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Additional Information Sources

- More information about the iSeries 400 can be found on the Internet at:
ibm.com/servers/eserver/iseries/
- More information about mySAP.com solutions can be found on the Internet at:
sap.com
- More information about the IBM and SAP Alliance can be found on the Internet at:
developer.ibm.com/erp/sap/

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e-Collaboration with SAP and the IBM @server iSeries 400.



What does a changing world mean to the world of information technology?

What role can the proven enterprise strengths of mySAP.com play in this new world?

How can the mature strengths of the iSeries 400 help make this transition to e-business easier?

No one can deny it. e-business is significantly altering traditional demand dynamics in the market. This e-business impact is changing as businesses move into later waves of e-business implementation and, as a result, companies are reinventing themselves to take advantage of these changes.

From Core Business to Extreme Business

e-business is all about speed: speeding up the supply chain so that you can get to market faster for a quicker return on investment. But responding to customer needs requires much more than just a fast Web server.

It requires finding ways to extend your core business applications to the Web in order to connect your business to other businesses, customers, suppliers and employees.

- It requires a system designed for security
- It requires a complete integrated system, not only a set of tools
- It requires a system that allows easy, cost effective deployment
- It requires an open system that easily interfaces to what you already have.

That's why an IBM @server iSeries 400 is ideal in an e-business environment. Not only does the iSeries 400 server supply the power, reliability and state-of-the-art security to handle your mission-critical applications, it provides complete integration, easy maintainability for low cost deployment, and proven, open

interfaces to existing systems. With the iSeries 400, you can extend all aspects of your business to the Web.

Expectations – Business Driven

Exploitation of e-business will require organizations to transform their business models.

Virtually all major companies have begun the transformation to e-business. Studies indicate that companies have passed rapidly through the operational improvement phase of e-business and are working on the true transformation associated with business reinvention and commerce realignment within the industry.

The business models of some new companies are already aligned to take advantage of this change. But traditional companies making the leap from bricks and mortar to the Internet will feel a larger transformation burden. However, the stability and existing infrastructure of traditional companies may allow them to have the most potential to realize the promise of e-business.

For more than two years, IBM has been encouraging organizations around the world to adopt "e-business". e-business defines a marketplace where businesses capitalize on Internet technologies and network computing to transform their internal processes, strengthen their relationships with customers, suppliers and business partners, buy and sell goods and services, and leverage information for competitive advantage. In short, e-businesses combine networks with knowledge to compete smarter, faster and more successfully.

*mySAP.com solutions
powered by the IBM @server iSeries 400*



For example, an employee buying from a Web site creates a purchase order in his company's purchasing system and a corresponding sales order in a vendor's order-taking system at the same moment – in one single step. Or two companies jointly use software for collaborative forecasting which is provided as a service through an electronic marketplace, but yet integrated with the companies' back-end systems. In each case, c-business enhances service while offering new business opportunities, eliminating costs, and providing real-time satisfaction for all concerned.

mySAP.com

The Internet is redefining the world of business – and nowadays customers are in the lead, demanding the best service, lowest price and shortest time-to-benefit. Success in this new world comes from participating in multi-enterprise networks that deliver maximum value to each participant. These communities must be flexible and open so that they can dynamically adapt to meet changing customer needs without wasting time on point-to-point interfacing.

mySAP.com is the open, collaborative Internet solution for this new world, ready today to unleash the ultimate power of the Internet: people in different enterprises and their customers working together as one.

SAP business solutions have enabled integration within thousands of single organizations: now mySAP.com delivers collaboration to entire markets by spanning enterprise boundaries. This new way of doing business is called collaborative business (c-business).

mySAP.com delivers these benefits through four key elements:

- mySAP.com Marketplaces are business hubs on the Internet that provide a collaboration infrastructure for c-business
- mySAP.com Workplaces are enterprise portals for empowering all the employees, customers, suppliers and partners of a company
- mySAP.com Business Scenarios combine intra- and inter-enterprise services, information and application components. These form collaborative business scenarios in the areas of e-Commerce, Customer Relationship Management, Supply Chain Management, Business Intelligence, and Enterprise Resource Management
- mySAP.com Application Hosting reduces the risk, time and investment needed to participate in c-business.

