Another leadership TPC-H 1 TB result for HP ProLiant DL785 G6 –
this time with Sybase IQ and Red Hat Enterprise Linux

#1 x86 performance in 1 TB non-clustered category
#1 Linux performance in 1 TB non-clustered category
#1 Sybase IQ result in 1 TB non-clustered category

Exceptional results
The DL785 G6 continues to be the only x86 server with eight six-core processors to post results on the QphH@1000GB benchmark. The DL785 G6 results are the #3 and #4 non-clustered performance results overall, which is impressive as the results are only 20% less than the 32-processor Sun SPARC Enterprise server.

In addition to holding the #1 and #2 x86 non-clustered performance records on the QphH@1000GB benchmark, the DL785 G6 holds the #1 and #2 8P price/performance records, #1 and #2 x86 price/performance records, and #1 and #2 Linux price/performance records.

ProLiant DL785 G6 scores 102,375.3 QphH@1000GB and $3.63 USD/QphH@1000GB

The DL785 G6 continues to be the only x86 eight-socket server with results posted on QphH@1000 GB benchmark, and the only x86 eight-socket server with 2 results posted on the benchmark, with 2 different databases and operating systems for customer comparisons.

Outstanding value
DL785 G6 is the highest performing x86 server result on the QphH@1000 GB benchmark, making it an ideal platform for enterprise class business intelligence and decision support solutions at an attractive price. The DL785 G6 also offers an excellent price/performance benefit as a single server (non-clustered) for large scale business intelligence deployment, a 26.3% performance improvement showcasing the superior performance of the DL785 server running Sybase.

What are the benefits of using the HP ProLiant DL785 G6 for decision support applications?
The DL785 G6 with the latest six-core AMD Opteron™ processors has been designed as an excellent database server. Its balanced architecture with ample I/O and memory make it an ideal platform for decision support and business intelligence processes. Many businesses find this type of benchmark useful in determining what servers to utilize because the TPC-H 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 questions. Hundreds of customers run their database applications on the DL785 server.

Multiple performance records
Neither the IBM x3950 M2 nor the Sun Fire X4640 have posted results on the QphH@1000GB benchmark as of the date of publication of this paper. HP provides results for many of its servers on multiple benchmarks to enable customers to make purchasing decision. The HP ProLiant DL785 G6 has achieved multiple performance records on multiple benchmarks in addition to the previous QphH@1000GB result. For more information, see several record-breaking benchmark briefs at:
**Business outcomes**

Powered by latest AMD six-core Opteron Processors, the HP ProLiant DL785 G6 is the next generation server of the award winning HP ProLiant DL785 G5, still offering all the familiar and easy to use ProLiant management tools and options as well as new enhancements.

The DL785 G6 offers enhanced power management, support for power monitoring, regulation, and capping, and support for HP Insight Power Manager.

With an outstanding price and multiple leading benchmarks in performance, customers are reassured that the DL785 G6 server will enable them to accelerate business growth, lower costs, and mitigate risk while delivering outstanding investment protection, making it the BEST PLATFORM in its class for their business applications.

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**Benchmark configuration**

The HP ProLiant DL785 G6 was configured with 8 Six-Core AMD Opteron™ 8439 2.8-GHz processors (8 processors/48 cores /48 threads), and 384 GB PC2-5300 (48 x 8 GB) main memory. The server was running Sybase IQ 15.1 database and Red Hat Enterprise Linux 5.3 operating system. The storage system consisted of eight PCIe Fibre Channel 8 GB dual-port adapters and four HP Modular Storage Array (MSA) 2324 enclosures populated with 96 x 72 GB 15K 2.5” dual-port SAS disks for the database, and 8 internal disks connected to an internal HP Smart Array P400 controller. System availability date is 02/01/10.

**About Sybase IQ**

Sybase IQ combines extraordinary speed and agility with low total cost of ownership, enabling enterprises to perform the critical business analysis and reporting that was previously impossible, impractical or cost-prohibitive. More than 1,800 customers worldwide have adopted Sybase IQ’s innovative, column-based processing approach to power their critical analytical and reporting systems. Sybase IQ solutions empower businesses to more accurately predict outcomes, gain real-time insights into business operations, and actively mitigate risks in today’s competitive global climate.

Sybase is an industry leader in delivering enterprise and mobile software to manage, analyze and mobilize information. We are recognized globally as the performance leader, proven in the most data-intensive industries and across all systems, networks and devices. For 25 years, our information management, analytics and enterprise mobility solutions have powered the world’s most mission-critical systems in financial services, telecommunications, manufacturing and government. For more information, visit [www.sybase.com](http://www.sybase.com) and read Sybase blogs.

**What are the benefits of choosing HP and Red Hat?**

HP and Red Hat have worked together for more than a decade to drive innovation in server and open source technology. The ongoing collaboration helps customers migrate applications, reduce technology infrastructure costs and achieve higher performance. In addition, HP and Red Hat:

- Build powerful solutions based on robust, certified platforms that migrating Sun customers can rely on
- Instill confidence in the joint solution due to the level of HP services, support and accountability
- Deliver a cost-effective solution optimized across the infrastructure, allowing companies to improve utilization, lower energy use and reduce costs.

**What TPC-H measures**

The TPC Benchmark™H (TPC-H) is a decision support benchmark, with components that are intended to be relevant to customers who deploy decision support systems as part of their business intelligence solution. The benchmark is comprised of a suite of business oriented ad-hoc queries and concurrent data modifications that examine large volumes of data and execute highly complex queries. TPC-H reports a metric called the TPCH Composite Query-per-Hour Performance Metric (QphH@Size), that reflects the capability of the system to process queries based upon the database size, single stream query processing power, and the query throughput when queries are submitted by multiple concurrent users. An additional price/performance metric ($/QphH@Size) is reported, and it is calculated by dividing the total solution cost by the QphH metric.

**TPC Disclosure:** A full disclosure report describing these benchmark results can be downloaded from the TPC web site at [http://www.tpc.org](http://www.tpc.org). The intent of this disclosure is to simplify comparison between results and for a customer to be able to replicate the results of this benchmark given appropriate documentation and products. Test results as of 02-01-10.