



IBM Tivoli Storage Manager for Databases

Highlights

- ***Combines Tivoli Storage Manager with vendor backup capabilities***
- ***Provides 24x7 availability of vital business data***
- ***Centralizes storage management with disaster recovery support***
- ***Optimizes resource consumption***
- ***Helps maintain data integrity***
- ***Supports LAN-free and server-less data transfer***

Combines Tivoli Storage Manager with vendor backup capabilities

IBM® Tivoli® Storage Manager for Databases can help you protect a wide range of applications and databases by letting you preserve data wherever it is and however it is stored. With Tivoli Storage Manager for Databases, you can further extend the automated power of Tivoli Storage Manager by exploiting the backup-certified utilities and interfaces provided by a variety of vendors. It can help you manage the costs associated with distributed storage management by leveraging storage resources and automating management tasks. It provides data protection for the Oracle, Informix® and Microsoft® SQL Server databases. The Tivoli Storage Manager for Databases functionality is included in the IBM DB2 Universal Database™ package and does not need to be purchased separately. For SAP R/3 systems with their underlying databases, Tivoli software offers a specialized product called Tivoli Storage Manager for ERP.

Provides 24x7 availability of vital business data

Tivoli Storage Manager for Databases is a production-oriented solution that helps you provide backup and recovery capabilities for your databases. This solution gives you the ability to recover data quickly and comprehensively in the event of a system failure. It works in conjunction with your Tivoli Storage Manager server to enable “hot” or online backups for supported databases and to maintain the integrity of your backup files.

Centralizes storage management with disaster recovery support

Tivoli Storage Manager for Databases lets you leverage the efficiency of centralized storage management. It takes advantage of the scalability, hierarchical storage management and powerful disaster-recovery functions of Tivoli Storage Manager with the ease and convenience of a centralized location. Tivoli Storage Manager for Databases can help you restore data,

including offsite tape management, without disrupting daily user activities. In the event of a disaster, it can also prepare and keep current a recovery plan with detailed recovery steps and computer scripts. An offsite copy of your active data can be restored to new storage to help get your business operating again as quickly as possible.

Optimizes resource consumption

Tivoli Storage Manager for Databases can help you enable a more efficient use of your IT resources by providing support for LAN-free backups and restores when used in connection with a storage area network (SAN) environment. The product features three distinct data protection clients: one for Microsoft SQL Server databases, one for Oracle databases and one for Informix databases. All three clients support online backups, helping you maximize the availability of your databases and the applications they support. The three clients support incremental backups, making it possible for you to reduce network traffic by saving only changed database blocks, thus avoiding the need to transfer the entire database during each backup window. The “data

striping” capability also lets you perform multiple parallel sessions to the Tivoli Storage Manager server to backup and restore data for a single database, helping increase data throughput (particularly in large databases).

Helps maintain data integrity

The ability to achieve a point-in-time restore of your e-business environment is critical. To help keep your data intact, Tivoli Storage Manager for Databases uses only backup-certified utilities and interfaces provided by the database vendors—Microsoft SQL Server, Oracle and Informix.

Microsoft SQL Server databases—Available with a Windows® graphical user interface for easy use, Tivoli Storage Manager Data Protection for SQL uses the dedicated backup application program interfaces provided by Microsoft to provide a professional, comprehensive storage management solution for Microsoft SQL 7 or SQL 2000 databases. The many capabilities of the Tivoli Storage Manager Data Protection for SQL client include the ability to automate scheduled backups, maintain multiple versions of your SQL database and

transaction log backup, as well as restore both database and transaction log backups. In addition, you can optimize performance with tunable multibuffer caching during backups and automatically inactivate previous backups after a new full backup.

Oracle databases—Tivoli Storage Manager Data Protection for Oracle is designed to help you apply highly automated storage management functions of your Tivoli Storage Manager server to your Oracle8i or Oracle 9i databases. This goal is achieved by providing an interface between the Tivoli Storage Manager server and the Oracle Recovery Manager (RMAN) utility. It can help you complete a full or tablespace backup of a database while the database is online or offline. You can also complete a full database restore while the database is offline. Backups of the archive log files associated with your databases can also be performed.

In addition, Tivoli software enables you to use the “duplex copy” feature available in RMAN 2.0, making it possible to send a backup to two separate storage tapes simultaneously.

Additional capabilities include the ability to optimize performance with tunable multibuffer caching during backups (same as with Microsoft SQL) and implement the synchronization utility to reconcile inventory between the Tivoli Storage Manager server and the Oracle catalog.

Informix databases—Tivoli Storage Manager Data Protection for Informix is designed to help you apply the automated storage management functions of your Tivoli Storage Manager server to Informix 32-bit and 64-bit databases. This is achieved by providing an interface between the Tivoli Storage Manager server and the Informix ON-Bar utility.

The Tivoli Storage Manager for Informix client supports capabilities such as the use of parallel sessions for both backups and restores. This can help you use network resources efficiently during regular backups, and may help you minimize the time required to complete a restore of your Informix databases.

Supports LAN-free and serverless data transfer

The Tivoli Storage Manager for Databases supports LAN-free data transfer to offload the LAN from network traffic in SAN environments. The LAN-free data transfer capability lets you move data transfer off the LAN to back up and restore data from a SAN-attached tape library that can be shared by Tivoli Storage Manager servers. This capability gives you an alternate path for data movement, allowing for a greater number of simultaneous client connections and freeing LAN bandwidth.

