HP ProLiant DL785 G6 takes a world record on SPECjAppServer®2004

HP Performance Brief

• #1 worldwide single-node result
• 23.4% better than Sun single-node result

#1 single-node result
Equipped with 8x 2.8-GHz Dual-Core AMD Opteron™ processors Model 8439SE, the ProLiant DL785 G6 achieved the world-record single-node server performance SPECjAppServer2004 result of 9,455.17 JOPS (jAppServer operations per second).

Nearly 25% better performance
This latest result delivers 23.4% more performance than the former #1 single-node result of 7,661 JOPS held by the Sun SPARC Enterprise T5440.

3.3X better price/performance and 1.6X performance/watt
As of 10-08-07, a Sun SPARC Enterprise T5440 model with the same configuration as the test model had a price of $159,105, $20.77USD/JOPS, and a power consumption of 2,045 Watts, 3,746 JOPS/Watt. The DL785 G6 with the same configuration as the test model was priced at $58,740, $6.21USD/JOPS, and a lower power consumption of 1,576 Watts, 5,999 JOPS/Watt.¹

Business outcomes
The DL785 G6 shows its capability to deliver excellent Java/J2EE based transaction processing capabilities at a lower price point.
• DL785 delivers 3.3 times better price/performance than Sun SPARC Enterprise T5440
• DL785 deliver 1.65 times better performance per watt than Sun SPARC Enterprise T5440

ProLiant DL785 G6 scores 9,455.17 JOPS

![Graph showing performance comparison]

The HP ProLiant DL785 G6 is an industry leader in Java/J2EE based end to end transaction processing performance.

Test results as of 10-07-09. For more details, please visit:

What are the benefits of using the HP ProLiant DL785 G6 for Oracle and Java/J2EE based end to end transaction processing performance?
Many businesses aggressively use the Web to permit customers direct specification of product configuration, ordering, and status checking. In addition, businesses strive to fully automate manufacturing, inventory, supply chain management, and customer billing. The SPECjAppServer 2004 benchmark makes use of manufacturing, supply chain management, and order/inventory as the "storyline" of the business problem. It is heavyweight, mission-critical, worldwide, 24x7, and necessitates use of a powerful and scalable infrastructure. HP platforms using Oracle provide organizations with a robust and reliable platform for mission-critical applications.

¹ Pricing data from HP and Sun websites as of 10-05-09.
Manager.
regulation, and
efficient power
enhanced the next generation
of the Standard Performance Evaluation Corporation.  Competitive benchmark results  and comparisons sta ted above reflect results published on
GHz processors Model 8439SE, (48 cores, 8 chips, 6 cores/chip), 256 GB RAM, two HP NC364T
Gigabit Network Adapters and four HP StorageWorks 70 Modular Smart Array
Enclosures through three Smart Array P800/512MB SAS controllers.

What SPECjAppServer2004 measures
SPECjAppServer2004 (Java Application Server) is an industry standard multi-tier benchmark for measuring the
dependence of Java 2 Enterprise Edition (J2EE) technology-based application servers. The workload is an
application that emulates information flow among an automotive dealership, manufacturing, supply
chain management, and an order/inventory system. SPECjAppServer2004 is an end-to-end application
which exercises all major J2EE technologies implemented by compliant application servers as follows:
1. The web container, including servlets and JSPs
2. The EJB container
3. EJB2.0 Container Managed Persistence
4. JMS and Message Driven Beans
5. Transaction management
6. Database connectivity

SPECjAppServer2004 also heavily exercises all parts of the underlying infrastructure that make up the application
environment, including hardware, JVM software, database software, JDBC drivers, and the system network.
SPECjAppServer2004 was developed by the Java subcommittee’s core design team. BEA, Borland, Darmstadt
University of Technology, HP, IBM, Intel, Oracle, Pramati, Sun and Sybase participated in the design, implementation
and testing phases of the product. The performance metric is jAppServer Operations Per Second
(SPECjAppServer2004 JOPS), which is the number of manufacturing work orders divided by the measurement
period in seconds. Another metric with this benchmark but which is not part of the discussion in the paper is
dependence/jOPS, which is the price of the System Under Test (including hardware, software, and support) divided by
the JOPS. More information about SPECjAppServer_2004 results can be found at the following Web page:

Technology for better business outcomes
To learn more, visit www.hp.com/servers/proliantDL785

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Corporation. Listing the highest SPECjAppServer2004 JOPS @ Standard results on single-node category. Results compared are 9,455 JOPS of
HP DL785 G6 and 7,661 JOPS on Sun T5440. Price/Performance ($/JOPS) comparison using price for a single HP DL785 (58,740 USD) and
Sun T5440 (159,105 USD ) using the configuration used for the benchmark as listed in the disclosed Bill of Material and the public listed
pricing information from the vendor websites as of October 7, 2009. Power usage calculations from vendor websites.SPECjAppServer2004
JOPS @ Standard (Java Operations Per Second) is the result metric used. SPEC and the benchmark name SPECjAppServer2004 are trademarks of
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