



How breakthroughs begin.™

Solution Brief

Isilon Clustered Storage Solutions for Internet/Web 2.0 Companies



Solutions for Internet/Web 2.0 Companies

Isilon Clustered Storage: Providing Massive Scalability and Other Breakthroughs for Internet/Web 2.0 Companies

The Internet/Web 2.0 digital data explosion is manifested not only in the immense size of unstructured files, but also by their graphically-rich, highly interactive nature. The emergence of photo- and video-sharing sites and the creation of interactive communities and 3D virtual worlds all involve producing, storing and accessing immense volumes of digital assets in the form of images, textures, audio, video and other file-based data.

Isilon IQ® clustered storage represents the core technology for storing and accessing the data assets of Internet/Web 2.0 companies. With the fifth generation of Isilon's unique OneFS® operating system software and the latest advances in industry-standard hardware, Isilon delivers modular, pay-as-you-grow, enterprise-class storage systems—enabling companies to transform data into information, and information into breakthroughs.

Industry Leading Scalability—up to 2.3 PB in a Single File System

One significant challenge being faced today is the ability to support massive amounts of traffic generated by Internet/Web 2.0 companies, and seamlessly react and respond to increased user uploads and media streaming. Isilon IQ easily scales storage, unifying vital data into one file system, increasing the performance of applications, and reducing the time spent managing storage. Isilon IQ delivers industry-leading scalability—up to 96 nodes in a single cluster and up to 2.3 petabytes in a single file system.

Performance To Support Interactive Data

Delivering rich interactive content is the real breakthrough of Internet/Web 2.0—and Isilon is a critical under-the-hood component of this breakthrough. Isilon IQ clustered storage scales from 4 terabytes to 2.3 petabytes and offers throughput of up to 20 GB/second.

In addition, Isilon IQ Accelerator-x platform extension nodes enable single stream performance of up to 400 MB/second, concurrent performance of up to 700 MB/second and delivery of over 26,000 transaction I/Ops—a powerful platform for the ever-expanding digital assets that are a hallmark of the next generation of Internet interactivity.

Unmatched Reliability

Isilon IQ ensures that data is always available, easily withstanding the loss of multiple disks or entire nodes without users losing any content. With Isilon, all files are striped across multiple nodes within a cluster, and no single node stores 100% of any file. If a node fails, all other nodes in the cluster still deliver 100% of the files without interruption.

