

## Solution Brief

Solutions for Small Businesses and  
Midsize Companies

SAP® MaxDB is the database of choice for small businesses and midsize companies requiring a solid, affordable, low-maintenance database that works seamlessly with SAP® and non-SAP applications. It scales to let you manage growing business and changing markets while retaining responsiveness to customers.



# LOW TOTAL COST OF OWNERSHIP FOR SMALL AND MIDSIZE COMPANIES

## SAP® MaxDB™: A PROVEN, AFFORDABLE, LOW-MAINTENANCE DATABASE

The SAP® MaxDB™ database is a cost-effective and powerful database that can help you run your small business or midsize company efficiently in a business climate with steadily shrinking allowances for time to value. To optimize processing for nimble response to change, SAP MaxDB helps make database management easy and offers low cost of ownership. Space management and log backup are automatic, for example, and you can make most configuration changes on the fly. SAP MaxDB is highly scalable and reliable and boasts some of the shortest response times in the industry.

SAP MaxDB is available for all installations of the SAP Business All-in-One solution and the SAP Business Suite family of business applications. SAP MaxDB is bundled with the full license for the SAP NetWeaver® technology platform, and the SAP Business ByDesign™ solution uses SAP MaxDB as the default database for the host system. Designed for online transaction processing and database sizes up to multiple terabytes, SAP MaxDB is the preferred database for internal SAP installations on UNIX and Linux. Because it supports a wide range of operating systems and hardware platforms, SAP MaxDB lets you use the configuration that is most efficient and cost-effective at your site. It currently runs on 13,000 installations at about 7,000 customer sites, including over 1,000 installations at small businesses and midsize companies.

### Meeting Business Challenges at Your Company

As a technology manager in a small business or midsize company, you know firsthand the challenge of keeping back-office costs low while providing 24x7 availability and integrated processing to your clients. Instead of choosing and implementing a single elegant solution, you probably inherited a jumble of inter-linked applications, each with its own support organization and upgrade cycle. With little financial margin for error, you need to respond immediately and effectively to customers and suppliers who initiate demand with the click of a mouse.

SAP MaxDB has a database management system optimized for use with SAP software, reducing your total cost of ownership with SAP applications.

And if you have the luxury of adding staff, the lack of industry standards and best practices makes database administration nearly impossible to teach.

THE BEST-RUN BUSINESSES RUN SAP™



SAP MaxDB can help relieve this squeeze by integrating quickly on Sun Solaris, IBM AIX, HP-UX, Linux, and Microsoft Windows platforms. SAP MaxDB also interfaces cleanly to most popular programming environments through Object Database Connectivity and Java Database Connectivity and works with most popular programming languages, including Perl, Python, and PHP.

When you run SAP MaxDB with SAP software, you have years of SAP expertise at your fingertips to meet your technical and customer support needs, including application development and integration.

### Empowering Administrators Through Self-Management

SAP MaxDB gets consistently high marks for self-management and built-in backup and recovery features. Most housekeeping chores require no operator intervention at all. When scheduled backups are due, they take place online with little effect on other operations, and the database is consistently available to end users. In extreme cases, such as a system crash or major change to your IT landscape, a recovery wizard guides you step-by-step to restore the complete database.

SAP MaxDB provides a broad range of tools for managing databases:

- The computing center management system integrated into the SAP Business All-in-One solution and SAP Business Suite
- The database studio, which provides administration as well as query functions
- The database manager administration tool
- The structured query language (SQL) studio and the SQL call level interface (SQLCLI) query tools
- The loader tool for data import and export and transfer between databases

### Offering a Full Portfolio of Features

SAP MaxDB helps you simplify database management tasks through the features and functions outlined below.

#### Data Organization and Storage

SAP MaxDB requires no size estimation for individual tables and indexes. Each table can grow and shrink without human intervention, since space management is fully automatic. You can configure SAP MaxDB to extend the database automatically under conditions you specify and the extension occurs while SAP MaxDB is online.

#### Data Security and Consistency

SAP MaxDB protects database resources from unauthorized manipulation at the operating system level. Like all secure databases, it separates administrator privileges from general



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user privileges and includes configurable logging of all significant system activity and robust algorithms for data encryption.

