

## IBM provides a broad portfolio of storage management solutions to help streamline data control from end to end



For many companies competing in today's global economy, maintaining availability of mission-critical data and applications is no longer a goal—it is a business necessity. To successfully carry out everyday business processes and operations, organizations rely heavily on rapid access to information, even as volumes of data continue to grow at an explosive rate.

At the same time, a growing number of governmental regulations and corporate best practices mandate that more data be stored in an easily accessible—yet secure—manner for extended periods of time. For most companies, this can mean no end in sight to the rising volumes of information to be managed. Systems created to handle all this data now need managing themselves—creating an ever-expanding set of new challenges.

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### Highlights

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- *Help improve storage utilization and reduce storage management costs by virtualizing existing storage IT infrastructures*
- *Address data growth and align storage management practices to business objectives*
- *Establish and maintain storage service levels in support of corporate IT infrastructure library initiatives*
- *Establish centralized management of information across hierarchies of storage for both production and retention-managed data*

Unfortunately, many businesses lack an enterprise-wide storage strategy to address this trend. In attempting to respond to growth, organizations add storage devices in an ad hoc manner—resulting in storage environments that are increasingly more complex and costly to manage, and often inefficiently utilized. To make matters worse, storage management can present significant IT labor costs, further impacting operating expenses.

### **The IBM portfolio of storage management products can help eliminate storage management challenges**

The IBM portfolio of storage management products can help provide end-to-end disk storage and management, allowing organizations to address the growing data challenges of managing information lifecycles. These products can help you create, organize and manage a storage environment that can better accommodate the explosive growth of data while simplifying administration and addressing rising costs.

IBM provides powerful, proven tools that work together to help you streamline your storage architecture, effectively consolidate resources and plan your organization's critical data requirements.

Products include:

- *IBM System Storage™ SAN Volume Controller*
- *IBM TotalStorage® Productivity Center*
- *IBM Tivoli® Provisioning Manager*
- *IBM Tivoli Storage Manager*
- *IBM System Storage Archive Manager*
- *IBM Tivoli Storage Process Manager*
- *IBM Tivoli Change and Configuration Management Database*

### **IBM System Storage SAN Volume Controller can help improve storage utilization**

The cornerstone of this portfolio of storage management products, the IBM System Storage SAN Volume Controller (SVC), is designed to help you simplify your storage infrastructure, use storage resources more efficiently, improve personnel productivity and increase application availability. SVC allows you to create a virtualized, multi-tiered environment to improve disk utilization and match the value of data with the most appropriate type of storage.

Furthermore, storage administration can be simplified. SVC is designed to pool storage volumes from IBM and non-IBM disk arrays into a single reservoir of

capacity that is shared by applications and managed from a central point. It can then allocate capacity to applications much more flexibly than is possible with traditional approaches where capacity is often pre-allocated to applications on dedicated storage systems. This flexibility can help improve disk resource utilization and application availability.

### **IBM TotalStorage Productivity Center adds the “smarts” to data and storage infrastructure**

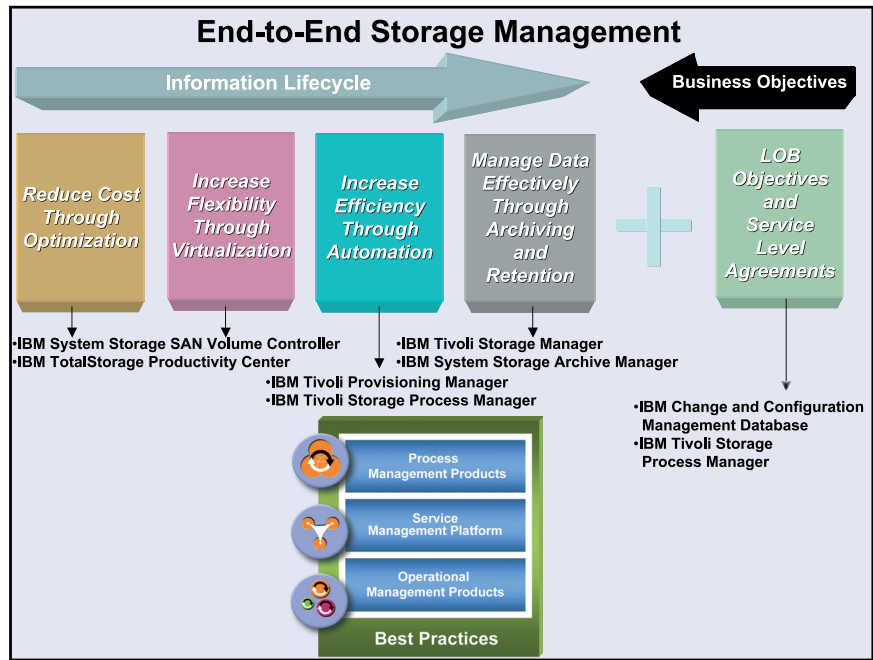
By combining SVC and IBM TotalStorage Productivity Center together in the same environment, you can quickly respond to rapidly growing storage requirements. TotalStorage Productivity Center software enables you to monitor and analyze storage trends—and plan for the future—by providing reports that help you understand and effectively manage the capacity utilization of storage systems, file systems and databases. It also allows you to automate file-system capacity provisioning; perform device configuration; proactively manage the performance of storage devices on your storage area network (SAN); and monitor and control your SAN fabric.

