



# HP ProLiant DL785 G5 earns #1 eight-processor performance result on two-tier SAP® Sales and Distribution Standard Application Benchmark with SAP Enhancement Package 4 for SAP ERP 6.0



## HP leadership with ProLiant servers

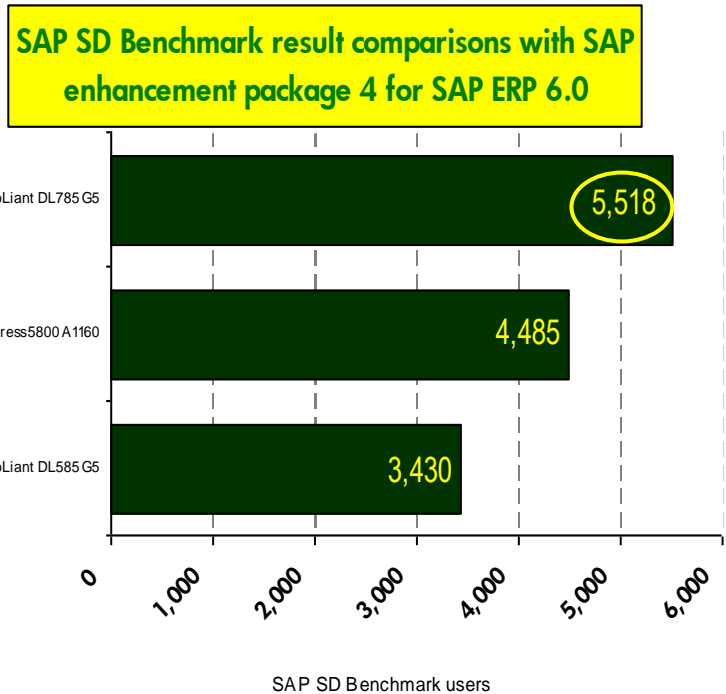
The latest **HP ProLiant DL785 G5 rack server**, the newest and most expandable addition to the award-winning HP ProLiant line, is an 8-socket server supporting up to 8 AMD Opteron™ Quad-Core processors, 512 GB of memory and 11 PCI-e I/O slots. The large memory capacity provides an ideal platform for EDA, financial, and petrochemical applications that demand lots of memory. With this highly scalable feature set the DL785 G5 is an ideal choice for the growing enterprise class database, consolidation, and virtualization environments seeking to improve server utilization and reduce server sprawl, while continuing to leverage all the familiar and easy-to-use ProLiant management tools and options.



## Key points

- #1 eight-processor performance result on the two-tier SAP Sales and Distribution (SD) Standard Application Benchmark with SAP enhancement package 4 for the SAP ERP 6.0 application.
- #1 eight-processor/32-core result posted result on the two-tier SAP Sales and Distribution (SD) Standard Application Benchmark with SAP enhancement package 4 for SAP ERP 6.0.

**Figure 1. Several results on two-tier SAP SD Standard Application Benchmark for servers running SAP enhancement package 4 for SAP ERP 6.0 (comparative details in Appendix)<sup>1</sup>**



All results as of 04-24-2009. Details in Appendix.

## Customer value

### Q. What are the benefits of using HP ProLiant servers and SAP applications?

SAP Standard Application Benchmarks test the hardware and database performance of SAP applications and components.

As one of the largest technology partners for SAP, HP is a global technology partner, software solution partner, global alliance support partner, global services partner, and global hosting partner. HP ProLiant servers consistently earn leading results on the two-tier SAP SD Standard Application Benchmark.

HP ProLiant servers have proven to be reliable and cost-effective. HP servers host almost 50% of all installations of SAP solutions, with more than 60,000 installations and 25,000 customers.

HP BladeSystem infrastructures offer a highly flexible and scalable environment that enables enterprises to embrace change while dramatically reducing their total cost of ownership.

HP's strong technology capabilities are demonstrated through the results of these benchmarks.

All results as of 04-24-2009. Details can be found at <http://www.sap.com/benchmark>.

## Technology for better business outcomes

## What's New

The SAP SD Standard Application Benchmark was performed in Redmond, WA, on the HP ProLiant DL785 G5 rack server configured with several new variables from its previous benchmark in December 2008. These variables include an SAP update to the SAP SD Standard Application Benchmark and the usage of Microsoft Windows Server 2008 Enterprise Edition and Microsoft SQL Server 2008 Enterprise Edition. In addition, the benchmark used the ProLiant DL785 G5 with the latest AMD Opteron processors at 3.1 GHz.

## SAP Enhancement Package 4 for SAP ERP 6.0

On January 1, 2009, SAP upgraded the SAP SD Standard Application Benchmark to the SAP enhancement package 4 for SAP ERP 6.0, part of SAP Business Suite 7 software. These enhancements make the SAP SD Standard Application Benchmark more resource intensive, which has a direct impact on the benchmark results, according to SAP. The steps of the benchmark scenario remain unchanged. The updates include utilizing a Unicode codepage, a change in the subsecond response time to below one second, use of the new general ledger, and the activation of credit limit check functionality that marks a date of change for the SAP ERP benchmarks.<sup>1</sup>

Although the ProLiant DL785 G5 showed a lower performance number with the enhancement package 4 versus an earlier result without the upgrade running SAP ERP 6.0, the outcome is a leading result within the new software environment.

