ALL-IN FILE SYSTEM

JAVELIN

ALL-INCLUSIVE DATA SERVICES

The world's best storage hardware deserves the world's best software to run it. So we present Javelin, our enterprise-class, fully featured file system for everything you need to provide the highest levels of data integrity and reliability.

Javelin provides unified, simultaneous file and block level storage support for NAS, iSCSI, and Fibre Channel in one single chassis. Unlike file systems that can break down at scale, Javelin supports nearly unlimited capacities and virtually unlimited objects. Migrate data to and from Storbyte storage transparently to other systems, expand capacity or cache while live and on-line, and set redundancy levels.

Built into Javelin are industry-leading data services such as intelligence-applied data reduction, thin provisioning, clustering, active-active failover, multipathing, direct-mount snapshots, and synchronous/asynchronous + true metro cluster replication.

TOTAL DATA INTEGRITY

Storbyte's block-level user definable Total Archive Data Integrity Audit provides once a month, once a quarter or once a year audits to identify any existing silent data corruption with integrated data repair + red flag/green flag reports to ensure one hundred percent digital data integrity. Our self-healing systems perform data repair in-flight with our managed Zero impact modeling with a performance consitancy guarantee.

Javelin includes what we believe to be the broadest range of redundancy and RAID definitions you can assign to the data, pool, tier, or application, including 0, 5, 6 (double- and triple-parity) and user definable RAID N, mirrored, and striped disk configurations. Our unique Distributed Resource Utilization uses RAID algorithms and intuitive mathematics to ensure maximum performance and IOPS with all models.

SMARTER HARDWARE NEEDS USER DEFINABLE SMARTER SOFTWARE

Javelin delivers sophisticated features for enterprise environments with large data volumes. Intelligent, multi-tier deduplication and compression is assignable to specific data sets or storage tiers based on your needs. The majority of the world's data cannot be deduped or compressed, so Javelin gives you the ability to use these capacity reduction and optimization algorithms to the correct data on the correct device.

COMPLETE DATA AVAILABILITY

We've built superior replication and snapshot capabilities that maximize Storbyte's hardware design. Javelin includes both synchronous and asynchronous on-site/o -site replication and mirroring to one or more destinations, with advanced, user-definable options. Storbyte o ers such unprecedented rack space e ciencies that users can take advantage of unlimited snapshots with zero impact on operations – select read-only or read/write, or assign di erent methods to di erent volumes based on your retention goals. Javelin replaces conventional data restore processes with immediate, zero rehydration reacquisition thanks to real-time mount points.

Storbyte also provides active/active metro clustering for high availability, an extremely sophisticated way to manage clustering for both local/on-premise and regional/remote data.

Our file system offers a complete data availability/protection suite with dozens of enterprise features. Javelin provides the capabilities to exchange traditional backup, archive, or data recovery models with true, immediate data reacquistion.

YOUR FILE SYSTEM OF CHOICE
+ VMware Ready Certified

We provide Javelin's industry-leading data management features with all our storage systems. However, all Storbyte hardware is designed with an open-systems architecture compatible with all standard file systems – GPFS / Spectrum Scale, Lustre, Ceph, GlusterFS, ZFS, EOFS, StorOne and virtually any third party software-defined storage solutions.

Javelin is engineered to be hardware-agnostic, so you can incorporate and extend these capabilities to manage data on any industry-standard storage, RAID system, JBOD, or JBOF expansion enclosures. That's why customers and channel partners alike choose Storbyte for their all-inclusive, integrated, single-source solution to build and manage affordable centralized storage from 10 Terabyte to 100's of Petabytes.

PERPETUAL UNLIMITED WARRANTY

The Javelin File System is included at no cost with all Storbyte storage systems. As you increase capacity Javelin is included providing Zero cost system upgrades to ensure true future-proof ownership.

