

IBM System Storage solutions for SAP IT environments



In today's global economy, maintaining availability of SAP mission-critical data and applications is a business necessity. Information must be secure, easily retrievable and accessible to help organizations make informed decisions that lead to growth and profitability. How can you take steps to keep information available—when and where you need it—to fuel innovation and growth?

Highlights

- Support interoperability for your SAP environment and help improve your IT infrastructure with proven IBM® System Storage™ solutions
- Address day-to-day challenges with cost-effective storage solutions for backup and recovery, databases, collaboration and archiving
- Manage growing business needs with continuous access to information through industry-leading virtualization and copy service capabilities

IBM System Storage solutions for SAP IT environments can help you create an infrastructure that responds to changing business requirements while enabling data sharing and collaboration across your enterprise. As a leader in storage systems and solutions, IBM offers the innovative technology, support for open standards and superior performance that companies require. Our portfolio of storage offerings, together with our

software, hardware and solutions offerings, are backed by IBM's support and efficiently provide a resilient infrastructure designed for securely storing SAP information and mitigating business risks.

IBM System Storage: Uniquely designed for your SAP environment

Many global businesses depend on SAP to help provide enterprise-wide visibility and control over essential operational processes. SAP customers need their systems to run efficiently and cost-effectively. Installing software upgrades, adding new modules and making other changes, however, can place a significant load on IT resources—potentially driving up costs and compromising performance.

Drawing on a history of storage innovation and a relationship with SAP that has lasted more than three decades, IBM works closely with SAP to provide a set of solutions designed to help simplify the task of running a dynamic SAP environment.

IBM System Storage offerings support many SAP solutions, including:

- SAP Business Suite, including applications based on the SAP NetWeaver technology platform
- SAP Business All-in-One
- SAP Business One

- SAP appliances, including Business Intelligence Accelerator and Enterprise Search
- SAP Business ByDesign suite
- SAP Information Lifecycle
 Management (ILM) and Archiving
 (supported by IBM CommonStore for
 SAP and FileNet®)

IBM System Storage solutions help you address your SAP information management needs, enabling you to create a resilient and flexible infrastructure for securely storing information and mitigating business risks. In addition, IBM works with SAP to enable storage solutions that support mutual customers through ongoing participation in the following SAP programs:

SAP Global Partner Award

Program—IBM received three SAP Pinnacle Awards in 2008. The award recognizes SAP partners who have excelled in developing their partnership with SAP by providing quality products, solutions and services to mutual customers.

• SAP Co-Innovation Lab—IBM collaborates with SAP in the lab, which offers a hands-on environment for SAP, its customers and its partners to innovate, accelerate and showcase new business solutions and technologies.

IBM SAP International Competence Center (ISICC)—

IBM has established a network of SAP customer competence centers. Headquartered in Walldorf, Germany, the headquarters of SAP, the ISICC serves as the central access point to the centers. Joint support teams help to deliver best-in-class solutions to joint customers, building on three decades of experience in optimizing IT infrastructure and service offerings for SAP solutions.

IBM storage support for SAP environments

IBM and SAP share a goal of enabling efficient integration between applications and infrastructure platforms for enterprise and small and medium business (SMB) customers. The relationship between the two companies is at the highest level within IBM, where SAP is a Strategic Alliance partner. The partnership includes hardware, software, services and developing joint solutions to further enhance customers' ability to run their SAP applications.

IBM and SAP also share a development lab-level technical relationship that focuses on developing, porting, optimizing, testing and supporting mutual customers. IBM assigns more than 40 full-time IBM solution architects,

more than 60 code enablers and more than 100 software developers to work directly with SAP at the ISICC to produce new and optimized SAP solutions on IBM platforms using software from IBM and third parties. IBM also works with SAP to help ensure SAP always has access to the latest IBM hardware and software technology for testing and optimization.

To ensure interoperability, IBM verifies its solutions onsite at the ISICC, using IBM storage equipment and IBM personnel to develop joint solutions, perform interoperability and technology validation testing and produce collateral such as technical solution guides (Redpapers) and performance and sizing guides.

IBM System Storage enables continuous information access, flexibility and growth

A growing business requires information to be available whenever and wherever it is needed across an enterprise.

