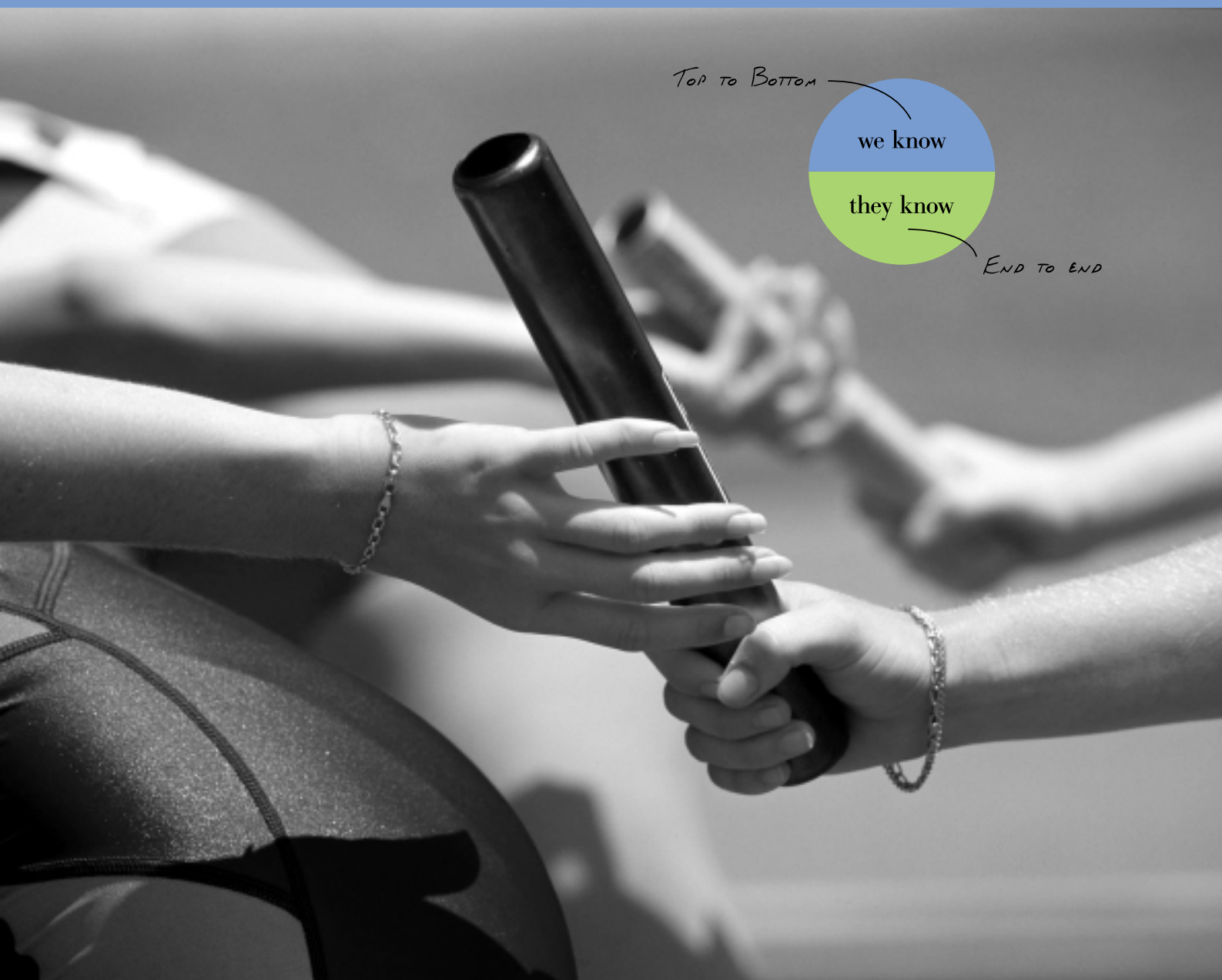


IBM DB2 INFORMATION MANAGEMENT SOFTWARE THE CHOICE FOR POWERING mySAP BUSINESS SUITE



TOP TO BOTTOM

we know

they know

END TO END

IBM®

SAP®

COMBINING THE POWER OF mySAP BUSINESS SUITE AND IBM DB2 INFORMATION MANAGEMENT SOFTWARE

In search of a solution

Today's customers are looking for a solution that enables dynamic information sharing, not only throughout the enterprise, but also across the enterprise's extended community – its customers, partners, and suppliers.

