SAN bloc
Series

Reliable Solutions
for the
flexible world

eurologic

A Modular Approach to Networked Storage

In today's rapidly changing business environment, you need storage solutions that can evolve. You need flexible solutions that grow and change with your business, while protecting your storage investment. You need the SANbloc™ series of Fibre Channel storage solutions from Eurologic Systems. Based on a modular, scalable design, the SANbloc series provides a robust storage solution flexible enough to meet your needs today…and tomorrow.

The SANbloc series gives you the power to configure storage capacity, functionality and performance to match and grow with your specific application. Scale your storage in multiple dimensions -RAID or JBOD, moderate or ultra-high capacity, normal or mission-critical availability -all with the same modular enclosure, easily and cost-effectively.

The SANbloc series can be configured as the FC2500 Fibre RAID or the FC2100 Fibre JBOD solution with the change of a single module. Performance and capacity can be tuned separately or in parallel to meet the storage requirements of applications workgroups, departments or the entire enterprise.

Innovative Modular Architecture
The SANbloc series is part of the FLEXIbloc™ family of storage solutions, based on Eurologic's advanced Flexible Storage Architecture (FSA). A truly modular, state-of-the-art design, FSA enables users to quickly and cost-effectively optimize individual storage solutions to their changing needs, applications and network environments by adding component "building blocks". The result is a truly universal solution for enterprises seeking flexible storage systems that address current and future needs, as well as unexpected changes.

Build . . .

Capacity for Modular Growth
The SANbloc series uses a modular, "building block" enclosure to achieve scalable capacity. Each enclosure supports up to 14 disk drives in a dense 3U form factor. When you need more storage, simply add more enclosures dynamically-up to a maximum of 8 enclosures or 112 drives. Eurologic works closely with leading disk drive vendors to test their latest high-capacity, high-speed drives early in the development stage, ensuring support for the most advanced drives on the market.

Interoperability for Storage Area Networks (SANs)
Interoperability is key to the successful implementation of a SAN. Through its Link Alliance Program, Eurologic partners with leading SAN infrastructure suppliers, including host bus adapter, disk drive, hub, switch, software and server vendors, to ensure the interoperability of its SANbloc FC2100 and FC2500 arrays with other components of the SAN. Support and ongoing collaborative testing with the leading manufacturers of SAN technologies ensures the highest levels of interoperability for SAN configurations.

High Availability for Business-Critical Applications
The SANbloc series provides continuous data access and protection against costly downtime and data loss. Key availability features include hot swappable, redundant RAID controllers, port by-pass circuitry and environmental monitoring, redundant power supplies and connections, advanced cooling modules, and battery-protected mirrored write cache. Dual-ported fibre drives and dual channel fibre loops provide additional redundancy.

In addition, any of the 14 drives can be used for ESI (enclosure services interface) communication and status. Revision and serial numbers are reported for each FRU (field replaceable unit). Visual and audible alarms and temperature monitoring provide timely alert of potential problems, enabling pro-active intervention. Eurologic's Spheras Multi-Path High Availability software and cluster support provide failover by keeping applications running through fault detection, automatic path failover and I/O rerouting, and enhances system performance through automatic load balancing.

Performance that Satisfies...

High Performance to Drive Productivity

The SANbloc series maximizes performance through dual active RAID controllers that operate in tandem to share the workload and double performance to an impressive 194 MB/s. It supports up to 512 MB of cache memory that can be configured as mirrored write, write-through, write-back, or read-ahead. If more bandwidth performance is required, such as for streaming media or seismic analysis applications, the ratio of RAID controllers to drives can be easily expanded. If higher transaction performance is required, for file serving or OLTP applications, the ratio of drives to controllers can be increased.

Array-based (hardware) RAID with support for RAID levels 0, 1, 0/1, 3, 5 and 10, 30 and 50 leaves the host CPU free for other processing tasks and can be configured for different applications, balancing performance and cost. For added protection, fault-tolerant locking tables guarantee that if a server uses an alternate path to access data, the controller that services the I/O will deliver the current state of the data.

Simplified Management...

Extensive Flexibility and Manageability

Eurologic's SANbloc series lets you configure multiple LUNs (logical unit numbers) within a RAID group. SANbloc supports dynamic expansion, allowing physical drives to be added to an existing RAID group while the system is operating. This provides the flexibility to allocate and re-deploy storage to different users.

The SANbloc series supports SAN mapping (LUN masking), enabling system managers to easily define and enforce storage access policies. SAN mapping can be used to partition storage pools by application or user group, enhancing the security of sensitive data and amortizing the storage investment across the multiple heterogeneous servers sharing the FC2100 or FC2500.

Eurologic's Spheras Storage Manager simplifies the management of SANbloc arrays to increase productivity, while reducing storage management costs. Spheras' easy-to-use browser-based graphical user interface offers a common look and feel across all platforms, enabling easier configuration, monitoring and tuning of SANbloc arrays.

The Confidence of Worldwide Support

At Eurologic, our commitment goes beyond advanced products. You also enjoy the confidence that comes with comprehensive support services, around the globe. Eurologic helps ensure the performance and availability of your storage network through our Globalrespond support program. We offer a complete range of support services-from 24x7 telephone assistance to on-site maintenance -enabling you to tailor a program to meet your needs.

SANbloc SERIES HIGHLIGHTS

- RAID or JBOD with the swap of a module
- 2 Gbit Fibre Channel-ready midplane protects your investment
- Modular architecture enables flexible configuration to any application
- Scalable to 4.1 TB (112 drives) in less than 5 square feet, with support for 15K RPM disk drives
- No single point of failure-redundant, hot-swappable components
- User installable, configurable and online maintainable-reduced cost and downtime
- Remote or local browser-based GUI management and monitoring
- Industry-leading price/performance
- Industry-standard 19-inch rackmount or deskside option for configuration flexibility
- SAN mapping (LUN masking) functionality-increases productivity, reduces cost of ownership
- Spheras Multi-Path High Availability software and cluster configuration support-improves data and application availability

SPECIFICATION SUMMARY

Host Interface
One or two Fibre Channel interfaces, 100 MB/s each, (200 MB/s total); External hub and switch support, Media Interface Adapter (MIA) support

Disk Drive Interface
Dual, independent Fibre Channel interfaces, 100 MB/s each, (200 MB/s total); failover to both Fibre Channel loops

Measured Performance (Dual Controllers, RAID 5)
194 MB/s, (sustained reads), 15,575 I/Os

System

Max drives/capacity per enclosure
Up to 14 drives/ 513 GB
Max drives/capacity per subsystem
Up to 112 drives/ 4.1 TB
Redundant, Hot Swappable Components
RAID controllers, power supply modules, advanced cooling modules, loop resiliency and SES (SCSI enclosure services) modules, power inlets and drives

System

Monitoring/ Failure Notification
Enclosure services via in-band SES adhering to SFF-8067; 14 drive ESI, audible alarms and LEDs

Disk Drives
18.35/36.7 GB 10K RPM, 18.35 GB 15K RPM

Software

Spheras Storage Manager
Local or remote management, monitoring and configuration

Host Platform Support

Intel:	Microsoft Windows NT 4.0, Windows 2000
Sun (Sparc):*	Solaris 7.x
Sun (Intel):*	Solaris 7.x
Red Hat:*	Linux 6.x

Spheras Multi-Path High Availability Software

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