IBM System Storage solutions for SAP support continuous access to information through interoperable and costeffective IBM storage hardware and software offerings and solutions such as Tivoli® Storage Manager for backup and restore, solutions for high availability and disaster recovery and IBM SAN Volume Controller (SVC) virtualization solutions.

IBM System Storage products for SAP can provide end-to-end disk and tape storage and management, helping organizations address the challenges of managing information life cycles. These products can help create, organize and manage a storage environment that can better accommodate explosive data growth while simplifying administration and addressing rising costs. IBM System Storage disk, tape and virtualization products range from entrylevel offerings to enterprise offerings (see Table 1).

Table 1: IBM System Storage Solutions and offerings for SAP (July 2008)

- IBM System Storage DS8000™ solutions are designed to deliver robust, flexible, highly available, reliable and cost-effective disk storage to support continuous operations for large enterprise and mission-critical workloads.
- IBM System Storage DS6000™ solutions are designed to provide enterprise-class functionality, high availability and high performance in a small, cost-effective, scalable package with mainframe host attachment.
- IBM System Storage DS4000[™] and DS5000[™] mid-range storage solutions are designed to provide SAP business IT infrastructures with low total cost of ownership, high performance, robust functionality and unparalleled ease of use.
- Small SAP businesses can take an overburdened internal storage infrastructure to a new level by using IBM's new entry-level flexible and affordable DS3200 (SAS), DS3300 (iSCSI) and DS3400 (FC) storage systems.
- SAP businesses concerned with archiving and compliance should consider the DR550, designed to provide a secure, scalable and cost-effective information retention solution supporting the archiving of files, e-mail, digital images, database applications and instant messages.

- IBM network-attached storage (NAS) N series products provide a wide-range of network attachment capabilities. The N5000, N6000 and N7000 series NAS systems are designed to deliver high-end enterprise storage and data management value with midrange affordability. For smaller businesses, N3000 series is designed to offer fast data access with low maintenance requirements. N series storage also provides a wide selection of software features and functions designed to provide a comprehensive set of robust management and operational tools as well as high-availability features, disaster recovery and data copy services that help provide support for IP-attached storage environments.
- IBM tape offerings continue to figure significantly into IT infrastructures for highcapacity storage backup. Unique tape attributes, including advanced encryption features, can help SAP IT users manage their storage requirements and leverage the value of tape in the storage hierarchy.
- For the dynamic SAP IT environment, IBM offers a full line-up of intelligent SAN switches, directors and routers to connect servers and storage systems in local, campus, metro and global infrastructures. IBM SAN switches provide the reliable, scalable and high-performance Fiber Channel connectivity required to capitalize on enterprise-wide data sharing and collaboration.
- The IBM CommonStore for SAP product is used for archiving SAP information onto the IBM DR550.
- The IBM Archive solution for SAP is a complete document management solution for SAP environments.
- Business Intelligence Accelerator
 Appliance is an easily implementable
 IBM Systems solution for SAP NetWeaver
 BI Accelerator that enables you to crunch
 through terabytes of data in seconds,
 enabling faster information analytics and
 business insight.
- IBM virtualization products can help optimize SAP storage environments, with products such as the System Storage SAN Volume Controller, which helps boost IT productivity by creating a single point of control, administration and security for combining storage capacity from multiple vendors into a single reservoir of capacity.
- IBM General Parallel File System (GPFS) is designed to consolidate file systems across Linux® and UNIX® servers, providing a common pool of file space that can be shared across platforms.

- The IBM System Storage Productivity
 Center allows the entire system
 management process to take place from a
 single, centralized console and is designed
 to help reduce the effort of managing
 complex, heterogeneous storage
 infrastructures, improve storage capacity
 utilization and improve administrative
 efficiency.
- IBM's Tivoli software solution portfolio offers complete coverage of all SAP elements. Storage management modules, including IBM Tivoli Storage Manager, are designed to automate backup and recovery policies to help promote business continuance, simplify storage management and accelerate return on investment.
- IBM's System p5 Solution Edition for SAP NetWeaver Business Intelligence (SAP NetWeaver BI) solution combines the IBM System p™ family of servers with IBM System btorage, IBM DB2® and powerful SAP NetWeaver BI software for a reliable, high-performance business intelligence solution that can be scaled to meet your needs.

