



StoneFly Technology Overview



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THE STONEFLY ADVANTAGE

StoneFly is a pioneer in IP Storage and was a contributor to the iSCSI protocol. As a result, Stonefly customers have been deploying StoneFusion based solutions with confidence since 2002. The StoneFusion powered IP Storage solutions offer key features including multiprotocol support, active/active clustering, storage virtualization, snapshots, synchronous mirroring and asynchronous replication. StoneFly solutions are cost-effective, and offer a range of deployment options to fit every use case.

SOLUTIONS

StoneFly's cost-effective IP SANs are integral to storage consolidation efforts, server virtualization implementations, email archiving initiatives, layered disaster recovery, and business continuity planning.

AFFILIATIONS AND PARTNERS

StoneFly is a member of the Storage Networking Industry Association [SNIA] and the IP Storage Forum sub-committee. StoneFly partners with industry leaders including Intel, Microsoft, VMware, Citrix, LSI, and Qlogic.

ABOUT STONEFLY

StoneFly, Inc. (StoneFly) was founded as a venture-backed startup in April, 2000 to deliver on the vision of simple and affordable storage optimization and disaster recovery protection through IP Storage Area Network (IP SAN) solutions. Based in Hayward, California with additional offices in San Diego, California; StoneFly is a subsidiary of Dynamic Network Factory, Inc. (DNF), a leading maker of high-performance network attached storage (NAS), storage area networks (SAN), RAID and iSCSI systems.

In addition to IP Storage Solutions, StoneFly has developed a series of Unified Storage and Server (USS™) and Unified Scale-Out (USO™) NAS products, providing a one stop solution to datacenter sprawl. StoneFly is a member of the Storage Networking Industry Association (SNIA) and a founding member of the IP Storage Institute (IPSI).



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INTELLIGENT IP STORAGE MADE SIMPLE

Stonefly is the innovator of powerful, cost-effective IP Storage solutions for departments, mid-tier workgroups, and enterprise organizations. Stonefly IP SAN products include snapshot and mirroring services, volume-based encryption, and Remote Asynchronous Replication for advanced disaster recovery. The heart of StoneFly IP SAN products is our award-winning StoneFusion™ Intelligent Network Platform. This platform implements advanced storage network management, storage provisioning, centralized volume management, data migration and storage consolidation. StoneFly IP SAN appliances include our patented Storage Virtualization technology (United States Patents: 7,302,500, 7,555,586, 7,558,885)



ADVANCED STORAGE SERVICES

Storage Virtualization

Our StoneFusion™ Intelligent Network Platform enables advanced storage management by separating physical storage from logical volumes to increase flexibility, modularity and fault tolerance. Storage resources can be located internally, externally or on a wide area network, with StoneFly's management framework providing storage services at the volume level, including redundancy, resources and tools to simplify storage management and increase storage availability.

MULTIPROTOCOL (UNIFIED) STORAGE

StoneFly's Unified Architecture supports both file-mode (NFS, CIFS) and block-mode (iSCSI) storage, delivering unprecedented flexibility. With a fully featured NAS, and IP SAN in one easy to manage appliance, users do not have to decide which technology to deploy.

SCALE-OUT STORAGE

StoneFly Scale-Out storage enables storage without limits. A metadata-free management framework powers a file system that accommodates an unlimited number of nodes and performance that scales linearly as nodes are added.

StoneFly Clustering

StoneFly's active/active clustering technology enables Storage Concentrators to be deployed in mission critical environments. With seamless failover technology and load-balancing, Storage Concentrator Clusters increase availability and performance cost effectively, making it easy to design a SAN with no single point of failure.