Tivoli Storage Manager for Databases builds the basis for Tivoli Storage Manager for Hardware and can realize a “near zero-impact” backup by leveraging the IBM Enterprise Storage Server™ “Shark” FlashCopy® function. With the combination of these products, you can avoid backup-related impact during online backup time.

Integration with other Tivoli products from IBM

- *Tivoli Storage Manager for Hardware*
- *Tivoli Storage Manager for ERP*
- *Tivoli Storage Manager for Mail*
- *Tivoli Storage Manager for WAS*

To learn more

For information on IBM Tivoli Storage Manager for Databases and integrated solutions from IBM, contact your IBM sales representative or visit info.tivoli.com/storageforsuccess

Tivoli software from IBM

An integral part of the comprehensive IBM e-business infrastructure solution, Tivoli technology management software helps traditional enterprises, emerging e-businesses and Internet businesses worldwide maximize their existing and future technology investments. Backed by world-class IBM services, support and research, Tivoli software provides a seamlessly integrated and flexible e-business infrastructure management solution that uses robust security to connect employees, business partners and customers.

IBM Tivoli Storage Manager for Databases system requirements

Data protection for Oracle, Version 2.2 on AIX

Hardware

- IBM RS/6000® or pSeries™
 - 96MB RAM
 - 6MB hard disk space
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Operating system/software

- IBM AIX 4.3.3 (32-bit or 64-bit) or AIX 5.1 (32-bit)
 - Oracle8i, Release 8.1.7; Oracle8i 8.1.7 Parallel Server; or Oracle9.0.1+ or Oracle9.0.1 Parallel Server
 - Tivoli Storage Manager server
 - Tivoli Storage Manager API, Version 4.2.1 or later
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Data protection for Oracle, Version 2.2 on HP-UX

Hardware

- HP 9000 series 700 or 800 workstation
 - 96MB RAM
 - 6MB hard disk space
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Operating system/software

- HP-UX 11.0 (32-bit or 64-bit) or 11i (32-bit or 64-bit)
 - Oracle8i, Release 8.1.7; Oracle8i 8.1.7 Parallel Server; or Oracle9.0.1+ or Oracle9.0.1 Parallel Server
 - Tivoli Storage Manager server
 - Tivoli Storage Manager API, Version 4.2.1 or later
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Data protection for Oracle, Version 2.2 on Sun Solaris

Hardware

- Sun™-4 SPARC™ or compatible workstation
 - 96MB RAM
 - 6MB hard disk space
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Operating system/software

- Sun Solaris™ 2.6 (32-bit) or Solaris 7 or 8 (32-bit or 64-bit)
 - Oracle8i, Release 8.1.7; Oracle8i 8.1.7 Parallel Server; or Oracle9.0.1+ or Oracle9.0.1 Parallel Server
 - Tivoli Storage Manager server
 - Tivoli Storage Manager API, Version 4.2.1 or later
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Data protection for Oracle, Version 2.2 on Windows

Hardware

- An Intel®-based 80486 or greater processor, including xSeries™ with Windows 2000 or Windows NT®
 - 32MB RAM
 - 6MB hard disk space
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IBM Tivoli Storage Manager for Databases system requirements (continued)

Data protection for Oracle, Version 2.2 on Windows (continued)

Operating system/software

- Windows NT 4.0 or Windows 2000 Server, Advanced Server, Datacenter or Professional
- Oracle8i, Release 8.1.7; Oracle8i 8.1.7 Parallel Server; or Oracle9.0.1+ or Oracle9.0.1 Parallel Server
- Tivoli Storage Manager server
- Tivoli Storage Manager API, Version 4.2.1 or later

Data protection for Microsoft SQL, Version 2.2 on Windows

- Tivoli Storage Manager server, Version 4.1 or later
- Microsoft SQL Server, Version 7.0 with Service Pack 3 or Microsoft SQL Server 2000
- Intel Pentium® 166 or equivalent, or later processor with at least 12MB of available disk space
- Minimum 48MB RAM (96MB recommended)
- Microsoft Windows NT, Version 4.0 with Service Pack 4 or Windows 2000 Server, Advanced Server or Datacenter Server

Data protection for Informix, Version 4.1 on AIX

Hardware

- RS/6000 or pSeries
- 64MB RAM
- 5MB hard disk space
- Tivoli Storage Manager server
- Informix version: IDS 7.3, UDO 9.2, XPS 8.31 (AIX 4.3 32-bit), IDS 7.31.FC7, UDO 9.2 (AIX 4.3 64-bit), UDO 9.21 (AIX 5.1 32-bit)
- AIX 4.3.3 (32-bit or 64-bit) or 5.1 (32-bit)

Data protection for Informix, Version 4.1 on Sun Solaris

Hardware

- Tivoli Storage Manager server
- Informix version: IDS 7.3, UDO 9.2, XPS 8.3.1
- SPARCstation or compatible workstation
- 64MB RAM minimum
- 5MB hard disk space
- Sun Solaris 2.6, 7 or 8 (32-bit)

Data protection for Informix, Version 4.1 on HP-UX

Hardware

- Tivoli Storage Manager server
 - Informix version: IDS, Version 9.21.HC4 (32-bit); IDS, Version 7.31.FC6; or IDS, Version 7.31.FC7 (64-bit)
 - HP 9000 series 700 or 800 workstation
 - 64MB RAM minimum
 - 5MB hard disk space
 - HP-UX 11 or 11i 32-bit or 64-bit
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