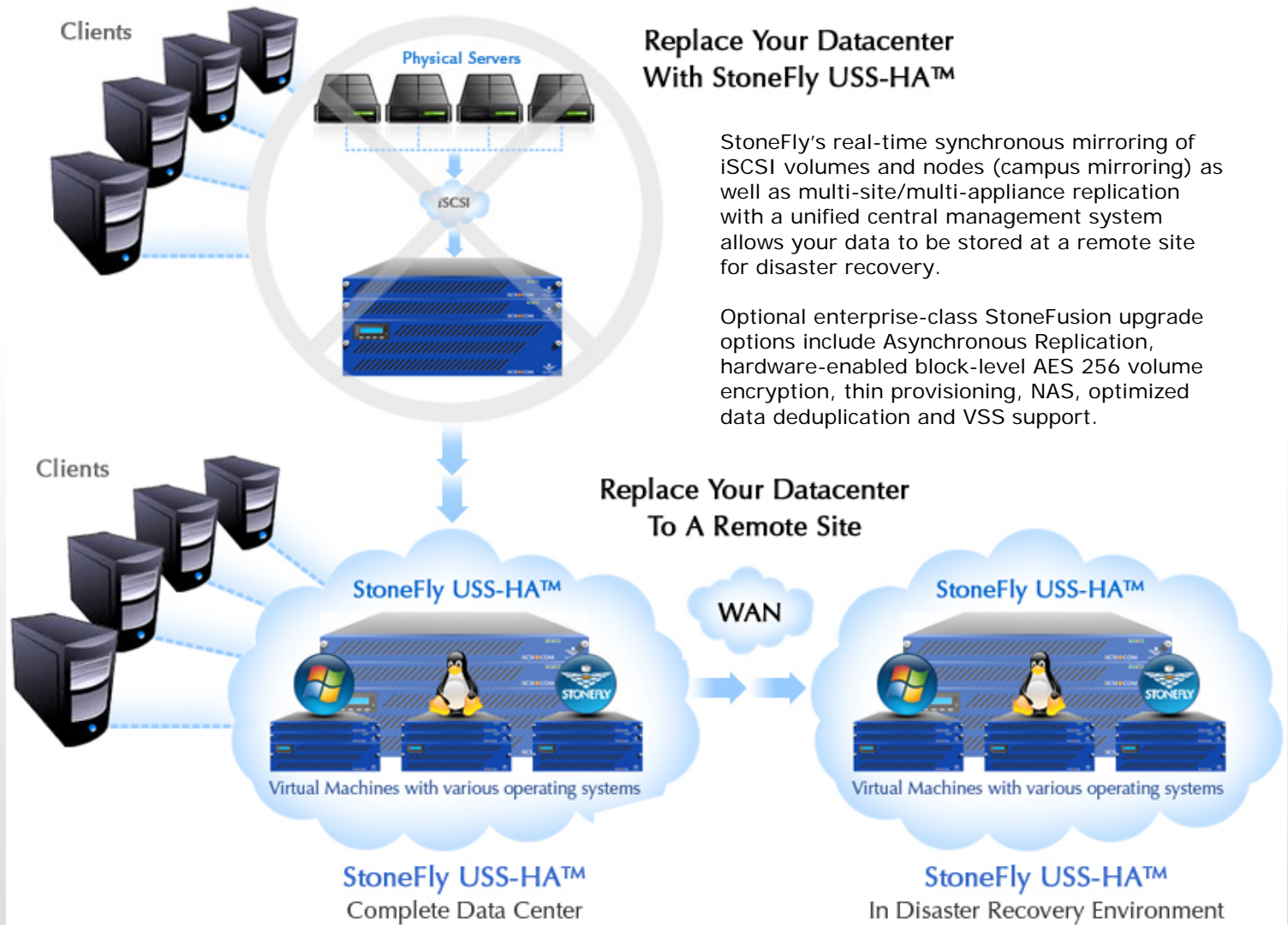




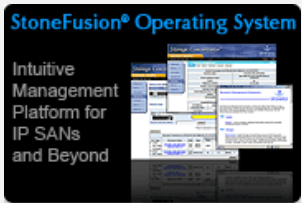
USS-HA "Unified Server & Storage" Appliance

StoneFly's USS-HA™ "Unified Server & Storage" Appliance is an ideal solution to consolidate all of your server and storage systems into one easy to manage, fully redundant, highly available modular appliance. Use of virtualized operating systems allows for complete hardware utilization and considerable reduction in power/cooling costs. USS-HA flexibility replaces the "Fixed Hardware Model" of the past with on-demand resource allocation (such as CPU, memory, storage, etc.) based on your application needs. USS-HA comes with a Virtual IP SAN Cluster (SCVM™) and the ability to create additional virtual storage or virtual servers as needed.

