HP ProLiant DL580 G5 achieves #1 4P non-clustered performance and price/performance on TPC-H@100GB benchmark

Interpreting the TPC-H@100GB result

- **#1 4P non-clustered performance**
- **#1 4P non-clustered price/performance**

HP, a market leader for industry-standard servers, announced on April 4, 2008, **new world record results on the TPC-H@100GB decision support benchmark**. The ProLiant DL580 G5 4-socket server achieved these results on the TPC-H@100 GB benchmark with **34,989.9 QphH, $3.97/QphH@100GB USD**, running Windows Server 2003 R2 Enterprise x64 Edition SP1 operating system and SQL Server 2005 Enterprise x64 Edition SP2 database and configured with four processors.

Figure 1. Top four 4P non-clustered performance results on TPC-H@100 GB benchmark

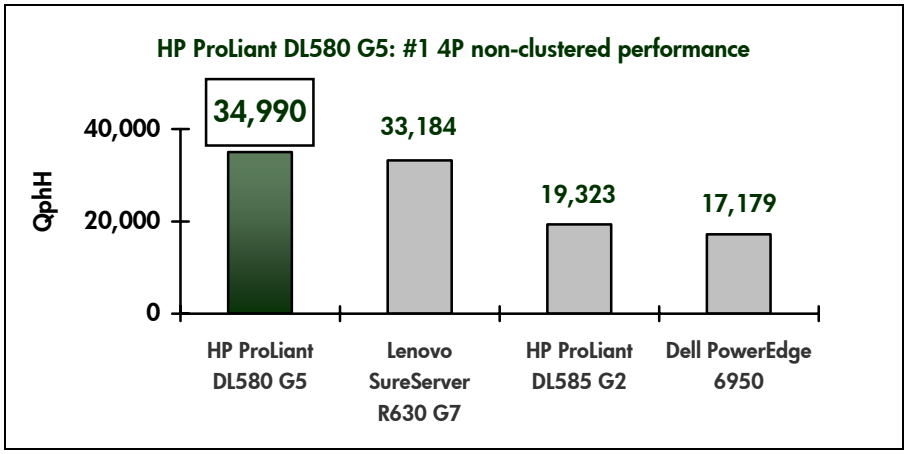
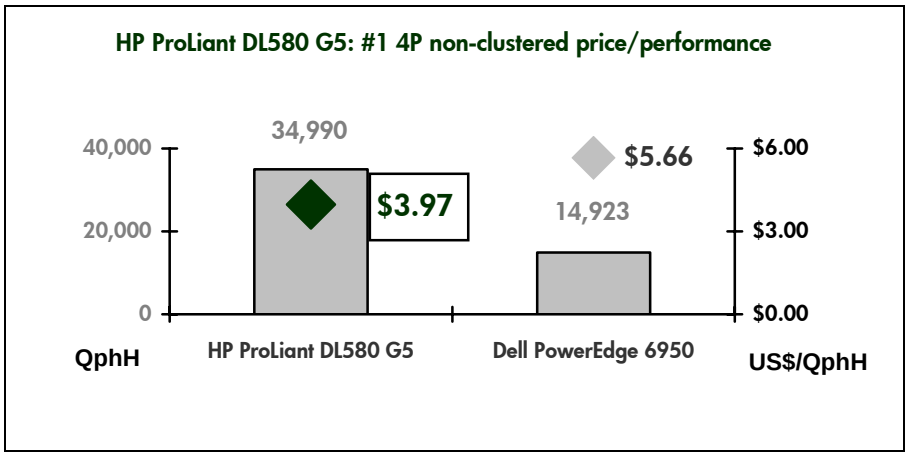


Figure 2. Top two 4P non-clustered price/performance results on TPC-H@100 GB benchmark



Best 4P non-clustered performance

Table 1. Top four 4P non-clustered price/performance results on TPC-H @ 100 GB benchmark

