February 12, 2013

# Introducing Intel® Cache Acceleration Software for Use with Intel® SSD Data Center Family

**NEWS HIGHLIGHTS**

- Intel launches new Cache Acceleration Software to complement the Intel® SSD data center family of products for a comprehensive caching solution.
- The software prioritizes application performance with unique, policy-based cache control that accelerates applications without backend storage or application changes.
- When combined with the Intel® SSD DC S3700 or Intel® SSD 910 Series, the solution allows IT to easily integrate with existing Windows* and now Linux* storage infrastructure, delivering SSD levels of performance without requiring full data migration.

SANTA CLARA, Calif., Feb. 12, 2013 -- Intel Corporation today announced its Intel® Cache Acceleration Software (CAS) for Linux* that prioritizes application performance, providing solid-state drive (SSD) levels of speed without migration costs, and built-in data integrity for Intel's SSD data center family of products.

The Linux version of the software will be generally available within 30 days as an enterprise subscription and open source release. It will complement the existing Intel CAS 2.0 for Windows that is available today.

Intel® CAS 2.0 is based on technology from Intel's August 2012 acquisition of NEVEX Virtual Technologies, and provides key capabilities that enhance the company's SSD data center family of products. Intel's CAS 2.0 solution provides significant input/output (I/O) and application performance improvements in use cases including database/OLTP, virtualization, cloud and big data (Hadoop)*.

"Intel CAS complements our SSD data center family by providing a total caching solution that delivers even more value and capability for our customers," said Chuck Brown, product line manager for Intel's Non-Volatile Memory Solutions Group. "Intel® CAS delivers a multi-level cache across the SSD and DRAM for optimal performance. Compared to short-stroked hard-drive technology, we've seen up to 50 times the improvement in I/O performance throughput for read intensive workloads by adding Intel CAS with the Intel SSD 910 series[1]."

"With the combination of Intel CAS and the Intel 910 PCIe SSD, Intel has a solution that is a game changer for server-side caching," said James Bagley, senior analyst at Storage Strategies-NOW. "It allows IT to easily add more performance to their existing storage infrastructure, delivering SSD levels of speed without a complete data migration."

"The idea of improving application performance without breaking the bank is one that has obvious appeal in today's increasingly complex and demanding IT environments," said Mark Peters, senior analyst at Enterprise Strategy Group. "Intel's CAS delivers on this aspiration in two ways: First, it is based upon Intel's high-performance and highly reliable solid-state

solutions, which ensures easy integration and data integrity; and second, it is differentiated from 'vanilla' solid-state solutions in its use of multi-level caching across DRAM and SSD, which helps to simultaneously drive overall performance above, and overall costs below, that of less-sophisticated SSD-only solutions."

**Provides Hassle-Free Application Acceleration and Performance**

The Intel CAS solution provides significantly[1] improved performance for I/O-intensive applications running on dedicated servers or virtual machines (VMs). With its unique policy-based caching, Intel CAS can target performance to specific applications, files, VM or individual database tables. Selective optimized caching allows administrators to focus performance on applications and data that directly impact the business while enabling consistent I/O acceleration by avoiding contention with other applications and server actions. A scalable application server tier with direct-attached SSD provides low latency and consistent performance, complementing SAN technologies for capacity storage tiers such as archive, backup, recovery and more. By balancing CPU and I/O performance, Intel CAS offers companies lower TCO with an optimized, integrated solution. "Attempts to solve I/O performance issues at the SAN tier have resulted in wasted spend, wasted productivity, and frustration to both users and IT administrators," said Steve Dalton, General Manager of Attached Platform Storage Software at Intel. "We have the seamless answer with our Cache Acceleration Software solution. Intel® CAS allows administrators to target storage performance to those applications that need it the most, offloading IOPS from primary storage to the servers themselves, providing a win-win with previous storage spend."

Intel CAS 2.0 for Windows and Linux supports the Intel SSD data center family including the Intel® DC S3700 and 910 Series. The open source code release will be available on intel.com. Additional information about Intel's new and innovative caching solution can be found at www.intel.com/content/www/us/en/software/intel-cache-acceleration-software.

**About Intel**
Intel (NASDAQ: INTC) is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world's computing devices. Additional information about Intel is available at newsroom.intel.com and blogs.intel.com.



1 Results have been estimated based solely on internal Intel analysis, using only Intel SSDs, and are provided for informational purposes only. Any difference in system hardware or software design or configuration may affect actual performance. Configurations: Measurements made using Intel Server model 2600CO (Copper Pass Server); Intel® E5-2680 processor (2.7GHz), 32GB DDR2/1333 memory; Microsoft* Windows 2008R2 SP1, Intel® CAS 2.0 release candidate 1; IOMeter 10.22.2009 ; 4K Random Read test; 32-queue depth; 800Gig Intel SSD 910 series, Intel RAID RS25AB080 with MR54p1 firmware; 8 x 10K SAS HDD in a RAID0 array.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.