HP ProLiant four-processor servers with newest AMD Opteron™ processors achieve outstanding results and scalability on two-tier SAP® Sales and Distribution (SD) standard application benchmark
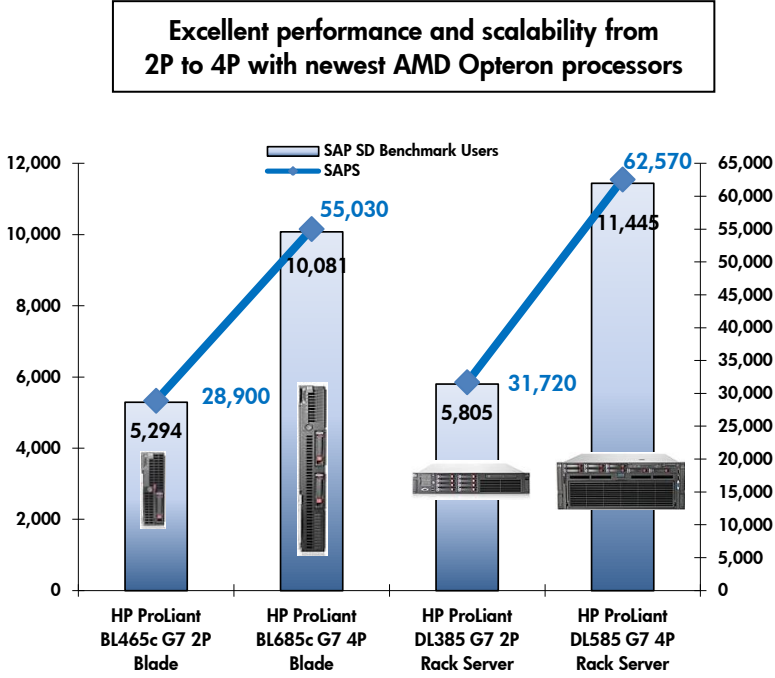
November 2011

Executive summary

Two HP ProLiant four-processor servers have achieved outstanding performance results on the two-tier SAP® Sales and Distribution (SD) standard application benchmark with SAP enhancement package 4 for the SAP ERP application 6.0. These results show the excellent ability of the new AMD Opteron™ 6200 Series processors ("Interlagos") to scale from two to four processors, and an excellent performance delta as compared to the previous HP ProLiant results with AMD Opteron 6100 SE Series processors ("Magny-Cours").

Key Take Aways (See Appendix A for minimum data for all claims):

- Outstanding two-processor to four-processor scaling with new AMD Opteron 6200 Series processors on the two-tier SAP SD standard application benchmark
- Outstanding generational processor scaling on two-processor and four-processor servers on the two-tier SAP SD standard application benchmark
- Excellent HP proof point for SAP solutions on both server blades and rack servers

Figure 1. HP ProLiant server results with AMD Opteron 6200 Series processors on the two-tier SAP SD standard application benchmark

Excellent performance and scalability from 2P to 4P with newest AMD Opteron processors

ONLY HP

Outstanding two- to four-processor scaling on two-tier SAP SD standard application benchmark

Performance improvement of up to 1.9X scaling in number of SAP SD benchmark users from two to four processors

All results noted were achieved on the two-tier SAP SD standard application benchmark and all servers shown ran SAP enhancement package 4 for SAP ERP 6.0. For more details, please visit: http://www.sap.com/benchmark. Results as of November 14, 2011.
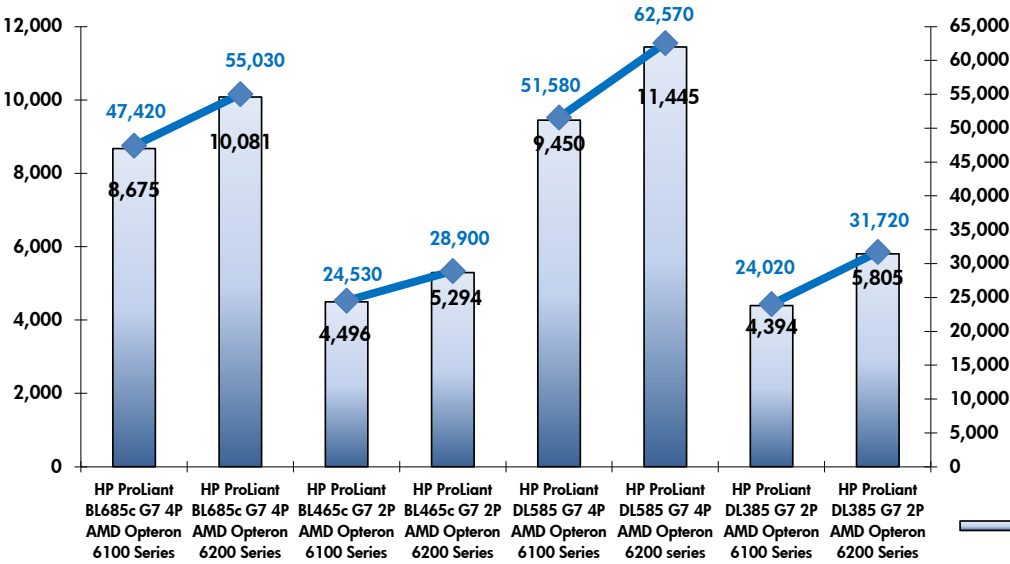
About the servers

