

## IBM Unveils New Clustering Technology and Integration of AMD Opteron Processor-Based Blade

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IBM announced today that it will further extend the value of the IBM eServer Cluster 1350 by delivering support for the next generation of AMD Opteron processor-based single and dual-core server offerings. These enhancements will provide Cluster 1350 customers access to a broader set of applications that require extreme performance, equipping them with the technology they need to tackle new business challenges.

The Cluster 1350 will feature support for the new AMD Opteron LS20 for IBM eServer BladeCenter, making it the only integrated cluster solution to incorporate high-performance, AMD64 dual-core technology in a blade-based compute node. Including these new servers in standard Cluster 1350 configurations will provide customers with enhanced node choices for high performance, memory-intensive applications as well as outstanding integration and compute density. In addition, the Cluster 1350 now offers the broadest range of node and switch choices available in a clustered solution from a major vendor.

"Today's announcement further expands our portfolio of compute nodes and core components, enabling high performance customers to gain the advantages of leading-edge technologies to create a cluster that is optimized for their specific application environment without assuming the risk of testing, integrating, deploying and supporting their own clusters," said Bob Lenard, director, Linux clusters, IBM eServer xSeries. "The Cluster 1350 reduces complexity and the need for



customers to maintain multiple service and support relationships."

With its improved capacity to handle a broad range of application environments, the Cluster 1350 is a primary choice for building on demand computing environments. Today, the Cluster 1350 is used in a variety of industries including financial services, industrial, petroleum and life sciences.

One IBM life sciences customer, the University at Buffalo (UB), selected the Cluster 1350 to help its studies of human protein behavior and aid in the design of drugs to treat diseases such as cancer, Alzheimer's, AIDS and multiple sclerosis. When the time came to upgrade its Dell and EMC server and storage systems, UB's Center of Excellence in Bioinformatics chose a Linux-based cluster with xSeries and BladeCenter nodes.

"The Cluster 1350 more than doubled the speed of our previous cluster, enabling us to shave critical time off achieving tangible results in our research," said Dr. Jeffrey Skolnick, director of the Center. "The cluster delivers the kind of performance we need to make significant strides in protein structure and function prediction. The greatly improved manageability and simplified infrastructure of the Cluster 1350 allows us to focus on generating results to find the causes of deadly diseases and develop new drugs to treat them."

The new, powerful AMD Opteron processor-based blade server delivers flexibility and choice for high performance computing applications. When combined with BladeCenter, the LS20 delivers compute density with outstanding processor performance and availability. This combination of capabilities makes the LS20 an ideal compute node for high performance clustered applications.

"IBM's integration of the AMD Opteron processor-based blade server



for the IBM eServer BladeCenter exemplifies its ongoing commitment to delivering choice to enterprise customers," said Pat Patla, director, Server/Workstation Marketing, Microprocessor Solutions Sector, AMD. "The unique AMD Opteron performance-per-watt power-saving features within our Direct Connect Architecture and AMD64 dual-core technology provide industry-leading capabilities to the IBM eServer BladeCenter."

In addition, the Cluster 1350 will support the new dual core IBM eServer 326 powered by Dual-Core AMD Opteron processors. IBM was one of the first major vendors to offer pre-tested and pre-configured AMD Opteron-based clustered solutions. In fact, in 2003, IBM became the first major OEM to introduce AMD Opteron support.

IBM will also expand the choice of switch and interconnect options available with the Cluster 1350 to further enhance customers' ability to build clustered environments that meet their specific needs. This expanded range of offerings will provide Cluster 1350 customers with the broadest range of networking choices available from a major vendor.

For example, the Cluster 1350 will now support the Voltaire InfiniBand Switch Router 9288, one of the industry's largest InfiniBand switching solutions with up to 10 Gigabytes per second of bandwidth. The 9288 provides high levels of performance and scalability for high performance computing clusters, allowing customers to pay as they grow.

IBM is also announcing the availability of IBM eServer OpenPower 710 and 720 nodes as management and storage nodes for clusters using IBM eServer BladeCenter JS20 compute nodes. By including these servers in standard Cluster 1350 configurations, IBM provides its clients with the ability to build Cluster 1350 configurations that are entirely POWERbased. In addition, IBM will continue to provide its clients the ability to



build clusters with Intel, AMD and POWER-based nodes in either homogeneous or mixed node configurations.

The new updates to the IBM eServer Cluster 1350 are planned to be available in mid-July. Pricing will vary depending upon specific configuration and will be announced upon availability.

The AMD Opteron LS20 for IBM eServer BladeCenter is available to order today. Pricing starts at \$2,259 in the U.S.

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