Data changes in SAP MaxDB are, as in most modern database management systems, transaction based. Unless all changes within a transaction are executed and a "commit" command is issued, no part of the transaction takes effect. Thus the database is always in a defined and consistent state.

### Protection from Data Loss

To protect you from data loss due to media errors, SAP MaxDB allows for data and log backup during operation. An automatic log backup feature lets the database system back up log entries when a certain number of entries has occurred or a specified time has elapsed.

SAP MaxDB tracks backup activities and assists you during any recovery process. The recovery wizard presents a recommendation and then lets you select the alternatives that work best for you. SAP MaxDB also supports mission-critical database instances with standby configurations.

### Performance

Buffering read and write operations helps minimize physical disk access. You can configure the SAP MaxDB buffers, including the data cache and the catalog cache for SQL metadata. Each time you start the database, you activate database monitoring functions. SAP MaxDB automatically collects and updates internal statistical information, which it uses to optimize data access and retrieval.

### Developing Your Human Capital

SAP currently offers its customers one general course on SAP MaxDB and two advanced SAP MaxDB workshops. SAP MaxDB is so accessible and

requires such minimal intervention that most users need only the three-day general course, Database Administration SAP MaxDB. It introduces application developers, IT managers, and staff members working directly with the database to SAP MaxDB and its tools for implementing appropriate backup strategies and diagnosing performance bottlenecks.

The workshop called Empowering SAP MaxDB Performance Monitoring and Optimization presents the basics of database architecture, and the SAP MaxDB Internals workshop deals with the workings of SAP MaxDB at the level of algorithms for important features of SAP MaxDB.

Certification to administer SAP software is based on a 20-day training program, including Database Administration SAP MaxDB, followed by a choice of platform-dependent administration courses.

### Why SAP MaxDB?

Your mission in a growing enterprise is to increase market share and business volume without jeopardizing the very things that make you great – your personal connections to your customers and your speed and flexibility in responding to their volatile demands. When your homegrown back-office systems can no longer keep up, it's

SAP MaxDB requires minimal administration and provides user-friendly tools to help keep training and IT staffing costs low. It gets consistently high marks for self-management and built-in backup and recovery features.

time to look into SAP applications to integrate your business processes and get full visibility over operations. And the database of choice with SAP Business All-In-One, SAP Business Suite, and SAP NetWeaver is SAP MaxDB: It's highly self-managing and proven over years of reliable service. And it helps make database management easy, bringing you lower cost of ownership.

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## Summary

The SAP® MaxDB™ database is a cost-effective, low-maintenance, high-performing database that can help your small business or midsize company operate at peak performance by integrating seamlessly with SAP or non-SAP applications. To maintain your competitive edge in a market defined by demand at the click of a mouse, SAP MaxDB offers self-management functions and technology to help reduce cost of ownership. SAP MaxDB is backed by decades of SAP expertise and offers, together with SAP applications, the advantage of comprehensive support from a single vendor. Highly scalable, SAP MaxDB grows with you as needs change.

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## Challenges

- Help legacy solutions keep pace with increasing business volume
- Simplify a complex web of application interfaces
- Avoid multiple maintenance cycles for unintegrated applications
- Relieve technicians of database restructuring and load-balancing tasks
- Make database administration easier to teach new staff members

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## Supported Business Processes and Software Functions

- Database administration – Allocate space and balance loads automatically
- Decision support – Query data quickly for thorough reporting
- Backup and recovery – Use simple wizard to restore data in case of crash
- Software development – Integrate third-party software via programming interfaces

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## Business Benefits

- Decrease maintenance downtime by folding applications into single-vendor unit
- Reduce total cost of ownership by saving on licensing and implementation costs
- Increase ROI through shortened time to value
- Improve decision support through better visibility into operations

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## For More Information

To find out more about SAP MaxDB and learn how the database can enhance your enterprise management capabilities, call your SAP representative or visit [www.sap.com](http://www.sap.com) or the SAP MaxDB home page at <http://sdn.sap.com/irj/sdn/maxdb>.

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