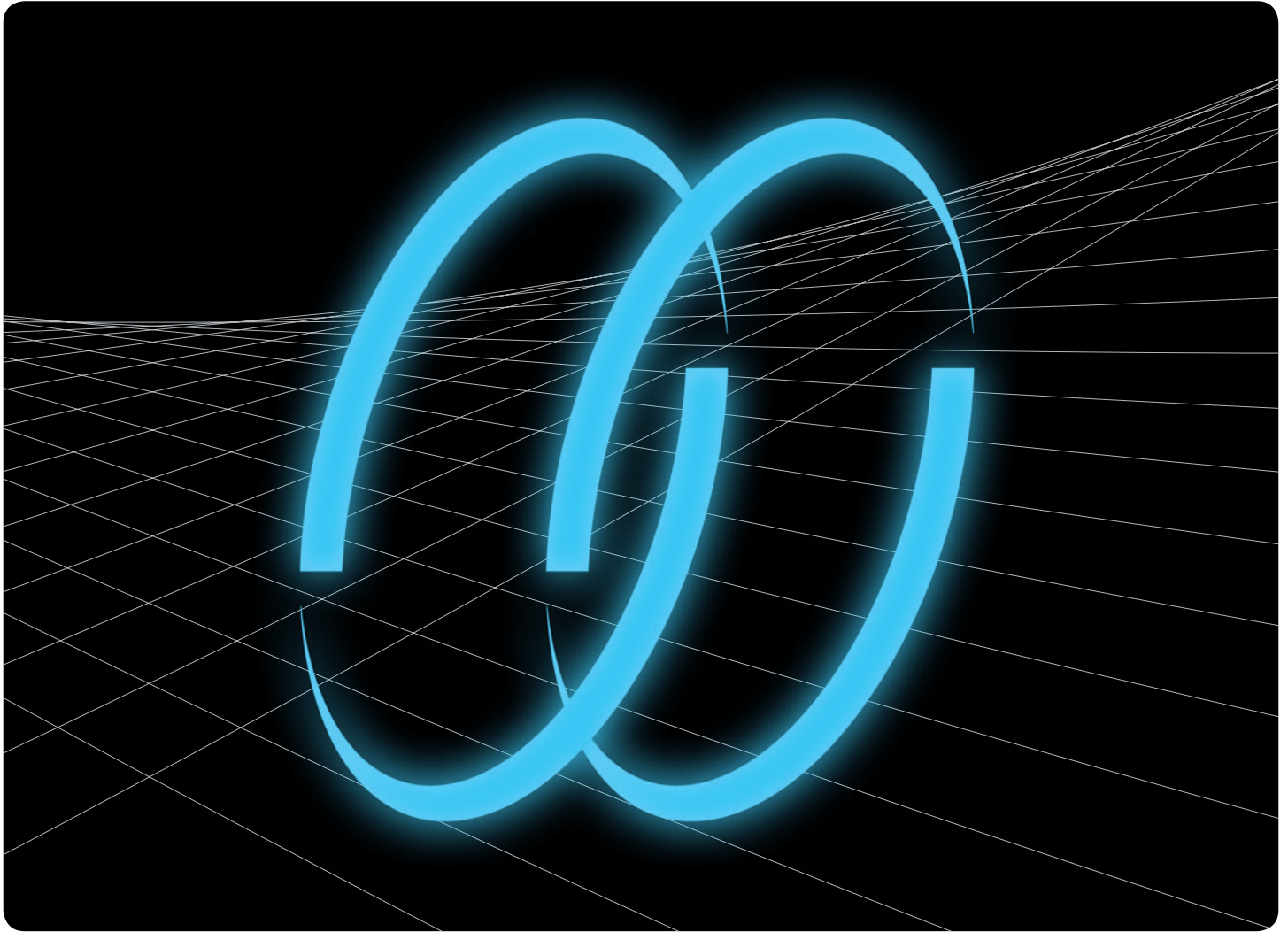


## Isilon Scale-out Storage Platform Overview



# It's not just data, it's your business.

### Accelerate it... Simply

Isilon provides you with the tools to dramatically increase the productivity of mission critical applications, workflows, and processes—allowing you to accelerate your business through faster time-to-money and new revenue opportunities.

