



# HP ProLiant DL380 G5 takes #1 2P performance spot on Siebel CRM Release 8.0 Benchmark Industry Applications running Windows



## HP first rack server benchmark on Siebel

### HP Leadership



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



The HP Integrity rx6600 server is a highly expandable platform for workload consolidation and virtualization that redefines the entry class. This next-generation HP Integrity server is capable of handling the business-critical workloads previously possible only with larger, more costly systems.

### Customer Value

What are the customer benefits of using HP ProLiant servers and the Siebel benchmark running Oracle and Windows?

Oracle's Siebel Platform Sizing and Performance Program is designed to stress the Siebel CRM Release 8.0 architecture and to demonstrate that large customers can successfully deploy many thousands of concurrent users.

The test simulated real-world requirements of a large organization, consisting of 5,200 concurrent, active users in a call center organization. Test conditions simulated service representatives running Siebel Financial Services Call Center and partner organizations running Siebel Partner Relationship Management (Web Sales and Web service).

The test system demonstrated that Oracle's Siebel CRM Release 8.0 architecture and HP ProLiant DL380 G5 and HP Integrity rx6600 servers form a very powerful and cost-effective business solution.

Siebel on HP servers. This benchmark demonstrated the versatility and flexibility of HP ProLiant hardware. The benchmark started with one HP ProLiant DL380 G5, one HP ProLiant DL360 G4 and one HP Integrity rx6600 Server. The servers supporting Siebel Application components ran Microsoft Windows 2003 Server EE, while the server supporting the Oracle 10gR2 DB ran HP-UX 11iv3.

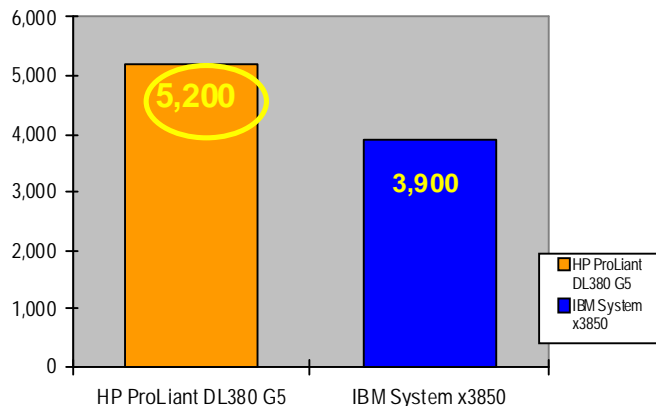
Low network utilization. The Siebel CRM Release 8.0 Smart Web Architecture and Smart Network Architecture efficiently managed the network, consuming only 2.8 kilobits per second per user.

Vertical scalability. The Siebel CRM Release 8.0 Application Server showed excellent scalability on an HP DL380 G5 server. Many users can be supported with minimal hardware.

### Key Points

- The HP ProLiant DL380 G5 holds the #1 result for two-socket performance on Siebel CRM Release 8.0 Benchmark Industry Applications running Microsoft Windows with 5,200 users.
- This result shows the highest number of users on a Windows benchmark on a single two-socket, 8-Core HP ProLiant rack server.
- The ProLiant DL380 G5 defeated the IBM System x3850 with more than 33% users!

Figure 1. Comparison of total number of users\* of the HP ProLiant DL380 G5 Quad-Core s two-socket rack server to the IBM x3850 server in the Oracle Siebel CRM Release 8.0 Benchmark Industry Applications.



\*These values are the total number of users for Financial Services Call Center, the Partner Relationship Management, and the EAI - Web Servers.

The HP ProLiant DL380 G5 can deploy up to 33.3% more number of users, demonstrating its efficiency advantage for real business platforms and addressing key requirements.

Technology for better business outcomes.

## HP sets the standard

HP, in conjunction with Microsoft and Oracle Corporation, completed the Siebel CRM 8.0 benchmarks on infrastructures designed to deliver a high-performance and cost-effective solution for mid-sized users of Siebel software. The tested configurations were built on HP infrastructures running Microsoft Windows 2003 Server and Oracle backend database. Completed as part of the CRM 8.0 Platform Sizing and Performance Program (PSPP), this benchmark, validated by Oracle Corporation, demonstrated that enterprises requiring up to 5,200 concurrent CRM application users can confidently deploy their CRM software in a complete HP server infrastructure and gain the advantage of an easily-managed, cost-effective infrastructure solution optimized for efficiency and change. This PSPP benchmark is an excellent indication of the capacity of the HP ProLiant DL380 G5 and HP Integrity rx6600 servers in a controlled environment and an important data point in assisting HP in sizing real customer environments.

