

# Fresenius AG



## Maintaining a Competitive Edge with Sun, SAP, and IBM DB2 Information Management Software



### DB2. Information Management Software

#### Vertical Market

- Pharmaceuticals

#### Key Challenges

- Customers require 24-hour product delivery. To remain competitive, ordering processes must be continually improved to meet demand and speed time to market.
- Database software must perform well on Sun's architecture and support SAP solutions.

#### Solution

- Informix migration to IBM DB2 Universal Database, Version 8

#### Partners

- IBM and SAP

#### Why Sun on IBM DB2 and SAP R/3

- Optimum performance results, excellent teaming, and commitment to Proof of Concept testing

#### Business Results

- Continually increasing productivity due to Sun's ability to scale and the IBM DB2 and SAP solution performance results on the Sun platform
- Increase system performance without increasing Sun server or storage footprint
- Proof of Concept successfully completed

*"Fresenius Netcare is fully committed to Sun Microsystems for its data center requirements. The Sun™ architecture and the Solaris™ Operating System provide the optimum performance environment for our needs. With Sun's products, we get the scalability, reliability, and high availability we need to grow our business."*

*– Holger Teutsch, Vice President of Operations, Fresenius Netcare*

### Sun Architecture Provides the Foundation for Database Migration

Fresenius and Sun share a long history that is representative of Sun's commitment to consistently delivering quality products and services to its customers. When it came time to replace the existing database software, Fresenius looked for a software partner who would deliver that same commitment as well as excellent performance results on Sun's technology.

"We wanted a database product that worked as well on the Sun platform as the existing Informix and SAP® solutions," said Mr. Teutsch. "Our database migration decision was based on selecting the software technology that provided the best performance results running with SAP solutions on the Sun platform. The IBM DB2® Universal Database™ demonstrated excellent results and won the deal."

Mr. Teutsch and the Fresenius' team performed an extensive six-month evaluation of multiple database software products. In addition to the product's ability to run on the Sun platform, their decision criteria included:

- Integration capabilities with existing SAP R/3® solution
- Experience with databases larger than 1 Terabyte
- Minimal impact on system administration's support, skills, and training levels
- Proven migration experience from Informix database product
- High availability support, ensuring limited system downtime
- Consulting Services experienced with Sun technology and SAP solutions
- Lower total cost of ownership by decreasing license and maintenance fees

### IBM and Sun Team to Push the Envelope on IBM DB2

IBM DB2 and Sun dedicated equipment and consulting services to lead a four-week Proof of Concept (POC) effort. The POC allowed Fresenius to test the database before investing in IBM DB2. During the POC testing, the two teams worked closely with Mr. Teutsch's team to fully test the solution's capabilities. "The POC was a significant financial investment for both companies," said Mr. Teutsch, Vice President of Operations, Fresenius Netcare.

“In addition to the joint investment in consulting services, Sun provided a Sun Fire™ 6800 Server, Sun StorEdge™ 9980 System (1.1 Terabyte disk), and T3 networks to fully replicate our environment. IBM provided the IBM DB2 solution suite and ran each benchmark using Fresenius data.”

“Fresenius’ order processing procedures are extremely time sensitive. Our final decision was based on the IBM DB2 product’s ability to achieve each of the established metrics without error and to successfully complete database replication during backup and restore activities.” (See Table 1.)

**Maintaining a Competitive Advantage**

An important competitive differentiator for many of Fresenius’ products is speed to market and order accuracy. The company’s database system must process 20,000 order lines in a 24-hour period. Down time or delays during the migration process could have a significant impact on the company’s ability to process orders effectively.

“The IBM DB2 product suite ran perfectly on Sun’s Solaris Operating System,” said Mr. Teutsch. “During the four-week POC testing, the two companies worked together seamlessly with the Fresenius team. We expect a smooth migration process with minimal to no impact on ordering processing.”

“We fully expect to continue increasing productivity using the IBM DB2 software database with our classic SAP R/3 solution—due to the technology advancements in the software and Sun’s product performance.”

The migration process will be completed by May 2004.

**About Fresenius**

Fresenius AG is a global health care company based in Bad Homburg, Germany. The company finished 2002 with Euro 7.5 billion in revenue. It provides products and services for dialysis, hospitals and the medical care of patients at home.

The subsidiary, Fresenius Medical Care cares for more than 117,000 patients with chronic kidney failures in its own clinics (dialysis treatment and products). Fresenius AG has over 65,000 employees worldwide.

Fresenius Netcare is the internal IT provider of Fresenius.

*Sun Technology—Data Center*

- Sun Enterprise™ Servers, from Workgroup to Sun Fire 6800
- Sun StorEdge 9980 Systems
- Sun Solaris Operating System

*Sun Services*

- SunSpectrum<sup>SM</sup> Gold+ Support
- Consulting Services—Proof of Concept Support

**Table 1. IBM DB2 POC Performance Metrics**

Function	IBM DB2 UDB	Informix
Backup (Offline)	5:04 hours	~ 7:00 hours
Restore	6:16 hours	~ 10:00 hours
ZWISO10	0:03 hours	0:04 hours
SD Zoll ++	32:40 hours	~55:00 hours
RFKKBUOO	11:48 hours	20:17 hours
SAPF190	3:31 hours	14:01 hours
ZAKOPL10	0:08 hours	0:14 hours
Archiving	3:58 hours	8:18 hours
Archiving	8:38 hours	16:14 hours
Archiving	6:53 hours	12:46 hours

Get the details.

For more information on Fresenius visit [www.fresenius-ag.com](http://www.fresenius-ag.com). For more information on SAP solutions on Sun visit [sun.com/sap](http://sun.com/sap). For more information on IBM DB2 solutions on Sun visit [sun.com/db2](http://sun.com/db2).

