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Strategic Snapshot

EMC: Delivering Storage Solutions Tailored for Medium Size Enterprises

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ABSTRACT

Medium-size enterprises have storage management requirements similar to those of larger companies but also have unique requirements because of their size. Storage management solutions for these businesses (companies with 100-1,000 employees) must be easy to deploy, easy to use, and easy on tight IT budgets. IT vendors must deliver solutions tailored to meet the special business and technology requirements of their mid-tier clients.

EMC, best known for its large-enterprise storage offerings, has been active in developing and delivering hardware and software solutions designed for the mid-tier market. The company recently announced new software products that broaden and deepen its existing mid-tier product line, delivering enterprise-class storage solutions tailored for medium-size enterprises.

In this paper, we will examine the unique requirements of the mid-size enterprise and outline the attributes of the ideal mid-tier storage management solutions. Finally, we will discuss EMC's new software offerings, as well as the options and opportunities they offer mid-tier enterprises.

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Introduction

Businesses today are generating enormous amounts of information, resulting in intense pressure on IT operations to manage it all with limited resources amidst dwindling budgets. This is exacerbated for mid-size companies where IT teams are thin and each individual often takes on many roles. Where large enterprises may have dedicated storage talent, mid-size businesses generally have systems or database administrators who also take care of storage management tasks. Storage management requirements — such as monitoring, reporting on, and allocating resources — are similar to those of larger enterprises, but mid-size organizations require solutions tailored for their staffing reality. Buying solutions designed for larger enterprises are overkill for these businesses and become a double whammy because they are difficult to deploy and require specialized skills; precious capital is squandered with no appreciable gain in business productivity.

The Ideal Storage Management Solution for Mid-size Companies Must …

Mid-size companies have increasing amounts of data to manage, store, and provide access to, and face increased pressure to do more with less. With this in mind, we offer the following must-haves for a storage management solution that targets this market.

- ♦ **Ease of deployment:** Offering large enterprise-class products to the mid-size companies with the idea that they can grow into these products at a future date is not viable. Mid-size companies cannot afford to purchase more than they need nor are these high-end solutions architected for easy deployment within the mid-size company. Administrators in mid-size companies think in terms of hours to deploy, not days, weeks, or even months.

- ♦ **Ease of use:** Companies of this size typically do not have a dedicated storage administrator. For this reason, the most effective mid-tier storage solutions are those that are easy to use and work with common and familiar platforms that are already well ensconced among mid-tier users.

- ♦ **Ease of automation:** A successful mid-tier storage solution must enhance the data recovery and backup process, improving both performance and security. This must include the ability to easily automate and repeat back up, recovery, and other storage functions, minimizing the impacts on IT staffing and productivity.

- ♦ **Ease of acquisition and support:** Solutions must be offered and supported by qualified and reliable channel partners if they are to gain traction among mid-tier customers.

In summary, a successful mid-tier storage solution will be appropriately priced and scaled for the mid-tier market, it will address limitations on IT staff through ease of use features, it will enhance existing storage deployments, and it will provide savings through increased ROI and decreased TCO.

EMC's Mid-Range Offerings

EMC has recently introduced several new and enhanced software products designed to meet the needs of the mid-tier market. What differentiates these products from competitors is that they are not simply light-duty versions of enterprise solutions, but rather they provide enterprise-class capabilities at a scale and price point appropriate for and within reach of the mid-size company.

VisualSRM — New

VisualSRM is designed to improve capacity utilization and availability while automating storage resource management. VisualSRM is storage-agnostic and provides file-level reporting from a host perspective. As a result, the storage administrator can understand how storage is being used and who is using it. In addition, policies can be set; for example, if a given file type is not accessed for a given period, policy can dictate that the file is to be moved to a different location (less expensive storage). VisualSRM can centralize storage resource management for a wide range of storage platforms (DAS, NAS, SAN), server platforms (Windows 2000/NT/XP, Solaris, AIX, HP-UX, Linux, NetWare), and applications (Microsoft Exchange, Oracle databases, Sybase databases, SQL Server databases). VisualSRM can integrate with other storage management applications from vendors such as IBM, VERITAS, HP, CA, and BMC.

VisualSAN — New

VisualSAN provides simplified discovery and monitoring of SAN environments and their attached devices, to aid in reducing the overall burden of SAN management. VisualSAN provides a single interface to discover, monitor, and manage CLARiiON SAN environments. Visual SAN consists of three components, Network Manager, Configuration Manager, and Performance Manager, which complementarily add functionality into the user interface:

♦ **VisualSAN Network Manager** is the base application for monitoring independent SAN devices. It serves as the common interface for integration of other components.

♦ **VisualSAN Configuration Manager** allows administrators to capture the state of a SAN configuration at a point in time for comparison, historical reference, change management, asset management, and replication of a specific SAN topology.

