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New IBM eServer BladeCenter Drives Server Consolidation Opportunities

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The BladeCenter announcement introduces a new family of blade servers from IBM. These blade servers are designed to meet the complex application needs of customers as they consolidate server environments for more efficient and effective compute architectures. The new blades provide important advancements in performance, density, environmental features, and manageability to make server consolidation on blade architectures a serious option for IT manager.

The Blade Evolution Meets the Data Center

The current trend in business is to better integrate existing IT systems rather than to purchase new ones. Managers are worried about the high costs of administration and management. Their IT budgets are either static or shrinking, while user needs continue to increase. Managers need technology to help them improve their computing environments without significantly increasing costs. One of the primary ways managers are achieving these business objectives is through server consolidation. If managers can consolidate hundreds of servers down to tens, then significant savings are possible in administration, management, and the physical environment. One way to achieve consolidation is with blade servers. Blades differ from standard rack servers as they are designed for dense environments, share subsystems such as storage and networking, and seek to minimize cabling issues. Blades usually had slower or older generations of processors than standard rackable servers, so when administrators compared rack servers with blades they discovered that some blade solutions were more expensive than traditional servers on a price/performance basis. Others discovered that complex applications could not get the necessary availability and scalability from blades, so possibilities for server consolidation with this architecture were limited. With these issues in mind, IBM created the BladeCenter, which is focused on increased performance, density, environmental controls, and system manageability.

Inside the BladeCenter Architecture

The IBM BladeCenter, an enclosure for blades, has been launched with the HS20, the first blade in the new family. In partnership with Intel, IBM has designed these blades to work with the Xeon family of processors. The first generation will utilize up to two of the 2GHz processors. IBM has chosen these processors to ensure the fastest blade performance possible, rather than the lowest cost solution. In addition, IBM has done the difficult work of environmental preparation with these processors and designed a system compatible with future generations of processor technology. The Xeon processors run hotter than the older Pentium III family, and IBM has engineered the systems to run these environments efficiently. In addition to environmental capabilities, the BladeCenter has a density of 7U or 14 blades per BladeCenter, which is two times the density of a 1U rack server solution. The product uses the integrated Systems Management Processor for better-integrated systems management and the IBM Director product for rapid deployment of blade solutions.

Enterprise Blade Server Consolidation Now Ready

With these new blades, server consolidation of enterprise applications is now practical. Customers can have the manageability, environment, and density needed to physically consolidate enterprise workloads without sacrificing performance. IBM is providing a blade solution that will allow users to scale enterprise workloads within tight budgets and still have room to scale. For customers seriously considering server consolidation, the new IBM BladeCenter solution offers an attractive alternative to traditional rack systems.