HP ProLiant DL380 G6 surpasses all records with new #1 performance result for SPECweb2005 benchmark

HP breaks over 70,000 simultaneous sessions with new generation server

HP Leadership

»The HP ProLiant DL380 G6 server continues to deliver on its heritage of engineering excellence with increased flexibility and performance, enterprise-class uptime and manageability, 2-socket Intel Xeon performance, and 2U density for a variety of applications. Its features include:

- Up to 2.93GHz Intel Xeon Quad-Core processors with Turbo Mode
- 60, 80, and 95 Watt processor support
- DDR3 1333MHz DIMMs and larger memory footprint
- Solid State Drives
- Common Power Supplies
- Modular Smart Array Controllers
- HP Onboard Administrator

Customer Value

What are the customer benefits of using the HP ProLiant servers and the SPECweb2005 benchmark?

The SPECweb2005 benchmark measures a system's ability to act as a web server.

Today, with web-based businesses requiring more peak performance and scalability to handle heavy user traffic while balancing cost and power concerns, the results from this benchmark are evidence of the clear value that the HP ProLiant DL380 G6 with Quad-Core Intel Xeon processors offer an Internet business or any data center – the ultimate in performance, reliability, and power efficiency.
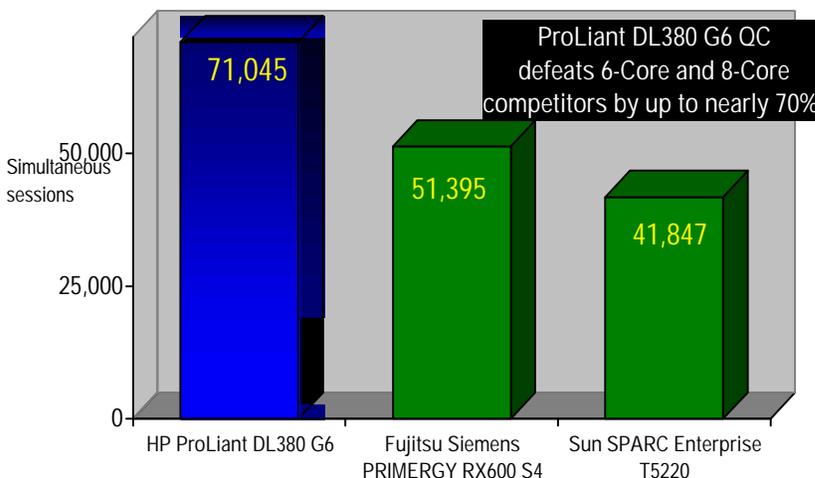
The record-breaking benchmark result of the HP ProLiant DL380 G6 demonstrates the outstanding performance and reliability HP solutions deliver to meet the increasingly high demands of web server users.

HP Lead Key Points

∩ HP ProLiant dominates performance leadership with the two-socket Quad-Core ProLiant DL380 G6 by achieving the #1 OVERALL performance result on the SPECweb2005 benchmark. The ProLiant DL380 G6 beat all SPECweb2005 competitors across the board, including Sun and Fujitsu Siemens.

∩ The Quad-Core ProLiant DL380 G6 showed nearly 70% performance improvement over the 8-Core Sun SPARC Enterprise T5220.

∩ With Intel Xeon Quad-Core processors, the latest Intel processor technology, and the new HP ProLiant Generation 6 server, the HP ProLiant DL380 G6 showed an increase of 140% in performance from its previous Quad-Core result in this benchmark.

This recent SPECweb2005 benchmark result lends another proof point to HP's industry-leading web server performance. HP was the first to break 20,000 simultaneous sessions, then 30,000, 40,000, recently 50,000 with the HP ProLiant DL580 G5, and now 70,000 with the ProLiant DL380 G6.

Figure 1. Comparison of the simultaneous sessions of the HP ProLiant DL380 G6 Intel Xeon two-socket rack server to Fujitsu Siemens and Sun SPARC servers on the SPECweb2005 benchmark. Test results as of 03-30-09.

ProLiant DL380 G6 QC defeats 6-Core and 8-Core competitors by up to nearly 70%!

Server	Simultaneous sessions
HP ProLiant DL380 G6	71,045
Fujitsu Siemens PRIMERGY RX600 S4	51,395
Sun SPARC Enterprise T5220	41,847

Technology for better business outcomes.

The ProLiant advantage

HP proven performance

HP has posted hundreds of results on the most commonly used benchmarks on hundreds of ProLiant servers and blades, helping customers to identify reasons to be confident in HP.