The platform must have the flexibility and scalability required to support future demands and, at the same time, provide a lower total cost of ownership (TCO) than other solutions.

SAP and IBM - a total solution

To meet these customer needs, SAP® and IBM® have teamed up to create one of the world's most powerful alliances. This alliance reflects more than 30 years of leadership based on continuous collaboration, innovation and service.

IBM and SAP bring together IBM's e-business on demand infrastructure and the industry-leading, comprehensive family of adaptive business solutions delivered by SAP to jointly manage your most critical business processes.

A key technology supporting enterprise solutions offered by the IBM and SAP alliance is the IBM DB2® Universal Database™ (DB2 UDB).

IBM, the market share leader in the worldwide relational database management system (RDBMS) market*, provides the world's leading relational database management systems and strategic development platforms for SAP. These meet the demands of businesses, from small-scale operations to the largest global enterprises.

IBM DB2:

An ideal match for mySAP™ Business Suite

Choosing the right relational database is critical to the long-term success of your implementation of SAP business solutions. Your decision is vital, and with DB2 UDB, we provide an information management system that delivers all the capabilities you need to meet your most exacting enterprise requirements.

In fact, SAP has such confidence in DB2 that it has chosen DB2 as one of its primary development environments. DB2 is rapidly becoming the SAP best-in-class database for most platforms. It is the only parallel-capable database today, certified for SAP Business Information Warehouse, satisfying the high-performance challenges of large implementations.

"The combination of DB2 Universal Database and mySAP Business Suite provides our customers with a competitive edge. This is especially significant in today's environment, where companies require a robust, scalable, available database and applications to run their mission-critical business solutions."

- Janet Perna, General Manager, IBM DB2 Information Management Software



"As the largest food and beverage company in the world, Nestlé has extensive business operations that reach literally into every corner of the globe. Nestlé's transformation is comprehensive and visionary, and a critical success factor is a reliable, scalable, world-wide e-infrastructure. IBM's leading technology and solutions, added to our global reach and our own experience in such complex transformations, will insure perfect enhancements of our business."

- Olivier Guin, Chief Information Officer, Nestlé

INDUSTRY SOLUTIONS AND mySAP BUSINESS SUITE

DB2 supports mySAP Business Suite powered by SAP NetWeaver™, ranging from mobile solutions to enterprise resource planning (ERP) offerings.

mySAP Business Suite

mySAP ERP provides an entry point into mySAP Business Suite. mySAP ERP offers the reliability, scalability and interoperability that SAP and IBM DB2 customers rely on.

mySAP Customer Relationship Management (mySAP CRM) offers a complete range of integrated solutions for operational, analytical, and collaborative management relationships, supporting all phases of the customer interaction cycle.

Other mySAP Business Suite solutions include: mySAP Supplier Relationship Management; mySAP Supply Chain Management, and mySAP Product Management.

SAP Industry Portfolios

Industry solution portfolios, such as SAP for Banking, complement the functionality of SAP cross-industry offerings and provide in-depth functionality for more than 25 industries: Aerospace & Defense; Automotive; Banking; Chemicals; Consumer Products; Engineering; Construction & Operations; Financial Service Providers; Healthcare; High Tech; Higher Education & Research; Industrial Machinery & Components; Insurance; Media; Mill Products; Mining; Oil & Gas; Pharmaceuticals; Professional Services; Public Sector; Retail; Service Providers; Telecommunications; Utilities

SAP NetWeaver

SAP NetWeaver technology platform is SAP's open integration and application platform that powers mySAP Business Suite and SAP xApps™ applications. When SAP NetWeaver was announced, IBM and SAP reiterated their mutual commitment to helping customers solve system integration issues in open development environments.

