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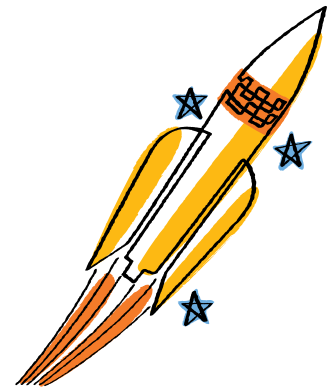
Datasheet

SANtricity Storage Manager

Achieve maximum performance and utilization of your E-series storage system

Overview
NetApp SANtricity Storage Manager software offers a powerful, easy-to-use interface for administering NetApp E-Series storage systems. With SANtricity software, storage administrators can achieve maximum performance and utilization of their storage through extensive configuration flexibility and custom performance tuning. And SANtricity software's online administration, advanced protection features, and extensive diagnostic capabilities mean that data is always available and fully protected when it reaches the storage system.

Intuitive GUI
Blending robust functionality and ease of use, SANtricity software is well-suited for both full-time storage administrators who want complete control over their storage configuration and part-time system administrators who prefer an intuitive interface and wizards designed to simplify storage management.

Configuration Flexibility
Every environment is different, with different priorities in regard to performance, data availability, and capacity utilization. SANtricity software's configuration flexibility means that an E-Series storage system can adapt to

wide-ranging requirements and meet the characteristics desired for a specific volume. This is especially important in high-performance environments with varying and often drastically different workloads and performance demands. This industry-leading flexibility enables SANtricity software to best match application LUN requirements, resulting in higher performance, more efficient utilization, and lower storage costs.

High Availability and Data Protection
When data is trusted to your storage system, accessing and protecting that information 24/7 is crucial to a company's future. SANtricity software goes above and beyond the basic high-availability features to significantly improve data availability, integrity, and protection. Its automated I/O path failover and extensive online configuration, reconfiguration, and maintenance capabilities mean that your data is always available. And with SANtricity's advanced protection technologies such as data-at-rest encryption, proactive monitoring, background repair, and extensive diagnostic features, data is fully protected when it reaches the storage system.

Online Administration
With SANtricity software, all management tasks can be performed while the storage remains online with complete

read/write data access. This allows storage administrators to make configuration changes, conduct maintenance, or expand the storage capacity without disrupting I/O to attached hosts. SANtricity software's online capabilities include:

- **Dynamic expansion** enables administrators to add new drive modules, configure volume groups, and create volumes without disrupting access to existing data.
- **Dynamic capacity expansion** adds up to two drives at a time to an existing volume group, introducing free capacity for volume creation or expansion and improving the performance of the volumes residing on that volume group.
- **Dynamic volume expansion** (DVE) allows administrators to expand the capacity of an existing volume by using the free capacity on an existing volume group. And DVE concatenates (combines) the new capacity with the original capacity for maximum performance and utilization.
- **Dynamic RAID level migration** changes the RAID level of a volume group on the existing drives, without requiring the relocation of data.
- **Dynamic segment size migration** enables administrators to change the segment size of a given volume.
- **Dynamic mode switching** allows administrators to switch from one remote mirroring mode to another —for example, from synchronous to asynchronous—without suspending or breaking the active mirror.
- **Dynamic defragmentation** rearranges volumes and consolidates free capacity within a volume group, resulting in optimized access patterns for existing and newly created volumes.
- **Nondisruptive controller firmware upgrades** mean no interruption to data access.

Premium Software Features

NetApp SafeStore™ encryption services provide comprehensive security for data at rest without sacrificing storage system performance or ease of use. Drive-based, government-grade encryption means data security in the event of drive theft, as well as for routine activities such as the return of defective drives for servicing or the decommission or repurposing of drives. Key management is transparent to day-to-day storage administration, making self-encrypting drives as easy to manage as traditional drives. And for customers who want even more peace of mind, SafeStore offers "instant secure erase," providing an even higher level of data erasure over traditional methods.

Storage partitioning can create up to 512 logical systems from a single E-Series storage system. Its heterogeneous host support enables storage consolidation implementations in multiplatform environments. Logical partitioning—any available volume can be mapped to any attached server— combined with SANtricity software's robust configuration capabilities enables administrators to choose from a range of volumes with different characteristics to meet a server's exact needs for a given LUN. This flexibility allows a range of hosts with different capacity, performance, or data protection demands to effectively share a single E-Series storage system.

Snapshot software creates a point-in-time image, or logical copy, of a storage volume, enabling secondary servers to access a suspended version of production data for a variety of applications including backup, application testing or development, information analysis, and data mining. The capacity-efficient Snapshot volume, which functions as a full copy but requires far less disk space, can also be used for fast file restoration, saving the time and expense of going to a tape archive.

Volume Copy creates a complete physical copy (clone) of a volume in a storage system. The clone volume is a unique entity that can be assigned to any host and used by applications that require a full point-in-time copy of production data (such as backup, application testing or development, information analysis, or data mining) without affecting the performance of the production volume. Volume Copy can also improve application performance and optimize capacity utilization by relocating volumes to more desirable locations within the storage system; for example, on faster or higher-capacity drives. And because the clone volume can have completely different characteristics from the original volume—for example, it can reside on a different volume group with different RAID level and different configuration settings— Volume Copy gives storage administrators maximum flexibility.

Remote volume mirror (RVM) protects the information stored on your NetApp E-Series storage system by continuously replicating (mirroring) local data to a remote storage system. For each set of volumes that make up a mirror pair, RVM supports a variety of replication options to give administrators the flexibility to optimize data protection and utilization. RVM's robust functionality includes multiple data transfer modes (synchronous and asynchronous), dynamic mode switching from one mode to another without suspending or breaking the active mirror, suspend/resume with delta resynchronization, and the ability to create a volume Snapshot copy of the remote data while the mirror remains active. Additionally, support for cross-mirroring enables two separate systems to function as remote disaster recovery sites.

About NetApp

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