”

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 83% of organizations have reported cloud repatriation activities, 64% have a higher total cost of service(s) than anticipated, and 34% have repatriated workloads due to data security issues. This is why establishing sound multi-cloud and private cloud strategies is critical to the future success of organizations across every industry.

Introducing Dell EMC ECS: Enterprise object storage

Dell EMC 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.

Deployable as a software-only model or a turnkey appliance, ECS boasts 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.

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What’s new: ECS 3.6

Performance enhancements
The new EXF900 powers performance-demanding workloads—IoT, AI, machine learning and analytics apps

Enterprise readiness
Protects data and helps organizations meet demanding compliance mandates

Object cloning (Cloud DVR)
Introduces the ability to write multiple private copies of an object in a single request

Retention improvements
Extends retention policies for objects already under retention

LEARN MORE >
Check out the EX-Series Tech Specs for more ECS appliance information
Cost-effective at scale

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.

Lower TCO: The enterprise scale, performance, and versatility of ECS delivers greater cost savings—59.5% 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 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 EMC 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.

Fast S3 for modern apps

All-flash S3: Combining the simplicity of S3 with the lighting-fast performance of the EXF900 all-flash, NVMe-based SSD appliance, ECS is the ideal data store for read-intensive applications such as Spark, TensorFlow, Presto and more. Using ECS to fuel GPU servers with throughput-optimized storage rapidly exposes training algorithms and applications to more data than ever before.

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.

Splunk analytics: ECS features the perfect blend of efficiency, durability, performance and scale to support Splunk SmartStore analytics workloads. Whether you require high performance storage to analyze machine data or efficient, economical cold storage, ECS helps your organization deliver operational intelligence, faster.

Streaming Data Platform storage: ECS is an ideal persistent data store for streaming data engines such as Dell EMC’s 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.

Enterprise proven

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.

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.

Legacy of leadership: Dell Technologies has a proven track record of leadership in the unstructured data storage industry with thousands of customers. In fact, Dell EMC is recognized as a Leader in Gartner’s distributed file systems and object storage Magic Quadrant for the 5th year running.5
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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 EMC ProDeploy Plus, delivering up to 66% faster deployment time and up to 85% less time on project planning. To identify and resolve issues before they happen, ECS includes your choice of Dell EMC 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 19% fewer critical issues and up to 70% faster response times. 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 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 EMC 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.

2. IDC SaaSPath 2020, April 2020, N=1,386
3. ESG Master Survey Results: Tipping Point: Striking the Hybrid Cloud Balance, October 2018, ESG
5. Gartner, Inc. "Magic Quadrant for Distributed File Systems and Object Storage" by Julia Palmer, Jerry Rozeman, Robert Preston, Chandra Mukhyala, Jeff Vogel, October 15, 2020. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner’s research organization and should not be construed as statements of fact. Gartner disclaims all warranties, express or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.
7. Based on a September 2019 internal analysis of service requests from August 2017 to August 2019 for Dell EMC Storage and Data Protection products