Technical documents on a range of issues related to implementing IBM Storage solutions in SAP environments can be found at:

ibm.com/systems/storage/solutions/isv/index.html#sap

Tested solutions: More than the sum of their parts

Every IT professional knows the intrinsic value of a tested, well-documented solution. After all, the most difficult processes in a project implementation usually center on correctly identifying the right technology to use—and from which vendors—followed by implementing those solutions in a manner based upon knowledge and experience.

Working with SAP, IBM System xTM, IBM Tivoli, partner independent software vendors (ISVs) and customers, IBM identifies key SAP technology areas to match up with IBM storage solutions, including:

- SAP on Microsoft® Windows® and Microsoft SQL Server® and UNIX
- SAP on Linux
- · SAP on Oracle
- SAP NetWeaver BI solutions based on IBM DB2 9 and IBM Systems solution for SAP NetWeaver BI Accelerator
- SAP Adaptive Computing
- SAP Enterprise Search

Storage solutions for database archiving

The SAP enterprise environment is becoming functionally broader and more flexible. New informational and collaborative applications complement core enterprise resource planning (ERP) systems. To optimize their value, the organization of storage resources requires special attention. Large-scale corporate SAP environments include hundreds of terabytes of disk storage; midsize installations routinely require from 5 TB to 50 TB of disk capacity. Overall capacity growth rates from 30 percent to 50 percent per year are routine, and many users experience

even higher levels.¹ Some applications, such as business intelligence and records retention for business and compliance purposes, generate a tremendous volume of data, requiring corresponding increases in storage capacity.

To meet the challenges presented by such growth, IBM provides storage solutions that help to optimize the full spectrum of storage hardware and software resources as components of an integrated, organization-wide infrastructure. In particular, IBM System Storage solutions are designed to address challenges surrounding database archiving. SAP application databases are at the core of critical operations for a wide range of organizations; to help ensure they deliver maximum return on investment, IBM solutions help create a highly effective SAP storage infrastructure in terms of functional capabilities, costeffectiveness and integration and optimization of server and storage resources.

IBM's SAP-certified point-in-time Tivoli Storage Manager for Advanced Copy Services offers Flash Backup, Flash Restore and Flash Cloning all in the same solution. Security modules, including Tivoli Access Manager for SAP and Tivoli Identity Manager for SAP, can help mitigate risks and enforce policies consistently while reducing administration costs.

IBM System Storage facilitates management of your growing SAP application environments and helps control the growth of your databases—and potentially reduces their size—while improving application performance and availability. IBM database archiving solutions, comprising products from IBM server and storage product families and both IBM System Storage DS series and N series storage solution families, can help simplify and consolidate your infrastructure while increasing production performance.

Why IBM?

Robust storage performance and availability can enhance your business processes and help reduce your total cost of ownership. On the other hand, an un-optimized storage environment can result in delays, downtime and even lost data. When considering which storage provider to choose for your next storage investment, be sure to compare:

- The breadth of storage software, hardware and solutions offerings
- Technology
- Relationship and commitment to SAP and supporting ISVs

- IT service and support offerings
- Financing options
- Quality, reliability and dependability

IBM offers the expertise and technical knowledge that can help you build a storage environment customized for today's SAP business needs that is flexible enough to handle future growth. Thanks to its long-standing partnership with SAP, IBM can offer some of the best storage products, technologies, services and solutions for your SAP environment.

For more information	
For more information about IBM Storage Systems for SAP IT environments, contact your IBM representative or visit the following Web sites:	
IBM System Storage	ibm.com/systems/storage/
IBM System Storage SAP solution guides and white papers	ibm.com/systems/storage/solutions/isv/index.html#sap
IBM System Storage on SAP Web site	www.sap.com/search/index.epx?q1=ibm+system+storage#=10
IBM Solutions for SAP: Overview – IBM System Storage	ibm.com/systems/storage/solutions/sap/index.html
SAP Business Suite	www.sap.com/solutions/business-suite/index.epx
SAP All-in-One	www.sap.com/solutions/sme/businessallinone/index.epx
SAP Business ByDesign	www.sap.com/solutions/sme/businessbydesign/index.epx
SAP BusinessOne	www.sap.com/solutions/sme/businessone/index.epx
Tivoli Storage Manager	www.sap.com/ecosystem/customers/directories/index.epx



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International Technology Group. International Technology Group Management Brief: "Value Proposition for IBM System Storage: IBM Information Infrastructure for SAP Deployments." March 2008.

