

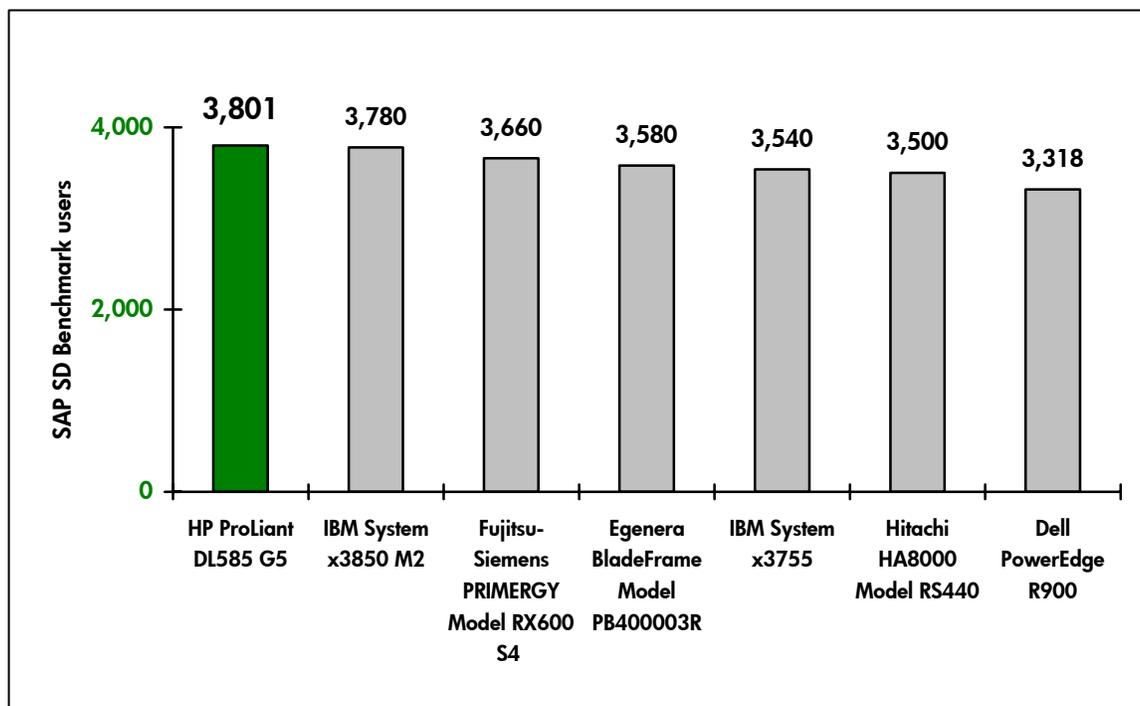
HP ProLiant DL585 G5 achieves #1 4-processor Windows result on two-tier SAP® Sales and Distribution Standard Application Benchmark



Key results at a glance:

- Leading 4-processor Windows performance result¹
- Performance increase of 7.3% with Quad-Core AMD Opteron™ 2.5 GHz processors as compared to the IBM System x3755 result of 3,540 SAP SD Benchmark users achieved with previous generation Quad-Core AMD Opteron 2.3 GHz processors

Figure 1. Several 4-processor Windows results on two-tier SAP SD Standard Application Benchmark²



Tests were performed on the HP ProLiant DL585 G5 server by HP's Houston Solution Alliances SAP Engineering lab in Houston, TX. HP received certification from SAP AG of the results on the two-tier SAP® Sales and Distribution (SD) Standard Application Benchmark for the ProLiant DL585 G5 (Certification #2008041) on July 11, 2008. The server was configured as a four-processor system with 4 Quad-Core 2.5-GHz Quad-Core AMD Opteron Processors 8360SE (4 processors/16 cores/16 threads), with 128 KB Integrated Level 1 cache per core, 512 KB Integrated Level 2 cache per processor, and 64 GB main memory. The server was running Microsoft Windows Server 2003 Enterprise Edition x64 SP2 operating system, Microsoft SQL Server 2005 x64 SP1 database, and the SAP ERP application Release 6.0. The HP ProLiant DL585 G5 achieved 3,801 SAP SD Benchmark users, equivalent to a throughput of 380,330 fully processed order line items per hour or 19,020 SAPs.

The HP ProLiant DL585 G5 4-socket server

The HP ProLiant DL585 G5 is a highly manageable, rack optimized, four-socket server designed for maximum performance in an industry standard architecture. With up to four Quad-core AMD Opteron™ processors and a large memory footprint, the DL585 G5 delivers the performance and performance-per-watt needed for compute-hungry database, virtualization, and consolidation applications. Its industry leading remote management functions help reduce your costs and improve your ability to respond quickly to business changes.

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 strong technology capabilities are demonstrated through the results of these benchmarks. HP's SAP Consulting and Integration services practice also has strong expertise with SAP solution-based deployments, and hundreds of successful customer implementations.
- From a platform perspective, HP servers are the market leader in the SQL Server space with nearly 50% share – double our nearest competitor.