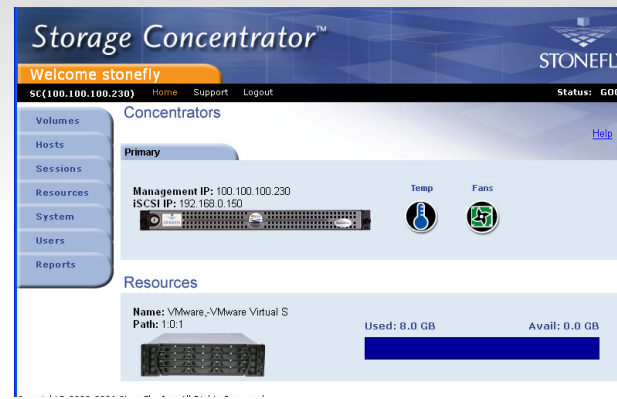
StoneFly Snapshot

StoneFly's snapshot technology offers a virtual, temporary, and perishable point-in-time replica

of an active live volume that uses a small amount of disk space, allowing administrators to use these images for data recovery. Volume snapshots are scheduled monthly, weekly, daily or hourly and appear to host systems as standard read/write volumes; each volume can be used to restore missing data, testing applications and efficient server backups. StoneFly Snapshot also integrates with host-based applications including Volume Shadow Copy Services (VSS), SQL, Exchange and other server-based applications.

StoneFly Reflection

StoneFly Reflection™ synchronous mirroring, campus mirroring, and asynchronous replication is designed for environments where maximizing application uptime and business continuity are paramount. StoneFly Reflection provides continuous access to a volume, without interruption to data availability, by substituting an exact mirror image or copy of the volume. Each mirror image simplifies disaster recovery and reduces system downtime. StoneFly Reflection asynchronous and synchronous mirroring simplifies deployment, operating transparently to users, applications, databases, and host processors. The result is next-generation performance, reliability and high data availability for critical applications.



Intuitive StoneFusion GUI

servers holding sensitive data that can be consolidated on the SAN. IP SAN-based encryption can also simplify efforts to support compliance regulations for HIPAA and the SEC. Additional features include unique key generation and removable key storage.

SAN-based Encryption

StoneFly's IP SANs also offer Advanced Encryption Standard (AES) 256 over iSCSI volumes to consolidate key management to the IP SAN. The encrypted IP SAN is ideal for organizations with multiple servers using host-based encryption or multiple database

StoneFly Services

Professional Services

StoneFly's experienced services team can assist organizations with installation, training, setup and ongoing SAN management for new IP SAN deployments. StoneFly's team also offers services geared towards implementing server virtualization projects, business continuity initiatives and storage optimization projects.

Electronic Recycling

Partner with StoneFly for complete product lifecycle management. As a responsible manufacturer, StoneFly provides dollar credit for recycled electronic equipment. We pick up, sort and dispose of your used equipment in an environmentally responsible manner. Additionally, we provide military-grade data destruction for maximum security for sensitive data as equipment is decommissioned.

Technical Specifications	Hard Drive Options	Maximum Storage	Redundancy	Replication	Snapshots	Clustering	Supported Protocols	10GbE Support	256-Bit Encryption
ISC-6GS	6Gb/S SAS, SATA III, SSD	336TB	☑	☑	☑	--	iSCSI	Optional Upgrade	Optional Upgrade
Voyager 6GS	6Gb/S SAS, SATA III, SSD	768TB	☑	☑	☑	☑	iSCSI	Optional Upgrade	Optional Upgrade
Unified Scale-Out	6Gb/S SAS, SATA III, SSD	Unlimited*	☑	☑	☑	☑†	iSCSI, CIFS, NFS	Optional Upgrade	Optional Upgrade
Unified Storage & Server	6Gb/S SAS, SATA III, SSD	336TB/768TB	☑	☑	☑	☑†	iSCSI, CIFS, NFS	Optional Upgrade	Optional Upgrade
SCVM™ Virtual IP SAN	--	☑	☑	☑	☑	☑	iSCSI, CIFS, NFS	--	--

* Capacity subject to file system limitations † With available High-Availability edition