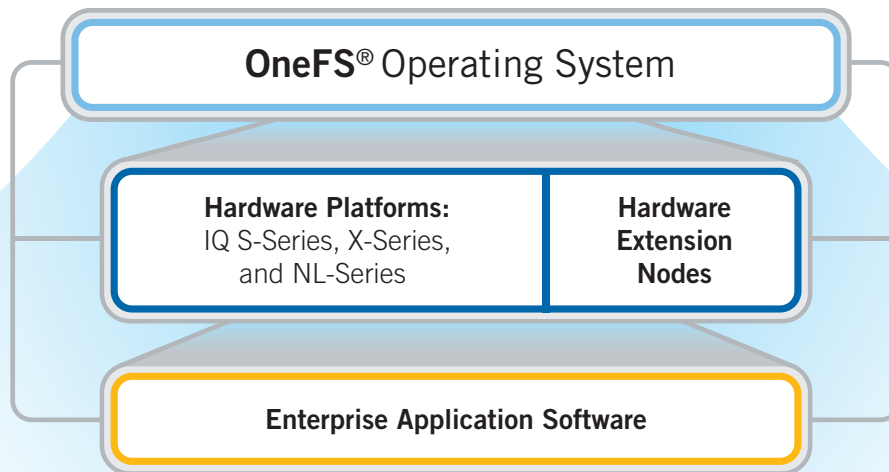
### Expand it... Simply

Isilon provides you with virtually unlimited room for growth. Go ahead. Take on more projects, perform more in-depth research, and serve up more data. You can instantly scale both capacity and performance to meet your specific business need—all without any additional IT burden.

### Protect it... Simply

You don't entrust your most valuable assets to just anyone. Isilon, the proven leader in the scale-out storage market, offers enterprise storage solutions to meet escalating storage challenges, providing the highest levels of reliability, availability, and serviceability in the industry.

As the global leader in scale-out storage, Isilon delivers powerful yet simple solutions for enterprises that want to manage their data, not their storage. Isilon's products are simple to install, manage and scale, at any size. And, unlike traditional enterprise storage, Isilon stays simple no matter how much storage is added, how much performance is required or how business needs change in the future. We're challenging enterprises to think differently about their storage, because when they do, they'll recognize there's a better, simpler way. Read on to learn what we mean.



*Isilon's end-to-end scale-out storage solutions, powered by the OneFS operating system, give users a broad range of options to meet their specific storage needs.*

## OneFS Operating System: The Engine That Powers Isilon's Scale-Out Storage Solutions

Isilon's sixth-generation OneFS® operating system provides the intelligence behind all Isilon® IQ scale-out storage solutions. Through the fusion of OneFS, state-of-the-art engineering, and enterprise industry-standard hardware, Isilon delivers highly scalable, ultra-high performance, modular scale-out storage systems. OneFS drives process and workflow acceleration, enables virtually unlimited growth, provides the highest levels of data protection available, and allows storage administrators to do more with less.

### Simplicity and Agility Through Innovation

Change is inevitable; that's why every Isilon system is built to rapidly and simply adapt. OneFS allows a storage system to grow symmetrically or independently as more space or processing power is required—providing a true pay-as-you-grow approach and the ability to scale-out as business needs dictate. Within 60 seconds, you can add capacity and performance—up to 10.4 petabytes and up to 85 GBps of throughput and over 1.4 million NFS ops in a single file system.

### Efficiency and Cost Savings

Orchestrated by OneFS, all components in an Isilon cluster work in concert to create a unified pool of highly-efficient storage—with a proven 80 percent storage utilization rate (versus 50 percent for traditional systems). Isilon's high efficiency means less physical storage is required to house the same amount of data—reducing both initial capital outlay and ongoing costs. And, with the OneFS autobalance feature you can quickly and easily add nodes without downtime, manual data migration, or application logic reconfiguration, saving precious IT resources. In fact, Isilon's ease-of-management requires less than one FTE per petabyte, further reducing overall storage costs.

