



How breakthroughs begin.™

Application Software

# Isilon SyncIQ™ Replication Software

Sophisticated, fast and easy to use, SyncIQ replication software provides data-intensive businesses with an unparalleled solution for file-based replication over the WAN and LAN.



## Customer Usage Scenarios

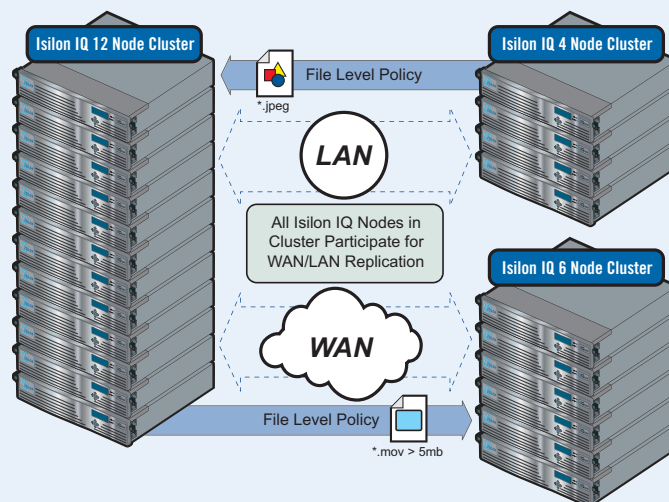
- **Disaster Recovery.** Replicates a copy of primary data to a secondary location (LAN/WAN) to ensure business continuity.
- **Distributed Digital Workflow.** Geographically distributed teams/groups can collaborate on multiple copies of shared files to improve workflow efficiency.
- **Information Life Cycle Management.** Automatically moves content from primary/online storage to less expensive near-line storage.
- **Distributed Online Delivery of Content.** Improves bandwidth utilization and speed of access by distributing content across networks, data centers & geographies.
- **Local Backup & Restore.** Increased performance of large scale backups and restores using disk-based backup target(s).

## Fast and Reliable File-Based Replication

Companies increasingly need to distribute large mission-critical data sets to multiple shared storage systems and to teams in multiple locations. This need requires the creation of new intelligent storage replication solutions. Leading companies are looking for solutions that enable the fast and reliable replication of large amounts of file-based data across their LANs and WANs, while at the same time driving down costs through greater simplicity and ease of use. Additionally, as the need for disaster recovery and fast disk-based backup infrastructures becomes more and more prevalent, enterprises require a solution that can quickly and efficiently move their mission-critical data throughout a globally distributed network to ensure the highest levels of availability.

Until now, traditional storage systems and host-based replication tools have been used to address these challenges at great cost and complexity, and with inadequate feature sets and inherent architectural performance limitations. Traditional replication products from major storage vendors force companies to satisfy their data replication needs with brute force techniques and limited policy-based intelligence. One-size-fits-all block level replication technology—long the industry norm in storage systems—fails to provide customers with the ability to replicate files by file type, file size and geographic location, or to enable customers to easily manage bandwidth utilization and cost. Without an effective and distributed replication system, data replication will be slow to propagate to target storage resources and will frequently become bottlenecked at lone storage controllers or by the capacity of single servers or “heads.”

## SyncIQ Replication Architecture



## Sophistication

SyncIQ is the most sophisticated policy-based file replication management tool available today. SyncIQ delivers a rich set of policies for scheduling replication jobs based on file type, file size, bandwidth requirements and storage resource availability. These policies can be set at the cluster, directory or even file level with a few simple clicks of the mouse from an intuitive, Web-based interface.

## Performance

SyncIQ delivers extremely fast replication of files across multiple Isilon IQ clusters over the WAN and LAN. SyncIQ is the only replication tool that leverages Isilon IQ's fully distributed and clustered architecture for parallelizing replication jobs across all nodes in both the source and target Isilon IQ clusters. Performance can be configured and optimized for both network bandwidth and cluster resource utilization, and multiple policies can be set for different days and times of the week.