This test simulated a large corporation of concurrent active users in multiple departments and addressed key business requirements. Siebel CRM Release 8.0 Smart Database Connection Pooling and Multiplexing allowed the database to service 5,200 concurrent users and the supporting Siebel CRM Release 8.0 server application services with only 587 database connections.

### Benchmark comparison

Table 1. Result comparison summary of the HP ProLiant DL380 G5 8-Core rack server to the IBM System X3850 8-Core server on the Siebel CRM Applications Release 8.0

Application server	ProLiant DL380 G5	IBM x3850
Configuration	2 x 3.16GHz Intel Xeon X5460 Quad-Core) 32GB RAM; Microsoft Windows 2003 Server EE, 32-bit, HT Enabled, Oracle 10gR2 Database Client v10.2.0.2	4 x 3.0GHz Intel Xeon MP Dual-Core; 32GB RAM; Microsoft Windows 2003 Server EE, 32-bit, Hyperthreading Enabled; Oracle 10gR2 Database Client v10.2.0.1.0
No of CPU Cores Total	8	8
Avg. Response Time	.219	.281
No. of users:		
Financial Services Call Center	1,560	1,170
Partner Relationship Management	520	390
EAI - Web Servers	3,120	2,340
Total no. of users	5,200	3,900
Business Transactions Throughput/Hour	79,572	58,924
Projected Daily Transactions	636,576	471,392

All results as of 02-01-09. For details on all configurations, see:

[http://www.oracle.com/apps\\_benchmark/html/white-papers-siebel.html](http://www.oracle.com/apps_benchmark/html/white-papers-siebel.html)

HP ProLiant DL380 White Paper: [http://www.oracle.com/apps\\_benchmark/doc/siebel-crm-8-industry-apps-on-hp-proliant-dl380-g5.pdf](http://www.oracle.com/apps_benchmark/doc/siebel-crm-8-industry-apps-on-hp-proliant-dl380-g5.pdf)

IBM System x3850 White Paper: [http://www.oracle.com/apps\\_benchmark/doc/IBM\\_Siebel8\\_3900\\_PSPP\\_Windows\\_Final.pdf](http://www.oracle.com/apps_benchmark/doc/IBM_Siebel8_3900_PSPP_Windows_Final.pdf)

## What makes it work

The Siebel CRM 8.0 Industry Applications performance result was achieved with one two-socket HP ProLiant DL380 G5 rack server configured as the application tier with 2 x 3.16GHz Intel Xeon X5460 Quad-Core (8CPUs) with 32GB of memory, while running Microsoft Windows 2003 Server Enterprise Edition, 32-bit, Hyperthreading Enabled, and Oracle 10gR2 Database Client v 10.2.0.2. One four-socket HP Integrity rx6600 server with 4 x 1.6GHz Intel Itanium 2 Dual-Core (8 CPUs) with 32GB of memory was used as the database server, running HP-UX 11iv3, 64-bit, Hyperthreading Enabled, and the Oracle 10gR2 Database v10.2.0.2.0. One two-socket HP ProLiant DL360 G4 rack server was used as the web server with 2 x 3.60GHz Intel Xeon Dual-Core processors (4 CPUs) with 4GB of memory. This compact enterprise solution demonstrates outstanding throughput, processing 79,572 complex business transactions per hour. Complete configuration details are listed in Appendix A.

## The HP advantage: HP innovative technology behind the results

### HP ProLiant DL380 G5

The versatility of the ProLiant DL380 G5 has made it the best-selling server in the world; 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

### HP Integrity rx6600



The HP Integrity rx6600 server's balanced architecture is built around the innovative HP zx2 chipset and is combined with the powerful Dual-Core Intel Itanium processor. Broad application support across multiple operating environments gives customers the choice to deploy the right solution for their business needs. The HP Integrity rx6600 key benefits include:

- Significant ROI through consolidation
- Increased operating environment flexibility that protects customer investment
- Enhanced scalability that delivers maximum power with minimum resources
- Robust availability for every application, every user, every time
- A choice of storage

## The advantages of the partnership between HP and Oracle

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.

