



HP ProLiant ML370 G5 runs more virtual machines per server



HP Leadership



The HP ProLiant ML370 G5 provides industry-leading management, performance and availability in a dual processor expansion server engineered to excel in a variety of environments from corporate work groups in growing businesses to critical remote sites requiring continuous accessibility and uptime.

Customer Value

What are the benefits of using HP ProLiant servers and VMmark?

HP ProLiant servers and VMware provide organizations with a robust and reliable platform for virtualization.

The VMmark benchmark measures the key performance characteristics for virtual machines. The benchmark represents an end user environment running multiple workloads, is platform neutral, and provides a methodical way to measure scalability so that the same benchmark can be used across different hardware platforms.¹

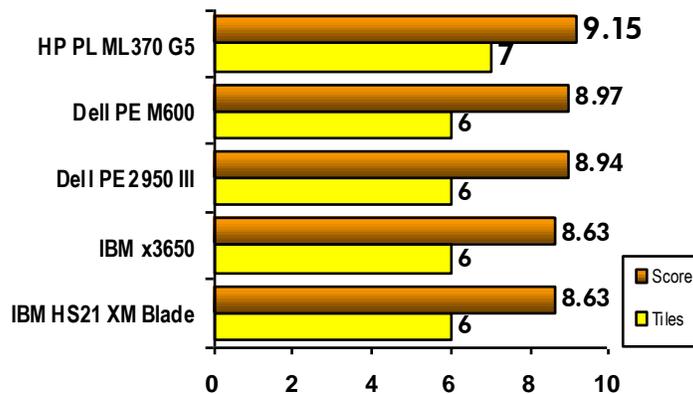
The HP ProLiant ML370 G5 offers up to a 20% performance advantage when compared to other two-socket, 8-core competitors utilizing VMware. With the VMmark benchmark result, customers can compare performance and scalability of different virtualization platforms, make appropriate hardware choices and monitor virtual machine performance on an ongoing basis. And they can be reassured the HP ProLiant ML370 G5 **IS** the appropriate choice.

Key Points

The HP ProLiant ML370 G5 is the highest performing 2P server on the VMmark benchmark with a score of 9.15@7 tiles. This result defeated Dell, IBM, and Sun.

Figure 1. VMmark results for two-socket, 8-core servers

ML370 G5: more virtual machines per server



The HP ProLiant ML370 G5 defeats other 8-core competitors by up to 10% by running more VMs on the virtualization benchmark!



Technology for better business outcomes.

¹ Excerpted from <http://www.vmware.com/products/vmmark/faq.html>

Table 1. VMmark configuration for system results.

System Description	VMmark Version & Score	Processors	Published Date
HP ProLiant ML370 G5 Quad-Core Intel Xeon X5470 3.3 GHz 48 GB RAM ; 2 sockets/8 cores/8 total threads	VMmark v1.1 VMware ESX v3.5.0 Update 3	9.15 @ 7 tiles	10/09/08
Dell PowerEdge M600 Quad-Core Intel Xeon X5470 3.3 GHz 32 GB RAM ; 2 sockets/8 cores/8 total threads	VMmark v1.1 VMware ESX v3.5.0 Update 2	8.97 @ 6 tiles	09/24/08
Dell PowerEdge 2900 III Quad-Core Intel Xeon X5470 3.3 GHz 64GB; 2 sockets/8 cores/8 total threads	VMmark v1.1 VMware ESX v3.5.0 Update 2	8.94 @ 6 tiles	09/29/08
IBM System x3650 Quad-Core Intel Xeon X5460 3.13 GHz 32 GB; 2 sockets/8 cores/8 total threads	VMmark v1.1 VMware ESX v3.5.0 Update 1	8.63 @ 6 tiles	09/02/08
IBM BladeCenter HS21 XM Quad-Core Intel Xeon X5450 3.0 GHz 32 GB; 2 sockets/8 cores/8 total threads	VMmark v1.1 VMware ESX v3.5.0 Update 1	8.44 @ 6 tiles	09/05/08

Test results as of 10-13-2008. For more details, please visit: <http://www.vmware.com/products/vmmark/results.html>

The ProLiant advantage

HP ProLiant ML370 G5

The flagship ML370 G5 provides industry-leading management, performance and availability in a dual processor expansion server engineered to excel in a variety of environments from corporate work groups in growing businesses to critical remote sites requiring continuous accessibility and uptime.