Easy To Use, Easy To Manage

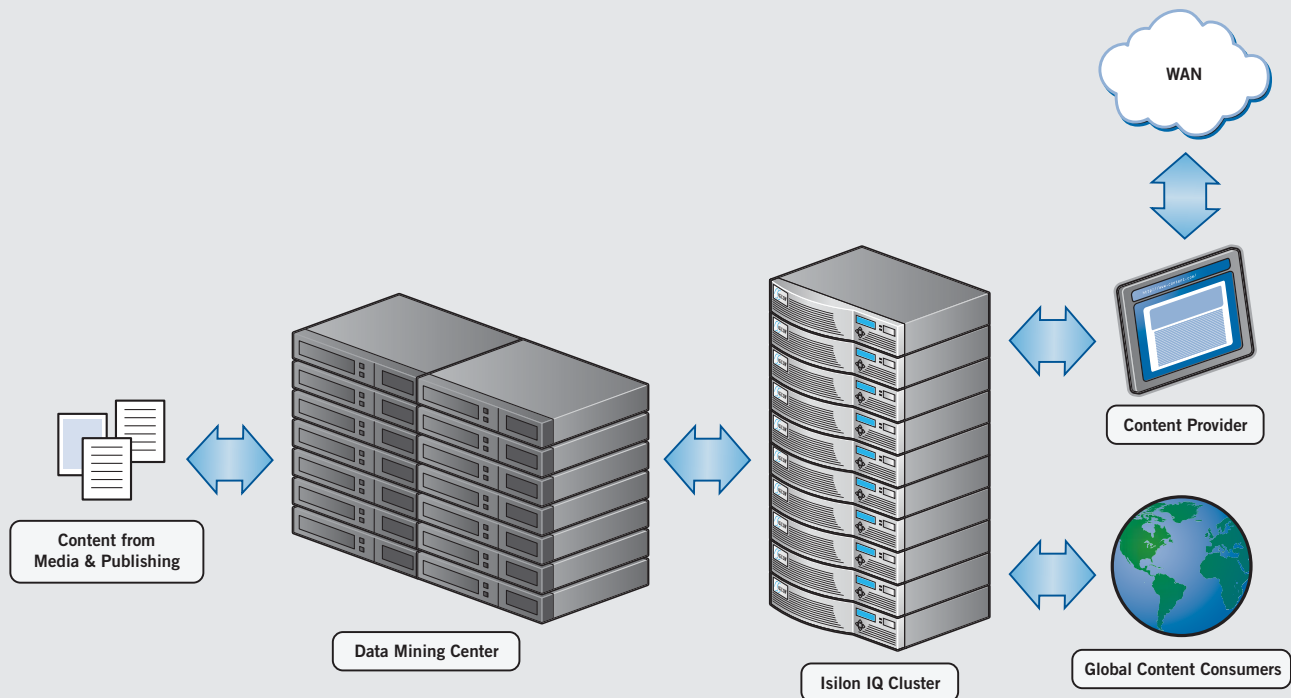
Many Internet/Web 2.0 companies operate a variety of IT operations outside of media content including e-mail, instant messaging and blogging, among others, so they require a storage system that is not only highly scalable, but also very easy to manage and administer. With Isilon IQ, one person can now manage petabytes of data. Administrators can simply add another node to an Isilon cluster to increase throughput and performance. And as new nodes and capacity are added to a cluster, Isilon IQ's exclusive AutoBalance feature automatically balances data across all nodes in a cluster in real time, removing throughput bottlenecks, maximizing performance and storage utilization and eliminating downtime.

Easy To Grow, Easy To Own

The Isilon IQ clustered storage product line addresses a full spectrum of storage needs—from the highest performance Tier-1 applications to Tier-2 enterprise archiving. Powered by OneFS, the Isilon IQ family of products creates a single pool of expandable storage that is easy to install and grow—once racked, a 10, 50 or 100+ terabyte cluster takes less than 10 minutes to configure and set up, and capacity can be added on the fly in as little as 60 seconds with no downtime. Isilon IQ enables customers to maximize their budgets by easily expanding storage on a modular pay-as-you-grow basis.

Breakthroughs Begin With Isilon

The Isilon product line is comprised of the Isilon IQ 1920, 3000, 6000, 9000 and 12000 platform nodes; the Isilon EX 6000, EX 9000, EX 12000 and Isilon IQ Accelerator-x extension nodes; and licensable software applications such as SyncIQ™, SnapshotIQ™, SmartConnect™, SmartQuotas™ and Aspera for Isilon IQ. This set of flexible and innovative products define new industry standards by delivering a single file system that scales to 2.3 petabytes of capacity, up to 20 GB/second of throughput and supports high-performance InfiniBand® for low-latency, highbandwidth intracluster communication—providing companies in the Internet/Web 2.0 industry with the power to transform their critical digital assets into business breakthroughs.



Customer Success

Kodak EasyShare Gallery Kodak EasyShare Gallery combines intelligent organization and sophisticated picture sharing into a single innovative online service. Kodak EasyShare Gallery selected Isilon IQ clustered storage systems to simplify their storage architecture and respond to their rapidly expanding customer base and ever growing image resolutions.

"At Kodak EasyShare Gallery, our customers trust us to safeguard their pictures and we use Isilon IQ to help us do that. The simplicity and performance Isilon IQ offers is fantastic and it is a great tribute to Isilon's ease of use that we have added hundreds of terabytes of capacity while only adding one junior level administrator, which would not have been possible with our legacy systems."

—Sonja Erickson, VP of Technical Operations for Kodak EasyShare Gallery

myspace.com a place for friends MySpace has grown to be one of the busiest sites on the Internet in just two years. Isilon IQ's modular clustered storage solutions support MySpace's huge volume of traffic, and allow it to easily respond to increased user uploads and media streaming. With 24x7 operations serving users across the globe, MySpace needs to modularly add capacity and performance with simple plug-and-play installation.

