HP ProLiant DL380 G5 earns two #1 performance records for Oracle E-Business Suite R12 with Oracle 10g

HP Leadership

» The ProLiant DL380 G5 continues to rank as the world's best selling server while consistently delivering on its proven history of design excellence.

Customer Value

What are the benefits of using HP ProLiant servers and Oracle E-Business Suite Applications?

HP's engineering investment in Oracle applications and technologies has produced significant customer benefits. For example, HP continually publishes leading benchmark results for Oracle Application environments, and HP and Oracle host 13 technology and competency centers worldwide. As a result, HP and Oracle have over 140,000 joint customers across the globe.
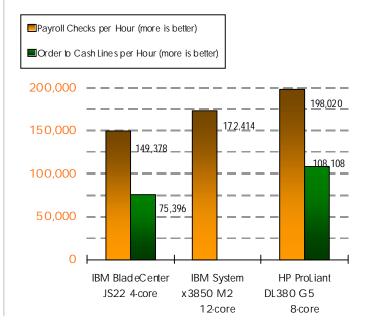
With Oracle applications, the HP ProLiant DL380 G5 offers up to a 43% performance advantage in the order-to-cash batch benchmark and up to 33% performance increase in the payroll batch benchmark when compared to its leading competitor.

Customers can compare performance of different platforms, make appropriate hardware choices and implement with confidence, knowing that they are backed by the full strength of the HP/Oracle Alliance. With proven performance for demanding scale-out applications, the ProLiant DL380 G5 is the right choice for a variety of rack deployments.

Key Points

- The HP ProLiant DL380 G5 earned the #1 Payroll Checks per Hour Throughput in the industry, defeating IBM.

- The ProLiant DL380 G5 also took the #1 Order-to-Cash performance record, again overtaking IBM.

- HP was the first vendor to publish the R12 Medium Model Application Benchmark.

Figure 1. EBS results for Order-to-Cash and Payroll Batch Benchmarks

Legend:
- ▉ Payroll Checks per Hour (more is better)
- ▉ Order to Cash Lines per Hour (more is better)

Server	Payroll Checks per Hour	Order to Cash Lines per Hour
IBM BladeCenter JS22 4-core	149,378	75,396
IBM System x3850 M2 12-core	172,414	
HP ProLiant DL380 G5 8-core	198,020	108,108

Technology for better business outcomes

Benchmark comparisons

On August 31, 2008, HP announced new record-breaking results on the Oracle E-Business Suite R12 Medium Model benchmark for the HP ProLiant DL380 G5. These stellar results were achieved using the HP ProLiant DL380 G5 server as a combined database and applications tier utilizing two Quad-Core Intel Xeon E5460 Series 3.16GHz processors (2 processors/ 8 cores/ 8 threads) with 32GB memory. Also included in the achievement of these results are high quality HP storage products, such as the HP Smart Array P400i Controller and an HP Storage Works EVA6100 disk array.

The server earned the best results positions for Orders-to-Cash and Payroll Batch in the OASB R12 medium model category submission.

Table 1. Result summary of the HP ProLiant DL380 G5 two-processor server compared to other competing platforms on the Oracle E-Business Suite R12 Medium Model Benchmark for Order-to-Cash and Payroll Benchmarks.

ORDER-TO-CASH BATCH	ProLiant DL380 G5 8-core	IBM BladeCenter JS22 4-core
Database server configuration	Two-processor (2/8/8) Quad-Core Intel Xeon X5460 3.16GHz (Combined database and applications tier)	Two processor (2/4/8) Dual-Core IBM POWER6 4.0GHz
Order-to-Cash Batch/ Hourly Order Line Throughput	108,108	75,396

PAYROLL BATCH	ProLiant DL380 G5 8-core	IBM System x3850 12-core	IBM BladeCenter JS22 4-core
Database server configuration	Two-processor (2/8/8) Quad-Core Intel Xeon X5460 3.16GHz	Four-processor (4/6/8) Six-Core Intel Xeon X7460 2.66GHz*	Two processor (2/4/8) Dual-Core IBM POWER6 4.0GHz
Payroll Batch/Hourly Employee Throughput	198,020	172,414	149,378

*Although 24 cores total, only 12 cores were allocated in the benchmark.