IBM DB2 Information Management Software supports all integration levels of SAP NetWeaver, starting from people over information to process integration based on SAP Web Application Server. Especially for SAP BW DB2 UDB supplies a scalable, high performance but financially viable information management solution. SAP BW is the foundation of SAP Business Intelligence (SAP BI) which is a key component of SAP NetWeaver. SAP BI makes information actionable by helping users throughout the enterprise understand, optimize and align disparate business data from heterogeneous sources. Key capabilities include data warehousing, business intelligence through online analytical processing, data mining and alerting, as well as business planning and simulation.

SAP Solutions for Small and Midsize Businesses

In today's marketplace, size doesn't always matter. In fact, you might be surprised to know that almost half of all SAP installations take place in organizations with annual revenues under U.S.\$200 million. These businesses understand the importance of aligning their technology and growth strategies. SAP solutions for small and midsize businesses (SMBs) along with the IBM DB2 UDB Express Edition, offer customers a cost-effective solution.

mySAP™ All-in-One

A suite of cost-effective, turnkey solutions prepackaged and easy to customize for businesses looking for a high degree of industry-specific functionality.

SAP Business One

Is a place to start for smaller businesses that do not require comprehensive, industry-specific applications. This straightforward, yet robust, solution is designed to cover all the basics: accounting, reporting, logistics, sales force automation, and more.

"We are now migrating our SAP system to a DB2 environment on Microsoft Windows with the aim of reducing operational management costs such as hardware maintenance fees. We expect to reduce cost's by 70 per cent or more annually."

- Takashi Sasaki, Assistant Director of the Information System Planning Division, Nissan Diesel



"IBM and SAP had both proven themselves so extensively throughout our enterprise that we never considered any other vendors for our enterprisewide ERP solution. We were eager to retain the benefits of DB2, which has always provided a robust data management platform that has scaled to accommodate our vigorous growth."

- Bernd Morlock, Computer Scientist for SAP System Platforms, Grohe Water Technology AG & Co. KG

THE DB2 ADVANTAGE

Because SAP solutions and DB2 are fully integrated, IBM and SAP provide a modular, relationship-based e-business framework. That makes it possible for users – from ten to tens of thousands – to attain unprecedented levels of connectivity, integration, and collaboration, from the front office to the back office and across all channels.

DB2 UDB information management software offers SAP customers a number of key benefits:

Pricing – DB2 provides a higher, more rapid return on investment and a truly exceptional price/performance ratio.

Performance – Due to the SAP and IBM long-term collaboration, coupled with the power of the IBM DB2 Universal Database, SAP customers can enjoy leading edge performance at a lower total cost of ownership (TCO).

Platform support – Support for all major platforms, from handheld devices to enterprise servers, as well as a wide range of operating systems.

Professional administration – SAP DBA Cockpit for DB2 UDB offers a single point of control for an easy and efficient administration of all DB2 UDB instances within a SAP ecosystem.

Lower total cost of ownership

In all major categories, including software pricing, service pricing, packaging and database administration efficiencies, DB2 UDB has been shown to have a lower TCO. In addition, the DB2 UDB highly intuitive GUIs help lower TCO by allowing database administrators to do more in less time. (See sidebar: "DB2 Provides Lower TCO.")

Enhanced performance

SAP benchmark studies prove that DB2 UDB offers superior performance for mySAP Business Suite solutions*. It is the only database with parallel mode functionality available today for SAP BW as part of SAP NetWeaver. This technology provides faster response times for complex queries such as those associated with online analytical processing (OLAP) applications handled by SAP BW.