System	QphH	Price/QphH	System Availability	Database	OS
HP ProLiant DL580 G5 Intel Quad-Core Xeon X7350 2.93GHz (4 processors/16 cores/16 threads)	34,989	3.97 US $	04/04/08	Microsoft SQL Server 2005 x64 Enterprise Edt SP2	Microsoft Windows Server 2003 Enterprise x64 Ent. R2
SureServer R630 G7 Intel Quad-Core X7350 2.93 GHz (4 processors/16 cores/16 threads)	33,184	50.07 China Yuan (CNY) Renminbi	01/31/08	Microsoft SQL Server 2005 Enterprise Edt SP2	Microsoft Windows Server 2003 Enterprise Edt. R2
HP ProLiant DL585 G2 AMD 8220SE 2.8 GHz (4 processors/8 cores/8 threads)	19,323	10.67 US $	01/16/07	Microsoft SQL Server 2005 x64 Enterprise Edt. SP1	Microsoft Windows Server 2003 Enterprise x64 Edition SP1
PowerEdge 6950/2.8GHz/2MB AMD Opteron 8220SE DC 2.8GHz (4 processors/8 cores/8 threads)	17,179	7.64 US $	12/04/06	Microsoft SQL Server 2005 Enterprise x64 Edition	Microsoft Windows Server 2003 Enterprise x64 Edition

Best 4P non-clustered price/performance

Table 2. Top two 4P non-clustered price/performance results on TPC-H @ 100 GB benchmark

System	QphH	Price/QphH	System Availability	Database	OS
HP ProLiant DL580 G5 Intel Quad-Core Xeon X7350 2.93GHz (4 processors/16 cores/16 threads)	34,989	3.97 US $	04/04/08	Microsoft SQL Server 2005 x64 Enterprise Edt SP2	Microsoft Windows Server 2003 Enterprise x64 Ent. R2
PowerEdge 6950/2.8GHz/2MB AMD Opteron 8220SE DC 2.8GHz (4 processors/8 cores/8 threads)	14,923	5.66 US $	12/04/06	Microsoft SQL Server 2005 Enterprise x64 Edition	Microsoft Windows Server 2003 Enterprise x64 Edition

HP ProLiant DL580 G5 server configuration

The HP ProLiant DL580 G5 was configured with four 2.93-GHz Quad-Core Intel X7350 processors (4 processor/16 cores/16 threads), and 128 GB main memory. The server used 5 x 36GB 15K-rpm HP Small Form Factor SAS internal disk drives and 175 x 36GB 15K-rpm HP Small Form Factor SAS external disk drives, an onboard controller, 6 HP Smart Array P800 controllers, 1 Smart Array E500 controller, and 1 Smart Array P400i controller.

The DL580 G5 is the best performing 4-way x86 server, combining Intel's quad-core Xeon processor technology, best-in-class availability features, and unsurpassed flexibility in an ideal system for mission-critical datacenter deployments.

For more information

HP ProLiant DL580: www.hp.com/servers/proliantdl580 HP ProLiant storage solutions: www.hp.com/go/serial

TPC: Results valid as of April 27, 2008. Complete results can be found at http://www.tpc.org.

The TPC Benchmark™H (TPC-H) is a decision support benchmark. It consists of a suite of business oriented ad-hoc queries and concurrent data modifications. The queries and the data populating the database have been chosen to have broad industry-wide relevance. This benchmark illustrates decision support systems that examine large volumes of data, execute queries with a high degree of complexity, and give answers to critical business question. The performance metric reported by TPC-H is called the TPC-H Composite Query-per-Hour Performance Metric (QphH@Size), and reflects multiple aspects of the capability of the system to process queries. These aspects include the selected database size against which the queries are executed, the query processing power when queries are submitted by a single stream, and the query throughput when queries are submitted by multiple concurrent users. The TPC-H Price/Performance metric is expressed as $/QphH@Size. A full disclosure report describing these benchmark results has been filed with the Transaction Processing Performance Council (TPC) and is available upon request. The full disclosure report describes the benchmark hardware and software configuration in detail, provides costs, and lists the code actually used to perform the test. Similar reports from other vendors are the source of the price/performance comparisons provided above. Summaries of all tests are published each month by the TPCand are also posted on the Internet on the TPC's World Wide Web Server. With these benchmarks, customers can objectively compare the performance of different vendors' servers in specific areas.