Communiqués de presse

IBM présente de nouveaux systèmes POWER7 inspirés de la technologie Watson

New blades, upgraded servers built to handle world's most demanding emerging applications

Armonk, NY - 13 avr. 2011: IBM (NYSE: IBM) today announced new workload-optimized POWER7® systems, including a performance boost to the Power 750 -- the same server used in Watson, the Jeopardy! winner -- that provides even faster processing capability than each machine used in the computer genius.

The new Power blades and upgraded Power servers are built to manage the world's most demanding emerging applications, used in healthcare management, financial services, scientific research and more. The specialized demands of these new applications rely on processing an enormous number of concurrent transactions and data while analyzing that information in real time.

For instance, the University of Massachusetts-Dartmouth is using two IBM POWER7 blades to study the effect of disturbances, called gravitational waves, on black holes in space. Increased knowledge of gravitational waves will help physicists and astronomers to understand some of the most fundamental laws of physics. They will provide new information about the dynamics of large-scale events in the Universe, like the death of stars and the birth of black holes.

"*We are running billions of intense calculations based on Einstein's theory of relativity on the POWER7 blades*," said **Gaurav Khanna, professor of physics at UMass-Dartmouth**. "*Running POWER7, I'm able to get results as much as eight times faster than running the same calculations on an Intel Xeon processor. Calculations that used to take a month to run are now finished in less than a week. This means that I can do eight times more science in the same timeframe than I could do before*."

In addition, the new POWER7 systems can provide clients with very high levels of server virtualization and consolidation, which can lead to improved price performance, improved energy efficiency and reduced footprint size in the data center.

RPM Technologies provides enterprise class wealth management software to some of the largest banks and financial services companies in Canada.

"*RPM has always been an early adapter of IBM technology and the POWER7 chips along with AIX 6.1 provided a big boost to the batch and threading speed of our products*," said **Allan Grossman, chief architect at RPM Technologies**. "*With POWER7 chips, batch jobs runtimes improved by upwards of 35 percent and less resources were used. As part of our upgrade, RPM also moved to a full virtualized environment across two POWER7 16-core P750 machines. This change reduced the time and effort to manage the boxes*."

Market research studies show that more and more clients are choosing to run their businesses on IBM Power Systems.TM. According to IDC, IBM extended its lead in the UNIX® servers in the fourth quarter of 2010 by capturing 53.9 percent revenue share of that segment, gaining 5.9 points of share over competitors and leading the second-place vendor by more than 30 percent.

"*Our strategy appears to be paying off as more and more customers choose Power Systems*" said **Tom Rosamilia, general manager of IBM Power and z Systems**. "*Today's Power announcements demonstrate IBM's ongoing investment in workload-optimized servers. Just two short months after publically demonstrating the future of computing with Watson and its advanced analytical and learning capabilities, IBM is upping the ante with a performance bump in the underlying system.*"

New and enhanced Power Systems products include:

- The new 16-core, single-wide IBM BladeCenter® PS703 and 32-core, double-wide IBM BladeCenter PS704 blade servers, which give clients an alternative to sprawling racks. The PS704 delivers 60-percent faster performance with twice the number of cores while using the same amount and space and energy as previous POWER7 blades. The new POWER7 blades support massive server consolidation with energy-efficient economics.
- The enhanced IBM Power 750 Express, the same system that powers Watson, now further optimized for the most challenging analytics workloads. The Power 750 has been upgraded with several options, including a faster POWER7 processor that offers more than three times the performance of comparable 32-core servers, such as Oracle's SPARC T3-2 server, and more than twice the performance of HP's Integrity BL890c i2. (2)
- The enhanced IBM Power 755, a high-performance computing cluster node with 32 POWER7 cores and a faster processor.

IBM also introduced a new Systems Director Management Console appliance that allows data center administrators to operate both Power servers and blades with a unified, intuitive interface for physical and virtualized system resource management.

IBM is extending technology from the acquisition of BLADE Network Technologies (BNT) across its portfolio of workload-optimized systems, including high performance top-of-rack BNT switches with VMready network virtualization and BLADEHarmony management software. These IBM BNT RackSwitch products will, for the first time, be closely integrated with IBM Power servers to support workloads such as cloud computing, financial services, Web 2.0, streaming video, medical and scientific research and business analytics. According to a recent report by The Tolly Group, the newest IBM BNT switch demonstrated significant performance and energy efficiency advantages over comparable switches, including an average of 55 percent better price and performance. (3)

IBM also announced additions to its Intelligent Cluster line of energy-efficient, high-performance computing platforms -- pre-integrated solutions that build upon its rack servers including BladeCenter or iDataPlex platforms. These new offerings allow customers -- in segments such as financial services and energy exploration, for example -- to build HPC configurations that can reduce power and cooling costs by up to 50 percent. The new Intelligent Cluster offerings include:

- New platforms updated with the latest Intel Xeon processor E7 family;
- New 10Gb Ethernet solutions that can enhance performance of HPC workloads by leveraging up to 11 times lower latency (3);
- A new InfiniBand solution for Intelligent Cluster that features integrated ethernet gateway to eliminate the need for a separate ethernet switch to help optimize workloads such as high-frequency trading.

Financing the Transition and Clearing the Floor

IBM Global Financing (IGF), the lending and leasing arm of IBM, provides customized financing for credit qualified clients that can accelerate a project's cash flow break even point, while enabling them to preserve cash for other investments, consolidate costs of the entire project and improve budget management with predictable payments.

IGF can also help customers remove older servers from their data centers through its Global Asset Recovery Services (4) unit. This "clears the floor" of older or antiquated technology and allows for clients to upgrade to any of the Power offerings. Coupled with customized financing, this can help accelerate the transition, while further enhancing the overall economics of moving to IBM Power Systems

About IBM Power Systems

Watson, IBM's Jeopardy! playing system, which recently competed against, and beat, the greatest Jeopardy! champions, was built using IBM Power Systems. Watson represents a big step in shifting the way we look at computers from today's "calculators" to "machines that learn." IBM Research scientists built Watson, using IBM POWER7 technology, as a research effort to pursue the future of computing. With the unveiling of Watson, for the first time, a computing system analyzed natural language and other language complexities in which humans excel at understanding and computers previously could not.

In the business world, IBM Power Systems incorporate a number of unique technologies for the specialized demands of new applications and services. In addition, the systems enable clients to manage current applications and services at less cost with technology breakthroughs in virtualization, energy savings, more cost-efficient use of memory, and better price/performance.

About IBM

For more information on IBM Smarter Computing, please visit:http://www-03.ibm.com/systems/data/flash/smartercomputing/

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Footnotes

(1) Compares the rPerf and number of cores of the PS702 to the rPerf and number of cores the PS704 (PS702 = 154rPerf/16-cores, PS704 = 251rPerf/32-cores). For more information, please visit:
http://www.ibm.com/systems/power/hardware/reports/system_perf.html

(2) Compares SPECint_2006 performance of Power 750 with 32-cores to Oracle's SPARC T3-2 server with 32 cores and HP Integrity BL890c i2 server with 32 cores. SPEC® and the benchmark names SPECrate®, SPECint®, and SPECjbb® are registered trademarks of the Standard Performance Evaluation Corporation. For the latest SPECint benchmark results, www.spec.org, Results current as of 4/8/11.

(3) Tolly Test Report: IBM BNT RackSwitch G8264, commissioned by IBM, March, 2011.

(4) Through IBM Global Asset Recovery Service, http://www-03.ibm.com/financing/us/recovery/