Smart

DB2 UDB now includes SMART (Self-Managing and Resource Tuning) technology that provides self-administration, self-tuning, and self-healing properties, minimizing maintenance and administrator intervention. SMART is part of IBM's drive to make full autonomic computing a reality for all its database implementations.

Manageability

DB2 UDB reduces the complexity of data management by eliminating, simplifying, and automating many tasks traditionally associated with maintaining an enterprise class database. DB2 UDB tools include the SAP DBA Cockpit for DB2, which is fully integrated with the SAP Computing Center Management System, and IBM's SMART technology.

Security

DB2 UDB provides strong security and identity features with authentication and authorization functionality that can be integrated easily with network and operating system security services. The database is designed to provide the highest level of security possible in a relational database management system, while leveraging the security features of the hardware platforms on which it operates.

High availability

Modern businesses regard constant and immediate access to information to be vital to the enterprise. High availability is the key requirement in order to eliminate or minimize downtime.

DB2 UDB takes full advantage of the high availability strategies of the particular platform that it is running on. For example, DB2 UDB running on Windows® 2000 uses Microsoft® Cluster Server (MSCS) as the basis for defining fail-over and mutual take-over. With IBM AIX® systems, DB2 UDB uses HACMP (High Availability Cluster Multi-Processing); and on Sun Solaris™, the database integrates with Sun Solstice™ and Veritas™. DB2 UDB availability is secured by SteelEye® on Linux® and by ServiceGuard on HP-UX® platforms.

IBM Parallel Sysplex® with Data Sharing is the cluster platform for the IBM S/390® and eServer™ zSeries™ mainframe DB2 environment.

*The SAP Standard Application SD benchmark, R/3 Release 4.6C performed on September 14, 2002, by IBM in Beaverton, OR, USA was certified on Oct. 2, 2002, with the following data: 47,528 SAP SD users; 1.88s average dialog response time; 799,330 processed order line items/h; OS: AIX 5.1; RDBMS: DB2 v8.1; R/3 Release 4.6C; Database Server: IBM eServer pSeries 690, 32-processors SMP, Power4 1.3Ghz, 24 MB L2 cache, 64 GB main memory (cert #2002053)

DB2 PROVIDES LOWER TCO

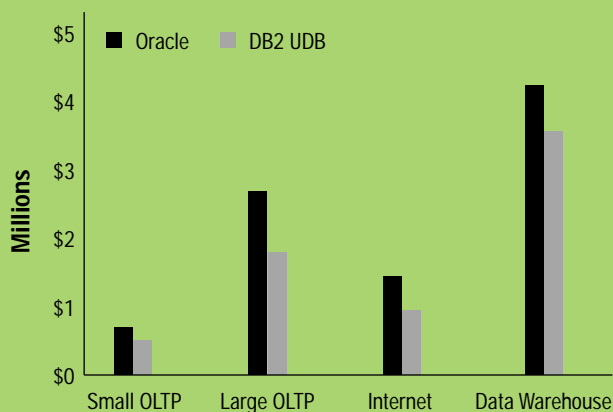
A study from D.H. Brown Associates evaluates the TCO for the two leading DBMS platforms – IBM DB2 Universal Database and Oracle Corporation's Oracle Database.

The research firm looked at four expense categories: software, service, development, and maintenance. The study concludes "Although the two products provide functionally equivalent technologies, they vary significantly in TCO.

Although the weights of these expense categories may vary by customer environments and applications, DB2's advantages suggest that it is the more economical choice over a five-year period for almost all scenarios."

