

IPStor® v6.0 Data Protection Software by FalconStor®

Remote site disaster recovery you can actually afford.



Remote replication for disaster recovery is expensive — so expensive that most organizations can only afford to implement it for their top tier of applications — if they can afford it at all. With FalconStor's IPStor v6.0, you can change all of that. Using FalconStor's Network Storage Server technology, organizations can build a disaster-recovery environment for business-critical applications at a fraction of the cost of the market-leading array-based solutions.

Business continuity that means business

Remote site protection and disaster recovery

Sun's key offer using FalconStor's IPStor architecture is heterogeneous remote storage replication over IP. This solution allows customers to replicate data over distance at a fraction of the cost of proprietary solutions. The cost savings allow customers to broaden the types of applications they can afford to replicate. IPStor's Single Instance Replication (SIR) feature dramatically reduces the bandwidth required for the replication process.

How does this work? In addition to local physical and virtual server protection, FalconStor NSS extends data protection to remote sites using powerful IP-based replication. FalconStor NSS devices in branch offices can replicate data to a central site NSS environment, eliminating the need for remote-site tape backups. Replicated data can be moved to tape at the central location.

Similarly, datacenter-based NSS devices can replicate to a remote DR site. In the event of a site-level disaster, administrators can quickly restart business operations at the DR site, using individual standby servers or consolidated virtual machines. Once the facilities at the local site are repaired, the remote replicated data can be written back to the local site to resume normal operations.

Replication designed to meet your business needs

IPStor offers two replication modes: Continuous, which replicates every write, and Periodic, which replicates the most recent write to the block. In periodic mode, IPStor's MicroScan™ option examines changed blocks at the disk sector level and replicates only unique changed sectors rather than entire file system blocks, reducing bandwidth requirements.

Reduced bandwidth and costs

Network bandwidth between a local and remote site can contribute significantly to the overall remote backup/DR overhead. FalconStor NSS offers a Replication option, which includes encryption for security and compression for reduced bandwidth consumption.

FalconStor MicroScan™ technology detects changes at the sub-block level, reducing bandwidth requirements by as much as 70 to 90 percent compared with other similar solutions. This leads to significant cost savings, making offsite data copying financially and technically feasible.

Moreover, the open architecture of FalconStor NSS lets you use any storage devices and protocol to further minimize overhead. For example, rather than re-create a full FC SAN at a DR site, you can use lower-cost SATA disks with standby servers attached via iSCSI. In addition, smaller remote sites can take advantage of centralized storage using iSCSI while replicating to an FC SAN in the datacenter.



Highlights

- Continuous local or remote data protection of DAS-, NAS-, and SAN-based data
- Nonstop data availability
- Comprehensive suite of storage services: mirroring, snapshot, replication, and continuous data protection (CDP)
- Simplified, centralized storage management
- Supports heterogeneous platforms
- Configurable to meet any enterprise requirements, from central site to remote offices, all fully integrated on the same platform
- Nodes can be configured in-band for virtualization or out-of-band for data protection without virtualization

High-availability failover options keep your business up and running

When your system is down, your business is down. That's why IPStor offers an Active-Active Failover Option that ensures the highest availability. The automatic failover configuration uses two IPStor appliances that continuously monitor each other. If one fails, the other appliance automatically assumes the workload without your intervention.

Simplicity saves time and money

Simplified management

IPStor's simplified storage management dramatically lowers administration overhead by consolidating storage resources for maximum utilization and efficiency. Plus, IPStor's centralized interface lets you dynamically provision all your SAN and NAS resources from a single console.

Consolidate everything

IPStor maximizes capacity utilization by consolidating disk resources across all boundaries, including the operating system, cabinet, vendor, connectivity, and interface. It enables you to integrate existing storage with new storage to create both SAN and NAS resources.

Migrate with ease

Need to migrate data with little disruption? IPStor's Network Volume Mirror (NVM) configuration enables fast safe, real-time data migration with minimal downtime. NVM provides write-split and data pass-through capabilities for continuous, high-performance data-protection and data-migration applications.

NVM leverages two key IPStor features: Storage Service Enabler (SSE) and Mirroring. SSE presents the existing storage through the IPStor software and makes IPStor services available without storage virtualization or re-allocation. Mirroring sends a copy of every write to a target storage device. Mirroring can be performed in synchronous mode, which protects data in local environments, or asynchronous mode, which protects data across distances.

