

HP ProLiant DL380 G5 two-socket, 8-core takes #1 position on Oracle E-Business Suite 11i Small Model Benchmark



The newest Quad-Core Intel Xeon version of the HP ProLiant DL380 G5 model is designed for improved server responsiveness, enhanced multi-tasking capabilities, and improved performance for the most demanding applications and virtualization projects



Key results at a glance:

- ProLiant leadership with the #1 result on Oracle E-Business Suite 11i Small Model Benchmark with the two-socket, 8-core HP ProLiant DL380 G5.
- The result defeated IBM's System x3850 four-socket, 8-core server result.
- With this benchmark, HP now owns the TOP 6 positions for published Oracle E-Business Suite small model benchmarks.
- The ProLiant DL380 G5 shows a 7% increase in processor speed scalability for when compared to its previous Quad-Core benchmark result.
- The results show the superior optimization of the ProLiant two-socket Quad-Core server architecture versus IBM's X3 four-socket Dual-Core architecture.

Once again, the HP ProLiant DL380 G5 has achieved a #1 performance result on the Oracle E-Business Suite 11i Small Model Benchmark, this time utilizing a two-socket, Quad-Core configuration with the latest Intel Xeon X5300 Series chipset.

The HP Difference

The ProLiant DL380 G5 achieved superior results when compared to the IBM x3850 in each of the following four key measurements:

- 45% faster in Average Response Time
- 60% faster in the 90th Percentile Response Time
- 23,309 more Lines per Hour Batch Throughput (more than twice as much!)
- 32,994 more Checks per Hour Batch Throughput (more than twice as much!)

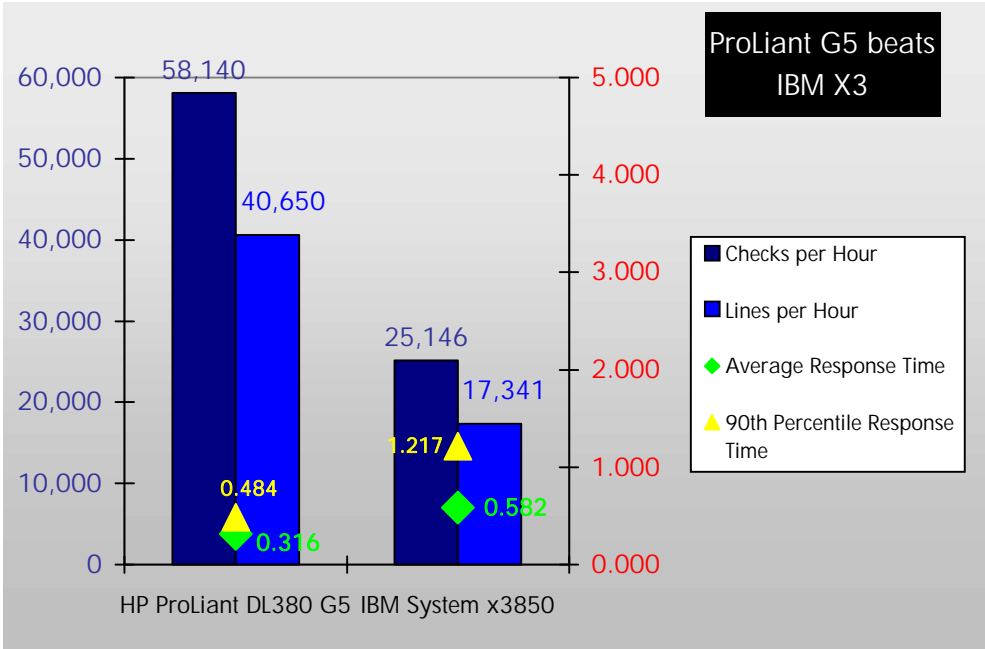


Figure 1. Comparison of performance results of the HP ProLiant DL380 G5 two-socket, Quad-Core server to the IBM x3850 four-socket, Dual-Core server on the 1,000-user Oracle E-Business Suite 11i Small Model Benchmark.

