HP ProLiant ML370 G5 achieves best price/performance on TPC-H@100GB benchmark

Interpreting the TPC-H@100GB result

■ **Lowest cost result**

HP, a market leader for industry-standard servers, announced on July 31, 2007, **a new world record best price/performance result on the TPC-H@100GB decision support benchmark**. The ProLiant ML370 G5 2-socket server achieved this lowest cost result on the TPC-H@100 GB benchmark with **4,521.2 QphH, $4.30/QphH@100GB USD**, running Windows Server 2003 R2 Standard Edition SP2 operating system and SQL Server 2005 Standard Edition SP2 database and configured with one processor.

Figure 1. The 5 lowest-cost results on the TPC-H@100 GB benchmark

HP ProLiant ML370 G5: Simply the lowest price

□ QphH
◆ $/QphH@100GB USD
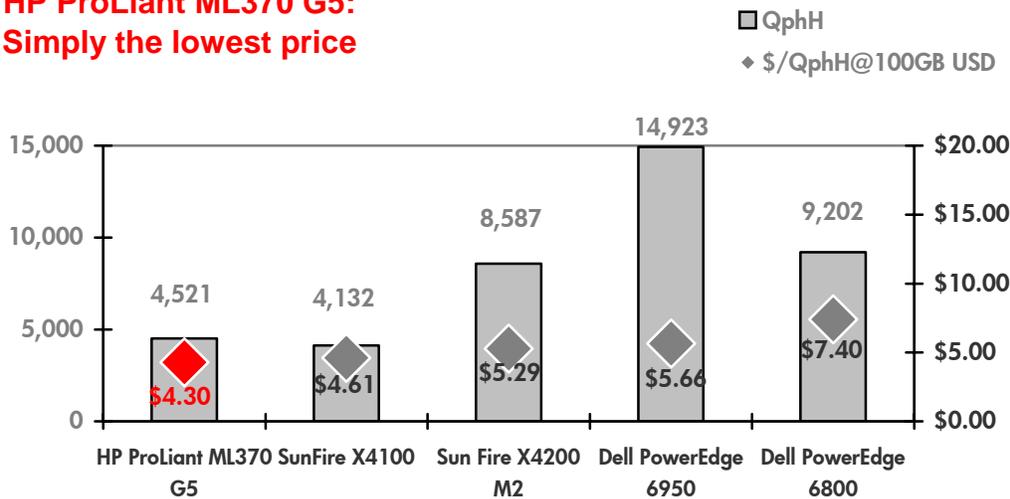
ProLiant server configuration

The HP ProLiant ML370 G5 was configured with one 2.66-GHz Quad Core Intel X5355 processors
(1 processor/4 cores/4 threads), and 16 GB main memory. The server used 16 x 36GB 15K-rpm HP Small Form Factor SAS internal disk drives and two HP Smart Array P400 controllers.

Lowest cost performance

Table 1. Best 5 price/performance results on TPC-H @ 100 GB benchmark

System	QphH	Price/QphH	System Availability	Database	OS
HP ProLiant ML370G5	4,521	$4.30/QphH@100GB USD	07/31/07	Microsoft SQL Server 2005 x64 Standard Edt SP2	Microsoft Windows Server 2003 R2 x64 Standard Ed.
SunFire X4100	4,132	$4.61/QphH@100GB USD	06/23/06	Sun Sybase IQ 12.6 Single	Sun Solaris 10
SunFire X4200 M2	8,587	$5.29/QphH@100GB USD	05/25/07	Sybase IQ 12.6 SAS	Sun Solaris 10
PowerEdge 6950/2.8GHz/2MB	14,923	$5.66/QphH@100GB USD	12/04/06	Microsoft SQL Server 2005 Enterprise x64 Edition	Microsoft Windows Server 2003 Enterprise x64 Edition
PowerEdge 6800/3.0GHz/2x2MB	9,202	$7.40/QphH@100GB USD	05/18/06	Microsoft SQL Server 2005 Enterprise x64 Edition	Microsoft Windows Server 2003 Enterprise x64 Edition

Why HP wins in performance

The latest ML370 G5 server

The flagship ML370 G5 provides industry-leading management, performance and availability in a dual processor expansion server engineered to excel in a variety of environments - from corporate work groups in growing businesses to critical remote sites requiring continuous accessibility and uptime.

HP Smart Array Controller P400

The HP Smart Array P400 is HP's first PCI-Express (PCIe) serial attached SCSI (SAS) RAID controller and provides new levels of performance and reliability for HP servers, through its support of the latest SCSI technology and advanced RAID capabilities.

HP Small Form Factor (SFF) SAS drives

The transition to SFF (2.5") SAS drives is the most significant transition in the industry's history, fueled by the biggest required leap in storage capacity ever experienced along with the need for faster access to stored data. HP has lead the way with this transition.

For more information

HP ProLiant ML370: www.hp.com/servers/proliantml370   HP ProLiant storage solutions: www.hp.com/go/serial

TPC: Results valid as of July 31, 2007. 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.