The hallmarks of integration, reliability and ease of use on the iSeries 400 have combined with mySAP.com solutions to meet the needs of the global marketplace. The flexible 64-bit architecture of the iSeries 400 provides scalability, further ensuring success in the mySAP.com market. iSeries 400 is recognized as a leader in the small and midsize enterprise marketplace, making it an ideal platform for mySAP.com with over 1,000 customer installations running on several thousand iSeries 400 systems worldwide. Organizations of all sizes have chosen to build their business on iSeries 400.

**From the beginning,
iSeries 400 has been
designed to deliver
real business value by
delivering exceptional
power along with
reliability and security.**

"SAP views IBM @server iSeries 400 as a strategic choice. The iSeries 400 represented from the beginning a real ease of use environment with proven reliability and availability. A worldwide joint IBM and SAP development team is focussed on the deployment of this solution, and enables us to provide an industry-leading product."

**Karl-Heinz Hess,
VP Development SAP and member
of the extended SAP board**

mySAP.com solutions powered by the IBM @server iSeries 400

The value of the iSeries 400 for mySAP.com solutions

Studies show that the majority of energy in a mySAP.com decision typically centers on the applications, with little or no consideration given to the server platform on which the application resides.

However, once mySAP.com has been implemented, the focus shifts towards the day to day requirements where performance, scalability, reliability and ease of management become critical – and now the server platform matters tremendously.

Without a powerful, robust, reliable, available, scalable and flexible server, the power of an outstanding mySAP.com package becomes crippled.

iSeries 400 server brings an industry leading value proposition that, when combined with mySAP.com solutions, gives you the foundation for success.

**The end result:
Unsurpassed customer
loyalty to the idea and
reality of the iSeries 400.**

Ease of Deployment

The faster mySAP.com is implemented, the faster senior management will see payback from the new mySAP.com offerings – a perfect match for today's fast-to-deploy, easy-to-implement iSeries 400 and mySAP.com solutions.

Integration, Security, Reliability

The iSeries 400 server is an integrated platform that combines hardware, operating system (OS/400), database management, security and communications capabilities in one tightly coupled package.

DB2 Universal Database for iSeries is built into the iSeries 400 operating system (OS/400), along with powerful system management tools (including backup & recovery), C-2 security, and network management. All of these elements come pre-loaded and pre-tested.

This has a real-world impact on reliability – AS/400 and iSeries 400 servers have been measured to have greater than 99.9% reliability. IBM customer surveys have shown AS/400 and iSeries 400 servers availability to be as high as 99.97%!

The value of integration

mySAP.com integrates the company business processes across partners, customers and suppliers. The iSeries 400 integrates the operating system, database, network and management of the underlying infrastructure. Combining the two, you get an integrated solution within an integrated platform.

Low Cost of Ownership

iSeries 400 is the lower cost platform over the life of your mySAP.com implementation due to its low administrative costs. Unlike many other systems, you typically do not need to have a costly, dedicated database administrator to manage the data on the system. Many of the network and systems management tasks are built into the operating system. And the great reliability of the iSeries 400 results in less money taken out of your business because of system down time.

IBM @server iSeries 400 Model 270 – giving small to medium-size businesses twice the power at one third the cost of the previous entry level AS/400 server model.



IBM @server iSeries 400 Technology

The new release of OS/400 Version 4 Release 5 (V4R5) provides robust support for today's emerging workloads, with many new and enhanced features. That's why so many businesses rely on iSeries 400 to help their transition to e-business. OS/400 V4R5 announcement highlights include:

