Intel® Itanium"-based Solutions from Dell

4-way Itanium® based Dell™ PowerEdge™
Server – delivering the power and
performance to drive the most
demanding business-critical applications,
in a space saving rack design.



 $\textit{Dell PowerEdge}^{\text{\tiny{m}}} \textit{Server and PowerVault}^{\text{\tiny{m}}} \textit{Storage Products}$



To power the next generation of demanding business applications while protecting existing investments, Dell will expand the current line of award-winning PowerEdge Enterprise Servers to incorporate Intel's Itanium processor. This advanced enterprise technology offers considerable performance enhancements for many server applications, including large database transactions, electronic business, and scalable web serving. Providing larger memory support and greater scalability, the Itanium processor can overcome many limitations of today's industry standard architectures. Designed for the stringent needs of business-critical applications, the new generation of PowerEdge Servers will offer built-in reliability, fault-resilience and system availability, all packaged in a space saving rack design and backed by Dell's service and support.

ITANIUM PROCESSOR – WHAT IS IT?

The Itanium processor is based on a next generation explicitly parallel instruction computing (EPIC) technology for scalability and reliability that Intel calls the most significant architectural advancement since the introduction of the 80386 microprocessor. The Itanium processor (formerly known as Merced) will be the first of many products to be released in this processor family. The Dell PowerEdge Itanium-based Servers are designed to take full advantage of this new technology, incorporating next generation storage controller and network components.

WHY CHANGE TO ITANIUM PROCESSOR-BASED COMPUTING?

- **Performance** Up to 6.4 GFLOPs of peak performance for high-end analysis and decision making. More tasks done in parallel, larger blocks of work done on each cycle, higher bandwidth, lower latencies, performance increases as compilers improve (historically ~30% per year*)
- Capacity More machine resources, larger data structures managed in memory (4 billion times larger than 32-bit**)
- Scalability Concurrent access to larger numbers of files, greater numbers of simultaneous users and processes
- Improved availability comprehensive ECC coverage and enhanced machine check architecture support business-critical availability
- Enhanced manageability Server management bus, asset management and FRU identification support
- Security performance Over 1200 RSA decrypts per second is a breakthrough over today's platform capabilities
- Flexibility Choice of Microsoft® Windows® 2000 64-bit and the Linux operating system
- Compatibility Binary compatibility for 32-bit applications

*Based on historical RISC performance on SPECint (www.spec.org)
*Source: Microsoft Developer Network. Features subject to change



ENSURING APPLICATION AVAILABILITY

Working vigorously with a wide range of ISV's, Dell is helping to ensure a rich set of applications is available, optimized to take full advantage of Itanium processor features on the Dell PowerEdge platform. The same vendors you trust with your business needs today will be ready to take you to the next generation of computing power including: Applix, Ariba, Computer Associates, EST, Extricity, IBM, Informatica, INTERSHOP, NetIQ, SAP, Selectica, VERITAS, webMethods and many more.

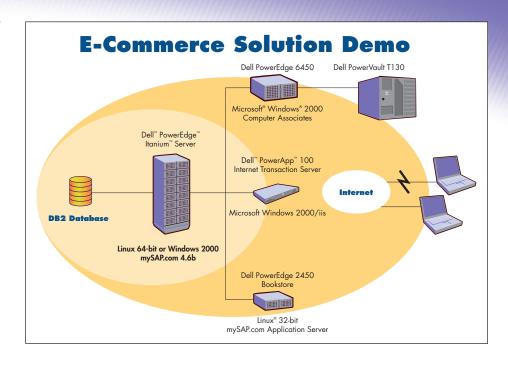
"We are pleased to be participating in the Dell Early Adopter Program of the Intel Itanium platform. Dell is giving us the opportunity to get to know this new platform, experience its performance level live, and test the Linux operating system. The results of our tests will be useful in helping us meet our future needs and in positioning ourselves in the SAP market as an implementation specialist."

Dipl. Kfm Manfred Klute General Manager Preussag Systemhaus GmbH

BUILDING IA-64 MOMENTUM

Dell Early Adopter Program

By providing pre-release systems and support to ISVs, Dell helps to ensure an abundance of applications are optimized and available to take advantage of all that the Itanium platform has to offer. Additionally, this program includes customer pilot sites for early porting and testing. End users have already begun work with these early systems in their environments.



Intel 64 Fund

Announced May 10, 1999, the purpose of this equity fund is to invest in technology companies developing innovative enterprise solutions for servers and workstations beginning with the Itanium processor. It was formed to accelerate the adoption of Itanium-based high volume servers and workstations.

DIG-64

Dell is a founding member of DIG-64, the Developers Interface Guide for Itanium-based servers. This industry group was formed to develop guidelines to establish basic system building blocks, interfaces, and programming conventions for upcoming Itanium-based servers and their system-level software in order to define hardware and software compatibility and interoperability.

"At the University Karlsruhe, we are eager to take our work with complex database applications and complex mathematical computation methods to the Itanium processor on a prototype system provided by Dell. We are excited to be with Dell at the forefront of this promising new technology."

Dr.-Ing. Karl-Heinz Sternemann Institute of Machine Tools and Production Science University Karlsruhe

For more Information:

Contact your Dell account representative, or visit www.dell.com

Other Useful Sites:

 $http://www.intel.com/eBusiness/server/resources/ia64/overview.htm \\ http://www.intel.com/eBusiness/server/resources/ia64/whitepapers.htm \\ http://dig64.org$

