

# IBM @server xSeries Servers - Robust, Flexible and Cost-Saving Platforms for Powering the SAS® Enterprise Business Intelligence Server

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## Highlights

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- **Simplify and speed deployment of the SAS® Enterprise BI Server.**
- **Provision a department or small business with an affordable, world-class SAS® Enterprise BI solution**
- **Help lower overall costs with IBM® @server® xSeries® servers**
- **Reduce complexity and achieve a faster time to intelligence**



For companies competing in the on demand world, real-time access to accurate information is no longer a luxury, it is a necessity. Companies of all sizes need a flexible yet simple Business Intelligence (BI) solution to help speed the access of company data into the hands of their decision makers.

Working together on a previous performance test, IBM and SAS demonstrated the power and scalability of the SAS® Enterprise BI Server by running nearly 1500 concurrent users on an IBM @server pSeries® platform. For this set of tests the focus was to demonstrate the flexibility of the SAS® Enterprise BI Server along with the IBM @server xSeries platform to deliver a cost effective departmental or small business BI solution to the marketplace.

### The SAS® Enterprise BI Server

SAS® Enterprise BI Server delivers an open, integrated enterprise architecture with new specially designed interfaces that support diverse users and their varied reporting and analytical needs. With the ability to access, analyze and share results within a common infrastructure, information and insights are accessible to all levels of your organization.

SAS® Enterprise BI Server includes a powerful information delivery portal, a flexible development environment, out-of-the-box integration with Microsoft® Office products, a dynamic desktop interface to the power of SAS, as well as easy-to-use Web and desktop reporting environments— all founded on a common metadata infrastructure.

The SAS® Enterprise BI Server provides the scalability to support multi-user access demands for timely and accurate delivery of key information. And with a standardized environment for business intelligence investigation, service levels can be consistently maintained, leaving IT resources to focus on strategic technology initiatives.

### **The IBM @server xSeries Server**

Becoming an on demand business means finding ways to grow, adapt and respond in a dynamic business environment while managing costs. IBM @server xSeries systems provide outstanding availability and systems management capabilities that help better manage and provision your computing resources, for a responsive IT environment that can grow with your business.

By investing in innovation, bringing main-frame-inspired technologies to the industry-standard Intel®-based sever segment and providing exceptional systems management offerings, these tower and rack-optimized xSeries systems are gaining momentum with customers, edging out the competition and earning increased share.

### **Rock-solid reliability, feature-rich functionality**

You count on the technology that's running your business. IBM @server xSeries systems are built on proven technology. And acclaimed IBM service and support helps keep you running smoothly—providing peace of mind so you can concentrate on your business.

Through a combination of state-of-the-art technologies and intuitive management tools, xSeries and BladeCenter® servers help you control your IT with fewer resources—saving you time and money. Sophisticated, yet easy-to-use functionality can help decrease operational expenses and improve productivity so you can spend more time managing your business than your technology.

### **IBM @server xSeries Server Performance with the SAS® Enterprise BI Server**

IBM and SAS engineers have recently completed a comprehensive test of the SAS® Enterprise BI Server Reference Architecture test suite running on an IBM @server x260 server. The Reference Architecture was developed by SAS as a means to compare performance between various system platforms. The tests simulate how a small retail business might use the server with varying numbers of active users accessing static and dynamic relational reports, and dynamic OLAP reports via a web browser.

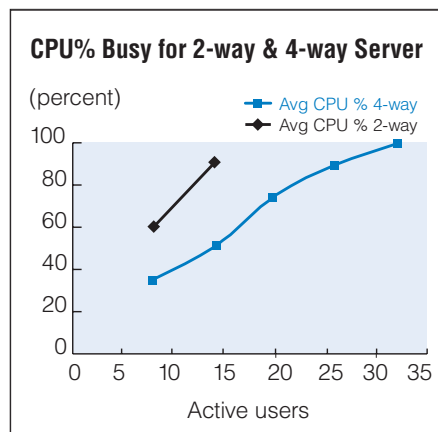


The platform used for this testing was an IBM @server xSeries x260 server configured as a two-way and four-way system with 3.16GHz Intel Xeon MP processors and 4GB of memory. There were three internal 136GB disk drives. The software stack used for the testing consisted of Windows® 2003 Enterprise Edition, DB2® version 8.1.7, WebSphere® Application Server version 5.1, and SAS® Enterprise BI Server Release 9 Service Pack 3.

The results of this testing are demonstrated in the graph below which shows that a 2-way x260 server will support about 12 active users while a 4-way x260 will support up to 25 or so active users.

### IBM @server xSeries Family Table

Model	Form Factor	Processors	Memory
x226	Tower	1- or 2-way Xeon	512MB - 16GB
x236	Tower	1- or 2-way Xeon	512MB - 16GB
x260	Tower	1- to 4-way Xeon MP	2GB - 64GB
x336	Rack - 1U	1- or 2-way Xeon/Dual Core Xeon	512MB - 16GB
x346	Rack - 2U	1- or 2-way Xeon/Dual Core Xeon	1GB - 16GB
x366	Rack - 3U	1- to 4-way Xeon MP/Dual Core Xeon MP	2GB - 64GB
x455	Rack - 4U	1- to 4-way Itanium 2	1GB - 56GB
x460	Rack - 3U	1- to 4-way Xeon MP/Dual Core Xeon MP	2GB - 64GB
HS20	Blade	1- or 2-way Xeon	512MB - 8GB
HS40	Blade	1- to 4-way Xeon MP	1GB - 16GB





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MB, GB, and TB = 1,000,000, 1,000,000,000 and 1,000,000,000,000 bytes, respectively, when referring to storage capacity. Accessible capacity is less; up to 3GB is used in service partition. Actual storage capacity will vary based upon many factors and may be less than stated. Some numbers given for storage capacities give capacity in native mode followed by capacity using data compression technology. Maximum internal hard disk and memory capacities may require the replacement of any standard hard drives and/or memory and the population of all hard disk bays and memory slots with the largest