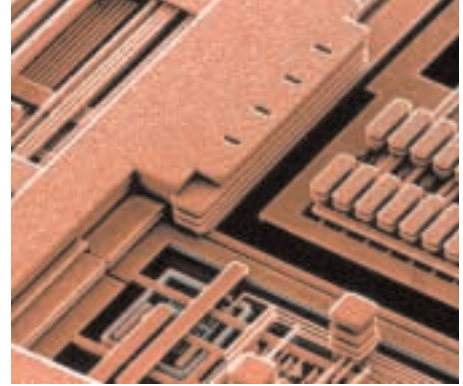
- Industry-leading TPC-C and NotesBench scalability on the new high-end IBM @server iSeries Model 840 server which offers 24-way symmetrical multi-processing on 6th generation 64-bit PowerPC performance
- IBM's breakthrough copper and Silicon-On-Insulator (SOI) technology
- High-speed Token Ring and 1 GB Ethernet adapters for improved network performance
- New Hot Plug PCI and High Speed Link (HSL) bus technologies delivering improved reliability and throughput performance
- Model 270 tuned for CPU-intensive processing, including web applications, Java and data mart
- Java and XML are fully supported.

Flex your Application Options

Keeping all your options open under extreme business conditions means dealing with a paradox: how do you create a computing environment that supports the way you work, when the way you work keeps changing? You want to be able to run any application you need, no matter what kind of server it runs on; but you don't want to be tied down managing dozens of different servers. That's why iSeries 400 can provide such a distinct advantage. Advanced design makes it the most flexible server on the market today, a server capable of running multiple application environments in a single box. Whatever you need to do, AS/400e lets you do it on one easy-to-manage server.

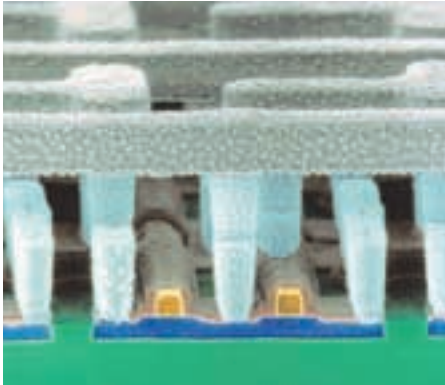
The IBM @server iSeries 400

- runs existing iSeries 400 applications
- runs ported UNIX applications
- runs Web applications via HTML, Java, WebSphere or Domino
- interoperates easily with Linux, UNIX, NT and Windows 2000 in an open environment
- integrates NT and Windows 2000 management tasks



After nearly 15 years of research, IBM scientists announced a new advance in semiconductor process that entails replacing aluminum with copper. Copper has less "resistance" than aluminum, and therefore transmits electrical signals faster. However, it doesn't mix as well with silicon, the base material of semiconductor chips. The IBM researchers found a way to put a microscopic barrier between the copper and silicon in a way that actually reduced the number of steps needed to complete a chip. With this development, IBM is able to produce extremely intricate circuit designs with copper at widths of 0.20 microns—down from the current industry standard of 0.25 microns.

SAP has successfully completed their certification tests for OS/400 V4R5 with SAP kernel releases 4.6C, 4.5B, 4.0B and 3.1I.



Without an insulator, power is lost. By adding an insulator on the silicon, the transmission of power through the transistor is more efficient. IBM's unique SOI process protects the millions of tiny transistors on a chip with a "blanket" of insulation, reducing harmful electrical effects that drain energy and hinder performance. IBM engineers have manufactured SOI chips that improve performance by up to 35 percent – translating into faster computers and communications gear.

IBM exploits these industry leading chip fabrication technologies in the new iSeries 400.

The strength of the iSeries 400 lies not just in the chip technology, but in the balanced system approach used in the design of the total system.

