

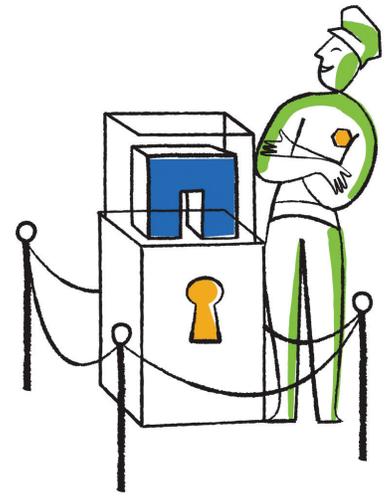


NetApp®

Datasheet

# SANtricity Storage Manager

Achieve maximum performance and utilization with this powerful, intuitive software interface for administering NetApp® E-Series storage systems.



## KEY BENEFITS

### Powerful, Intuitive, Flexible

Full-time storage administrators appreciate the extensive configuration flexibility that allows optimal performance tuning; part-time system administrators love the intuitive interface and wizards designed to simplify storage management.

### High Availability

Our software goes above and beyond with automated I/O path failover, online configuration options, state-of-the-art RAID, proactive monitoring, along with the AutoSupport™ tool.

### Data Protection

With features such as data-at-rest encryption, background repair, advanced data protection and replication features, and extensive diagnostic capabilities, NetApp SANtricity® software helps enable data to be fully protected when it reaches the 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 differing priorities in regard to performance, data availability, and capacity utilization. SANtricity software's flexibility enables an E-Series storage system to adapt to wide-ranging requirements and meet the characteristics desired. This is especially important in

high-performance environments with often drastically different workloads and performance demands. This industry-leading flexibility enables SANtricity software to best match application requirements, resulting in higher performance, more efficient utilization, and lower storage costs.

## High Availability

When data is trusted to your storage system, accessing and protecting that information 24/7 are crucial to a company's future. SANtricity software goes above and beyond the basic high-availability features to significantly improve data access, integrity, and protection. Its automated I/O path failover and extensive online configuration, reconfiguration, and maintenance capabilities mean that your data is always available.

## Data Protection

Advanced SANtricity protection technologies such as data-at-rest encryption, data assurance with T10 PI integrity checking, proactive monitoring, background repair, remote mirroring, volume copy, and snapshot features, enable data to be fully protected.

## 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 storage capacity without disrupting I/O to attached hosts. These online capabilities include:

- Dynamic RAID-level migration changes the RAID level of a volume group on the existing drives without requiring the relocation of data. The software supports Dynamic Disk Pools (DDP) and RAID levels 0, 1, 3, 5, 6, and 10.
- 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 segment size migration enables administrators to change the segment size of a given volume.
- 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.
- Performance Monitor provides graphical displays to fine-tune and optimize system performance.

### Premium Software Features

Storage partitioning can create up to 512 logical systems supporting heterogeneous hosts from a single E-Series storage system each with different

characteristics to meet a server's exact storage needs. This flexibility allows a range of hosts with different capacity, performance, or data protection demands to effectively share a single E-Series storage system.

The SSD Cache feature provides intelligent read caching capability to identify and host the subset of the data that is hot on the SSDs. This caching approach works in real time and in a data-driven fashion and remains always on. Users are not required to set up complicated policies to define the trigger for data movement between tiers—they can set it and forget it.

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, file restoration, application testing or development, information analysis, and data mining. The capacity-efficient Snapshot volume, which functions as a full copy requires far less disk space. Snapshot groups can be established to more efficiently create numerous images of a volume with less capacity usage and performance impact.

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. The clone volume can have completely different characteristics from the original volume giving storage administrators maximum flexibility.

Remote mirroring protects information by continuously replicating (mirroring) local data to a remote storage system. For each set of volumes that make up a mirror pair, a variety of replication options optimize data protection and business application recovery needs.

This robust functionality includes suspend/resume with delta resynchronization, mirror groups for consistency, 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.

Thin provisioning delivers significant savings by separating the internal allocation of storage from the external allocation reported to hosts. In essence, unallocated storage is shared across numerous volumes to drastically reduce the amount of total storage capacity due to overprovisioning for unknown usage.

AutoSupport enhances customer service, speeds problem resolution, and prevents issues by automatically sending alerts by either event-based or time-based (weekly, daily, other) criteria to provide faster and better customer service, keeping your systems up and running longer.

Data assurance provides data integrity checking from the application level to the spindle. By conforming to the T10 PI standard, the E-Series provides this additional data confidence.

Drive encryption services provide comprehensive security for data at rest without sacrificing storage system performance or ease of use. Drive-based government-grade encryption means you have 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 decommissioning or repurposing of drives.

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### About NetApp

NetApp creates innovative storage and data management solutions that deliver outstanding cost efficiency and accelerate business breakthroughs. Discover our passion for helping companies around the world go further, faster at [www.netapp.com](http://www.netapp.com).

Go further, faster®



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