



SOLSTICE DISKSUITE™

KEY HIGHLIGHTS

- Create volumes spanning multiple storage devices
- Disk striping enables parallel I/O and load balancing for improved performance
- RAID 1 and RAID 5 handle disk failures transparently
- A hot-spare facility provides automatic online recovery
- Soft partitioning allows thousands of partitions and file systems on a disk or on a RAID 1 or RAID 5 volume
- SNMP traps for event notification
- CIM/WBEM APIs enable creation and monitoring of Solstice DiskSuite devices
- Graphical user interface simplifies management and logs commands to support script-based configuration
- Straight forward command line interface simplifies remote administration
- Alternate path support helps to ensure that data remains accessible, even in the event that one of the data paths fails.
- Concatenation and the UFS *grow file system* command allow the construction of large logical devices and enable online expansion and reconfiguration
- Complete localization support

As more and more mission-critical applications move from proprietary mainframes to open platforms, the need for robust storage management and performance optimization increases. Data must be instantly accessible and available, 24 hours a day, 7 days a week. Taking a system offline to perform traditional disk management maintenance is not an option. Solstice DiskSuite™ software provides the tools needed to help achieve these goals.

THE SOLARIS™ OPERATING ENVIRONMENT

Today's explosive levels of growth — in terms of bandwidth, networks, and digital devices — have created the phenomenon known as the Net Effect. It's forcing organizations to rethink how they create, manage, extend, and ultimately deliver information technology (IT) services. Yet at the same time, it's creating massive opportunities for innovation with regard to service and functionality.

For more than 15 years, Sun has been telling the world that The Network Is The Computer™, and has led the way in helping our customers harness the transforming power of the Net Effect. As the foundation for Sun™ systems, the Solaris™ Operating Environment enables your IT organization to deliver on the promise of massive scale, continuous real-time computing, and secure systems — while increasing service levels, reducing risk, and decreasing costs. With Solaris 8 software, you can efficiently manage resources and provide a higher level service. It also helps reduce complexity by providing easy-to-use interfaces and comprehensive administration tools — all designed to help lower your IT risk. And by optimizing your resources and enabling them to scale to meet demand, the Solaris 8 Operating Environment helps you to minimize costs and lower your total cost of ownership.

SOLSTICE DISKSUITE

Solstice DiskSuite is a disk and storage management solution that meets the demands of both mission-critical enterprise applications and agile Web-based organizations. A component of the Solaris Operating Environment, Solstice DiskSuite software meets the need for high data availability, enhanced system I/O performance, and simplified administration of large systems with multiple storage devices.

IMPROVED PERFORMANCE AND SYSTEM MONITORING

Solstice DiskSuite software provides the tools to improve storage I/O performance and thereby enhance overall system performance.

RAID 0

Disk striping — spreading the I/O load over several disks — improves application performance by increasing the storage I/O throughput available to a single process.

The Solstice DiskSuite performance monitor simplifies the tasks of identifying I/O bottlenecks and verifying that they have been corrected.

ENHANCED DATA AVAILABILITY

With Solstice DiskSuite software, you gain access to a powerful set of tools designed to enhance data availability — and to ensure that your organization remains productive — through around-the-clock access to information.

The Solaris Operating Environment is a key element of the Sun Open Net Environment (Sun ONE), a framework that enables the creation, assembly, and deployment Web services today, and lays the foundation for the next generation of services — smart Web services. Sun ONE is based on an open architecture, integratable with legacy systems and third-party software, and operational now.

RAID 1

Solstice DiskSuite provides a comprehensive data-redundancy solution. It transparently maintains a mirror copy of data on another disk and automatically uses the surviving copy in the event of hardware failure.

RAID 1 + 0

Solstice DiskSuite software intelligently provides RAID 1 + 0 capabilities when the underlying devices are identical physical disks, but provides RAID 0 + 1 when, as in the case of network storage devices, logical devices can support internal redundancy.

RAID 5

The RAID 5 feature in Solstice DiskSuite software provides highly available data storage at a lower cost — using less disk space — than mirroring. By distributing parity information across all disks in the RAID array, it allows recovery from any single disk failure within the array without data loss.

Soft Partitions

The soft partitions feature of Solstice DiskSuite allows a physical disk or a RAID 0, RAID 1, or RAID 5 volume to be subdivided into soft partitions — up to thousands if necessary — each of which can contain a file system. The size of each soft partition is independently configurable.

Soft partitions provide the flexibility to effectively utilize high-capacity storage devices. They make it easy to create multiple file systems or disk partitions on top of underlying RAID 0, RAID 1, or RAID 5 volumes that have already been configured to provide the

required data availability and performance characteristics.

Hot Spare

Online system recovery is supplemented by the use of a hot-spare utility that automatically replaces failed RAID 1 or RAID 5 components. This facility migrates new partitions to replace failing ones. Users continue to access the surviving copy of the data while a new mirror is automatically generated — without interrupting service.

IMPROVED DATA RELIABILITY AND INTEGRITY

Solstice DiskSuite software provides the cornerstone for data reliability and integrity in your enterprise. It incorporates technology that helps ensure consistency across mirrors.

INCREASED FILE SYSTEM CAPACITY

In the past, when a UNIX® file system ran out of space, files had to be moved around or the file system needed to be completely reconstructed on a larger disk. The result: service interruption.

Solstice DiskSuite software solves this problem by enabling a single file system to span multiple physical disks. Space is no longer an issue, and neither is downtime. With Solstice DiskSuite, just add a new partition to the file system, issue the online *grow file system command*, and you continue without downtime or interruption.

EASY AND FLEXIBLE ADMINISTRATION

Solstice DiskSuite provides the flexibility and agility necessary to effectively manage your growing, dynamic, storage environment. It offers a powerful, simple graphical user interface (GUI) that is accessible through the Solaris Management Console in addition to the traditional command-line interface. The GUI provides error-free setup of disks such as RAID 0 and RAID 5, as well as easy, ongoing administration of disk subsystems. It provides a visual representation of the storage subsystem, along with interactive filtering capabilities — both of which are invaluable in managing large, complex disk subsystems.

REQUIREMENTS

- Solaris Operating Environment
 - Included with the Solaris 8 Operating Environment
 - For Solaris 7 or 2.6 Operating Environments, requires Solaris Easy Access Server
- SPARC™ (64-/32-bit) or Intel Architecture (32-bit) systems
- 50 Mbytes of disk space with a minimum of two (2) drives

FOR MORE INFORMATION

To learn more about Solstice DiskSuite software and the Solaris Operating Environment, please visit our Web site at www.sun.com/solaris.