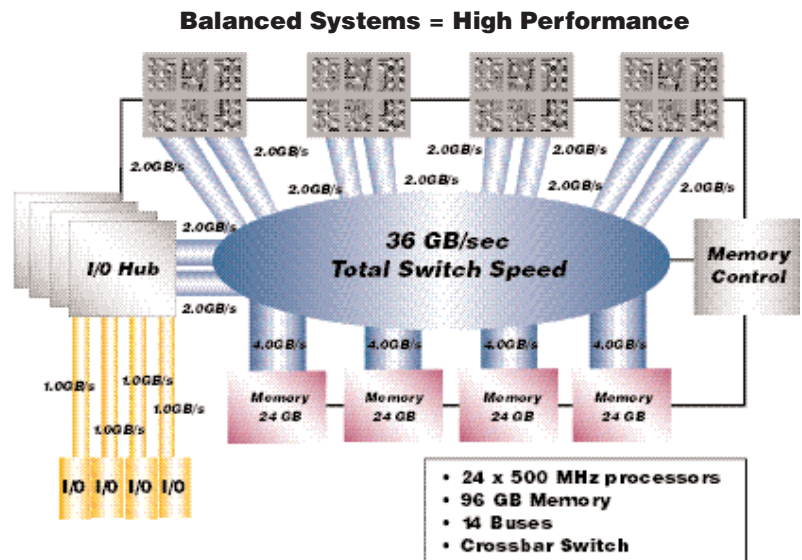
All the components of the iSeries 400 work together to provide a balanced system.

The crossbar switch moves information to and from memory, processors, cache and the I/O subsystem at a combined speed of 36 Gigabytes per second. The Input and Output subsystems use High Speed Link, or HSL, to transfer data to disk and tape devices. At one Gigabyte per second, HSL is significantly faster than the 40 Megabytes per second transfer rates associated with SCSI, and ten times faster than Fiber Channel.

The iSeries 400 Architecture is balanced to provide high performance. This architecture is part of the reason why a Model 840 can outperform other servers.

A single server and mySAP.com

Running multiple workloads on one iSeries 400 server exploits the architecture of OS/400, effectively using features such as subsystems, memory pool allocations and separate disk storage areas for different applications.



The capability of Logical Partitions (LPAR) offers the ability to use best business practices for IS management (for example, isolation of the production environment) and the cost and simplicity benefits of a single system.

As an additional advantage, not only Test and Development for SAP R/3 but mySAP.com solutions such as SAP Business Information Warehouse could be run in separate iSeries 400 partitions without causing conflicts with the mySAP.com production system.

The iSeries 400 runs on industry-leading Copper and Silicon-On-Insulator (SOI) processor technology. This is the 6th generation of iSeries 400 PowerPC 64-Bit RISC processors.

A balanced system, the latest chip technology, and a highly effective operating system architecture has real results. The iSeries 400 has the highest single server TPC-C benchmark of 152,346.25 tpmC (July 26, 2000). The largest iSeries 400 offers 3.8 times the performance for mySAP.com solutions of the previous high-end IBM AS/400 servers, and the smallest iSeries 400 offers twice the performance for customers with 50 active users or less at a lower price than previous models.

IBM @server iSeries 400 Successes – What our customers (and SAP) say



"We had this NT system in here for about three months, using Oracle database – a lot of administration, extend table spaces, reset this, redo logs filling up – we don't have to worry about that on the IBM AS/400."

Joel Cox,
Hollister Incorporated

"The IBM AS/400 was a tremendous help in our SAP implementation. The AS/400 hardware and operating system were solid and most importantly the DB2/400 was so easy to implement that it made our job very easy – we did not have to worry about any database issues such as allocations, referential integrity, fragmentation, etc. and we could concentrate our implementation efforts on the business processes. I came from a mainframe environment where we had many system programmers and database administrators caring for the infrastructure. Now that I have used the AS/400, I wonder why I didn't use the AS/400 before to reduce the overall operating costs and complexity."

Louis Hui,
JVC Canada

"The great advantage of the IBM AS/400 is the parallel operation of the database and application servers. This simplifies the administration and makes a separate application server for SAP R/3 superfluous. The numerous functions and the loss-free performance of the hardware and software prove that the decision in favor of IBM AS/400 and SAP R/3 was correct."

Gerhard Walter,
Danfoss InterServices GmbH

"The continuously improving system availability and performance of our centrally controlled IBM AS/400 systems help us to fulfill this service promise. The proper integration of machines, operating systems, databases and applications on the IBM AS/400 gives us considerable relief from administration tasks."