♦ **VisualSAN Performance Manager** provides live and historical analysis of network link statistics across a SAN.

Navisphere

Navisphere Manager provides comprehensive capabilities to manage multiple CLARiiON arrays that allow less experienced administrators to understand and manage their storage arrays. Through a browser interface, administrators can manage EMC's SnapView, MirrorView, and Access Logix operations from Navisphere Manager as well.

MetaLUNs — Enhanced

MetaLUNs (Logical Unit Numbers), which are managed through Navisphere, allow administrators to dynamically allocate storage to application that requires more capacity. MetaLUNS allows storage to be added to existing storage pools on the fly — eliminating out – of-storage conditions without impacting applications.

SnapView — Enhanced

SnapView enables administrators to make a point-in-time copy of information without using server resources. This CLARiiON-based application allows for "zero-window" backup operations and meets the needs of businesses that require parallel access to critical data. SnapView now also provides for instant restore from data snapshots, which can reduced the rollback process from hours to minutes.

SnapView Microsoft Exchange Support — New

SnapView now provides integrated support for Microsoft Exchange thus allowing for simplified, automated backup and recovery of Exchange data stores. This product is targeted at companies that struggle with Exchange support or are consolidating existing Exchange environments. Going forward, EMC stated that it intends to offer similar integration with Windows 2003 VSS.

PowerPath

PowerPath resides on servers and manages the I/O paths from the server to storage to maximize performance and ensure availability of information. PowerPath aims to optimize the paths to data, so that administrators can achieve better utilization of their server and storage, which in turn may allow the postponing of upgrades while providing higher reliability and failover protection.

SAN Copy — Enhanced

SAN Copy provides for rapid copying of data across the SAN and can be used to relocate data for load balancing, data migration, testing, staging, and data distribution. SAN Copy allows businesses to move data without degrading LAN performance and throughput while providing the flexible to copy to and from any storage.

MirrorView

MirrorView is a CLARiiON-based application similar to SnapView that gives administrators the ability to copy information without using server cycles. MirrorView differs from SnapView in that it provides *remote* copies of the information. As part of a disaster recovery solution, the remote copy is fully restartable and online should the primary processing facilities fail. Recovery time using MirrorView is significantly reduced compared with tape-based disaster recovery procedures.

Looking to the Future

EMC's commitment to the mid-tier market does not stop with product development in the year 2003. The company has established an aggressive roadmap to continue enhancing its mid-tier offerings. VisualSAN and Visual SRM are planned for significant upgrades in the coming months that will enhance security and extend workflow capabilities. SAN Copy will become increasingly flexible and open over the same period, providing an incremental copy function to reduce the time to move data while providing support for additional non-EMC storage arrays. SnapView's planned extensions include integration modules for SQL Server, to increase its Microsoft application coverage. EMC also plans to integrate with new standard Microsoft Windows 2003 storage interfaces such as VSS and VDS. MirrorView is targeted to offer an asynchronous copy option, extending its disaster recovery distance capabilities while lowering long distance costs.

While other systems vendors including IBM and HP offer storage, their primary focus is *not* storage. In our mind, EMC's singular focus on storage sets it apart from its rivals, and is a meaningful consideration for mid-size businesses. Each of the current and planned solutions are or will be available in a variety of packages and bundles that can be purchased together or separately as deemed best by the customer. This flexibility makes it easier for EMC channel partners to offer appropriate storage solutions across a wider range of mid-tier enterprise environments.

Perhaps most importantly, EMC seems fully committed to continue expanding its channel coverage and portfolio of product and services offerings to help mid-tier customers gain maximum leverage from their existing and new multi-vendor storage deployments.

What Does It All Mean?

The ideal mid-tier storage management solution must demonstrate a great deal of sensitivity to the realities of the mid-tier enterprise. These solutions must be affordable, dependable, and easy to deploy and manage as well as demonstrate measurable value to help improve utilization of assets while improving service to the business. Part of this value proposition will include a keen awareness of the mid-tier enterprise's present skill sets and levels of storage expertise. Products that leverage both existing deployments and in-house knowledge will, in our opinion, be well positioned for success.

EMC's modular solution set, designed specifically to meet the needs of mid-size businesses, is the most comprehensive offering available from any one vendor today. Tailored to fit the expertise and financial limitations of mid-tier enterprises while solving real problems, today EMC's roadmap suggests continued additions and enhancement to these solutions well into the future. Additionally, EMC is enhancing and certifying its channel partners enabling mid-size businesses to work through trusted business partners who are well versed in meeting their clients' integration and support needs.

We believe mid-tier enterprises have never had a better opportunity to meet their ongoing storage hardware and software needs. But while there are many offerings in the storage marketplace, few offer mid-tier customers a set of solutions as properly scaled and feature-rich as EMC's. Mid-tier businesses seeking comprehensive and scalable storage solutions are well advised to investigate and consider EMC's mid-market offerings.