EMC ISILON ARCHIVING SOLUTIONS

ESSENTIALS

- **Unmatched efficiency**
  80%+ storage utilization and data deduplication option
- **Highly resilient**
  Ensure 100% data availability in the event of multiple component failures
- **Robust security options**
  Safeguard data and meet compliance requirements
- **Massive scalability**
  Expand capacity easily to 50 PB in a single cluster
- **Simple to manage**
  Single file system, single volume architecture
- **Automated storage tiering**
  Reduce costs and optimize resources

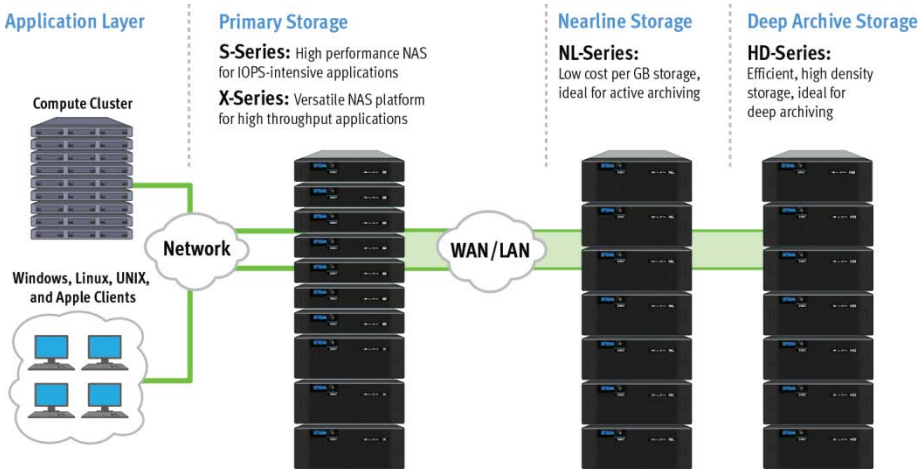
DON'T LET YOUR DATA OUTGROW YOU

STAY AHEAD WITH THE SMART, SCALABLE ARCHIVING SOLUTION FROM EMC ISILON

Implementing and maintaining an efficient and secure data archive is vital for organizations across all kinds of industries and agencies. Unstructured data is growing fast – and that puts a strain on primary storage resources and IT budgets. At the same time, many organizations also need to make sure they're in compliance with regulatory requirements for long-term data retention, while others are looking to preserve and protect content for historical purposes.

EMC® Isilon® archive solutions provide organizations with a highly efficient, massively scalable, and secure disk-based archive that protects data for long-term retention while optimizing the use of primary storage resources.

Isilon Archive Solutions Architecture



EMC Isilon, the industry's #1 scale-out NAS platform, is an ideal choice for storing, managing and protecting unstructured data. It's simple to manage and delivers unmatched efficiency and flexibility. With Isilon, you get the right blend of performance and capacity for workloads of any size, including file shares, home directories, archiving, and Big Data analytics. Best of all, Isilon offers flexible archiving storage options so you can find just the right fit for your organization.

FLEXIBLE HARDWARE AND SOFTWARE OPTIONS

The **EMC Isilon NL-Series** platform is designed for highly efficient, large-capacity storage, and is ideal for nearline storage and active archiving workloads. The Isilon

NL-Series product family includes the Isilon NL410, a 4U platform that offers flexible capacity options that range between 36 TB to 210 TB per node.

The **EMC Isilon HD-Series** is a high-density storage platform designed for deep archive and archive use cases with a capacity requirement of over 2 PB. The Isilon HD-Series product family includes the Isilon HD400, a 4U platform with a capacity of 354 TB per node. With it, you can store up to 3.2 PB in a single rack and reduce data center operating costs – including power, cooling and floor space – by up to 50%.

The Isilon NL-Series and Isilon HD-Series can be combined into a single cluster that includes Isilon primary storage platforms: the Isilon S-Series, our high performance NAS product line and the Isilon X-Series, our most versatile NAS storage platform.

All nodes in an Isilon cluster are powered by the **EMC Isilon OneFS®** operating system. OneFS combines the three layers of traditional storage architectures—file system, volume manager, and data protection—into one unified software layer, creating a single intelligent file system that spans all nodes within the cluster. With its modular, single file system architecture, OneFS enables Isilon storage systems to provide a massively scalable platform that is highly efficient and simple to manage.

Isilon archive solutions are supported by all major archiving software applications. In addition to integrated support with popular EMC applications including **InfoArchive** and **SourceOne**, Isilon has also been tested and integrated with leading archiving applications from third party ISVs. This means that with Isilon, you have the flexibility to choose the archiving application that your business needs.

ROBUST DATA PROTECTION AND SECURITY

Get the industry's highest level of end-to-end data protection. Isilon OneFS provides N+1 through N+4 protection levels, safeguarding data against up to four simultaneous hardware component failures. That quadruple failure protection ensures that even if up to four nodes or drives fail simultaneously, 100% of your data is still available. This goes far beyond the typical RAID 6 double disk failure protection in use today.