Benchmark comparisons

Table 1. Result summary of the HP ProLiant DL380 G5 two-socket server to the IBM x3850 four-socket server results on the 1,000-user Oracle EBS 11i Small Model Benchmark. The Oracle E-Business Suite 11i Small Model Benchmark workload is best-aligned to 8-core and smaller systems

Summary of results for DL380 G5 vs. IBM x3850 on Oracle E-Business Suite 11i Small Model Benchmark		
1,000 Concurrent Users		
	DL380 G5	IBM x3850
Average Response Time	0.316	0.582 sec
90 th percentile Response Time	0.484	1.217 sec
Order-to-Cash Lines/Hour Batch Throughput	40,650	17,341
Payroll Checks/Hour Batch Throughput	58,140	25,146







Scalability

The ProLiant DL380 G5 achieved a 7% scalability increase when changing processor speeds from a 2.66GHz to 3.0GHz utilizing the Intel Xeon X5300 Series chipset.

HP leads with Top 6 positions

With the ProLiant DL380 G5 as the top performer, HP now captures the Top 6 positions for published Oracle E-Business Suite small model benchmarks.

Table 2. The HP ProLiant DL380, ProLiant BL685c, and ProLiant DL580 hold the Top 6 positions for performance utilizing 1,000 users online with a batch of 10,000 order lines and 5,000 payroll employees.

Rank	Company	System	Result
1		ProLiant DL380 G5 equipped with 2 x 3.0GHz Intel Xeon Quad-Core X5365 processors (8-core)	0.316 sec 40,650 Lines/Hour 58,140 Checks/Hour
2		ProLiant DL380 G5 equipped with 2 x 2.66GHz Intel Xeon Quad-Core X5355 processors (8-core)	0.379 sec 36,166 Lines/Hour 54,152 Checks/Hour
3		ProLiant BL685c equipped with 4 x 2.8GHz AMD Opteron Dual-Core 8220 processors (8-core)	0.373 sec 26,984 Lines/Hour 46,296 Checks/Hour
4		ProLiant DL580 G4 equipped with 4 x 3.4GHz Intel Xeon Dual-Core 7140M processors. (8-core)	0.415 sec 23,511 Lines/Hour 43,415 Checks/Hour
5		ProLiant DL580 G4 equipped with 2 x 3.4GHz Intel Xeon Dual-Core 7140M processors (4-core)	0.448 sec 21,254 Lines/Hour 38,119 Checks/Hour
6		ProLiant DL580 G3 equipped with 4 x 3.0GHz Intel Xeon Dual-Core 7040 processors (8-core)	0.505 sec 17,497 Lines/Hour 23,872 Checks/Hour

The ProLiant Advantage

These stellar results were achieved using the HP ProLiant DL380 G5 server as the database tier combined with HP ProLiant BL685c server blades in the applications tier. The HP ProLiant BL685c server blade delivers maximum Dual-Core performance, enterprise manageability and availability, and superior server design to the datacenter, including:

- Uncompromising Dual-Core performance for the most demanding applications
- Enterprise-class manageability and availability to keep operations up and running smoothly
- Superior ProLiant design to enable highly flexible, reliable, and efficient server deployments
- Multi-server and high performance Dual-Core applications

Also included behind the scenes of these results are many high quality HP storage products, such as the HP Smart Array P400 Controller, HP Storage Works 4Gb PCI-E Fibre Channel controller, and a Storage Works EVA6000 disk array.

