

World's Largest Linux System Image Achieved on SGI Altix 4700 Blade Servers

SGI Shatters Linux Scalability Records Yet Again with 1,024 Processors Running Under Single Copy of Linux

MOUNTAIN VIEW, Calif. (June 26, 2006)—Silicon Graphics (OTC: SGID) today announced another high-performance computing (HPC) first: the world's largest computer to operate under a single copy of the Linux® OS.

On its powerful and acclaimed SGI® Altix® 4700 blade platform and a beta version of SUSE® Linux Enterprise Server 10 from Novell, SGI demonstrated a single system image (SSI) running on a world-record 1,024 processors. Until that moment, the largest Linux SSI operated on 512 processors - another SGI record.

SGI heralded the achievement as the world's top HPC innovators arrive in Dresden, Germany for the 21st International Supercomputing Conference.

"Since first introducing the SGI Altix platform in 2003, SGI time and again has demonstrated its unique ability to support high-end workloads on Linux by setting remarkable scalability records," said Dave Parry, senior vice president and product general manager, SGI. "At the time SGI first demonstrated its Altix server line, it was commonly believed that Linux could not scale beyond 16 processors. Today, SGI proves once again that it can confound the expectations of an entire industry in ways that benefit HPC users worldwide."

"Once again, SUSE Linux Enterprise proves itself as a technical leader in the market, this time in the area of Linux scalability," said Roger Levy, Novell vice president and general manager of Open Platform Solutions. "Novell and SGI continue to reset expectations of what the world can expect from an industry-standard, enterprise-class Linux platform. As the system requirements for high-performance computing continue to grow more complex, only SUSE Linux Enterprise can scale to meet those business needs."

The record-breaking Altix 4700 system is now installed in Munich, Germany, at the Leibniz Computing Centre Munich (LRZ). LRZ houses Germany's National Supercomputer System, and the Altix 4700 installation marked the completion of LRZ's Phase I deployment, which incorporates 4,096 Intel® Itanium® 2 processors, 17TB of global shared memory, and a 330TB SGI InfiniteStorage solution.

The LRZ system, known as HLRB II, operates all 4,096 processors as a unified platform that enables applications to directly address all 17TB of memory.

"LRZ is excited to deploy a system architecture that will give us not only a powerful new HPC engine, but one that offers the freedom to explore system configurations at the true leading edge of SSI partitioning," said Dr. Matthias Brehm, head of the HPC Group at LRZ. "The Altix architecture offers a unique opportunity to run both shared-memory, pure MPI tasks and hybrid codes."

Though LRZ will initially operate the system in 256-processor partitions, HLRB-II administrators plan

to move to 512-processor partitions in the next phase of installation.

"We are also interested in moving to the 1,024-processor SSI boundary to extend this capability later, as soon as our users express a demand for it," Dr. Brehm said. Larger partitions will allow HLRB-II administrators to experience faster runtimes and more streamlined administration, while users will benefit from reduced code development. SUSE Linux Enterprise Server 9 from Novell currently supports SSIs of up to 512 processors.

Even as SGI pushes system sizes to new heights, the company is also bringing new levels of RAS (reliability, availability and serviceability) to high-end Linux environments. SGI's RAS efforts leverage its unique experience in building the world's largest and most robust server systems combined with focused investments on such features as memory error recovery. RAS is increasingly important to enterprise users facing more complex and data-intensive workloads than ever before.

For more information about SGI Altix 4700 systems or SGI's leadership in driving the 64-bit Linux revolution, visit: www.sgi.com/products/servers/altix.

SILICON GRAPHICS | The Source of Innovation and Discovery™

SGI, also known as Silicon Graphics, Inc. (OTC: SGID), is a leader in high-performance computing. SGI helps customers solve their computing challenges, whether it's sharing images to aid in brain surgery, designing and manufacturing safer and more efficient cars and airplanes, studying global climate, providing technologies for homeland security and defense, enabling the transition from analog to digital broadcasting, or helping enterprises manage large data. With offices worldwide, the company is headquartered in Mountain View, Calif., and can be found on the Web at www.sgi.com.

Silicon Graphics, SGI, Altix, the SGI cube and the SGI logo are registered trademarks, and The Source of Innovation and Discovery is a trademark of Silicon Graphics, Inc., in the United States and/or other countries worldwide. Linux is a registered trademark of Linus Torvalds in several countries. Intel and Itanium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Novell and SUSE are registered trademarks of Novell, Inc. in the United States and other countries. All other trademarks mentioned herein are the property of their respective owners.

Contact Information

For more information contact PR Rep of SGI (<http://www.sgi.com/>)

Keywords

[altix](#)

[sgi](#)

[linux](#)

You can read this press release online [here](#)