



HP ProLiant  
BL465c G5

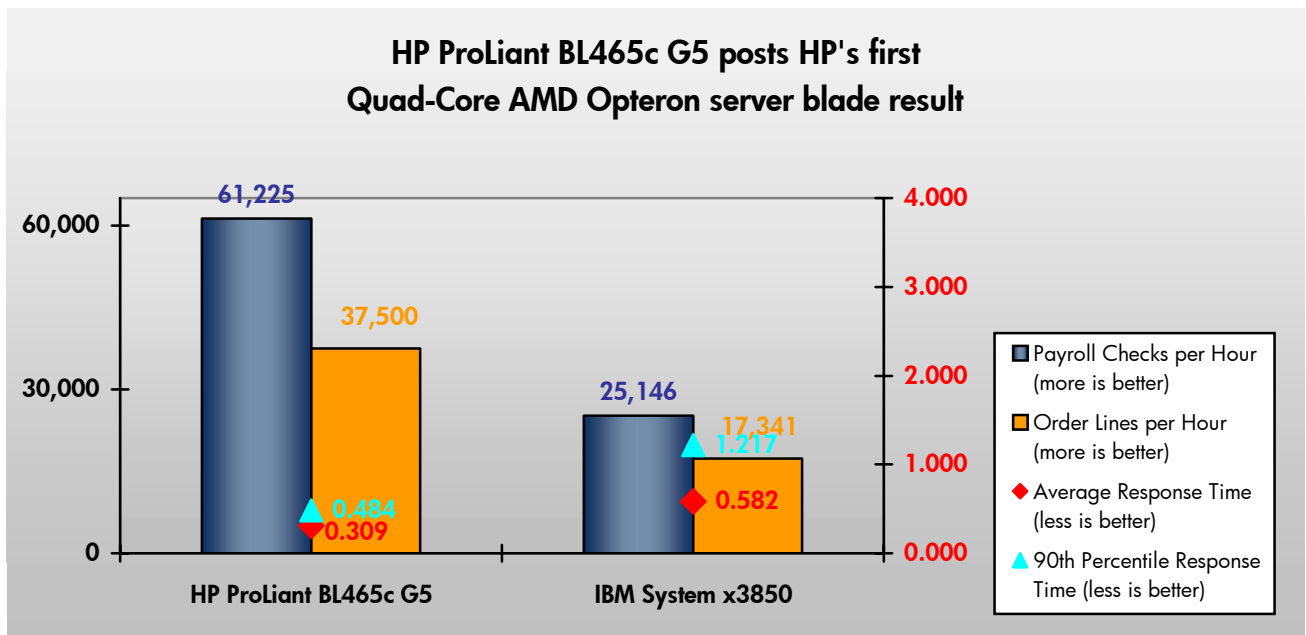
HP ProLiant BL465c G5 server blade posts HP's first Quad-Core AMD Opteron™ blade result on Oracle Applications Standard Benchmark (small model, single DB instance)



### Key results at a glance

- ProLiant BL465c G5 result is the first Quad-Core AMD Opteron™ server blade result to be posted
- ProLiant BL465c G5 is the #3 result
- HP servers hold the top 9 results on this benchmark

Figure 1. Comparison of performance results on the 1,000-user Oracle E-Business Suite 11i Small Model Benchmark.



On March 24, 2008, HP submitted a new result for the HP ProLiant BL465c G5 on the Oracle E-Business Suite 11i Small Model benchmark. The HP ProLiant BL465c G5 achieved superior results as compared to the IBM x3850 in each of the following key measurements:

- **88% faster in Average Response Time**
- **Nearly 3x as fast in 90<sup>th</sup> percentile Response Time**
- **More than twice the Order Cash Lines per Hour Batch Throughput**
- **More than twice the Payroll Checks per Hour Batch Throughput**

The results show the superior optimization of the ProLiant two processor quad-core server blade architecture versus IBM's X3 four processor dual-core server architecture.

**Table 1.** Result summary of the HP ProLiant BL465c G5 two processor server to the IBM x3850 four processor results on the 1,000-user Oracle E-Business Suite 11i Small Model Benchmark. The Oracle E-Business Suite 11i Small Model Benchmark workload is best-aligned to 8-core and smaller systems.

<b>Summary of results for HP ProLiant BL465c G5 vs. IBM x3850 on Oracle E-Business Suite 11i Small Model Benchmark</b>		
1,000 Concurrent Users – 4-processor results		
	<b>BL465c G5</b>	<b>IBM x3850</b>
Average Response Time	0.309	0.582 sec
90 <sup>th</sup> percentile Response Time	0.484	1.217 sec
Order-to-Cash Lines/Hour Batch Throughput	37,500	17,341
Payroll Checks/Hour Batch Throughput	61,225	25,146

Results valid as of 3-24-08. More information on published benchmark results is available at: [http://www.oracle.com/apps\\_benchmark/html/results.html#small](http://www.oracle.com/apps_benchmark/html/results.html#small)

## The ProLiant Advantage

These stellar results were achieved using the HP ProLiant BL465c G5 server blade as the database tier and the applications tier. The HP ProLiant BL465c G5 server blade, now with Quad-Core AMD Opteron processors, delivers maximum performance, enterprise manageability and availability, and superior server design to the datacenter, including:

- Uncompromising 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 E200i Controller, QLogic QMH2462 4Gb Fibre Channel controller, and an HP 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 140,000 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 Intel Itanium®-based database releases 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 BL465c G5: [www.hp.com/servers/bl465c](http://www.hp.com/servers/bl465c)

HP ProLiant storage solutions: [www.hp.com/go/serial](http://www.hp.com/go/serial) and [h18004.www1.hp.com/products/servers/platforms/storage.html](http://h18004.www1.hp.com/products/servers/platforms/storage.html)

OASB information: [www.oracle.com/apps\\_benchmark/html/results.html](http://www.oracle.com/apps_benchmark/html/results.html)

HP and Oracle partnership: [h71028.www7.hp.com/enterprise/cache/6606-0-0-225-121.html?jumpid=reg\\_R1002\\_USEN](http://h71028.www7.hp.com/enterprise/cache/6606-0-0-225-121.html?jumpid=reg_R1002_USEN)

More information can also be found at the following web page:

[http://www.oracle.com/apps\\_benchmark/html/results.html#small](http://www.oracle.com/apps_benchmark/html/results.html#small)

#### Server configurations

**HP ProLiant BL465c G5 server blade 1,000-user results on Oracle E-Business Suite 11i Benchmark:** In March 2008, 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 37,500 Lines per Hour, 61,224 Checks per Hour, a 90th percentile response time of 0.484 seconds, and an average response time of 0.309 seconds. This result, submitted 03-31-08, was achieved on a Hewlett-Packard® ProLiant™ BL465c G5 database server configured with 2 x 2.3GHz Quad-Core AMD® Opteron® 2356 processors (2 processors/8 cores/8 threads) with 2MB Level 2 cache and 2MB Level 3 cache per core, 32GB memory, and PC-5300 Registered DDR2-667MHz DIMMs. The system used 2 x 72GB SFF SAS internal disk drives attached to an integrated HP Smart Array E200i Controller, and 1 x HP Storage Works EVA6000 disk array attached to 1 QLogic QMH2462 4Gb 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. most recent 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 processors (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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