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.
- HP has been awarded SAP's highest level of partnership in 3 out of 4 key areas, including HP's SAP customer support process.³

Summary

With HP's commitment to standards-based solutions and joint testing of SAP applications on HP systems, HP customers have a wide choice in comprehensive, proven solutions that meet their specific business requirements.

For more information

HP ProLiant DL585 G5: www.hp.com/servers/dl585

HP ProLiant storage solutions: www.hp.com/go/serial and <http://h18004.www1.hp.com/products/servers/platforms/storage.html>

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

¹All results as of 07-14-2008; details can be found at <http://www.sap.com/benchmark>

²Appendix A - configurations

IBM System x3850 M2 results on the two-tier SAP SD Standard Application Benchmark. The IBM System x3850 M2 (**Certification #2007068**) was configured as a 4-processor server (4 processors/16 cores/16 threads) with Quad-Core Intel Xeon Processors X7350 2.93 GHz with 64KB L1 cache per core and 4 MB L2 cache per 2 cores, and 64 GB main memory. The IBM System x3850 M2 server was running SAP ERP 6.0 with Microsoft Windows Server 2003 Enterprise Edition operating system and DB2 9 database and achieved 3,780 SAP SD Benchmark users, equivalent to a throughput of 378,330 fully processed line items per hour and 18,920 total SAPS.

Fujitsu Siemens Computers PRIMERGY Model RX600 S4 results on the two-tier SAP SD Standard Application Benchmark. The Fujitsu Siemens Computers PRIMERGY Model RX600 S4 (**Certification #2008004**) was configured as a 4-processor server (4 processors/16 cores/16 threads) with Quad-Core Intel Xeon Processors X7350 2.93 GHz with 64KB L1 cache per core and 4 MB L2 cache per 2 cores, and 64 GB main memory. The Fujitsu Siemens Computers PRIMERGY Model RX600 S4 server was running SAP ERP 6.0 with Microsoft Windows Server 2003 Enterprise Edition operating system and Microsoft SQL Server 2005 database and achieved 3,660 SAP SD Benchmark users, equivalent to a throughput of 366,330 fully processed line items per hour and 18,320 total SAPS.

Egenera BladeFrame Model PB400003R results on the two-tier SAP SD Standard Application Benchmark. The Egenera BladeFrame Model PB400003R (**Certification #2007075**) was configured as a 4-processor server (4 processors/16 cores/16 threads) with Quad-Core Intel Xeon Processors X7350 2.93 GHz with 64KB L1 cache per core and 4 MB L2 cache per 2 cores, and 64 GB main memory. The Egenera BladeFrame Model PB400003R server was running SAP ERP 6.0 with Microsoft Windows Server 2003 Enterprise Edition operating system and Microsoft SQL Server 2005 database and achieved 3,580 SAP SD Benchmark users, equivalent to a throughput of 360,670 fully processed line items per hour and 18,030 total SAPS.

IBM System x3755 results on the two-tier SAP SD Standard Application Benchmark. The IBM System x3755 (**Certification #2008032**) was configured as a 4-processor server (4 processors/16 cores/16 threads) with Quad-Core AMD Opteron processors Model 8356 2.3 GHz with 128KB L1 cache, 512 KB L2 cache per core, and 2 MB L3 cache per processor, and 64 GB main memory. The IBM System x3755 server was running SAP ERP 6.0 with Microsoft Windows Server 2003 Enterprise Edition operating system and DB2 9.5 database and achieved 3,540 SAP SD Benchmark users, equivalent to a throughput of 354,330 fully processed line items per hour and 17,720 total SAPS.

Hitachi HA8000 Model RS440 results on the two-tier SAP SD Standard Application Benchmark. The Hitachi HA8000 Model RS440 (**Certification #2008028**) was configured as a 4-processor server (4 processors/16 cores/16 threads) with Quad-Core Intel Xeon Processors X7350 2.93 GHz with 64KB L1 cache per core and 4 MB L2 cache per 2 cores, and 64 GB main memory. The Hitachi HA8000 Model RS440 server was running SAP ERP 6.0 with Microsoft Windows Server 2003 Enterprise Edition operating system and Microsoft SQL Server 2005 database and achieved 3,500 SAP SD Benchmark users, equivalent to a throughput of 350,330 fully processed line items per hour and 17,520 total SAPS.

Dell PowerEdge R900 results on the two-tier SAP SD Standard Application Benchmark. The Dell PowerEdge R900 (**Certification #2008027**) was configured as a 4-processor server (4 processors/16 cores/16 threads) with Quad-Core Intel Xeon Processors X7350 2.93 GHz with 64KB L1 cache per core and 4 MB L2 cache per 2 cores, and 94 GB main memory. The Dell R900 server was running SAP ERP 6.0 with Microsoft Windows Server 2003 Enterprise Edition operating system and Microsoft SQL Server 2005 database and achieved 3,318 SAP SD Benchmark users, equivalent to a throughput of 333,670 fully processed line items per hour and 16,680 total SAPS.

³<http://h71028.www7.hp.com/ERC/downloads/4AA0-9971ENW.pdf> and <http://h71028.www7.hp.com/enterprise/cache/13419-0-0-121.html>

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