



Google Search Appliance 6.0 Now Available: A Brilliant Innovation that Showcases Intel's Platform Intelligence

Google Inc. today announced its next-generation Google Search Appliance (GSA) 6.0, which delivers extraordinary search power for the enterprise, powered by the Intel® Xeon® processor 5500 series. Building on the capabilities of its predecessors, this appliance allows enterprises to search billions of documents. »

ROI CALCULATOR

New: Try Intel's Virtualization ROI calculator on Facebook. See how much you can save with virtualization and compare with friends and colleagues. [Try it now!](#) »

INTEL NEWS

Nehalem Launch Resets Performance Bar

New servers, blades and

TOP INTEL CONTENT

- » First the Tick, Now the Tock: Next Generation Intel® Microarchitecture Nehalem
- » Intel Xeon Processor 5500 Series Product Brief
- » Intel and Microsoft Complementary Virtualization Technologies

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HOTLIST

New Intel® Xeon® Processor Increases Server Efficiency and Capabilities



The Wallet Watcher

Always watching the bottom line, your job is to make sure you get a solid return on your technology investments. You're interested in getting the most bang for your buck by investing in the most efficient servers and maintaining high utilization rates.



March 30, 2009

Almost half of data center owners say they're going to run out of power capacity in the next year or two. You need to add the cost of electricity to power and cool your data center servers to the cost of the hardware and facilities, and it's going to test your data center's ability to grow with your business.

Wallet Watchers who are concerned with energy efficiency know the Intel® Xeon® processor 5500 series provides a foundation for them to refresh existing or design new data centers from the inside out to achieve greater performance while using less energy and space. Energy-efficient processors and sub-systems in the Intel Xeon processor 5500 series get the most out of each server rack, pedestal, or blade.

The automated energy-efficiency features of Intel Microarchitecture codename Nehalem deliver 5x improvement in power management capabilities compared to the first Intel quad-core server processors by allowing 5x as many operating states, a 5x reduction in idle power, and 5x faster transitions to and from low-power states.

Intel Intelligent Power Technology introduces power management to all of the platform components: the processor, chipset, and memory. This allows operating systems to put processor power and memory into the lowest available states needed to support current workloads without reducing performance and allowing individual cores to be idled independent of the others. Using this combination of features, the Intel Xeon processor 5500 series can deliver up to 50 percent lower server idle power. Intel Intelligent Power Technology makes power available for critical workloads while conserving power where there is less demand, delivering as much as 2.25x more performance in a comparable power envelope and dramatically reducing idle power.

Automated energy features are only one part of how the Intel Xeon processor 5500 series can help you watch your wallet. Processor features that make it easier for you to virtualize your data center will increase the utilization rate of your servers and help you get more out of your data center.

Virtualization and energy efficiency go hand-in-hand, because virtualization allows consolidation of workloads onto fewer physical platforms. The Intel Intelligent Power Node Manager and operating system tools allow IT managers to set a power budget for a rack, a row of servers, or the entire data center, enabling up to 20 percent denser deployments.

Better virtualization performance enables higher consolidation ratios. Enhancements to Intel Virtualization Technology (Intel VT) in combination with a new platform design provide up to 2.1x higher virtualization performance versus last year's Intel two-processor servers..

Flexible, real-time consolidation with Intel VT FlexMigration and leading virtualization software solutions help IT to conserve power during non-peak periods by rebalancing workloads on fewer platforms to reduce energy costs.

Resources For You

First the Tick, Now the Tock: Next Generation Intel® Microarchitecture Nehalem

A new Intel microarchitecture, codenamed Nehalem, dynamically manages cores, threads, cache, interfaces, and power to deliver outstanding energy efficiency and performance on demand.

Why Choose Intel® Server Products?

Watch this YouTube video to see what goes into each Intel server product.

Reducing Storage Growth and Costs: A Comprehensive Approach to Storage Optimization

Intel IT developed a pragmatic plan to address rising capacity requirements and costs related to storage. After assessing the current storage environment, it then created a roadmap to deliver an optimized storage environment based on existing and emerging technologies. The plan should reduce storage capacity requirements by 27 percent over the next five years while keeping costs flat.