All together now

IPStor's Storage Service Enabler Option lets you incorporate existing disks into an IPStor-managed SAN, so you can take advantage of the full suite of IPStor storage services without changing the original disk partitions or volumes and without any data conversion or migration.

The Capacity-on-Demand Agent improves utilization through automatic, policy-based storage provisioning, data migration, and compression. The BootIP for Blade Servers option delivers innovative boot over IP services for Windows and Linux-based blade servers, enabling centralized management and rapid system upgrade and recovery, maximizing business continuity and improving ROI.

The power of performance

Enhanced I/O speeds

Tired of inadequate I/O performance? IPStor offers a range of performance optimization services that deliver faster data processing, including multipathing, load balancing, and fail-safe caching. IPStor's Disk Striping option provides RAID 0 software for dramatically improved I/O performance. Disk striping uses standard disk drives to spread the I/O load across all drives in the set, making it ideal for high-performance applications.

Move into the fast lane

Need more throughput? The software's DynaPath Agent and IP Trunking option distribute data along multiple paths, increasing bandwidth for greater throughput and load balancing.

Key benefits

- Simplified, centralized management lowers total cost of ownership (TCO)
- Consolidated storage resources reduce capital investment
- Reduced downtime increases productivity
- Better utilization increases operational efficiency
- Easy, flexible, scalable solutions improve ROI

Tech specs

IPStor Enterprise Edition gives your storage environment the power to perform to its fullest potential. From SAN- and NAS-based datacenter storage to local machines and remote offices, IPStor simplifies data protection and management, and lets you focus on your business objectives.

Key specifications	Details
Supports up to 1024 virtual devices per IPStor appliance <ul style="list-style-type: none"> • IPStor utilizes Sun's disks, RAIDs, tape libraries, and tape devices • Tested on Sun V40Z, X4200, and X4600 server systems 	<ul style="list-style-type: none"> • IPStor software • Clients • Java™-based Management Console – Requires Java 2 Runtime Environment 5
Software	
IPStor appliance hardware requirements	<ul style="list-style-type: none"> • Linux: <ul style="list-style-type: none"> – Intel-based CPU – Minimum 2.8 GHz 64-bit Xeon or 2.0 GHz dual core Xeon recommended • 2 GB RAM minimum • 4 GB RAM recommended
Supported platforms	<ul style="list-style-type: none"> • Red Hat Enterprise Linux 4.2
Supported interfaces	<ul style="list-style-type: none"> • iSCSI, Fibre Channel
Storage devices	<ul style="list-style-type: none"> • Hard disks, RAID, tape devices, and tape libraries
Virtual disks	<ul style="list-style-type: none"> • Up to 1024 virtual devices per IPStor appliance • Up to 2 TB per virtual disk
Clients	
The following platforms are supported for Fibre Channel application servers	<ul style="list-style-type: none"> • Windows NT 4.0; Windows 2000; Windows Server 2003; Red Hat Linux; SUSE Linux; Solaris™ SPARC®; Solaris x86; AIX; HP-UX; NetWare; Compaq Tru64 Unix; Macintosh; OpenVMS; SCO OpenServer; SGI IRIX
The following platforms are supported for iSCSI application servers	<ul style="list-style-type: none"> • Windows 2000; 2003; XP; NetWare; Red Hat Linux; SUSE Linux; Solaris; AIX; HP-UX; VMWare
Java-based Management Console – Requires Java 2 Runtime Environment 5	
Supported platforms	<ul style="list-style-type: none"> • Windows NT, 2000, XP, 2003; Linux; Solaris

Support

Sun StorageTek™ service professionals can help you solve your storage challenges by delivering services that optimize and manage storage performance over the life of your data.

Our consulting services address utilization, availability, capability planning and management efficiency, helping you quickly realize the benefits from your investment so you can continue to access the information you need, when you need it. Sun Software Service Plans are designed to help you keep your software—and business—running smoothly and efficiently. Sun Software Service Plans help you proactively manage your software and provide swift resolution when problems do arise, helping improve performance and availability.

Learn More

To learn more, call your Sun sales representative or Sun authorized reseller or visit sun.com/ipstor