HP ProLiant DL385 G2 earns #1 result for 2-processor, Dual-Core server AND #1 2-socket AMD server on SPECweb2005 Benchmark



The HP ProLiant DL385 G2 bested all 2-processor, 4-core competitors with the fastest performance of 14,964 simultaneous user sessions and 24,096 SPECweb2005_Banking (SSL) transactions on the SPECweb2005 benchmark performed in April 2007.

The server was configured with 2 x 2.80GHz Dual-Core (4 cores/2 chips/2 cores per chip) AMD Opteron Model 2220 processors and 32GB of main memory running Rock Web Server Software v1.4.1 (x86_64) on RedHat Enterprise Linux 4 Update 3. The ProLiant DL385 G2 also utilized the HP Smart Array P400i Controller, the Smart Array P800 Controller, and two Modular Smart Array 70 Enclosures during the testing.

This result defeated Dell, Fujitsu Siemens, and IBM competitors by up to 46% performance advantage in simultaneous user sessions and .49% in SPECweb2005_Banking (SSL) transactions. This outcome proves that AMD's Dual-Core processor technology, combined with HP ProLiant design excellence, delivers superior performance for HP customers.



Figure 1. SPECweb2005 2-processor, Dual-Core results

Interpreting the results

Engineered with ProLiant reliability and proven 2-processor AMD Opteron performance for ease of ownership, enterprise-class uptime and manageability, the HP ProLiant DL385 G2 displayed superior results on the SPECweb2005 benchmark as shown in the table below.

Configuration details	Simultaneous user sessions	SPECweb2005_Banking (SSL trans.)
HP ProLiant DL385 G2	14,668	24,096
AMD Opteron Model 2220		
Dell PowerEdge 2950	14,495	23,800
Intel Xeon 5160	Performance advantage for HP!	Performance advantage for HP!
Fujitsu Siemens PRIMERGY	10,084	16,600
TX300 S3	31% performance advantage for HP!	31% performance advantage for HP!
Intel Xeon 5160		
IBM xSeries 3650	9,182	15,000
Intel Xeon 5160	37% performance advantage for HP!	37% performance advantage for HP!
IBM p5 550	7,881	12,240
POWER5+	46% performance advantage for HP!	49% performance advantage for HP!

The HP ProLiant DL385 G2



The completely redesigned HP ProLiant DL385 G2 continues to build on the success of the DL380 G5, delivering on its heritage of engineering excellence, enterprise-class uptime and manageability, proven 2-processor Dual-Core AMD Opteron performance, and 2U density for a variety of rack deployments and applications.

The new ProLiant DL385 G2 High Performance model includes the latest performance technologies and enterprise class availability features pre-installed for convenience and value.

Key benefits for the ProLiant DL385 G2 include:

- Proven performance for demanding scale-out applications
- Versatility and availability
- Industry-leading management solutions enable powerful administration
- Engineered for reliability and ease of ownership
- Delivering Best-run Server Infrastructure

HP SFF SAS: leading the future of storage



The transition to SFF SAS drives is one of the most significant transitions in the industry's history, fueled by the biggest required leap in storage capacity ever experienced along with the need for faster access to stored data.

- Higher reliability
 - 1.7 million mean time between failures (MTBF) vs. 1.5 million for 3.5" SCSI
- Better performance
 - Serial point-to-point connections
 - More spindles per platform
- Greater efficiency and improved thermals with SFF drives
 - Half the power consumption 9 Watts
 - SFF enables better airflow



Airflow



HP Smart Array Controller P800

The HP Smart Array P800 is a 16 port, PCI-E SAS controller. It ships standard with 512MB cache, dual batteries and RAID 6 (ADG) support. This controller supports up to 108 hard drives and is the highest performing controller in the Smart Array portfolio.



HP StorageWorks 70 Modular Smart Array

The HP StorageWorks 70 Modular Smart Array is an end-to-end flexible storage array, offering data availability, enhanced reliability, enhanced performance, and tiered storage capability with SAS and SATA drives and investment protection. Small and midrange business growing storage needs can be managed by deploying this low cost, flexible tiered storage system with up to 14.4TB capacity supporting SAS or SATA.

About SPECweb2005

This next-generation SPEC benchmark was designed by industry leading companies, including Hewlett-Packard, in order to evaluate the performance of state-of-the-art web servers. The three workloads, banking



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(https), e-commerce (https and http), and support (http) are designed to closely match today's real-world web server access patterns. Each workload measures simultaneous user sessions; however, the overall score of SPECweb2005 is unitless. A server achieving a higher score represents a server with an overall better performance running all three workloads.

SPEC, the SPEC logo, and the benchmark name SPECweb are registered trademarks of the Standard Performance Evaluation Corporation (SPEC). The SPEC logo is © 2006 Standard Performance Evaluation Corporation (SPEC), reprinted with permission. Herein two comparisons presented above are based on the top performing Intel 4-socket and all servers respectively. The competitive benchmark results stated herein reflect results published on <u>www.spec.org</u> as of May 7, 2007. For the latest SPECweb2005 benchmark results, please visit <u>www.spec.org/web2005</u>.

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