Designed to optimize
storage strategies

How ETERNUS DX improves data management
in small and medium-sized enterprises

shaping tomorrow with you

FUJITSU

Data management requirements are increasing day by day

Many storage administrators are familiar with the problem of overload, which is caused by the ongoing rapid growth of data volumes. New applications and increasing amounts of unstructured information and data analysis mean that many IT systems have reached their capacity limits. In addition, the I/O requirements in today's applications are becoming more demanding. Business intelligence solutions, virtualization projects and expanding databases also call for higher levels of performance. At the same time, as the value of business data and information increases, the need for improved data security, integrity and availability becomes even more important. All of this makes data management very difficult, if not impossible, especially in environments that have grown organically, with data distributed across numerous hard disks.

Typical signs that call for rethinking your storage strategy

- Long search and response times reduce user productivity.
- Administrators are always busy taking care of routine tasks.
- Capacity and/or network bottlenecks occur frequently.
- Steps taken to prevent interruptions in daily business operations (such as redundancy and disaster recovery concepts) are difficult to implement and costly.
- Backup and archiving are complicated and expensive.

The extremely rapid growth of data volumes is often the cause of many storage problems. Generally speaking, as soon as two-thirds of a storage system's capacity is being utilized, you may be faced with declining performance, limited bandwidth, less flexibility and similar issues.

Mastering the challenges of data management

Here are a few tips that have been very helpful in daily practice:

Consolidate your storage infrastructure. In environments that have evolved organically it is nearly impossible to make sweeping and consistent improvements. That is true for data availability as well as backup and recovery, not to mention reductions in data management tasks and costs. But there is some good news: If you choose a modern and efficient solution to consolidate your environment, you will also automatically benefit from IT operations that are robust and reliable.

Align your storage strategy with the IT and business plans of your enterprise. One of the key questions to consider applies to the expected development of your applications landscape. To ensure that this landscape is flexible and efficient, most enterprises have discovered that sooner or later server virtualization is a necessity because it prevents uncontrolled growth of the infrastructure and thus keeps costs and effort at reasonable levels. However, it should be noted that virtualization leads to higher demands on the performance and reliability of the storage solution.

Be prepared for the fact that the volume of data will continue to grow. Forecasts are difficult to make, therefore your storage solution should give you enough leeway to gradually increase capacity and performance. It is also essential to use management software having intuitive features so that you benefit from operations that run efficiently over the long-term.

Be more flexible. Business plans change and that impacts IT more often than most people think. Therefore it is important to have a storage solution that adjusts to changing business developments. Having a consistent system family concept, ranging from entry-level to high-end models with standardized software and hardware functions, is of great advantage. And if your storage system offers functionality that can easily be enhanced, as well as support for various protocols, use of diverse hard disk drives and easy integration in new application scenarios, you can be sure that you are ready to handle any new business challenges.

Best practice: ARA Assistance

ARA Assistance GmbH, in cooperation with ARCD e.V. (Automobile and Travel Club of Germany) and Auto&Reise GmbH, offers first-class call center and customer management services. A large number of insurance companies, customer clubs and carmakers rely on the experience and competencies of ARA Assistance when it comes to serving their customers.

All of the IT services are provided from the ARA Assistance data center. The goal of the project was to bring down the rising complexity and costs of administration and maintenance for the ten servers in the data center. At the same time, new IT resources would also make the system landscape less complicated while boosting performance and availability. After consulting with

Bechtle, a Fujitsu SELECT Partner, the IT managers at ARA Assistance decided in favor of a virtualization solution distributed over two data center sites, with one ETERNUS DX storage system at each location. In this fast SAN storage solution, all of the data and applications of ARA Assistance reside on high performance platforms featuring high availability. ETERNUS SF Storage Management Software and functions such as automatic SLA management and thin provisioning have made data storage management much easier. What's more, the number of servers in the data center was reduced from ten to just three. All of these improvements mean that ARA Assistance can now cut the costs for energy, maintenance and administration by 55 percent annually.

Optimize your data management with Fujitsu and ETERNUS DX

Fujitsu is one of the few global players with in-depth competence in server, storage, network infrastructure and service solutions. This competence is complemented by the global ETERNUS storage portfolio from Fujitsu. The brand stands for reliable, powerful and straightforward storage solutions. ETERNUS DX disk storage systems are based on Intel® Xeon® processor and designed to give you secure, reliable and affordable data management. Even users with little storage experience can carry out key tasks successfully thanks to the easy installation, management and enhancement features of the solution – and this is supported by the standardized and intuitive ETERNUS SF Express Storage Management Software available for all entry-level system models.

Redundant design, RAID protection and integrated data protection in combination with maximum configuration flexibility make ETERNUS DX "The flexible Data Safe" for all application scenarios. These storage systems, which continue to set one performance benchmark after another, deliver high throughput and fast response times even under peak loads, for example for databases, e-mail, business intelligence or virtualized applications. At the same time ETERNUS DX is distinguished by impressive energy efficiency thanks to technologies like Eco-mode.

Even the entry-level ETERNUS DX systems offer the design and functionality normally expected of much larger systems, for example all RAID levels and intelligent functions like Data Block Guard to ensure

data integrity. Other safeguards include data encryption to prevent unauthorized access, redundant copy for automatic recovery of a hard disk at the first sign of an imminent failure, and advance copy functions for data backup with snapshots, not to mention cloning to support business continuity.

In addition to such high performance, ETERNUS DX storage systems also promise excellent adaptability. The systems support Fibre Channel and Ethernet (iSCSI, FCoE)-based infrastructures as well as various disk drive types (even in mixed configurations). What's more, capacity enhancements can be made during running operations without having to swap out the data.

Your benefits:

- Simplified storage infrastructure and less administration
- Minimized risk of interrupted business operations
- Optimal support for IT virtualization
- Readiness to handle growing volumes of data
- High performance for even the most demanding applications
- Maximum flexibility to adjust to new business requirements
- Effective and efficient operation

http://solutions.us.fujitsu.com/www/content/products/storage/ETERNUS/index.php

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