Results valid as of 11-14-08. More information on published benchmark results is available at: http://www.oracle.com/apps_benchmark/html/results.html#medium.

The HP advantage: HP innovative technology behind the results

The HP ProLiant DL380 G5 server

The unmatched flexibility of the ProLiant DL380 G5 has made it the best-selling server in the world and it continues to deliver on its heritage of engineering excellence with enterprise-class uptime and manageability, two socket Intel Xeon performance, and 2U density. The ProLiant DL380 G5 is designed for environments of all types and sizes, including space-constrained corporate data centers and service providers, and sophisticated SMB locations.

Key benefits include:

- Engineered for reliability and ease of ownership Dual and Quad-Core Intel Xeon performance for demanding scale-out applications and virtualization projects
- Industry-leading management to enable powerful administration
- Versatility and availability for a wide range of deployments

About the Oracle Applications Standard Benchmark (OASB)

The Oracle Applications Standard Benchmark seeks to demonstrate performance and scalability of Oracle E-Business Suite on a variety of platforms. In these results, a representative batch workload is maintained with end-to-end business flows for both an HR payroll process and an Orders to Cash cycle.

The Oracle Applications Standard Benchmark is focused on ERP applications and represents a mixed workload intended to model the most common transactions operating on the most widely used enterprise application modules. Definitions of transactions that compose the benchmark load were obtained through collaboration with functional consultants and are representative of typical customer workloads, with batch transactions representing 25% of the total workload. HP, unlike several competitors, uses this real-world benchmark to focus on customer core transactions.

New Oracle E-Business Suite R12 Benchmark

Oracle E-Business Suite Release 12 (EBS R12) enables businesses to think globally to make better decisions, work globally to be more competitive, and manage globally to lower costs and increase performance. With a new user experience and hundreds of cross-industry capabilities spanning enterprise resource planning, customer relationship management, and supply chain planning, this new release helps customers manage the complexities of global business environments.[1]

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1 http://www.oracle.com/applications/e-business-suite-release.html

Server configurations

Order-to-cash benchmark:

HP ProLiant DL380 G5 server result on Oracle E-Business Suite R12 Benchmark Medium Model: In August 2008, Oracle and Hewlett-Packard conducted a benchmark in Corona, CA, to measure the order-to-cash batch performance of the Oracle Applications Standard Benchmark processes in an environment running Oracle E-Business Suite (EBS) 12 with Oracle Database 10g™ (10.2.0.3) and Oracle Enterprise Linux 4 Update 4, and achieved 108,108 Lines per Hour. This result, submitted 08-31-08, was achieved on a Hewlett-Packard ProLiant DL380 G5 database server configured with 2 x 3.16GHz Quad-Core Intel Xeon X5460 processors (2 processors/8 cores/8 threads) with 12MB of cache, 32GB memory, and PC2-5300 Registered DDR2-667MHz DIMMs. The system used 8 x 72GB internal disk drives attached to an integrated HP Smart Array P400i Controller, and one HP Storage Works EVA6100 disk array attached to a single Emulex® Zephyr-X LightPulse® Fibre Channel controller for data and logs. Unlike other results in this category where two separate systems were involved, HP used a single HP ProLiant DL380 G5 as a combined application server and database server.

vs. IBM BladeCenter JS22 POWER 6 result on Oracle E-Business Suite R12 Benchmark: In August 2008, Oracle and IBM conducted a benchmark in Beaverton, Oregon, to measure the order-to-cash batch performance of the Oracle Applications Standard Benchmark processes in an environment running Oracle 6 EBS R12 with Oracle Database 10g (10.2.0.3), 64-bit, and IBM AIX 6.1 operating system, and achieved 75,396 Lines per Hour. This result, submitted 09/10/08, was achieved on an IBM BladeCenter JS22 database server configured with 2 x 4.0GHz Dual-Core IBM POWER 6 processor chips (2 processors/4 cores/8 threads) with 4MB L2 cache per core, and 32GB memory. An IBM SystemStorage DS4800 was used for data storage. An IBM BladeCenter JS22 POWER6- Dual-Core server was used as an application/web server.