FEATURES & SPECS ≫≫≫

ENTERPRISE-GRADE BENEFITS

✓ **High Availability**
Active-Active or Active-Passive dual node HA Cluster for iSCSI / NFS / SMB over Ethernet, Fibre Channel and SAS

✓ **Data Protection**
On- and Off-site Data Protection, offering built-in backup of everything and instant Disaster Recovery, as well as multiple backup destinations with user-defined Interval-Retention plans

✓ **Reliability and redundancy**
Atomic Transaction Writes, Data and Metadata Checksumming, Self-Healing, N-Mirrors, up to Triple-Parity, optionally mirrored boot medium

✓ **User Definable Optimization**
User definable storage tier/data set available Compression and In-line Deduplication

✓ **Quick and simple storage management**
Easy-to-use WebGUI with intuitive navigation, Console UI and scriptable CLI / API and REST API

✓ **Data Virtualization**
Thin and Over Provisioning with pooled storage model, unlimited and instant Snapshots and Clones

✓ **Scalability**
Up to 10PB in single namespace with the JFS technology Unified storage model One storage supporting multiple protocols (file and block-based) iSCSI, FC InfiniBand and NFS, SMB (CIFS)

✓ **Data Acceleration**
Two-level caching (SSD and RAM) to optimize the access time to the most recent and the most frequently used data, random writes are converted into sequential writes
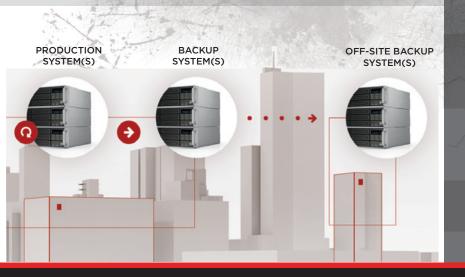
✓ **Convenient monitoring**
Storbyte Javelin monitoring system (on WebGUI, SNMP), as well as monitoring with industry-standard platforms like Nagios or Check_MK

✓ **Flexible technical support options**
Global Technical support provided 24x365. Multiple options to support any data availability model

✓ **Robust storage environments and compatibility**
Javelin is tested and certified with all major market and open systems architectures providing a true open systems architecture future proofing support model

TECHNICAL SPECIFICATIONS

Connections and storage protocols	1Gbps, 10Gbps, 40Gbps, 100Gpps Ethernet 40Gbps IP over InfiniBand iSCSI NFS v3 SMB up to 3.0.2 / CIFS Fibre Channel
Hardware	HBA SAS / FC for standard clusters or SATA controller in case of Single Node or Cluster over Ethernet
Data integrity and availability	256-bit block level checksums Mirror (eq. RAID 10), RAID-Z1, -Z2, (eq. RAID 5, 6), -Z3, On- and Off-site Data Protection, Active-Active or Active-Passive dual node HA Cluster for iSCSI, FC and NFS, SMB (CIFS), Self-healing against silent data corruption, Disk Multipathing
Data optimization	RAM, SSD and HDD hybrid pool, Tiered Caching, Unlimited Snapshots Unlimited Clones (writable Snapshots) Thin Provisioning, Over Provisioning User Definable Inline Data Deduplication, Inline Compression
Management	WebGUI, Console UI, CLI, SNMP and REST API, E-mail notification, Roll-back to previous configuration
Examples of supported	HA configurations, Cluster in a Box (CiB), Common Storage Cluster over SAS Cluster over SAS with internal SAS expander, Cluster with multiple JBODs over SAS or FC (Stretched) Metro Cluster over Ethernet, And more...
Upgrades / Updates	Hot - On-Line - Zero Impact Roll Forward / Roll Back Upgrades and Updates. Single Controller / Dual Controller seamless support
Supported environments	VMware, Microsoft Windows, Microsoft Hyper-V, Microsoft Active Directory, Citrix, Linux, RHEL, MacOS, XEN, OpenStack
Licensing and feature packs	Your Forever Perpetual No License Solution

Product Specifications Subject to Change

PRODUCTION SYSTEM(S)   BACKUP SYSTEM(S)   OFF-SITE BACKUP SYSTEM(S)