IBM DELIVERS A "THREE-IN-ONE" SOLUTION THAT SIMPLIFIES IT MANAGEMENT AND LOWERS TCO

IBM @server x440 runs the J.D. Edwards OneWorld Xe solution on a single Intel-processor-based server

Traffic increases

we know

they know

Cost reductions

Reduce cost of ownership without compromising performance

The demands of rapidly expanding e-business initiatives, a challenging global economy and shrinking budgets are driving information technology (IT) professionals to find ever-more efficient ways to process and distribute mission-critical information enterprisewide. Organizations running J.D. Edwards® OneWorld® Xe solutions need powerful, flexible and reliable servers that are also affordable to both purchase and maintain.

The new IBM @server xSeries™ 440, powered by the Intel® Xeon™ Processor MP, is powerful enough to run multiple functions of the J.D. Edwards OneWorld Xe solution on a single system, which can sharply reduce total cost of ownership (TCO). The x440 system also features a unique upgrade path, providing outstanding flexibility and expansion options

for scaling up or out within a multitier architecture environment, so it can handle the heavy workloads of the largest enterprises.

Run all your OneWorld Xe solution components on a single system

With a "three-in-one" x440 solution, all J.D. Edwards OneWorld Xe functions, including the database server, the application logic server and the Java™ Application Server (powered by IBM WebSphere® Application Server), run on a single system. Fewer servers mean a simplified IT infrastructure with both lower up-front acquisition and maintenance costs. The x440 solution is appropriate for any OneWorld Xe implementation designed to support HTML clients.

IBM @server **xSeries 440**

- *The x440 is powerful enough to run multiple functions of the J.D. Edwards OneWorld Xe solution on a single system.*

- *The three-in-one configuration is easier and less expensive to manage and maintain.*

- *A flexible building-block architecture enables "pay as you grow" scalability.*

- *IBM mainframe-inspired technologies, such as Active™ PCI-X and Active Memory™, deliver new levels of performance, availability and reliability in a rack-optimized form factor.*

IBM | @ business solutions | JD EDWARDS

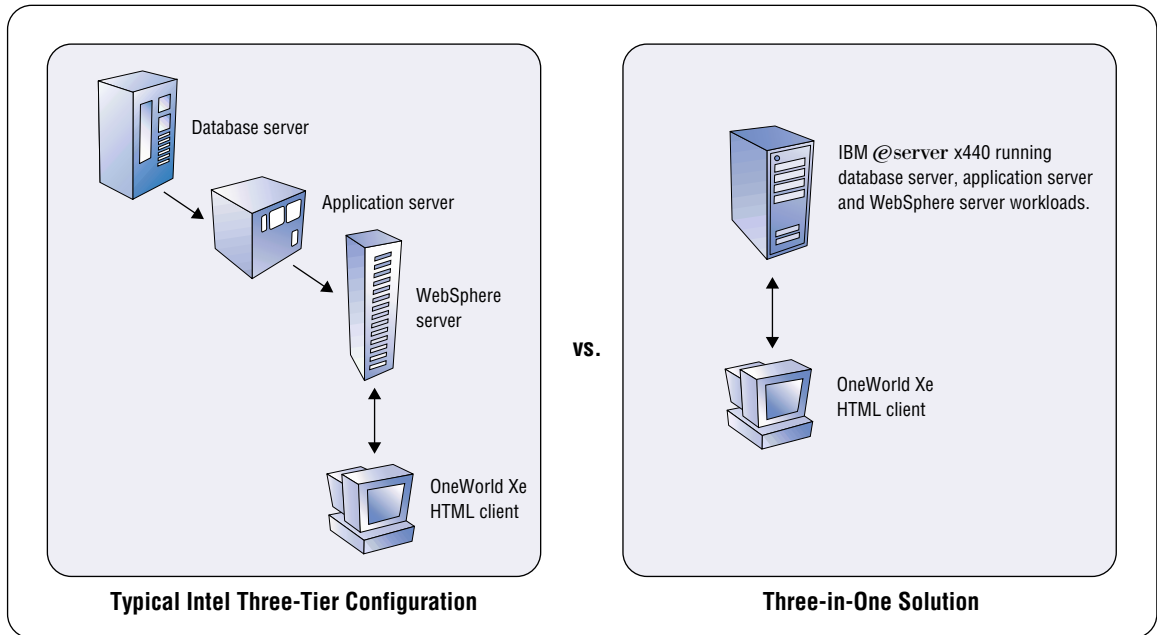**Implement a server solution that can evolve with your business**