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
- 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
- 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.

## Partnership between HP and Siebel

HP is the leading platform provider for customers implementing Siebel applications. HP and Oracle understand what drives your business. With Oracle's Siebel System applications, we focus on deploying flexible CRM solutions for your environment and fine-tuning them, while providing the best performance with your infrastructure. The HP and Oracle's Siebel Applications enable you to increase the lifetime value of your customers, decrease your total cost of ownership, and leverage your existing technologies and business assets – allowing you to respond quickly to ever-changing customer needs.

Recognizing the bottom-line benefits of being customer-driven, today's chief executives are focusing their IT investments on Customer Relationship Management (CRM) applications to enable their organizations to deliver a superior customer experience. Siebel Systems offers best-in-class software for customer relationship management, derived from more than 3,500 customer deployments, and has documented hundreds of industry-specific best practices for more than 20 industries and industry segments and embedded them directly into Siebel eBusiness Applications.

## 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](http://www.hp.com/servers/dl380)

HP Integrity rx6600: [www.hp.com/servers/integrityrx6600](http://www.hp.com/servers/integrityrx6600)

HP ProLiant IBM System x3850: [www.ibm.com/servers](http://www.ibm.com/servers)

HP BladeSystem storage solutions: <http://h18006.www1.hp.com/storage/bladeSystem/index.html>

HP performed the benchmark project at the HP Enterprise Solutions Partner Labs in Houston, TX. Performance and solutions engineers from HP, Microsoft, and Siebel participated in the benchmark efforts. For full technical details and disclosure:

[http://www.siebel.com/products/performance\\_benchmark/index.shtm](http://www.siebel.com/products/performance_benchmark/index.shtm)

For complimentary sizing and configuration support from HP, please contact the HP Siebel Solutions Center at [siebel.hp@hp.com](mailto:siebel.hp@hp.com).

For further information on HP and Siebel Systems working together to deliver industry-leading solutions, please visit: <http://www.hp.com/go/siebel>

HP and Oracle partnership: [www.hp.com/go/oracle](http://www.hp.com/go/oracle) and [www.hporacle.com](http://www.hporacle.com)

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## Appendix A

The following configurations were used in this benchmark:

### PSPP Components

- Siebel CRM Release 8.0 Industry Applications
- Microsoft Windows 2003 Server Enterprise Edition (EE)
- HP-UX 11iv3
- Oracle 10gR2 Database Server v10.2.0.2.0

### Gateway/Application Server 1

- 1x2-way HP ProLiant DL380 G5 configured with:
  - 2 x 3.16GHz Intel Xeon (X5460) Quad-Core CPUs (8 CPU cores)
  - 32GB RAM
  - Microsoft Windows 2003 Server EE, 32-bit, Hyperthreading Enabled
  - Oracle 10gR2 Database Client v 10.2.0.2
  - Siebel CRM 8.0 SIA [20204] ENU

### Database Server

- 1x4-way HP Integrity rx6600 server configured with:
  - 4 x 1.6GHz Intel Itanium 2 Dual-Core CPUs (8 CPU cores)
  - 32GB RAM (installed)
  - HP-UX 11iv3, 64-bit, Hyperthreading Enabled
  - Oracle 10gR2 Database Server v10.2.0.2.0

### Web Server

- 1x2-way HP ProLiant DL360 G4 configured with:
  - 2 x 3.60GHz Intel Xeon Dual-Core processors (4 CPU cores)
  - 4GB RAM
  - Microsoft Windows 2003 Server EE, 32-bit, Hyperthreading Enabled
  - Microsoft IIS 6.0
  - Siebel CRM 8.0 SIA [20204] ENU

### HP LoadRunner Controller 1

- 1x HP ProLiant DL380 G4 configured with:
  - 2 x 2.8GHz Intel Xeon Dual-Core CPUs
  - 4GB RAM
  - Microsoft Windows Server 2003 EE SP1
  - LoadRunner version 8.1

### HP LoadRunner Host 2

- 1x HP ProLiant DL380 G4 configured with:
  - 2 x 2.8GHz Intel Xeon Dual-Core CPUs
  - 4GB RAM
  - Microsoft Windows Server 2003 EE SP1
  - LoadRunner version 8.1