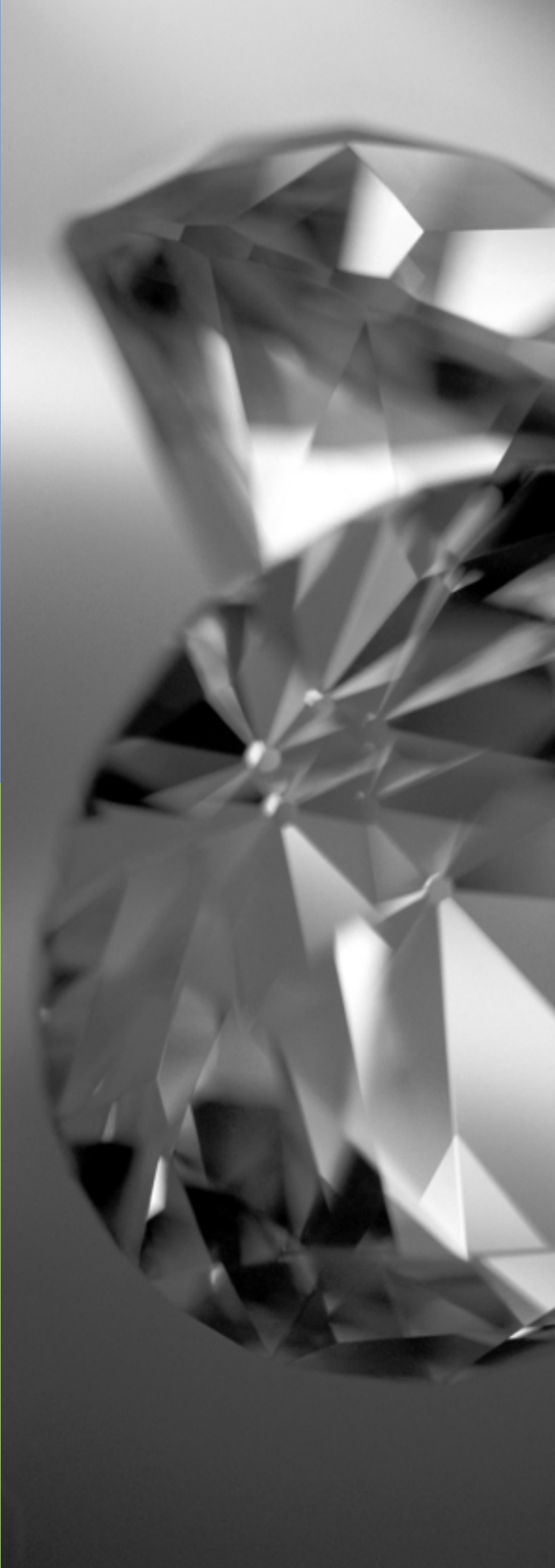
– D.H Brown Associates, Inc, IBM DB2 UDB Universal Database V8.1 vs. Oracle 9iR2. Total Cost of Ownership, November 2002.

TCO Analysis Over 5-Year-Period - D.H. Brown Associates Study
Price/Support and Build/Maintain



Scenario	Savings – \$	Savings – %
Small OLTP	191,819	31
Large OLTP	936,926	34
Internet	398,668	27
Data Warehouse	604,691	14

D.H Brown Associates, Inc, IBM DB2 UDB Universal Database V8.1 vs. Oracle 9iR2. Total Cost of Ownership, November 2002



New levels of scalability

DB2 UDB's ability to meet the changing requirements in workloads ensures that companies are able to scale their database with the growth of their business. Companies are able to meet future business needs, such as expanding global operations and strategic business processes.

Scalability is also a major requirement for SAP BW and DB2 UDB fully meets the expectations and provides additional capabilities. (See sidebar: "A Matter of Scale.")

Integrated information

DB2 UDB is optimized for key applications as e-commerce, business intelligence and information integration. Because DB2 UDB supports the latest Web services standards, like the Extensible Markup Language (XML), and Internet protocols, such for example, Simple Object Access Protocol (SOAP), the enterprise can easily share data with partners, customers, and suppliers.

The database's information integration technologies include built-in support for SOAP, XML, and Java™, providing the ability to dynamically build and deploy standards-based and innovative Web services. They can analyze data from almost any database type or data type. Now, with a single SQL query, DB2 can access and consolidate information from Web services providers without going through an application.

