

## Migration of SAP® solutions to IBM DB2

*Cost optimization made easy*

### Good reasons for a migration to DB2

**Now is the right time to reduce the costs for your IT infrastructure and make way for new, innovative solutions.**

#### Now is the time to switch to DB2

A solid, scalable and low-cost basis for your SAP environment – whether you use the SAP® ERP application, SAP Business Suite applications or the SAP NetWeaver® technology platform.. DB2 is always a good choice! The fact that the migration from Oracle to DB2 works simply and is standardized is another reason to decide for DB2 immediately:

***Profit from the current IBM migration offers .***

#### Low complexity for your IT administration

With the tight integration between the database solution DB2 and the SAP applications, you ensure other advantages: The DB2 database is installed in a time-saving manner within the SAP software installation process and – at the push of a button – given an optimized configuration for the SAP software. Autonomic computing functions automate administration tasks and reduce the workload of the database administrator. **Your advantage: Lower administration overhead, low complexity, high productivity.**

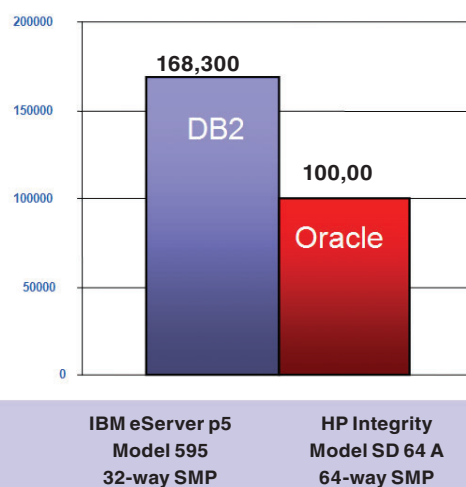
#### Shrink the size of your database

DB2 brings to the table a significant advancement with its new compression feature. This feature allows databases to be compressed typically between 30 and 55 % (numbers based on customer tests and installations) thus reducing storage costs and improving performance in many cases. In addition, backup images are now half the size and therefore backup/restore operations now finish in almost half the time. **Your advantage: save space, time and money.**

#### Profit from a strong partnership

SAP and IBM have been working together closely for many years and have a joint development roadmap for the next couple of years. **Your advantages: Simplified configuration, more performance, and higher availability for your SAP systems.**

**SAP Sales & Distribution, SAP R/3 Release 4.7, 3-Tier Benchmark Best Results for DB2 and Oracle<sup>1</sup>**



#### Increase in SAP software performance

Since May 11, 2005 DB2 has the leading SAP SD 3-Tier benchmark. A total of 168,300 SD users was achieved 68% more than the best comparable result with Oracle!<sup>1</sup>

**Your advantage: Outstanding performance, fast processes, and high availability.**

#### Low overall costs

Low administration overhead and low license fees mean that DB2 involves extremely favorable overall costs. Customers who migrated their SAP systems from Oracle to DB2 reported cost savings from 25% to up to 50%. Agrium<sup>2</sup> saved among others around 50% on maintenance costs by migrating to DB2; rku.it<sup>3</sup> concluded that DB2 would cost 40% less over five years, including licensing, maintenance and migration; and Austrian Railways<sup>4</sup> mentioned a 25% reduction in total cost of ownership with DB2, compared to Oracle. When switching from Oracle to DB2, attractive migration offers are available to you (see case study on page 3). The bottom line is: **DB2 saves money. Now is the time to switch from Oracle to DB2.**

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## Secured future with DB2

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DB2 9.5 represents a major step in the seamless integration with SAP software and is available since December 2007 for SAP solutions. With DB2, IBM and SAP use the same maintenance model 5-1-2. Each version of DB2 that is supplied with an SAP application is supported throughout the entire maintenance period for the SAP application – there are no mandatory upgrades. It represents a significant intensification of the cooperation that has already existed for many years.

DB2 Information Management is a major line of business for IBM, and has a comprehensive portfolio. IBM offers integrated middleware solutions, automatically providing interfaces to other IBM solutions. For example, DB2 provides a free backup/restore interface to the Tivoli Storage Manager.

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## Migration – a proven process

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Within the framework of the migration process, free SAP tools are deployed in a proven process specified by SAP. Coordinated with SAP, IBM supplements the migration process to include a number of tools to accelerate the time required for migration.

This makes it possible to carry out even large-scale migrations with a downtime of one weekend. Alongside the suitable tools, IBM has acquired a wealth of experience out of successful migration projects.

