Securely manage Dell/EMC storage from virtually anywhere, anytime

The EMC® Navisphere® Management Suite is a secure, easy-to-use web-based storage management solution that provides comprehensive management capabilities to help maximize your Dell/EMC investment. The Navisphere Management Suite is offered in three tiers: Navisphere Workgroup, Navisphere Departmental and Navisphere Enterprise. Navisphere Manager is also available on the Dell/EMC AX100 platform for customers deploying and centrally managing a mix of Dell/EMC AX and CX series systems. Additionally, all Dell/EMC platform applications, including MirrorView™/Synchronous, MirrorView/Asynchronous, Navisphere Analyzer, SAN Copy™, and SnapView™, are managed via the Navisphere Management Suite. Navisphere's capabilities can be enhanced with other EMC storage management applications that provide SAN, storage resource and replication management for other EMC platforms and third-party storage hardware.

Discover, monitor and configure all Dell/EMC arrays via a secure, easy-to-use Web-based management interface – virtually anytime, anywhere

The software runs on the array and can manage all SCSI and SAN-based Dell/EMC arrays, whether they are located at primary or satellite locations and can also run on a Windows® workstation. Browser based management from home or on the road can also be facilitated. To protect data privacy, all data transmitted between the browser and the array is encrypted using Secure Socket Layer (SSL) technology and robust user-account management is also provided.

Navisphere Management Suite provides an easy way to provision Dell/EMC arrays installed throughout your enterprise. It utilizes a familiar Windows® Explorer-style user interface that is browser-based so you don’t need extensive training. With Navisphere Management Suite, RAID Groups can be configured automatically or manually and then LUNs can be created from these RAID Groups. Administrators can also LUN mask and control data access across multiple heterogeneous hosts in distributed SANs. Not only does Navisphere Management Suite simplify storage provisioning, your configuration can be changed dynamically as business needs and requirements change. For example, Navisphere Management Suite can adjust the allocation between read and write cache memory for a storage processor without requiring a reboot of the system or any attached hosts.
DELL ENTERPRISE SERVICES

Dell Services can deliver the services you need to realize the full value of your IT investment. Complementing our award-winning products, these IT infrastructure services incorporate operational excellence, accountability and value.

By utilizing our best practices, proven processes and expertise in implementing standards-based technologies, we can help strengthen your IT infrastructure and enable you to adopt evolving technologies. Whether you need support, deployment, asset management, training, certification, planning or professional services – individually or bundled as a total solution – you can count on Dell.

Strengthening Your IT Infrastructure

Our planning services help integrate your new enterprise hardware into your existing or evolving IT infrastructure. We can provide guidance whether you’re adding a single or multiple servers, storage area network or high-performance computing cluster.

We can also help you enhance the overall performance of your IT infrastructure and data center by consolidating software and hardware, developing a business continuity plan and migrating to standards-based technologies.

Simplifying Deployment

Dell simplifies implementation with comprehensive services that accelerate deployment of new hardware and IT solutions. During the initial system-build of your server, we can customize software and hardware to match your specific requirements. By helping you rapidly deploy new capabilities while minimizing disruptions, we can contribute to improved efficiencies and lower costs.

Our training services provide education and certification courses to help you better manage and use your new hardware so you can reap the full benefits of standards-based technologies.

Providing Award-Winning Service & Support

Your server and storage infrastructure is central to your business, which is why you need a partner who can help minimize downtime and keep your business-critical systems running efficiently. Our enterprise support services are designed to protect your entire enterprise or to focus on specific systems. These customizable services include hardware and software support with varied response levels, account management and remote resolution.

We can also help you enhance the performance of your data center and provide managed IT solutions and asset management services for your enterprise, desktop and notebook environments.

The Dell Enterprise Command Centers (ECC) – which utilize industry-leading technologies and tools that speed up problem resolution – efficiently route spare parts and direct expert technicians to your site.

Services vary by region. For more information, please visit www.dell.com.

Manage and control Dell/EMC based applications including:

- MirrorView/Synchronous
- SAN Copy
- MirrorView/Asynchronous
- SnapView
- Navisphere Analyzer

MirrorView™ provides highly available data storage across geographically separate locations. By maintaining synchronous and asynchronous data mirroring between Dell/EMC® arrays, MirrorView helps ensure data availability of byte-for-byte mirrored images. Navisphere Management Suite supplies powerful easy-to-use tools for implementing these mirror configurations and helps for fast disaster recovery by quickly managing failover to a secondary site. Navisphere Management Suite controls SnapView™ operations for the capture of an instantaneous, point-in-time image of a LUN and retains the image independently of subsequent changes to the original data. These SnapView snapshots and clones/Business Continuance Volumes (BCVs) can make data available to another host or direct-connect backup device for backup operations, decision support or testing while I/Os continue to the production data. EMC SAN Copy™ is array-based software that runs on a Dell/EMC array. It moves and copies data across a SAN, providing data mobility between two or more Dell/EMC arrays, and/or between CLARiiON® systems, CLARion and Symmetrix® systems or CLARion and supported non-EMC storage systems. With the ability to move data over distance, SAN Copy helps you simplify data migrations, streamline data distribution and improve protection of valuable information assets.

Helps simplify provisioning by utilizing Dell/EMC’s metaLUN and virtual LUN capabilities

MetaLUN capability is one of the latest feature additions to the Navisphere Management Suite. MetaLUNs are groups of LUNs that help increase performance capability by allowing a volume to span a large number of drives. They also help improve capacity utilization because they can access capacity virtually anywhere in the array. Finally, since MetaLUN capability is non-disruptive, it helps reduce out-of-disk-space issues and downtime.

Another feature addition to the Navisphere Management Suite is EMC virtual LUN technology. Virtual LUN technology, managed from the Navisphere Manager Console or CLI, helps enable movement of volumes within a Dell/EMC CX series system without disrupting the application. This capability helps enable the dynamic movement of data from FC to ATA drives for tiered storage within a single Dell/EMC array. RAID types can also be adjusted as needed to help improve performance and virtual LUN technology can help improve capacity utilization by moving data to underutilized spindles in the array.

Automatic notification and display of crucial status changes and events for proactive administration 24x7x365

Navisphere Management Suite provides storage event notification software for enterprises running Dell/EMC arrays. The software is customizable and can be configured to send an e-mail or to page selected personnel. Navisphere Management Suite provides fully integrated support for CA Unicenter® TNG, HP® OpenView™ and Tivoli® NetView™. The Navisphere Management Suite’s framework integration module can support auto-discovery and display of Dell/EMC arrays in the network map of these framework applications.

Helps improve performance graphing/chartsing to assist in trend analysis, reporting and capacity management with Navisphere Analyzer

Navisphere Analyzer is a browser-based performance analysis tool that can enable investigate performance patterns and trends. Data is collected for disks, storage processors (SPs), LUNs, cache and EMC SnapView sessions and is used to find performance bottlenecks. It can be used to continually monitor and analyze performance and to determine how to fine-tune array performance for maximum utilization.

Navisphere Analyzer provides detailed real-time and historical information about your Dell/EMC arrays. This can help you to investigate performance patterns and trends before problems occur and can provide a powerful tool for hardware capacity planning, as well as for intelligent load balancing.

Navisphere CLI can enhance Navisphere Management Suite’s GUI capabilities

The Navisphere CLI provides a set of text-based commands that can be run in a non-graphical environment or from a remote location. Navisphere CLI is used for issuing commands to an array, writing scripts, requesting array status, recording commands and the resulting output, and as a tool for problem determination. The Navisphere CLI runs on a management host that communicates with the storage system.

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