"Our media delivery and storage needs are tripling every year and this presented a challenge for our traditional storage systems. Isilon IQ is a critical part of our infrastructure—the performance, scalability and cost savings we realize with Isilon IQ will help fuel the next wave of our development."

—Aber Whitcomb, CTO, MySpace

Isilon IQ Clustered Storage

The Isilon IQ family of clustered storage systems was designed from the ground up to meet the needs of data-intensive enterprises and high-performance computing environments. By combining Isilon's OneFS® operating system software with the latest advances in industry-standard hardware, Isilon delivers modular, pay-as-you-grow, enterprise-class clustered storage systems.

- Isilon's OneFS distributed file system creates a single, shared global namespace
- First and only truly symmetrical clustered storage architecture
- System can scale from 4TB–2.3PB in a single file system
- Unmatched aggregate throughput from a single file system with up to 20 GB/second
- Single stream performance of more than 400 MB/second, concurrent performance of 700 MB/second and over 26,000 transaction I/Ops
- Industry leading, high availability for clustered storage systems
- Powerful, easy-to-use Web-based management
- 60-second scaling of both capacity and performance
- Built-in, automatic application/client connection load balancing
- Industry-standard protocol support (NFS, CIFS, HTTP, FTP, NDMP, SNMP, LDAP, ADS, NIS)

Isilon also offers a robust suite of clustered storage software applications that optimize data protection and management:

SyncIQ™

Enterprises increasingly need to distribute large, mission-critical data sets to multiple shared storage systems and teams in multiple locations. SyncIQ replication software is the industry's only policy-based file replication system designed exclusively for clustered storage, combining a rich set of policies for creating and scheduling storage replication jobs with innovative bandwidth throttling and cluster utilization capabilities.

SnapshotIQ™

Isilon Systems introduces a true breakthrough in snapshot technology that provides a uniquely simple, scalable and flexible way to enable enterprise-class protection and user-driven data recovery for clustered storage. With the ability to support an unlimited number of snapshots within a highly scalable single pool of clustered storage and up to 1,024 snapshots within any single directory, SnapshotIQ represents a significant advancement over traditional snapshot technology.

SmartQuotas™

SmartQuotas quota management software delivers quotas and thin provisioning technology for clustered storage and provides data-intensive enterprises with an unparalleled solution for optimizing the value of their storage resources. SmartQuotas enables businesses to simply and flexibly manage storage resources across their entire organization—with both hard quotas and thin provisioning capability—to support growing storage demands with minimal resources.

SmartConnect™

Isilon Systems' exclusive SmartConnect software application allows IT Managers to meet the demands of an always-on, 24x7x365 world by ensuring the highest levels of performance and industry leading high availability. With intelligent client connection load balancing and failover support, SmartConnect represents a breakthrough in optimizing clustered storage performance and availability.

Aspera for Isilon IQ

Aspera and Isilon have partnered to provide a solution for quickly transferring the largest files across wide area networks or directly to end-users, independent of network conditions or distance. Files of any type—video, audio, images or other large, rich media files or file-based data—can be rapidly transferred without impacting other network traffic, while scaling to speeds that meet growing business demands.

About Isilon Systems

Isilon Systems is the worldwide leader in clustered storage systems and software for file-based data, enabling enterprises to transform data into information—and information into breakthroughs. Isilon's award-winning family of IQ clustered storage systems combines Isilon's OneFS operating system software with the latest advances in industry-standard hardware to deliver modular, pay-as-you-grow, enterprise-class storage systems. Isilon's clustered storage solutions speed access to critical business information while dramatically reducing the cost and complexity of storing it.



Isilon Systems, Inc. | www.isilon.com
3101 Western Ave, Seattle, WA 98121

Toll-Free: 877-2-ISILON • Phone: +1-206-315-7602
Fax: +1-206-315-7501 • Email: sales@isilon.com


How breakthroughs begin.™