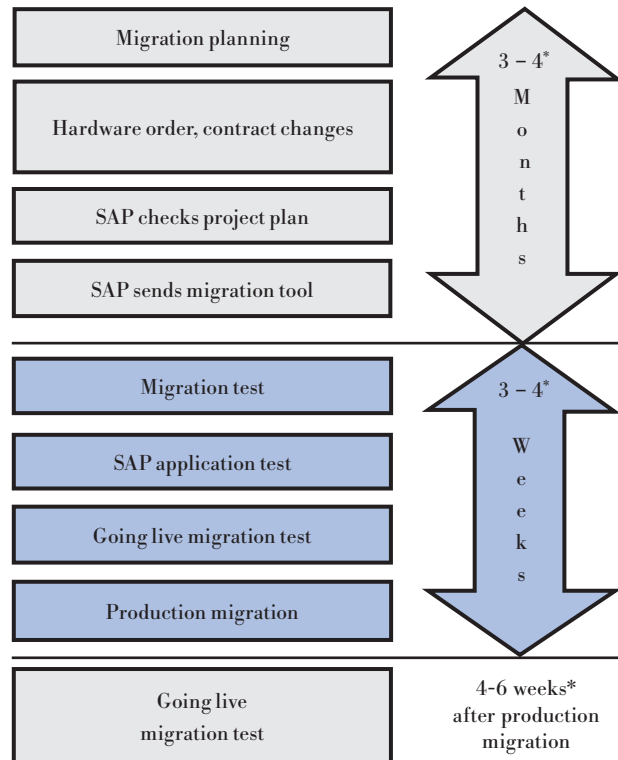
Both – tools and experience – support you in minimizing the risks and the costs of migration.

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## The right time to migrate

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Nowadays, migrations are a standard process, whereby the duration and scope depend very heavily on the customer environment. An ideal point in time to change the information base is an SAP application release upgrade or a Unicode conversion. The additional overhead for a simultaneous change of the database is very low. System consolidations, hardware or operating system changes are also suitable for a database migration: A switch to DB2 can be performed with low additional overhead.



\*) Values based on experience from IBM customer projects

On the business side, SAP software license extensions, upgrade to SAP ERP, or the renewal of a database license are favorable points in time for a switch of the existing database software. In general terms, any point in time that involves a technical or business change to the database can be viewed as favorable. Contact us and we will determine the best point in time for you at low cost.

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## Assessment - free of charge

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Experienced consultants of IBM Software Services for DB2 Information Management check your existing SAP software environment with regard to the planned database migration. The main purpose of the analysis is to illustrate the possible individual cost savings and to provide a clear picture about the migration effort. In addition, you are shown other possibilities to optimize your SAP software environment, where applicable. From a technical perspective, this allows us to enable the smooth and rapid migration of Oracle, SQL Server, Informix and the SAP MaxDB™ to DB2. The result of the analysis serves as the basis for planning the other activities of the migration process.

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## Our offer

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Our offer is formed by attractive DB2 license and maintenance terms. These are individually tailored to your needs on the basis of the preceding analysis of your SAP software environment. We also provide special low-cost migration services within the framework of this offer. This is made possible by the exact knowledge of your SAP environment and the extensive experience of our migration experts based on numerous highly varied migration projects. In addition, the migration time is minimized by means of the proven IBM DB2 migration tools.

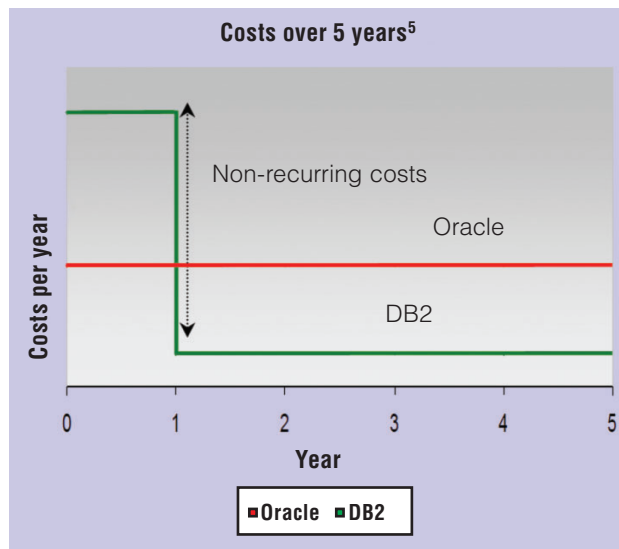
To accompany the migration, there is a course contingent for customers who are planning or have already decided to make the change. The aim of the training courses is to ensure the smoothest possible operation of the migrated systems.

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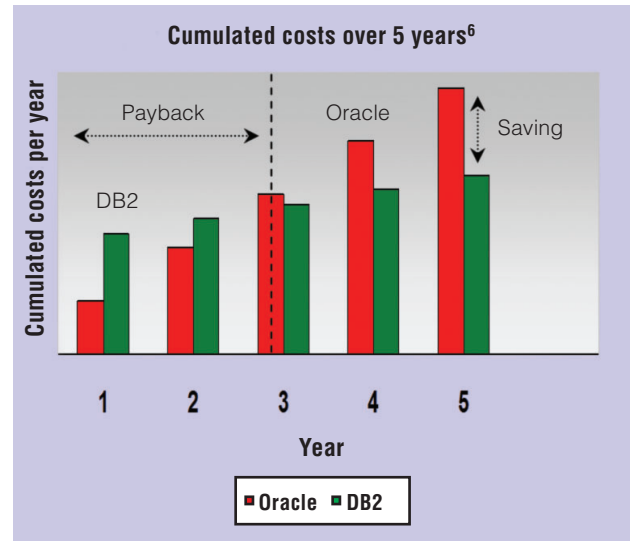
## Case study

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The following diagram shows the representative costs over time for the database switch of a customer over a period of 5 years. After non-recurring costs in the course of the migration, the costs have dropped considerably as of the 2nd year.