Benchmark configurations and comparisons

The recent HP ProLiant DL380 G6 test results took the #1 overall performance record on the SPECweb2005 benchmark, utilizing a Quad-Core (8-cores/2 chips/4 cores per chip), HyperThreading-enabled configuration with the Intel Xeon X5570 Processor configured with 96GB (12x8GB) memory running Red Hat Enterprise Linux 5.3 operating system and Rock Web Server v1.4.7 System Web Server software. The server ran with two Intel 10GB Dual Port NICs and one HP Smart Array P410i (embedded) and one Smart Array P411 Controller with 512MB cache connected to two Modular Smart Array 70 Enclosures with 2x36GB Small Form Factor (SFF) SAS 15K RPM and 42x72GB SFF SAS 15K RPM hard drives.

Table 1. Configurations and result summaries of the HP ProLiant DL380 G6 rack server compared to the 8-Core Sun and 6-Core Fujitsu Siemens competitor on the SPECweb2005 benchmark.

Configurations and results for HP ProLiant DL380 G6 and Sun and Fujitsu competitors on the SPECweb2005 benchmark			
Server	ProLiant DL380 G6	Sun SPARC Enterprise T5220	Fujitsu Siemens PRIMERGY RX600 S4
Web server configuration	Quad-Core Intel Xeon X5570 2.93GHz 8 cores/2 chips/4 cores per chip 96GB (12 x 8) memory; Red Hat Enterprise Linux (RHEL) 5.3 OS	8-Core UltraSPARC T2 1.4GHz 8 cores/1 chip/8 cores per chip 64GB (16 x 4) memory; Solaris 10 05/08 OS	6-Core Intel Xeon X7460 2.667GHz 24 cores/4 chips/6 cores per chip 128GB (16 x 8) memory; RHEL 5.2 OS
Simultaneous Sessions	71,045	41,847	51, 395
	HP Performance Advantage	HP shows nearly 70% performance improvement!	HP shows 38% performance improvement!

Table 2. ProLiant DL380 Generation scalability comparison on the SPECweb2005 benchmark.

ProLiant DL380 G5 and G6 performance scalability results and configurations	
ProLiant DL380 G6 Quad-Core	ProLiant DL380 G5 Quad-Core
Intel Xeon X5570 2.93GHz 8 cores/2 chips/4 cores per chip 96GB (12 x 8) memory; Red Hat Enterprise Linux (RHEL) 5.3 OS	Quad-Core Intel Xeon X5460 3.16GHz 8 cores/2 chips/4 cores per chip 32GB (8 x 4) memory; Red Hat Enterprise Linux (RHEL) 5 U1 OS
71,045 simultaneous sessions	29,581 simultaneous sessions
HP Performance Scalability from Generation 5 to Generation 6 with new Intel processor technology is 140%!	

All test results as of 03-30-09. The HP ProLiant DL380 G6 results were submitted to SPEC on 03-25-09. For more details, please visit: www.spec.org/web2005.

### HP Smart Array Controller P411

The HP Smart Array P411 is HP's PCI Express (PCIe) Serial Attached SCSI (SAS) RAID controller. The low profile, half height card has 8 ports and utilizes DDR2-800 memory. The P411 is ideal for RAID 0/1, 5, 1+0 & 5+0 and can be upgraded with the 512MB battery-backed write cache (BBWC) module and Smart Array Advanced via license key for RAID 6 &, 6 +0.

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
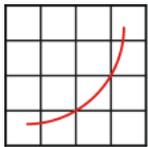
This next-generation SPEC benchmark was designed by industry leading companies, including Hewlett-Packard, in order to evaluate the performance of state-of-the-art web servers. The three workloads, banking (https), e-commerce (https and http), and support (http) are designed to closely match today's real-world web server access patterns. Each workload measures simultaneous user sessions; however, the overall score of SPECweb2005 is unit-less. 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 ©2009 Standard Performance Evaluation Corporation (SPEC), reprinted with permission. Herein two comparisons presented above are based on the top performing four-socket, two-socket, and all servers respectively. The competitive benchmark results stated herein reflect results published on www.spec.org as of March 30, 2009. The HP ProLiant DL380 G6 results were submitted to SPEC on March 25, 2009.

For the latest SPECweb2005 benchmark results, please visit www.spec.org/web2005.

For more information

HP ProLiant DL380 G6: www.hp.com/servers/proliantdl380

HP ProLiant storage solutions: http://h18004.www1.hp.com/products/servers/platforms/storage.html

ProLiant benchmarks: www.hp.com/servers/benchmarks