The HP ProLiant BL685c G7 is a single-width full-height blade supporting four processors. The BL465c G7 is a single-width half-height blade supporting two processors. The DL585 G7 is a four-processor rack server and the DL385 G7 is a two-processor rack server.

Figure 1. HP ProLiant server intergenerational results with AMD Opteron processors on the two-tier SAP SD standard application benchmark

1.3X generational processor performance improvement from AMD Opteron processors

All results noted were achieved on the two-tier SAP SD standard application benchmark and all servers shown ran SAP enhancement package 4 for SAP ERP 6.0. For more details, please visit: http://www.sap.com/benchmark. Results as of November 14, 2011.

For more information

HP ProLiant G7 Server Blades: http://www.hp.com/go/bladesystem
HP ProLiant Rack-Optimized (DL) Servers: http://www.hp.com/go/proliant
Results as of November 14, 2011; details can be found at http://www.sap.com/benchmark

Appendix: Minimum data for two-tier SAP SD Standard Application Benchmark results

Table 1: Configuration details and certification numbers for Figure 1.

Platform, number of cores/processor, processor type (total processors/cores/threads), memory	Certification number	OS, database, and SAP software	SAP SD benchmark users	SAPS
HP ProLiant BL465c G7, 16 cores, 2.3-GHz AMD Opteron 6276 Processor (2/32/32), 128 GB RAM	2011047	Windows Server R2 EE, x64, SQL Server 2008 x64, SAP enhancement package 4 for SAP ERP 6.0	5,294	28,900
HP ProLiant BL685c G7, 16 cores, 2.3-GHz AMD Opteron 6276 Processor (4/64/64), 256 GB RAM	2011048	Windows Server R2 EE, x64, SQL Server 2008 x64, SAP enhancement package 4 for SAP ERP 6.0	10,081	55,030
HP ProLiant DL385 G7, 16 cores, 2.6-GHz AMD Opteron 6282 SE Processor (2/32/32), 128 GB RAM	2011045	Windows Server R2 EE, x64, SQL Server 2008 x64, SAP enhancement package 4 for SAP ERP 6.0	5,805	31,720
HP ProLiant DL585 G7, 16 cores, 2.6-GHz AMD Opteron 6282 SE Processor (4/64/64), 256 GB RAM	2011046	Windows Server R2 EE, x64, SQL Server 2008 x64, SAP enhancement package 4 for SAP ERP 6.0	11,445	62,570

Table 1: Configuration details and certification numbers for Figure 2.

Platform, number of cores/processors, processor type (total processors/cores/threads), memory	Certification number	OS, database, and SAP software	SAP SD benchmark users	SAPS
HP ProLiant BL685c G7, 12 cores, 2.2-GHz, AMD Opteron x Processor (4/48/48), 256 GB RAM	2010026	Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	8,675	47,420
HP ProLiant BL685c G7, 16 cores, 2.3-GHz AMD Opteron 6276 Processor (4/64/64), 256GB RAM	2011048	Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	10,081	55,030
HP ProLiant BL465c G7, 12 cores, 2.3-GHz AMD Opteron x Processor (2/24/24), 128 GB RAM	2011007	Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	4,496	24,530
HP ProLiant BL465c G7, 16 cores, 2.3-GHz AMD Opteron 6276 Processor (2/32/32), 128 GB RAM	2011047	Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	5,294	28,900
HP ProLiant DL585 G7, 12 cores, 2.5-GHz, AMD Opteron x Processor (4/48/48), 256 GB RAM	2011006	Windows Server 2008 R2, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	9,450	51,580
HP ProLiant DL585 G7, 16 cores, 2.6-GHz AMD Opteron 6282 SE Processor (4/64/64), 256 GB RAM	2011046	Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	11,445	62,570
HP ProLiant DL385 G7, 12 cores, 2.3-GHz, AMD Opteron 6176 SE Processor (2/24/24), 128 GB RAM	2010015	Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	4,394	24,020
HP ProLiant DL385 G7, 16 cores, 2.6-GHz AMD Opteron 6282 SE Processor (2/32/32), 128 GB RAM	2011045	Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0	5,805	31,720