Intel-Based Servers with new Microsoft OS deliver industry- leading capabilities, performance

Intel, HP and Microsoft Achieve No. 1 TPC-C Benchmark Result with Intel Itanium 2 Processor 6M

Intel President and COO Paul Otellini today described how Intel-based servers combined with Microsoft's new operating system and database deliver industry-leading capabilities and performance - all backed by tens of thousands of worldwide system and component sellers, software developers and solution providers. Otellini also revealed the world's highest-ever single-system transaction processing performance, achieved on an HP server with the next Itanium 2 processor (code-named "Madison"), Windows* Server 2003 and SQL Server 2000, Enterprise Edition (64-bit)."We've seen tremendous growth over the past decade in Intel-based servers," Otellini said. "Intel Xeon processors power more than eight of 10 servers that ship today, and the 64-bit Itanium processor family has been shipping for more than two years and is rapidly gaining popularity. The introduction of Windows Server 2003 and SQL Server 2000 64-bit marks a major milestone in the movement of the Windows operating environment to enterprise-class computing powered by Itanium 2 processors. Together with Microsoft, we look forward to delivering the best performance and price-performance systems shipping today.""Intel and Microsoft have collaborated to ensure that Windows Server 2003 is optimised to take full advantage of the unique capabilities of the Itanium and Xeon processor families," said Steve Ballmer, Microsoft CEO. "Since the initial development phases, we have worked together extensively to ensure that the combination of Windows Server 2003, SQL Server 2000, Enterprise Edition (64-bit) and Intel processors equals the best value for back-end database consolidation and delivers the enterprise-hardened capabilities needed for mission-critical business applications."Speaking to attendees at the Windows Server 2003 launch today, Otellini revealed that HP, Microsoft and Intel have achieved the world's highest-ever single-system TPC-C benchmark.** The result was accomplished on a non-clustered 64-processor HP server based on Intel's forthcoming Itanium 2 processor 6M (Madison), Microsoft Windows Server 2003 Data Centre Edition and SQL Server 2000 Enterprise Edition (64-bit). The result of 658,277 transactions per minute (tpmC) exceeds the previous record, set by a 128-processor RISC system. TPC-C is an industry-standard benchmark for measuring a database server's processing performance based on an enterprise transaction model for handling orders.In addition, NEC, Microsoft and Intel announced yesterday a TPC-C result of 514,034.72 tpmC with a 32-processor NEC Express 5800/1320Xc server based on the Intel Itanium 2 processor 6M (Madison) running Windows Server 2003 Datacentre Edition (64-bit) and SQL Server 2000 (64-bit). The result is the world's best performance for a non-clustered, 32-processor server, and is the best price/performance value among the top 10 non-clustered systems (US$11.50/tpmC).***Otellini also illustrated the growing number of Itanium 2-based systems on the market today and coming this year, highlighting servers from Unisys and Dell. The Unisys ES7000/560, announced today, is the industry's firstenterprise server incorporating 32-bit Intel Xeon processors, 64-bit Itanium 2 processors and PCI blade appliances in a single system. The Itanium 2-based Dell PowerEdge server is expected to ship this year."The Itanium 2 processor is becoming increasingly mainstream thanks to its high performance, broad choice of platforms and software, and price advantages. Dell's plan to introduce Itanium 2-based systems reflects the market's readiness for these critical capabilities," said Thomas F. Coleman, director of the Cornell Theory Centre. "We are excited that Dell will be introducing Itanium 2-based systems this year and are looking forward to delivering the benefits of these systems to our education and business clients as soon as possible."Microsoft today also introduced a version of its SQL Server database for Itanium 2-based servers. SQL Server 2000 Enterprise Edition (64-bit) and Windows Server 2003 take full advantage of the parallel processing capabilities and larger memory addressing of the Itanium architecture, processing data-intensive transaction workloads faster, supporting more concurrent users and increasing scalability and throughput.The Windows Server 2003 launch enables other major software vendors to introduce applications on Itanium 2-based platforms, including BEA WebLogic Enterprise Platform*, i2 Technologies with key Supply Chain Management solutions, J.D. Edwards Business Intelligence, Network Associates* McAfee* VirusScan* Enterprise 7.0, SAP mySAP* Business Suite, Symantec AntiVirus Corporate Edition and dozens of others, adding to the hundreds of applications and tools already shipping for the Itanium processor family. Intel also introduced the Intel VTune(tm) Performance Analyser 7.0 and Intel VTune(tm) Enterprise Analyser 2.0 tools, which support developers using Windows 2003 Server, to make application and web performance tuning easier and more efficient on individual or multi-tier Intel-based platforms.Windows Server 2003 is available in Standard and Web editions for the Intel Xeon processor family, and Enterprise and Data Centre editions for Intel Xeon processors MP and Itanium 2 processors. Windows Server 2003 supports up to 32 Intel Xeon processors MP with 64 GB of memory, and is optimised to take full advantage of Intel's Hyper-Threading technology, which provides up to 30 per cent performance boosts for multithreaded applications. The operating system also delivers exclusive 64-bit support for Intel's Itanium processor family, handling up to 64 processors and 512 GB of memory. Windows Server 2003 also supports advanced clustering, larger page sizes and improved error detection and logging for added dependability and productivity. About IntelIntel, the world's largest chip maker, is also a leading manufacturer of computer, networking and communications products. Additional information about Intel is available at www.intel.com/pressroom.- ENDS -Intel, Itanium and Pentium are trademarks or registered trademarks of IntelCorporation or its subsidiaries in the United States and other countries.*Third-party marks and brands are property of their respective holders.**Source: www.tpc.org: HP Superdome Server, 658,277 tpmC at US$9.80/tpmC, with 64 Intel Itanium 2 processors, each at 1.5 GHz with 6MB of L3 cache, running Microsoft Windows Server 2003 Datacentre Edition and Microsoft SQL

Server 2000 Enterprise Edition 64-bit, with 512 GB RAM. TPC-C Availability date: Oct. 23, 2003.***Source www.tpc.org: NEC Express5800/1320Xc*, 514034.72 tpmC, US$11.50/tpmC, with thirty two (32) Intel Itanium 2 processors 6M at 1.5 GHz, running Microsoft Windows Server 2003 Datacentre Edition and Microsoft SQL Server 2000 Enterprise Edition 64-bit, with 512 GB RAM; Available: 10/22/2003, Hardware Availability date 08/11/2003.