## Enterprise Application Software

Massive stores of data present unique management challenges including disaster recovery, quota management, and off-site replication. Isilon's specialized applications are designed specifically for large, clustered storage environments.

- InsightIQ™ — Data Management**  
 Powerful, yet simple analytics platform
- SmartPools™ — Data Management**  
 Single file system for multiple tiers
- SmartQuotas™ — Data Management**  
 Quotas and thin provisioning for clustered storage
- SmartConnect™ — Data Access**  
 Policy-based load balancing with failover
- SnapshotIQ™ — Data Protection**  
 Simple, scalable, and flexible data protection
- Isilon for vCenter — Data Protection**  
 Manage Isilon functions from vCenter
- SyncIQ™ — Data Replication**  
 Fast and flexible file-based asynchronous replication
- SmartLock — Data Retention**  
 Policy-based retention and protection against accidental deletion
- Aspera for Isilon IQ™ — High-Performance Content Delivery**  
 High-performance wide area file and content delivery

# Isilon Hardware Platform: Three Flexible Product Lines

Isilon offers of highly-flexible scale-out storage solutions with precisely the right storage on a “pay-as-you-grow” basis eliminating the need for forecasting or over-provisioning. The Isilon hardware platforms are built on the innovative Isilon scale-out storage architecture—designed for simplicity, value, best-in-class performance and unmatched reliability. Isilon’s platform offerings include three flexible product lines tailored for specific business needs.



## IQ S-Series

The answer for ultra-performance primary storage, purpose built for high-transactional and IOPS-intensive applications. The S-Series presents the greatest \$/IOPS of any scale-out NAS solution in a super-high efficiency and ultra-low overhead package. With SSD technology for file-system metadata and file-based storage workflows, the Isilon S-Series delivers additional performance gains for metadata intensive operations while improving overall latency.

**Current Products:** S200, IQ 5400S, IQ 5000S-SSD

**Capacity:** 16.2 TB to 2.1 PB

## Use Cases

- **Design & Simulation:** simulation, verification, and analysis of electronic and mechanical systems, design for manufacturability, and analysis requiring fast scratch storage
- **Digital Media:** broadcast, real-time streaming, rendering, and post production
- **Web 2.0:** Web-based database and email



## IQ X-Series

Isilon’s most flexible and comprehensive series strikes the right balance between large capacity and high-performance storage. The extremely versatile X-Series is the best overall solution for high throughput and high concurrency applications. With SSD technology for file-system metadata and file-based storage workflows, the Isilon X-series significantly accelerates namespace intensive operations.

**Current Products:** X200, IQ 6000X, IQ 12000X, IQ 36000X, IQ 72000X, IQ 10000X-SSD, IQ 32000X-SSD

**Capacity:** 5.76 TB to 10.4 PB

## Use Cases

- **Life Sciences:** genetic sequencing and large-scale microscopy environments
- **Digital Media:** broadcast, post production, and DI (digital intermediate)
- **Internet/Web 2.0:** online video, audio, and image serving; Web-analytics
- **Electronic Design Automation:** design team collaboration, design libraries, tool scripts, and design implementation databases



## IQ NL-Series

The NL-Series is designed to provide cost-effective, highly-scalable nearline storage. High density, massive capacity and maximum efficiency are the strengths of the NL-Series. It offers the best \$/TB ratio and the lowest overall TCO of any scale-out storage solution available.

**Current Products:** IQ 36NL, IQ 72NL & IQ 108NL

**Capacity:** 252 TB to 15.5 PB

**Density:** 36 TB, 72 TB or 108 TB per 4U node

## Use Cases

- **Nearline Archiving:** For economical storage and rapid disk-based access to reference data to meet business and legal requirements.
- **Disaster Recovery:** When combined with the Isilon SyncIQ™ replication application, a proven solution for organizations whose multi-site replication strategy requires an economical, high-capacity storage device to be located remotely.

## Hardware Extension Nodes

Standard IQ storage nodes, the foundation of the various platforms, allow linear scaling—as capacity is added, performance is simultaneously increased. Extension nodes allow for independent scaling of either capacity or performance, delivering the agility your business requires to quickly react to ever changing performance and capacity needs.