- [Optimize System Performance and Ease of Serviceability](#)
- [Manage Seamlessly From Anywhere, Anytime](#)
- [Enterprise-class Redundancy Features](#)
- [Maximum flexibility](#)

HP ProLiant servers, BladeSystem, and VMmark

Partnership between HP and VMware

HP is proud that the HP ProLiant DL580 server platform was chosen to be the reference system in the development of the VMmark benchmark. More than a dozen ProLiant servers are certified for VMware. HP can help your business plan, implement, and operate a virtual infrastructure with VMware. HP qualifies a wide range of ProLiant servers, StorageWorks storage, and integrated HP management software. For a quick overview, visit www.hp.com/go/vmware for more information. HP lists a total of 46 VMware ESX Server certified servers, more than IBM (37), Dell (23), and Sun (21).²

²Same cross-generational count used for competitor platforms. For the most up to date list visit: www.hp.com/go/vmware and http://www.vmware.com/pdf/vi3_systems_guide.pdf. The VMware systems guide was last updated October 8, 2008.

HP market leadership

HP ProLiant servers and server blades are a vital part of the HP success story. September 2008: IDC released a quarterly update to their Worldwide Quarterly Server Tracker, citing market share figures for the 2nd calendar quarter of 2008 (2Q08). Consider these telling facts:

(Source: All of the following market share figures are for the 2nd Quarter of 2008 (unless otherwise noted) and represent worldwide results as reported by the IDC Worldwide Quarterly Server Tracker, August 2008)

HP leads with #1 x86 market share in Q2/083

- For the 25th consecutive quarter, over 6 years, HP is the #1 vendor in worldwide server shipments. HP shipped 1 out of every 3 servers worldwide as HP captured 33.6 percent total unit shipment share.
 - HP shipped over 133,000 more servers than #2 Dell.
 - HP shipped over 410,000 more servers than #3 IBM and 7.4 times as many as #4 Sun.
 - For the 48th consecutive quarter, 12 years, HP ProLiant is the x86 server market share leader in both factory revenue and units,⁴ shipping 1 out of every 3 servers in this market.
 - HP's x86 revenue share was 9.2 points higher than its nearest competitor, Dell.
 - HP remains the leading provider of AMD Opteron processor-based servers and server blades, with a 35.8% of factory revenue share.
-

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 more information on VMware for HP ProLiant servers:

<http://h18004.www1.hp.com/products/servers/vmware/index.html>

HP ProLiant ML370 G5: www.hp.com/servers/proliantml370

Overview of VMmark benchmark: ftp://ftp.compaq.com/pub/products/servers/benchmarks/VMmark_Overview.pdf

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. AMD-8111, AMD-8131, AMD-8132, and AMD-8151 are trademarks of Advanced Micro Devices, Inc. HyperTransport is a licensed trademark of the HyperTransport Technology Consortium. Windows is a registered trademark of Microsoft Corporation in the U.S. and other jurisdictions. Intel is a trademark or registered trademark of Intel Corporation or its subsidiaries in the United States and other countries. Xeon is a trademark or registered trademark of Intel Corporation in the U.S. and other countries and is used under license. Linux is a U.S. registered trademark of Linus Torvalds. Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation.

For information about VMmark and the rules regarding its usage visit www.vmware.com/go/vmmark. VMware® VMmark™ is a product of VMware, Inc. VMmark utilizes SPECjbb2005® and SPECweb2005®, which are available from the Standard Performance Evaluation Corporation (SPEC). The competitive benchmark results stated herein reflect results published on www.vmware.com as of October 13, 2008.

October 2008

⁴Includes Compaq ProLiant from Q196 through Q202 and HP ProLiant from Q302 through Q306. Source: IDC Worldwide Quarterly Server Tracker August 2008