The advantages of the partnership between HP and Oracle

Strategic partners for over 25 years, HP and Oracle have more than 100,000 joint customers. Our accomplishments together are numerous. Here are just a few:

- A strong breadth and depth of platform, software, and services offerings
- Joint development, testing, and optimization
- Performance and price/performance leadership validated by industry and Oracle Applications benchmarking
- Oracle's Database is the most popular database among HP-UX customers
- HP Consulting and Integration Services deliver solutions for Enterprise Integration and Service Oriented Architecture with Oracle Fusion Middleware
- HP is a leading Oracle Applications Infrastructure Partner
- There are 13 HP/Oracle solution and demo centers worldwide
- Oracle Fusion Middleware is showcased in HP's SOA Competency Centers around the world
- Oracle chose HP to be a key platform provider for its development of Itanium®-based databases for Linux, Unix, and Windows
- The partners provide executive alignment that starts at the top and runs through both organizations

HP and Oracle aim to address today's business challenges by enabling the synchronization of infrastructure, applications, services, and business processes – from suppliers through to customers – to help organizations reduce the cost of change, reduce total cost of ownership, simplify IT management complexity, and rapidly implement solutions that provide a competitive advantage.

For more information

HP ProLiant DL380 G5: www.hp.com/proliantdl380g5

HP ProLiant BL685c: <http://www.hp.com/bladeservers>

HP ProLiant storage solutions: www.hp.com/go/serial and <http://h18004.www1.hp.com/products/servers/platforms/storage.html>

OASB information is available at http://www.oracle.com/apps_benchmark/html/results.html

HP and Oracle partnership:
www.hp.com/go/oracle

More information about all servers can also be found at the following web page:
http://www.oracle.com/apps_benchmark/html/results.html#small

Server configurations

HP ProLiant DL380 G5 1,000-user results on Oracle E-Business Suite 11i Benchmark: In August 2007, Oracle and Hewlett-Packard conducted a benchmark in Cupertino, California, to measure the online and batch performance of the Oracle Applications Standard Benchmark processes in an environment running Oracle E-Business Suite (EBS) 11i (11.5.10) with Oracle Database 10g™ (10.1.0.4) 64-bit and Red Hat® Enterprise Linux® Advanced Server release 4.0 Update 4, and achieved 40,650 Lines per Hour, 58,140 Checks per Hour, a 90th percentile response time of 0.484 seconds, and an average response time of 0.316 seconds. This result, submitted 08-14-07, was achieved on a Hewlett-Packard® ProLiant™ DL380 G5 database server configured with 2 x 3.0GHz Intel® Xeon X5365 Quad-Core processors (2 processors/8 cores/8 threads) with 2 x 4MB Level 2 cache, 32GB memory, and PC2-5300 667MHz DDR2 fully-buffered DIMMs. The system used 8 x 72GB SFF SAS internal disk drives attached to an integrated HP Smart Array P400 Controller, and 1 x HP Storage Works EVA6000 disk array attached to 1 HP Storage Works 4Gb PCI-e Fibre Channel controller for data and logs. Two HP ProLiant BL685c blade servers were used as application and web servers and one HP ProLiant BL685c blade server was used as the CM/NFS server.

vs. IBM System x3850 1,000-user results on Oracle E-Business Suite 11i Benchmark: In May and June 2006, Oracle and IBM conducted a benchmark in Research Triangle Park, North Carolina, to measure the online and batch performance of the Oracle Applications Standard Benchmark processes in an environment running Oracle E-Business Suite (EBS) 11i (11.5.10) with Oracle Database 10g™ (10.1.0.4) and Red Hat® Enterprise Linux Advanced Server release 3.0 Update 6, and achieved 17,341 Lines per Hour, 25,146 Checks per Hour, a 90th percentile response time of 1.217 seconds, and an average response time of 0.582 seconds. This result, submitted 06-20-06, was achieved on an IBM System x3850 database server configured with 4 x 3.0GHz Dual-Core Intel® Xeon® 7040 Processor (4 processors/8 cores/16 threads) with 2 x 2MB L2 cache per Core, and 32GB memory. Two IBM TotalStorage DS4500s were used for data storage. A second IBM System x3850 four-processor, Dual-Core server was used as an application/web server.

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