Wolfgang Hildebrandt,
Manager of the Competence
Center SAP and IT Manager,
Europe Wella AG

"mySAP.com solutions will run on the latest iSeries 400 processor line at general availability. iSeries 400 is one of SAP's strategic platform lines for SAP R/3, with more than 900 customers worldwide running mySAP.com solutions on the iSeries 400. SAP expects continued growth in the future and therefore continues its investment in this platform by dedicating substantial resources to porting, marketing and supporting SAP R/3 on IBM @server iSeries 400."

Stephan Rossius,
SAP's Global Partner Director
IBM

Asian Language Support using a Unicode Database

In the Internet Age, Unicode is *the* choice for language representation. SAP's intent was to be able to deliver its Asian Language support on iSeries 400, and Unicode was clearly the right strategic choice for the database. The Asian Language solution on the iSeries 400 combines the proven SAP Asian language support with the advanced Unicode Database on the iSeries 400.

This mySAP.com solution for iSeries introduces for the first time SAP solutions utilizing the IBM DB2 Universal Database on iSeries 400 advanced Unicode database technology. Unicode is recognized as the leading character set encoding technology for enabling globalization of IT applications. This new product broadens the offering of SAP solutions on iSeries 400 to include a product for companies requiring Asian languages.

The new version of mySAP.com solution on iSeries 400 will be available in 2001. It will initially support one Asian language plus English in a single SAP solution. Asian languages planned for initial support are Japanese, Korean, Traditional Chinese, and Simplified Chinese.

"Pioneering the use of Unicode for DBCS (Double Byte Character Set) Asian Language support on iSeries 400 shows the commitment by SAP to iSeries 400 as a strategic platform for mySAP.com. The strong relationship between IBM and SAP allowed us to break new ground with this innovative approach to encoding languages."

Tom Jarosh, General Manager, Midmarket Server Group

It's not just about servers – extending the mySAP.com solution with the iSeries 400 and IBM

IBM provides a complete range of services to implement SAP, support your iSeries 400 and add value to your continued SAP implementation tasks. IBM has successfully completed SAP implementations around the world, and has thousands of qualified consultants to help you get the most out of mySAP.com.

If you want to extend your ERP solution to the Web, then Domino and WebSphere can help you both integrate your ERP solution with E-Mail and business workflow with Domino, as well as put your ERP solution enterprise on the Web with WebSphere.

Domino and SAP – perfect together

The Domino Server environment is the perfect complement to an SAP R/3 deployment when supporting collaborative applications and also to extend the reach of SAP R/3 to new users. SAP R/3, being the ERP backbone of a business, has some very specific characteristics that make it strong in that environment. Domino is the perfect solution to act as the bridge to open up the centralized data and logic of an SAP R/3 system to casual and mobile users.

Integrate and Extend

A good e-business needs a great infrastructure. Once the proper platform is in place, any company can quickly evolve through the different stages of e-business. You need access to your data and you need to extend to the Web. WebSphere and MQ Series can help you build strong broad-based e-business transaction systems. It has a broad vision, it is transaction-oriented and IBM has hundreds of dotcom references to back it up.

Access to SAP data is easy with MQ Series Integrator – built on top of MQ Series, the de facto standard for messaging in the world today.

WebSphere is included with the OS/400 operating system. WebSphere Application Server for iSeries 400 is an e-business application deployment environment built on open standards-based technology. The Standard Edition lets you use Java servlets, Java Server Pages and XML to quickly transform static Web sites into vital sources of dynamic Web content.

IBM embraces open standards. The alphaWorks and developerWorks Web sites are great examples of how our software development labs are open to everyone.

IBM is dedicated to openness standards compliance. We have the best selling Java tools on the market and a development environment that is fully integrated for testing and delivery with servers.

Why is the iSeries 400 so popular?

It's the most powerful and versatile business server you can buy, yet it's so reliable and easy to use that you hardly ever have to think about it. It's a constantly evolving system that keeps incorporating the latest technologies, yet it never forces you to replace the applications you rely on. It runs the largest portfolio of applications in the world, including Java applications. And it runs them with greater scalability and at a lower cost than its competitors.