SPEC delivers blade server power-performance metric

SPEC introduces new capabilities with SPECpower_ssj2008 V1.10

WARRENTON, Va., April 15, 2009 – The Standard Performance Evaluation Corp. (SPEC) has released SPECpower_ssj2008 V1.10, the latest version of the only industry-standard benchmark that measures power consumption in relation to performance for server-class computers.

The major new feature in SPECpower_ssj2008 V1.10 is support for measuring multi-node servers. Other new features further automate power measurement, including support for multiple power analyzers. In addition, a visual activity monitor (VAM) provides a real-time graphic display of data collected while running the benchmark.

"With this release, SPEC is responding to market demand to measure power and performance for blade servers," says Klaus-Dieter Lange, chair of the SPECpower committee. "It further extends the benchmark as a comprehensive tool that assists IT managers in deploying energy-efficient data centers."

SPECpower_ssj2008 is both a benchmark and a flexible toolset that generates customized loads allowing site-specific, in-depth analysis of server efficiency. Results from the latest version of the benchmark will be comparable to V1.00 and V1.01, although the previous versions are limited to measuring one server at a time.

Extending an industry milestone

"The first version of SPECpower was a milestone for the computing industry and V1.10 significantly extends the benchmark's functionality," says Andrew Fanara, director of the Energy Star Product Specifications Development Team for the Environmental Protection Agency (EPA). "We will continue to work with the SPECpower committee on future Energy Star initiatives."

Kirk Cameron, director of the Scalable Performance Laboratory (SCAPE) at Virginia Tech and a pioneer in green computing technologies, sees SPECpower_ssj2008 V1.10 as an important tool for data center analysis.

"The latest SPECpower benchmark provides the kind of customization that will enable IT managers to analyze power-performance trade-offs and make better-informed server choices," says Cameron.

SPEC member companies active in developing SPECpower_ssj2008 V1.10 include AMD, Dell, Fujitsu, HP, Intel, IBM, and Sun Microsystems.

About the benchmark

SPECpower_ssj2008 reports power consumption for servers at different performance levels – from 100-percent to idle in 10-percent segments – over a set period of time. The graduated workload recognizes the fact that processing loads and power consumption on servers vary substantially over the course of days or weeks. To compute a power-performance metric across all levels, measured transaction throughputs for each segment are added together, then divided by the sum of the average power consumed for each segment. The result is a figure of merit called "overall ssj_ops/watt."

The benchmark workload represents typical server-side Java business applications. The workload is scalable, multi-threaded, portable across a wide range of operating environments, and economical to run. It exercises CPUs, caches, memory hierarchy, and the scalability of shared memory processors (SMPs), as well as implementations of the Java Virtual Machine (JVM), JIT (just in time) compiler, garbage collection, threads, and some aspects of the operating system.

Available immediately

SPECpower_ssj2008 V1.10 is available immediately from SPEC for $1,600; discounts are available for qualified non-profit and educational institutions. The price includes benchmark support worldwide and future maintenance releases. Free upgrades will be distributed to current SPECpower_ssj2008 customers. More details and order information are available at www.spec.org/specpower or through e-mail at info@spec.org.

About SPEC

SPEC is a non-profit organization that establishes, maintains and endorses standardized benchmarks to evaluate performance for the newest generation of computing systems. Its membership comprises more than 80 leading computer hardware and software vendors, educational institutions, research organizations, and government agencies worldwide. For more information, visit www.spec.org or contact the SPEC office by phone: 540-349-7878, fax: 540-349-5992, or email: info@spec.org.

###

Media contact: *Bob Cramblitt*
Cramblitt & Company
919-481-4599; info@cramco.com