### Capacity Extension Nodes

When you simply need more space, adding Isilon EX nodes to an Isilon IQ 6000X or IQ 12000X platform node provides a low-cost way to independently expand capacity from 6 to 12 TB at a time.



### Performance Extension Nodes

**IQ Accelerator** – By seamlessly adding the IQ Accelerator to an existing Isilon S-Series or X-Series cluster, you can add more than 400 MB/second of single-stream throughput and up to 700 MB/second of concurrent throughput for the most transactional access patterns.

**Back-up Accelerator** – The Back-up Accelerator can be seamlessly added to any existing Isilon cluster to deliver up to 480 MB/second of performance across four concurrent streams, speeding back-up operations and reducing the risk of business-critical data loss.



Used Isilon storage for on-site coverage of the Olympic Games in Athens, Torino and Beijing

*"We needed a storage solution that could reliably deliver unparalleled access to content for our broadcast team, both on-site in Beijing and at our multiple broadcast centers in the United States. Having used Isilon IQ for each of the past two Olympic Games, we knew it would once again provide all we needed to successfully execute our broadcast in Beijing."*

**Craig Lau**  
VP of Technology  
NBC Olympics



One of the world's leading genomics and biomedical research institutes

*"With Isilon IQ, we've been able to grow a single file system to nearly a petabyte in less than a year, while still maintaining the data throughput necessary to power our workflow and advance our research."*

**Matthew Trunnell**  
Manager of Research Computing  
Broad Institute

## ADOBE® scene7®

A hosted web-based publishing system that helps companies cost-effectively generate and publish graphic images, e-catalogs, and more

*"The Isilon clustered storage solution met our requirements for high levels of reliability, scalability and ease of use."*

**Pete Noel**  
Sr. Director of Technology & Operations  
Scene7 at Adobe

## Isilon's World-Class Support Services Maximize the Value of Your Investment

Feel confident. We know that outstanding support is essential to ensuring the continued success of your business. That's why an investment in an Isilon scale-out storage solution is backed by a global team of support experts that are ready to respond to any disruption to your storage environment.

We understand that responding to problems after they occur is no longer enough. Potential issues must be anticipated and prevented to ensure the highest possible performance, data availability, and operational efficiency. That's the role of Isilon Support Services. We're here for you when you need us.

## Comprehensive, Breakthrough Storage Solutions

Through the winning combination of Isilon's groundbreaking OneFS operating system, high-performance industry-standard hardware, and powerful application software, Isilon provides a complete portfolio of innovative storage solutions that drive business value for customers by optimizing mission-critical applications, workflows, and processes. Isilon enables enterprises and research organizations worldwide to manage large and rapidly growing amounts of data in a highly-scalable, easy-to-manage, and cost-effective way.

Isilon's innovative scale-out storage solutions—built for agility, simplicity, and value—provide both a tiered storage approach for specialized needs and the ability to unify digital workflows into a single, high-performance, highly scalable shared pool of storage. Every easy-to-manage Isilon solution is designed to accelerate workflow productivity and reduce capital and operational expenditures while seamlessly scaling storage in lockstep with the growth of mission-critical data.

### Move your business ahead

For more information on how Isilon's proven scale-out storage solutions can accelerate your productivity and reduce costs, call Isilon Sales at the number below or contact your authorized Isilon reseller.

To locate a reseller near you, use our Partner Locator tool at <http://www.isilon.com/partnerlocator>



**UK EMEA HQ**  
Knyvett House, The Causeway,  
Staines, Middlesex  
TW18 3BA, UK  
Phone: +44 (0) 1784 895 038

**Isilon Systems France**  
Tour Montparnasse  
26è étage  
75015 Paris, France  
Phone: +33 (1) 44 10 41 36

**Isilon Systems GmbH**  
Schleussnerstr.42  
D-63263 Neu-Isenburg  
Germany  
Phone +49-6102-88484-0

Isilon Systems, Inc. | [www.isilon.com](http://www.isilon.com) Toll-Free: 877-2-ISILON • Phone: +1-206-315-7602

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