IBM DB2 Everyplace®

DB2 Everyplace brings the reliability, scalability, and performance of DB2 to the mobile device, enabling SAP's mobile solutions. With its small footprint, it is a perfect match for personal digital assistants (PDAs) type of devices. DB2 Everyplace provides enhanced security through data encryption and high-performance data management infrastructure, which makes it the first choice as a datastore for mobile applications.

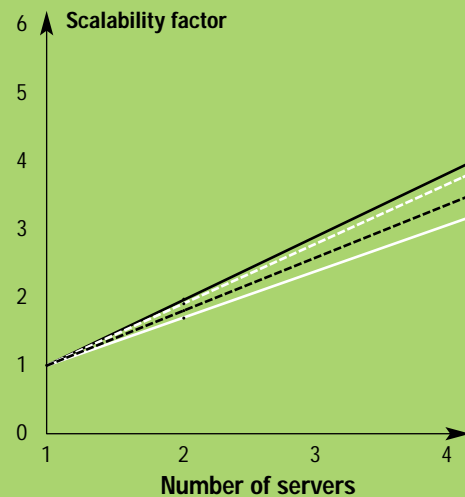
SAP solutions for mobile business applications, such as Mobile Sales for Handhelds and Direct Store Delivery exploit DB2 Everyplace in order to give customers access to key SAP data, anytime and anywhere.

A MATTER OF SCALE

This IBM study demonstrates the superior scalability of DB2 UDB used in conjunction with SAP BW, allowing customers to maintain their systems at the best price/performance ratio. Based on the good results using a single machine, an impressive performance increase was achieved when adding additional CPUs or servers. There is no need to exchange your existing server in case you need more database performance simply add CPUs or machines.

For the full story, please visit:
ibm.com/developerworks/db2/library/techarticle/0208christian/0208christian.html

IBM Study
Scalability results on the basis of different workloads



- Linear scalability
- Long-running queries
- Short-running queries
- Data load

IBM DB2 INFORMATION MANAGEMENT SOFTWARE OFFERS COMPLETE SOLUTIONS FOR SAP ENVIRONMENTS

IBM DB2 CommonStore for SAP

This integrated data archival and document management solution for SAP provides users with fast, convenient access to enterprise business content while minimizing resource consumption.

It relieves the pressure on the SAP database layer and improves overall SAP performance by routing inactive data to an external archive. Millions of SAP objects can be stored on relatively inexpensive media such as optical disks and tape libraries. Business content can then be retrieved and distributed electronically in a few seconds. This saves time and money and promotes faster, more accurate customer service, supply-chain planning and other functions that depend on real-time data availability. DB2 CommonStore for SAP is certified for the Archive Link Interface from SAP.

IBM DB2 Intelligent Miner™ for Data

The combination of SAP Business Information Warehouse and the high performance data mining technology of the IBM DB2 Intelligent Miner for Data delivers consistent, up-to-the minute data and provides all the tools needed for analyzing large amounts of aggregated information.

Working with intuitive graphical interfaces, administrators can easily handle metadata from mining analyzes, including input and output data, mining parameters, and results.



"IBM DB2 CommonStore for SAP was the only content management solution we found that integrates closely with SAP through the SAP Archive Link interface. And the ability to attach a bill of lading to an SAP Sales order makes it fast and easy to locate the required documents."

– Carmine Salierno, Chief Information Officer,
Sharp Electronics Corporation

IBM AND SAP: EXPERIENCE DELIVERS ANSWERS

IBM SAP integration and support centers

As part of the SAP and IBM alliance, the two companies have established IBM SAP integration and support centers that provide SAP and DB2 UDB customers with around the clock support. The centers are located at IBM development laboratories in San Jose, California and Toronto, Canada, and augment the development, testing and support teams at SAP's headquarters in Walldorf, Germany.