## Simplicity

SyncIQ is unmatched in its simplicity and ease of use. SyncIQ provides an intuitive, fully integrated Web-based management console that allows for graphical monitoring and reporting across all Isilon IQ nodes. As a licensable software module for Isilon IQ, SyncIQ can be installed, configured and replicating data in less than 10 minutes. No professional services, specialized training or complex system design is required.

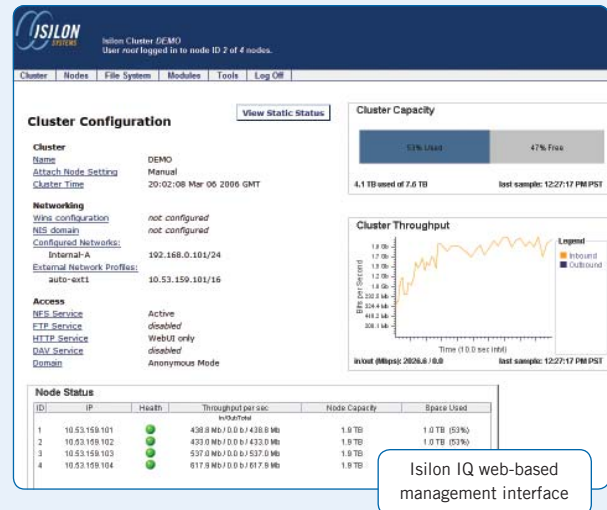
## Key Features

### SyncIQ Architecture

- **File-based, Asynchronous Replication.** Provides file-based, asynchronous data replication across N-clusters of Isilon IQ storage.
- **WAN & LAN Support.** Customers can perform replication jobs either on the LAN (internal to a data center) or over the WAN (external data centers).
- **Multi-Directional Replication.** SyncIQ replication supports replicating from one-to-one, one-to-many and many-to-many, both uni- and bi-directionally.

### SyncIQ Management Features

- **Replication Policy Control.** Replication policies can be set for an entire cluster or at the directory level.
- **File-Level Policies.** Replication policies can also be set for a specific file type or types (e.g., .jpg, .pdf) and for specified file ranges (e.g., 100KB–1GB).
- **Scheduling/Frequency.** Customers can designate the frequency for replication (e.g., every 24 hours, once a week).
- **Web-based Monitoring.** A robust Web-based interface is fully integrated into the OneFS management tool to control all the functionality, including scheduling, policy settings, monitoring and logging of data transferred and bandwidth utilization.



## SyncIQ Performance

- **Unmatched Replication Performance.** Leveraging Isilon IQ's clustered architecture, all nodes concurrently send and receive data during replication jobs in real time, without impacting users reading and writing to the system. This enables the highest performing file-based replication product in the market for network storage solutions.
- **Differential Transfers.** Only files that have changed will be replicated to the target clusters. This will optimize transfer times and minimize bandwidth used.
- **Bandwidth Metering & Scheduling.** Users can limit the amount of network bandwidth for any given replication job. This allows the scheduling of different bandwidth levels during defined windows of time, according to network availability, utilization and cost.
- **Throttled Cluster Impact.** Replication jobs can be tuned to utilize as much or as little of the total Isilon IQ cluster resources as needed to balance the speed of replication with the performance of the applications and demands of users accessing the cluster.

## SyncIQ High Availability

- **Failure & Recovery.** In the event the secondary system is not available due to a system or network interruption, the replication job will be able to roll back and restart at the last successful copy operation.
- **Time-Based Deletes.** SyncIQ allows for scheduled deletes so that a deletion can take place on a replicated data set after a specified period of time (e.g. 1 week, 1 month).
- **Alerts & Logging.** Upon a critical failure or loss of network connection, an alert will be sent to all recipients configured to receive critical alerts.

## Isilon IQ Support

SyncIQ replication software can be installed non-disruptively in fewer than ten minutes on all Isilon IQ storage systems running OneFS v2.5 or higher.

For more information about how Isilon IQ or SyncIQ can improve your bottom line, contact an Isilon sales representative or Isilon Smart Partner reseller.