

Cisco UCS Demonstrates TPC-H Benchmark Leadership with the SAP Sybase IQ Database



Performance Brief
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Highlights

Best Single-System x86 Performance

- The Cisco Unified Computing System™ (Cisco UCS®) C420 M3 Rack Server achieved 230,119.9 QphH@3000GB on the TPC-H benchmark with the SAP Sybase IQ database. This is the best performance result of any single-system x86 configuration.

Best Nonclustered Price:Performance Ratio at 3000 GB

- The system demonstrated a price:performance ratio of US\$1.29 per QphH@3000GB, offering the best single-system price/performance at 3000 GB.

A Tradition of Performance and Price:Performance Leadership

- Cisco has established a tradition of performance and price/performance leadership on essential enterprise benchmarks. Cisco's results indicate the degree to which Cisco® servers can deliver cost-effective scalability and performance to enterprise applications.

Cisco UCS® C420 M3 Rack Server achieves best single-system x86 performance and price/performance at 3000 GB on the TPC-H benchmark.

Industry-Leading Performance for Decision Support

Many businesses depend on decision-support systems. Successful implementations require infrastructure that delivers the right information at the right time along with servers that deliver outstanding performance. Cisco's recent TPC-H result illustrates the power of Cisco UCS C420 M3 Rack Servers to deliver industry-leading performance at significantly lower cost of ownership than competing systems. This TPC-H result establishes the leadership of Cisco solutions, delivering the best single-system x86 performance and price/performance ratio at 3000 GB (Figure 1).

Cisco's results demonstrate 20 percent greater performance with 76 percent less cost than the IBM Power 780 server; and 42 percent better performance than the HP DL980 G7 server with configurations shown under "Disclosures" on page 2.

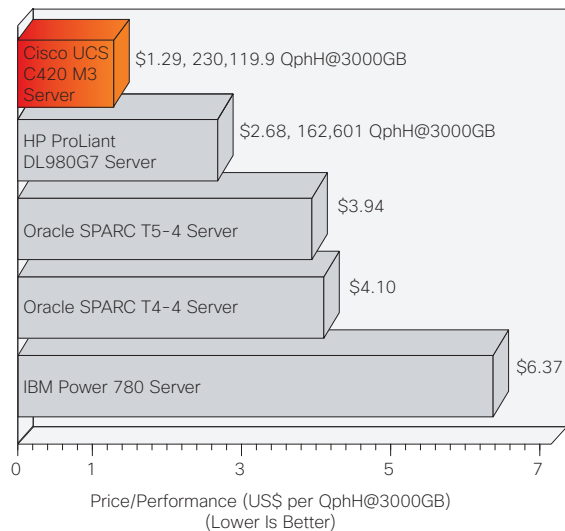


Figure 1. Cisco UCS C420 M3 Server Delivers the Best Single-System Price/Performance at 3000 GB on the TPC-H Benchmark (See Page 2 for Disclosures)

Cisco UCS Demonstrates TPC-H Benchmark Leadership with the SAP Sybase IQ Database

TPC-H Benchmark

The TPC-H benchmark is an industry-standard decision-support-system benchmark, designed to measure the capability of a system to examine large volumes of data, run complex queries, and answer critical business questions. The TPC-H benchmark evaluates a composite performance metric (QphH@size) and a price/performance metric (\$/QphH@size) that measures the performance of various decision-support systems by running sets of queries against a standard database under controlled conditions.

Cisco UCS C240 M3 Rack Server

The Cisco UCS C420 M3 Rack Server is a high-density, 4-socket rack server designed for compute, I/O, storage, and memory-intensive applications. The system is a two-rack-unit (2RU) rack server with the Intel® Xeon® processor E5-4600 product family, up to 1.5 terabytes (TB) of double-data-rate 3 (DDR3) memory, and up to 16 Small Form-Factor (SFF) hot-pluggable SAS or SATA disk drives or solid-state drives (SSDs).

Benchmark Configuration

As tested, the benchmark configuration consisted of a Cisco UCS C420 M3 Rack Server with 1 TB of memory and four 2.7-GHz Intel Xeon E5-4650 processors with 20 MB of cache space. The server was equipped with six Cisco UCS Fusion-io 1205M ioDrive2 Adapters, eight 600-GB SFF SAS hard disk drives, and eight Cisco UCS 200-GB SATA enterprise performance SSDs. The system ran SAP Sybase IQ Version 16 Single Application Server Edition (SASE) and Red Hat Enterprise Linux Server Release 6.4. The configuration is available December 31, 2013.

For More Information

For more information about Cisco UCS performance, please visit <http://www.cisco.com/go/ucsatwork>.

Disclosures

TPC-H, QphH, and \$/QphH are trademarks of the Transaction Processing Performance Council (TPC). The performance results described in this document are derived from detailed benchmark results available as of October 31, 2013, at <http://www.tpc.org/tpch/default.asp>.

HP ProLiant DL980 G7 Server

achieved 162,601.7 QphH@3000GB and US\$2.68 USD per QphH@3000 GB and was available October 13, 2010. For configuration details and results, see <http://www.tpc.org/3253>.

IBM Power 780 Server achieved 192,001 QphH@3000GB and US\$6.37 USD per QphH@3000 GB and was available November 30, 2011. For configuration details and results see <http://www.tpc.org/3277>.

Oracle SPARC T5-4 Server achieved 409,721 QphH@3000GB and US\$3.94 USD per QphH@3000 GB and was available September 24, 2013. For configuration details and results see <http://www.tpc.org/3288>.

Oracle SPARC T4-4 Server achieved 205,792 QphH@3000GB and US\$4.10 USD per QphH@3000 GB and was available May 31, 2012. For configuration details and results see <http://www.tpc.org/3278>.



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