## Interpreting the performance results

### ProLiant server testing configurations

HP received certification from SAP AG of the results on the two-tier SAP SD Standard Application Benchmark for the ProLiant DL785 G5 (Certification #2009009).

The ProLiant DL785 G5 rack server was set up as an eight-processor system with eight 3.1-GHz Quad-Core AMD Opteron 8393 Processors (8 processors/32 cores/32 threads), with 128 KB L1 cache and 512 KB L2 cache per core, 6MB L3 cache per processor, and 128 GB (32 x 4 GB) main memory. The server was running Microsoft Windows Server 2008 Enterprise Edition operating system, Microsoft SQL Server 2008 Enterprise Edition database, and the SAP enhancement package 4 for SAP ERP 6.0 (Unicode). The HP ProLiant DL785 G5 achieved 5,581 SAP SD Benchmark users, equivalent to a throughput of 603,670 fully processed order line items per hour or 30,180 SAPS.

All results as of 04-24-2009; details can be found at <http://www.sap.com/benchmark>.

## The HP difference

HP provides all of the tools and services required for customers to plan their deployment of the SAP ERP application as well as the best practices and experience to help implement the application successfully without disruption to business operations. Thousands of deployments of SAP solutions worldwide run mission-critical environments on HP servers.

Unlike many other service providers, HP Services shares with customers its solid expertise in HP technology for flexible management, virtualization, consolidation, and integration of SAP solution-based environments.

In addition, HP is a global SAP partner offering leading support for SQL implementations. HP's SAP Consulting and Integration services practice also has strong expertise with SAP solution-based deployments, and hundreds of successful customer implementations.

## SAP and HP Partnership

HP has been partnering with SAP AG for over 20 years and is one of the largest SAP customers in the world. In fact, SAP selected HP output management technology. Together, SAP and HP created a remarkable legacy providing world-class business solutions to global clients. They offer a unique combination of open, flexible technologies and

broad expertise. That's why nearly half of the worldwide implementations of SAP applications run on HP infrastructure.

- HP servers host almost 50% of all SAP solution-based installations with more than 60,000+ installations and more than 25,000 customers.
- HP is a worldwide leader in SAP operations, with 250+ outsourcing customers managing over 850,000 users.
- We integrate, certify, and optimize new solutions by utilizing:
  - Six SAP Solutions Centers located in Atlanta, Georgia and Houston, Texas, USA; and in Asia in Singapore, India, China, and Korea.
  - One SAP Competency Center, Walldorf, Germany.
  - 24x7 support through globally connected SAP support centers in more than 15 countries worldwide.
  - Four engineering labs located in Walldorf, Germany; Houston, Texas, USA; Marlborough, MA., USA; and Redmond, Washington, USA.
- HP uses SAP solutions for enterprise resource planning and supply chain management.
- HP's output management technology is a proven and recommended platform for output management in the context of SAP solutions.

## Appendix

### <sup>1</sup>Configuration details from Figure 1 versus ProLiant DL785 G5 server

**NEC Express5800 A1160 results on the two-tier SAP SD Standard Application Benchmark.** The NEC Express5800 A1160 (Certification #2009001) was configured as an 8-processor server (8 processors/48 cores/48 threads) with Intel Xeon Processors X7460 2.66 GHz with 64 KB L1 cache, 3 MB L2 cache per 2 cores, and 16 MB L3 cache per processor, and 256 GB main memory. The NEC Express5800 A1160 was running Microsoft Windows Server 2008 Datacenter Edition operating system, Microsoft SQL Server 2008 database, and the SAP enhancement package 4 for SAP ERP 6.0 (Unicode) and achieved 4.485 SAP SD Benchmark users, equivalent to a throughput of 505,670 fully processed line items per hour and 25,280 total SAPS.

**HP ProLiant DL585 G5 results on the two-tier SAP SD Standard Application Benchmark.** The HP ProLiant DL585 G5 (Certification #2009004) was configured as a four-processor server with four 3.1-GHz Quad-Core AMD Opteron 8393 Processors (4 processors/16 cores/16 threads), with 128 KB L1 cache and 512 KB L2 cache per core, 6MB L3 cache per processor, and 64 GB (16 x 4 GB) FBD main memory. The server was running Microsoft Windows Server 2008 Enterprise Edition operating system, Microsoft SQL Server 2008 Enterprise Edition database, and the SAP enhancement package 4 for SAP ERP 6.0 (Unicode). The HP ProLiant DL585 G5 achieved 3,430 SAP SD Benchmark users, equivalent to a throughput of 374,670 fully processed order line items per hour or 18,730 SAPS.

## For more information

HP ProLiant DL785 G5: [www.hp.com/servers/proliantdl785](http://www.hp.com/servers/proliantdl785)

HP ProLiant storage solutions: [www.hp.com/go/serial](http://www.hp.com/go/serial) and

<http://h18004.www1.hp.com/products/servers/platforms/storage.html>

SAP benchmark details: <http://www.sap.com/benchmark>

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