EMC Isilon provides smart solutions for data backup, disaster recovery protection, security and compliance:

- **EMC Isilon SnapshotIQ™** enables fast and efficient data backup and allows you to take point-in-time copies of data with your choice of snapshot intervals and RPO time options.
- **EMC Isilon SyncIQ®** provides multi-site disaster recovery protection, letting you replicate data to your choice of local and remote sites. SyncIQ supports both LAN and WAN networks to replicate over short or long distances, providing protection from both site-specific and regional disasters.
- **Isilon SmartLock™** software provides immutable storage for data. With a write once, read many (WORM) locking capability, SmartLock ensures tamper-proof archiving of critical data sets for compliance purposes.

Isilon storage platforms also offer data at rest encryption options that include self-encrypting drives to prevent data theft, role-based access control (RBAC), and secure access zones to limit data access. File system auditing helps to identify unauthorized data access attempts. Isilon also offers Security and Technical Implementation Guide (STIG) hardening, CAC/PIV Smartcard authentication, and FIPS OpenSSL support.

SIMPLE TO MANAGE

The Isilon OneFS operating system is designed to simplify administration activities – and keep them that way as you scale your Isilon storage system to keep up with your growing data environment. OneFS is a single file system, single volume architecture with a single namespace, making it easy to manage, regardless of the number of nodes in your Isilon storage cluster. Unlike traditional storage platforms, you don't have to manage multiple LUNs and volumes that must be tracked and moved manually. Isilon also includes features that help to automate management such as Isilon SmartConnect™ which provides client connection load balancing and optimizes system performance.

SCALE CAPACITY QUICKLY WITHOUT DISRUPTION

With Isilon's modular architecture, your archive solution can easily scale capacity from 50 TB up to 50 PB. Adding new nodes to your Isilon cluster only takes a minute, and won't cause any disruption. This can help you plan and meet capacity requirements efficiently while limiting datacenter sprawl. And with Isilon AutoBalance™, there is no need to move data manually – it's done automatically and transparently to your business users.

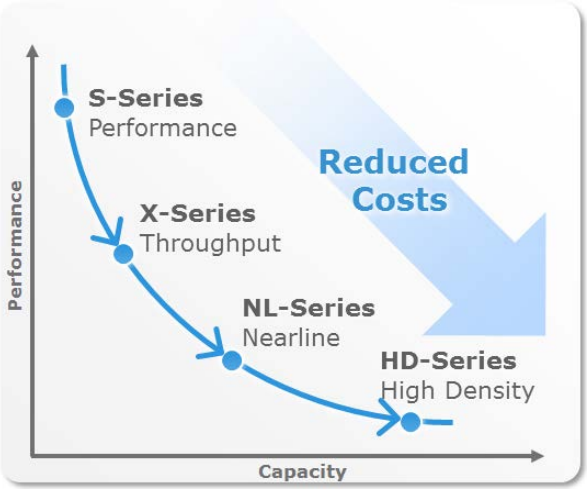
SPEND LESS, STORE MORE

With Isilon scale-out NAS storage, you can achieve over 80% storage utilization compared to only 50% to 60% utilization with traditional storage platforms, so you can store more for less. Isilon SmartDedupe™ makes storage even more efficient with a data deduplication option, reducing storage requirements by up to 35% in environments with redundant data across multiple sources. Combined with the simple and easy-to-manage OneFS operating system, you can reduce capital expenditures as well as ongoing operating costs.

OPTIMIZE WITH AUTOMATED, STORAGE TIERING

Isilon SmartPools™ software can help you simplify management and lower storage costs even more. Policy-based, automated tiering approach lets you to optimize storage resources and automatically move older, unused data to economical archive storage. SmartPools is integrated with the Isilon OneFS operating system to allow a single point of management, with a single scalable file system that offer multiple tiers of performance—depending on the data. This automated, policy-based data movement is transparent to the users.

Automated Storage Tiering with EMC Isilon SmartPools



With SmartPools, you can automatically match storage resources with your data and application requirements. SmartPools also simplifies management by eliminating the need for manual data migrations.

SUMMARY

Isilon archive solutions allow you to deploy a highly efficient, massively scalable, and secure disk-based archive that protects your data for long-term retention while optimizing the use of your organization's primary storage resources. You can easily expand your Isilon archive solution in just one minute. And with Isilon, your solution will remain simple to manage no matter how large your archive grows.

TAKE THE NEXT STEP

Contact your EMC sales representative or authorized reseller to learn more about how the EMC Isilon archive solutions can benefit your organization.

Also see our solutions in the EMC Store at https://store.emc.com/isilon.

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller, visit www.emc.com, or explore and compare products in the EMC Store.

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