IBM SAP International Competency Center (ISICC)

Headquartered in Walldorf, Germany, this center provides customers with technical support through 25 local competency centers located across Africa, Asia-Pacific, Europe, and the Americas.

The ISICC acts as the central access point for IBM and SAP, as well as for partners and customers regarding all aspects of SAP projects. In addition to customer-oriented activities, the center is also engaged in various joint development and porting projects. The ISICC ensures leadership by delivering e-business solutions based on mySAP Business Suite and IBM's e-business framework. The center leverages experience from thousands of SAP projects to provide greater value to IBM and SAP customers.

IBM SAP Collaboration Technology Support Center

Together, IBM and SAP have formed the Collaboration Technology Support Center (CTSC). Headquartered in Walldorf and staffed with SAP and IBM professionals, the center plays a significant role in supporting IBM and SAP collaboration strategies. These strategies focus on achieving interoperability among SAP and IBM technologies, identifying new integration scenarios, defining proof of concepts, providing solution assurance and supporting open standards.

For example, the CTSC ensured that the new IBM WebSphere® Business Integration Adapter for SAP Exchange Infrastructure (SAP XI) interoperates with SAP XI JMS Adapter. SAP XI JMS Adapter, in conjunction with IBM WebSphere Business Integration Adapter for SAP XI, enables a business application running on a SAP system to work with a business application that runs on IBM WebSphere, applying Java™ Messaging Support (JMS) using IBM WebSphere MQ.

IBM Global Financing

IBM Global Financing is one of the world's largest information technology financiers conducting business in more than 40 countries. IBM finances hardware, software and services with a full range of flexible, low-rate offerings, allowing its customers to free up capital for other investments.

Service and support

With more than 8,500 highly focused professionals, IBM Global Services is ready to assist your company in streamlining its implementation of SAP solutions. Our consultants, supported by a network of IBM and SAP global solution centers, provide a reservoir of extensive industry knowledge and a proven approach to helping companies and institutions resolve complex business challenges. With experience in strategy consulting; application innovation; business transformation outsourcing; systems design and implementation; and operation and outsourcing services, IBM Business Consulting Services offerings correspond with SAP's emerging initiatives and technologies.

Education

Knowledge is the foundation of success in today's competitive marketplace.

IBM DB2 education for SAP is designed specifically to enhance your knowledge in DB2 administration for mySAP Business Suite. Furthermore, special classes are available to teach deep insight knowledge how to benefit most from the parallel mode functionality of DB2 UDB in an SAP BW implementation. SAP and IBM have added those training courses to the worldwide SAP curriculum, which provides a broad education offering - from basics up to expert knowledge.

Consultants from business partners, SAP and IBM as well as customers receive information that is geared to their needs, and builds the foundation for successful implementations. IBM education offerings for DB2 Intelligent Miner and DB2 CommonStore for SAP are complementing the training offering for IBM DB2 and SAP.

"The strategic alliance of IBM and SAP has brought together two world-class companies – to the benefit of our common clients who will now constantly have industry-specific end-to-end solutions at their disposal. The profound experience of IBM in relation to e-infrastructure and its precise knowledge of industry requirements are ideally suited to mySAP Business Suite.

The IBM and SAP alliance – with beginnings that go back 30 years – has thus far carried out more than 30,000 installations worldwide. Moreover, with around 30,000 users, IBM is one of SAP's largest clients - a clear sign that, at IBM, they use what they sell."

- Volker Loehr,
Vice President, Global
IBM SAP Alliance, IBM

- Rainer Hofmann,
Global Partner Director IBM,
SAP



FIND OUT MORE

For more information about IBM DB2 Information Management solutions for SAP, contact your IBM sales representative, or visit:

IBM and SAP Alliance:
ibm-sap.com

IBM DB2 Information Management and SAP:
ibm.com/software/data/partners/ae1partners/sap

IBM DB2 Information Management Software:
ibm.com/software/data



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