Payroll benchmark:

HP ProLiant DL380 G5 server result on Oracle E-Business Suite R12 Benchmark Medium Model: In August 2008, Oracle and Hewlett-Packard conducted a benchmark in Corona, CA, to measure the payroll batch performance of the Oracle Applications Standard Benchmark processes in an environment running Oracle EBS 12 with Oracle Database 10g (10.2.0.3) and Red Hat® Enterprise Linux® Advanced Server release 4.0 Update 4, and achieved 198,020 Lines per Hour. This result, submitted 08-31-08, was achieved on a Hewlett-Packard® ProLiant™ DL380 G5 database server configured with 2 x 3.16GHz Quad-Core Intel Xeon X5460 processors (2 processors/8 cores/8 threads) with 12MB of cache, 32GB memory, and PC2-5300 Registered DDR2-667MHz DIMMs. The system used 8 x 72GB internal disk drives attached to an integrated HP Smart Array P400i Controller, and one HP Storage Works EVA6100 disk array attached to a single Emulex® Zephyr-X LightPulse® Fibre Channel controller for data and logs. An HP ProLiant DL380 G5 with the same configuration was used as the application server.

vs. IBM BladeCenter JS22 POWER6 result on Oracle E-Business Suite R12 Benchmark: In August 2008, Oracle and IBM conducted a benchmark in Beaverton, Oregon, to measure the payroll batch performance of the Oracle Applications Standard Benchmark processes in an environment running Oracle EBS R12 with Oracle Database 10g (10.2.0.3), 64-bit, and IBM AIX 6.1 operating system, and achieved 149,378 Lines per Hour. This result, submitted 09/10/08, was achieved on an IBM BladeCenter JS22 database server configured with 2 x 4.0GHz Dual-Core IBM POWER 6 processor chips (2 processors/4 cores/8 threads) with 4MB L2 cache per core, and 32GB memory. An IBM SystemStorage DS4800 was used for data storage. An IBM BladeCenter JS22 POWER6- Dual-Core server was used as an application/web server.

vs. IBM System x3850 M2 result on Oracle E-Business Suite R12 Benchmark: In August 2008, Oracle and IBM conducted a benchmark in San Mateo, CA, to measure the payroll batch performance of the Oracle Applications Standard Benchmark processes in an environment running Oracle EBS R12 with Oracle Database 10g (10.2.0.3), 64-bit, and Red Hat Linux Enterprise 4 operating system, and achieved 172,414 Lines per Hour. This result, submitted 09/17/08, was achieved on an IBM System x3850 database server configured with 4 x 2.66GHz Six-Core Intel Xeon X7460 processor chips (4 processors/6 cores/24 threads)* with 3x3MB L2 cache and 16MB L3 cache, and 64GB memory. An IBM SystemStorage DS4700 was used for data storage. An IBM BladeCenter HS21 (8853-AC1) - server was used as an application/web server.

*24 cores total, but only 12 were allocated for the benchmark

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 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.

HP proven performance

Proven performance is part of the reason that HP is #1 in server shipments. HP has posted hundreds of benchmark results on the most commonly used benchmarks on hundreds of ProLiant servers and blades, helping customer to identify reasons to be confident in HP.

For more information

For the HP ProLiant DL380 G5: www.hp.com/servers/dl380

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

OASB information and results: www.oracle.com/apps_benchmark/html/results.html

HP and Oracle partnership: http://h71028.www7.hp.com/enterprise/cache/4281-0-0-0-121.aspx?jumpid=hpr_R1002_USEN

HP Oracle E-Business Solution brief for midsize businesses:

http://h71028.www7.hp.com/ERC/downloads/4AA1-5108ENW.pdf