Working together, the powerful, single point of management delivered by SVC and the intelligence added to data protection and retention practices by TotalStorage Productivity Center can help you build and manage storage environments that are able to accommodate fast-rising volumes of data, improve efficiency and lower storage costs.

**IBM Tivoli Provisioning Manager helps boost IT productivity**

TotalStorage Productivity Center and IBM System Storage SAN Volume Controller can also be combined with IBM Tivoli Provisioning Manager to simplify storage provisioning through workflow-based automation of provisioning tasks. Built on a service-oriented architecture, Tivoli Provisioning Manager uses Web services and application programming interfaces to coordinate the provisioning actions of TotalStorage Productivity Center.

With Tivoli Provisioning Manager, IT managers can use pre-built industry best-practice workflows or customize workflows to address their company's data center best practices and procedures. This enables organizations to automatically manage the lifecycle of data and distributed resources and helps reduce IT management costs.



**IBM Tivoli Storage Manager can help improve information management**

At the heart of the IBM end-to-end storage management portfolio, IBM Tivoli Storage Manager provides complete information management across hierarchies of storage for both production and retention-managed data.

Tivoli Storage Manager is designed to help increase data protection, decrease backup and restore times and lower storage management costs. Web-based management, intelligent data move-and-store techniques and comprehensive policy-based automation are designed into Tivoli Storage Manager to

help you protect your organization's data from the effects of system failures and other errors. Archive, space management and bare-metal restore data, as well as backup and retention data, are stored in a hierarchy of offline storage. This enables you to match the value of the data to the most cost-effective storage management practices.

Tivoli Storage Manager also works together with TotalStorage Productivity Center to monitor backups and archives. After scanning file systems to analyze storage usage, TotalStorage Productivity Center can provide reports

on capacity, help identify at-risk files and direct Tivoli Storage Manager to take appropriate action. This level of integration is critical to improving efficiency and lowering costs.

### **IBM System Storage Archive Manager helps keep data safe**

IBM System Storage Archive Manager further extends Tivoli Storage Manager's policy-based data management capabilities enabling businesses to establish additional safeguards on data retention.

System Storage Archive Manager helps manage and simplify the retrieval of data—including records, e-mails and design documents—and makes the deletion of data before its scheduled expiration extremely difficult. Short of physical destruction to storage media or server, or deliberate corruption of data or deletion of the Archive Manager database, Archive Manager helps prevent data on the server it manages from being deleted before its scheduled expiration date.

### **IBM Tivoli Storage Process Manager simplifies information lifecycle management**

A critical component of the IBM Tivoli Storage Management portfolio, IBM Tivoli Storage Process Manager provides a powerful information lifecycle

management tool. It coordinates simple and complex change, configuration and event management processes and extends them with storage-related tasks and process steps. Tivoli Storage Process Manager delivers capabilities to discover key storage configuration items and give you a better understanding of your storage environment in relation to the rest of your IT infrastructure.

Tivoli Storage Process Manager also delivers specific storage-related automated workflows to help you implement provisioning, data cleanup and backup incident prioritization in concert with TotalStorage Productivity Center, Tivoli Storage Manager and Tivoli Provisioning Manager. In addition, it provides a fully defined model of storage attributes and relationships in the IBM Tivoli Change and Configuration Management Database.

### **IBM Tivoli Change and Configuration Management Database aligns storage management with business objectives**

IBM Tivoli Change and Configuration Management Database (CCMDB) helps you automatically discover and federate IT information spread across the enterprise, including details about servers,

storage devices, networks, middleware, applications and data. By integrating, automating and optimizing data, workflows and policies, Tivoli CCMDB helps you drive process automation and effectively enforce policies that reduce IT faults and resolution costs. The result is storage management aligned to your growing business needs.

Deployed with IBM TotalStorage Productivity, Tivoli CCMDB can collect essential information about the configurations of storage devices and map the storage infrastructure to business applications and processes. As a result, storage administrators will be better able to determine the business impact of a storage availability or performance problem.

### **IBM storage solutions deliver powerful solutions to data challenges**

All of the products in the IBM storage management portfolio are designed to work together to help you address the unique storage challenges your business has today. Whether you are faced with constantly adding and changing storage resources to cope with growth, considering implementing tiered storage to support information lifecycle management strategies or simply trying to do a better job of balancing the data load, IBM can keep your data right where you need it.



## For more information

To learn more about how IBM TotalStorage and System Storage products can help you accommodate rising volumes of data, improve efficiency and lower storage costs, contact your IBM sales representative or IBM Business Partner, or visit us at: **ibm.com/storage**



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