The three-in-one configuration for J.D. Edwards OneWorld Xe demonstrates the power and flexibility of the x440 system. Based upon the IBM XA-32 chipset, the IBM @server x440 employs groundbreaking IBM Enterprise X-Architecture™ technology that delivers a flexible building-block approach to scalability—along with radical advancements in performance, availability and systems management.

Providing support for scaling up to 16-way symmetric multiprocessing (SMP) with flexible system partitioning and remote input/output (I/O), the x440 offers a "pay as you grow" building-block design that allows you to purchase only the performance and I/O capacity you need, when you need it, without up-front investments in costly infrastructure.

Exceptional price/performance with industry-standard systems for J.D. Edwards OneWorld Xe environments

The x440 is the first industry-standard server to introduce Level 4 system cache. The IBM XceL4™ Server Accelerator Cache can increase overall system performance by alleviating the processors' need to access main memory for data. You can also count on the x440 to deliver OnForever™ availability with an impressive array of features such as Chipkill™ memory and software rejuvenation that keep your J.D. Edwards OneWorld Xe applications running around the clock. Every dollar you don't need to spend to ensure system availability is a dollar you can invest in other important aspects of your business.

Role of the IBM @server x440 in the Three-in-One Solution

Typical Intel Three-Tier Configuration   **Three-in-One Solution**

In contrast to the typical Intel-processor-based three-tier configuration, the "three-in-one" IBM x440 solution requires fewer servers to support the J.D. Edwards application environment. This reduces your up-front acquisition costs and simplifies the management of your infrastructure—two factors that drive down the total cost of ownership.

OneWorld Xe benchmark performance on the IBM @server x440

Performance characterization testing of OneWorld Xe running on the IBM @server x440 was conducted using standardized sizing characterization test scripts provided by J.D. Edwards Platform Technologies. Processes were divided into three types: financial, manufacturing and distribution. Test scripts were designed to simulate tasks performed by a typical user, such as sales order entry, purchase order entry and work order entry.

J.D. Edwards OneWorld Xe server functions were run on a single x440 system. These included functions for the application logic server, WebSphere Application Server 3.5 and IBM DB2® Universal Database™, the industry's first multimedia, Web-ready relational database management system. The OneWorld Xe deployment server function was run on a separate xSeries server. The IBM TotalStorage™ FAStT500 Storage Server provided the high-speed data storage to complement these industry-leading performance results.