Even after a payback period of less than 3 years, there was a significant cost benefit, which continued to grow in years 4 and 5.



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## Some customer examples

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Thousands of companies worldwide from a wide variety of sectors and of many sizes use DB2 for SAP applications. An excerpt from the list of reference customers include:

### Austrian Railways

- SAP software migration from Oracle to DB2/AIX

### Central Michigan University

- SAP software migration from MS SQL Server to DB2/AIX

### Fresenius

- SAP software migration from Informix to DB2/Solaris

### Kone

- SAP software migration from Informix to DB2/HP-UX

### Mahle

- SAP software migration from Oracle to DB2/AIX

### SAP IT (SAP AG)

- SAP software migration from Oracle to DB2/HP-UX

### Teck Cominco

- SAP software migration from Oracle to DB2/Linux

### Tellabs

- SAP software migration from Informix/Oracle to DB2/Sun

### University of Toronto

- SAP software migration from Oracle to DB2/AIX

These and many more customer reports can be viewed at:

[ibm.com/solutions/sap](http://ibm.com/solutions/sap)

Please use the search term: DB2 and SAP under the heading "Case studies".

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## The opinions of our customers

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*“We needed a database that represented the future and DB2 9 is the future. DB2 9 compression capabilities are key in helping reduce the size of our databases-in one case by up to 83 percent. This ultimately helps us minimize storage costs and increase performance.”*

*– Jean Holley, CIO, Tellabs, Inc.*

*„This project was a great example of the benefits of combining Unicode conversion and database migration, because the data cleansing and archiving processes helped us reduce the size of the database by more than 22 percent.”*

*– Peter Boegler, Solution Architect, SAP IT*

### IBM Software Group

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## Further information

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### SAP and DB2 Information Management Software

[ibm.com/software/data/db2/sap/](http://ibm.com/software/data/db2/sap/)

### Alliance between IBM and SAP

[ibm-sap.com](http://ibm-sap.com)

- <sup>1)</sup> The benchmark was performed by IBM in Beaverton, OR, USA on May 11, 2005 and May 13, 2005, certified with the following data: 168,300 SAP SD users; 1.95 seconds average response time; 16,896,670 processed order line items/hour; OS: AIX 5.3; RDBMS: DB2 UDB 8.2; R/3 Release 4.70; database server: IBM eServer p5 Model 595, 32-way SMP, POWER5, 1.9 GHz, 32 KB(D) + 64 KB(I) L1 cache per processor, 1,92 MB L2 cache and 36 MB L3 cache per 2 processors, 256 GB main memory (Cert #2005021). The Oracle SAP SD Standard R/3 Enterprise 4.70 Application Benchmark was performed by HP in Cupertino, CA, USA on October 14, 2004 and on November 8, 2004, certified with the following data: 100,000 SAP SD users; 1.75 seconds average response time; 10,210,330 processed order line items/hour; OS: HP-UX 11i; RDBMS: Oracle 10g; R/3 Release: 4.70; database server: HP Integrity Model SD64A, 64-way SMP, Intel® Itanium 2, 1.6 GHz, 32 KB L1 cache, 256 KB L2 cache, 9 MB L3 cache, 256 GB main memory (Cert #2004068). More information on SAP benchmarks at: [www.sap.com/benchmark](http://www.sap.com/benchmark)
- <sup>2)</sup> See case study: „Agrium finds the formula for growth with IBM System p“, GK12-4306-00 (10/07)
- <sup>3)</sup> See case study: „rku.it optimizes business performance for SAP with IBM DB2“, GK12-4083-00 (12-05)
- <sup>4)</sup> See case study: „Austrian Railways rolls out lower TCO with IBM Information On Demand“, GC38-0732-00
- <sup>5)</sup> The costs for DB2 in the first year are composed of non-recurring license costs and project costs for the migration. The costs in subsequent years are the maintenance fees for DB2. In the case of the costs for Oracle, no license costs were applied (as it is assumed that these have already been paid in the past), rather only continuous maintenance fees.
- <sup>6)</sup> The diagram accumulates the costs over 5 years. In the case of Oracle, these are the maintenance fees for this period of time. In the case of DB2, these are license fees and project costs for the migration in the first year and DB2 maintenance fees in the subsequent years.

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