USS-HA Unified Storage & Server Cluster appliances are designed to offer the ultimate in high-availability with active-active RAID controllers, improved redundancy and fast performance at a lower price point. Base configurations are available in a 5U configuration with dual 1U Storage Concentrators scalable up to 672 drives, as well as 7U configurations with dual 2U Storage Concentrators and 9U configurations with dual 3U Storage Concentrators that are scalable up to 1568 drives using up to 14 StoneFly USS-HA Expansion Arrays and 84 StoneFly USS-HA Expansion Units.



USS-HA Cluster – Key Software & Hardware Features



Tiered Storage

16K SAS	16K SAS	SSD	SSD
16K SAS	16K SAS	SSD	SSD
16K SAS	16K SAS	SSD	SSD
16K SAS	16K SAS	SSD	SSD

StoneFly SCVM™ 7.0 Base iSCSI Management 64-Bit Storage Concentrator Virtual Machine Guest Operating System on Each Cluster Node

- Logical Volume Creation and Patented Advanced Storage Virtualization Services
- 200 iSCSI Volumes Supported with 1022 Concurrent Host iSCSI Sessions
- iSCSI Port Teaming, Failover and Load-Balancing
- Volume-Level Access Control and Dynamic Volume Management
- Support for iSCSI, SNMP Traps, UPS, Nagios, RAID Monitoring, Call Home
- System-Wide Graphical Performance and Utilization Reporting
- Advanced Report Management
- Automated Online Volume / Storage Expansion

StoneFly StoneFusion 7.0 Advanced Features Package on Each Cluster Node

- StoneFly Active / Active Clustering Services with Host and IP SAN Load Balancing, Seamless Failover and Failback Operations
- StoneFly Snapshot Services with 2520 Delta-Based Snapshots per Subsystem
- Mountable Read-Write Snapshot Volumes
- Snapshot Schedule Utility, Command Line Interface Utility
- StoneFly Real-Time Synchronous Mirroring of iSCSI Volumes and Nodes (Campus Mirroring)
- Multi-Site/Multi-Appliance Replication and Unified Central Management System
- Tiered Storage Architecture with Hardware and Software Support

Available Software Upgrade Options

- Asynchronous Replication (One-to-Many & Many-to-One)
- Hardware-Enabled Block Level AES 256 Volume Encryption
- Thin Provisioning with Space Reclamation
- Data Deduplication (Requires StoneFusion 8.x)
- NAS (Supports CIFS and NFS Protocols)
- VSS Support



StoneFly i7003v-D Dual 1U, StoneFly i7103v-D Dual 2U or StoneFly i7203v-D Dual 3U Storage Concentrator Cluster, Quad 6Gb SAS Connection

- Choice of Space-Saving 1U, Low-Profile 2U, or Full-Height 3U Storage Concentrators
- Hot-Swappable Cluster Nodes with Failover and Failback
- Dual Hexa-Core Storage Virtualization Engines per Cluster Node
- 32GB to 512GB Data Packet and Command Queuing Cache for SSPP® per Cluster Node
- Scale Capacity to 672 Drives (i7003v-D) or 1568 Drives (i7103v-D/i7203v-D) with up to 14 StoneFly USS-HA Expansion Arrays and 84 StoneFly USS-HA Expansion Units
- Two Hot-Swappable OS Drives Mirrored at RAID 1 with Cache Battery Backup in each Node
- i7003v-D Features 4 Gigabit RJ-45 Copper Ethernet & 4 10Gb SFP+ Connections per Cluster and Supports up to 20x1Gb or 20x10Gb (RJ-45/CX4 Copper, SFP+, SR/LR Optical)
- i7103v-D/i7203v-D Features 4 Gigabit RJ-45 Copper Ethernet Connections per Cluster and Supports up to 52x1Gb or 48x10Gb (RJ-45/CX4 Copper, SFP+, SR/LR Optical)
- One Gigabit Management Port & IPMI v2.0 with Virtual Media & KVM-Over-LAN per Node
- Redundant 80-PLUS® Certified Hot-Swappable Power Supplies
- Integrated DVD+/-RW Optical Drive
- VMware vSphere Essentials Kit



StoneFly USS-HA Expansion Array

- Dual Active-Active Hot-Swappable Storage Controllers with Transparent Failover/Failback
- Sixteen Hot-Swappable 6Gb SAS or SSD Disk Drives per Chassis
- RAID Levels 0, 1, 0+1, 3, 5, 6, 10, 30, 50, 60, and Global Spares
- ECC-Protected RAID Cache with Battery Backup on Each Controller
- Dual Out-of-Band Ethernet Interfaces for Remote Status Monitoring & Configuration
- Redundant 80-PLUS® Certified High-Efficiency Hot-Swappable Power Supply Modules
- Scale Capacity with up to 6 Expansion Units per Expansion Array



StoneFly USS-HA Expansion Unit

- Redundant JBOD Expander Controllers for Dual RAID Controller Configurations
- Sixteen Hot-Swappable 6Gb SAS or SSD Disk Drives per Chassis
- In-Band Enclosure Management Service to Monitor/Control All Enclosure Elements
- Redundant 80-PLUS® Certified High-Efficiency Hot-Swappable Power Supply Modules