The IBM @server x440 raises the bar on scalability and performance for Intel Xeon Processor MP-based systems. In fact, it is the only Intel Xeon Processor MP server available today that has been proven to support 200 simultaneous Web-connected users with an average response time of .66 seconds running all of these functions on a single Intel-based system.
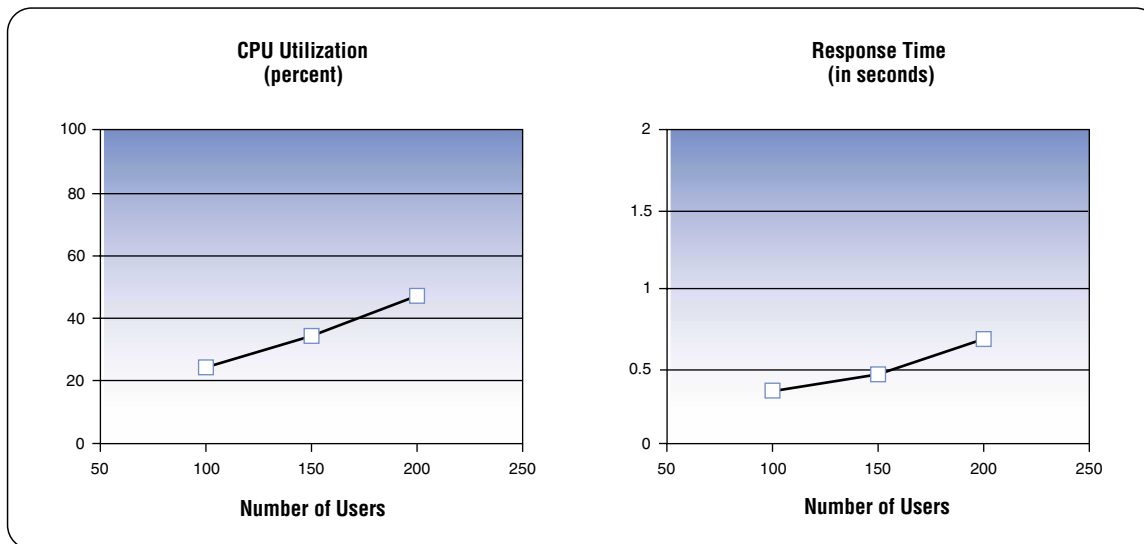
Components of IBM x440 Performance Benchmark Test

Server under Test	x440
Number of Servers	1
Server Model	8687-2RX
Number of Processors	Up to 8 (4 tested)
Main Memory	Up to 16GB (6GB tested)
OS Release Level	Microsoft® Windows® 2000 Advanced Server SP2
Database Release Level	IBM DB2 Universal Database Enterprise Edition 7.2.4
WebSphere Release Level	IBM WebSphere Application Server 3.5.5
J.D. Edwards Release Level	OneWorld Xe SP18+

Note: The server under test was connected to the following storage subsystems:

IBM FAStT 500 Storage Server—Model 3552-1RU
IBM FAStT 500 EXP 500—Model3560-1RU with (20) 36.4GB drives
IBM FAStT 500 EXP 500—Model3560-1RU with (20) 18.2GB drives
IBM SAN Fibre Channel Switch—Model 2109-S08

Three-in-One Solution Test Results

Note: Graphs are based on database server test data only.

A comprehensive portfolio of best-in-class systems management tools

To get the most value out of your technology investment throughout its life-cycle, you need smart, effective systems management. IBM @server xSeries systems management tools delivered in IBM Director help save you time and reduce operating costs by increasing availability, tracking assets, optimizing performance and enabling remote management. Self-managing and self-healing capabilities developed through our eLiza™ initiative help you not only solve problems quickly but also avert downtime altogether.

Power and economy in a single, manageable solution

For organizations running J.D. Edwards OneWorld Xe enterprise applications on Intel-processor-based systems, the IBM @server x440 is an exceptional choice. Powerful enough to run multiple OneWorld Xe functions on a single

server without sacrificing performance or availability, the IBM @server x440 is extremely flexible and scalable, thanks to its innovative SMP building-block design.

For more information

The IBM and J.D. Edwards alliance provides integrated, collaborative e-business solutions that can help reduce costs and increase revenues at a low total cost of ownership. To learn more about IBM and J.D. Edwards solutions, call 1 888 426-5505 or visit:

www.ibm-jdedwards.com

ibm.com/servers

"We are very excited about the IBM @server xSeries 440 and the promise of its new technology to help deliver J.D. Edwards software in new ways. This flexible and robust new Intel server design—plus the ability to add capacity to meet increasing workload—will be especially attractive as our customers grow and want to add more extended enterprise solutions."

—Perry Moss, Director of Technology Marketing, J.D. Edwards