Record-breaking HP ProLiant DL785 G5 virtualization performance: first to achieve 126 Virtual Machines on VMmark!

**Key Points**

- Highest VMmark score ever posted at 30.50@21 tiles
- First server to break the 30 barrier on the VMmark benchmark
- #1 leadership score in the eight-socket/32-core category
- Beats IBM by a whopping 23.9% and Sun by 4.8%
- Result projects potential of over 750 virtual machines in a 42U rack
- 10.1% increase from previous DL785 G5 result (27.71@19 tiles)

**Customer Value**

What are the benefits of using the HP ProLiant DL785 G5 for virtualization?

HP understands customers’ business needs and is best equipped to deliver a consolidation solution to fit those needs. The industry’s 8-socket workhorse, the DL785 G5, delivers leading expandability for x86 virtualization and enterprise applications. With the HP ProLiant DL785 G5, customers receive well-balanced 8-socket architecture for reducing cost through consolidation in a platform that provides ample I/O with 11 expansion slots and a large memory footprint of up to 512 GB RAM to support a very large number of virtual machines.

With this result, the ProLiant DL785 G5 achieved an unprecedented 126 virtual machines (21 tiles x 6 virtual machines), and projects the potential to achieve more than 750 virtual machines per 42U rack!

**Figure 1. VMmark benchmark comparison of HP, IBM, and Sun top results**

Each tile is a collection of 6 diverse workloads each running its own virtual machine.
Table 1. VMmark configuration for top HP, Sun, and IBM results

<table>
<thead>
<tr>
<th>System Description</th>
<th>VMmark Version</th>
<th>Score</th>
<th>Published Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP ProLiant DL785 G5 Quad-Core AMD Opteron™ 8393SE 3.1GHz 8 sockets/32 cores/32 total threads 256 GB RAM</td>
<td>VMmark v 1.1 VMware ESX v4.0 Build 154785</td>
<td>30.50@21 tiles</td>
<td>04/22/09</td>
</tr>
<tr>
<td>Sun Fire X4600 M2 Quad-Core AMD Opteron 8384 2.7GHz 8 sockets/32 cores/32 total threads 128 GB memory</td>
<td>VMmark v 1.1 VMware ESX v3.5.0 Update 3 Build 123630</td>
<td>29.11@19 tiles</td>
<td>03/10/09</td>
</tr>
<tr>
<td>IBM System x3950 M2 Quad-Core Intel Xeon MP X7350 2.93 GHz 8 sockets/32 cores/32 total threads 128 GB RAM</td>
<td>VMmark v 1.1 VMware ESX v3.5.0 Update 2 Build 110181</td>
<td>24.62@18 tiles</td>
<td>10/02/08</td>
</tr>
</tbody>
</table>

Test results as of 04-22-09. For more details, please visit: http://www.vmware.com/products/vmmark/results.html

What VMmark measures

The VMmark benchmark is intended to measure the performance of virtualized servers on a system under test (SUT) so that customers can compare the capabilities of different platforms for virtualization. VMmark represents the performance of virtual machines within a server running VMware ESX and a set combination of operating systems and applications reflecting a typical datacenter environment. VMmark uses a collection of ‘sub-tests’ derived from commonly used load-generation tools as well as from benchmarks developed by the Standard Performance Evaluation Corporation (SPEC®). VMmark uses workloads that represent common applications in datacenters. It is important to note that VMmark is designed to benchmark the performance of the virtualization software and the hardware, and is not designed as a benchmark of any other software component.

For more information

HP ProLiant DL785 G5 server: www.hp.com/servers/dl785

HP VMware information: http://www.hp.com/go/vmware


VMmark overview: http://www.vmware.com/products/vmmark/overview.html

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