HP ProLiant DL380 G7 demonstrates unmatched two-processor performance on two-tier SAP® Sales and Distribution (SD) standard application benchmark

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Executive summary
The HP ProLiant DL380 achieved the following #1 overall two-processor result on the two-tier SAP® Sales and Distribution (SD) standard application benchmark with SAP enhancement package 4 for the SAP ERP application 6.0: 5,110 SAP SD benchmark users with 27,880 SAPS. This result showed increased performance when compared to similarly configured two-processor competitors.¹

Key Take Aways:
- Greater number of SAP SD benchmark users than similarly configured IBM, Fujitsu, Cisco, or Hitachi competitors¹
- New ProLiant 6-core processors scale up to 49.6% greater performance than the previous generation processors
- New ProLiant Generation 7 technology delivers leading performance
- Proof point of greater performance for demanding scale-out applications in a business environment with 6-core Intel Xeon 5600 Series Processors compared to Quad-core processors

Competitors follow the leader: HP has better performance with 6-core processors

![Comparison Chart](chart.png)

Figure 1: The ProLiant DL380 G7 6-core rack server earned the #1 2-processor performance result when it achieved 5,110 SAP SD benchmark users (27,880 SAPS). See page 3 for Figure 1 configurations and Appendix A on pages 3-4 for comparison minimum data.

¹ Comparing performance of HP ProLiant DL380 G7 3.33GHz 6-core processors to IBM x3850 M3, Fujitsu PRIMERGY BX922 S2, Cisco UCS B200 M2, and Hitachi Blade Symphony BS2000 6-core 3.33GHz processors. See Appendix A on page 4 for comparison minimum data.
**Performance scalability greater with 6-core processors, G7 generation**

In addition to achieving leading performance 2-processor results on the two-tier SAP SD standard application benchmark, the ProLiant DL380 G7 server showed excellent two-processor, 6-core, 3.33GHz performance scalability results when compared to the following Generation 6 server results:

- its previous 2-processor, Quad-core result with 49.6% greater performance
- its previous 2-processor, 6-core, 2.93GHz result with 8.6% greater performance

**What this means for customers**

**Business transformation:**

HP is uniquely positioned to build the Converged Infrastructure because HP is also the only company to offer a full portfolio of standards-based, integrated solutions, and services developed specifically to solve the complexities of the data center. This means that companies can use the same architecture to run and manage multiple workloads across servers, storage, and networking. This significantly reduces complexity, resource requirements, and costs.

And with the ProLiant DL380 G7 technology and SAP software, customers can enjoy the benefits of:

- Providing basic information to configure and size SAP Business Suite software
- Allowing users to compare different platforms
- Enabling proof-of-concepts scenarios
- Providing an outlook for future performance levels (new platforms, new servers, and so on)

**Why the ProLiant DL380 is the world’s best-selling rack server**

The HP ProLiant DL380 G7 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.

**Bottom line**

**The ProLiant Advantage.** HP ProLiant provides the thought-leading innovation that can give customers’ businesses a technology edge. With our continuous advancements in the science of server computing combined with new Intel Xeon technology and SAP software, HP can help you gain an IT advantage over your competitive rivals.
Benchmark configurations

HP received certification from SAP AG of the results of the ProLiant DL380 G7 Server Blade on the two-tier SAP SD standard application benchmark (Certification #2010031) performed in Houston, Texas. The HP ProLiant DL380 G7 was set up as a two-processor system with two 3.33GHz 6-Core Intel Xeon X5680 Processors (2 processors/12 cores/24 threads), with 64KB L1 cache per core, 256KB L2 cache per core, 12MB L3 cache per processor, and 96GB main memory (12 x 8GB PC3-10600 DIMMs, 1333MHz). The server was also configured with one Smart Array P410i Controller (onboard) and one Smart Array P411 Controller connected to 33 x 72GB 6GB dual-port 15K SAS SFF external drives. The server was running Windows Server 2008 Enterprise Edition operating system, SQL Server 2008 Enterprise Edition database, and SAP enhancement package 4 for SAP ERP 6.0. The HP ProLiant DL380 G7 achieved 5,110 SAP SD benchmark users, equivalent to a throughput of 557,670 fully processed order line items per hour or 27,880 SAPS. All results as of 07-16-10; details can be found at http://www.sap.com/benchmark.

For more information check out:
HP ProLiant www.hp.com/servers/
SAP: www.sap.com
# Appendix A

## Configuration and Certification Number Details

<table>
<thead>
<tr>
<th>Platform, processor type (processors/cores/threads, memory)</th>
<th>Certification number</th>
<th>OS, database, and SAP software</th>
<th>SAP SD benchmark users</th>
<th>Order line items/hour</th>
<th>SAPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM System x3650 M3, Two-processors, 6-core Intel 3.33GHz Intel Xeon X5680, (2/12/24), 96GB RAM</td>
<td>2010025</td>
<td>Windows Server 2008 EE, DB2 9.7, SAP enhancement package 4 for SAP ERP 6.0</td>
<td>5,100</td>
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<td>Fujitsu PRIMERGY BX922 S2, Two-processors, 6-core 3.33GHz Intel Xeon X5680, (2/12/24), 72GB RAM</td>
<td>2010008</td>
<td>Windows Server 2008 R2 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0</td>
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<td>536,000</td>
<td>26,800</td>
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<td>Cisco UCS B200 M2, Two-processors, 6-cores, 3.33GHz Intel Xeon X5680, (2/12/24), 96GB RAM</td>
<td>2010018</td>
<td>Windows Server 2008 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0</td>
<td>4,852</td>
<td>529,670</td>
<td>26,480</td>
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## Heightened scalability with 6-core/Quad-core processors graph

<table>
<thead>
<tr>
<th>Platform, processor type (processors/cores/threads, memory)</th>
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<th>Order line items/hour</th>
<th>SAPS</th>
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<tr>
<td>HP ProLiant DL380 G7, Two-processors, 6-core 3.33GHz Intel Xeon X5680 (2/12/24), 96GB RAM</td>
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<td>Windows Server 2008 EE, SQL Server 2008 EE, SAP enhancement package 4 for SAP ERP 6.0</td>
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<td>27,780</td>
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<td>HP ProLiant BL460c G6, Two-processors, 6-core, 2.93GHz Intel Xeon X5670 (2/12/24), 96GB RAM</td>
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<td>Windows Server 2008 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0</td>
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<td>Windows Server 2008 EE, SQL Server 2008, SAP enhancement package 4 for SAP ERP 6.0</td>
<td>3,415</td>
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