HP ProLiant DL785 G5 sets new record in virtualization performance – again!

HP Leadership

114 virtual machines –
the best virtualization platform:

HP ProLiant DL785 G5

VMmark

The industry's 8-socket workhorse delivers leading expandability for x86 virtualization and enterprise applications – the most expandable 8-socket x86 server available!

Customer Value

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

HP understands our customers' business needs and is best equipped to deliver a consolidation solution to fit those needs.

With the HP ProLiant DL785 G5, customers achieve well-balanced 8-socket architecture for reducing cost through consolidation in a platform that provides ample I/O and memory to support a very large number of virtual machines.

Because the ProLiant DL785 G5 can achieve 114 virtual machines (19 tiles x 6 virtual machines), and can also achieve 6 servers per 42U rack, customers can achieve nearly 700 virtual machines per 42U rack!
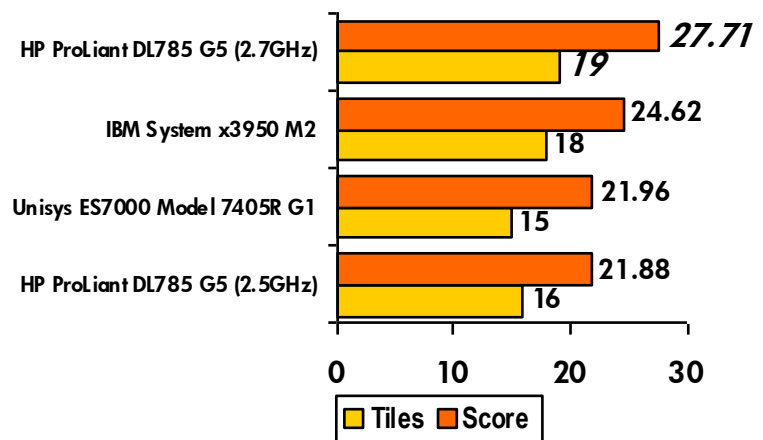
Technology for Better Business Outcomes

Key Points

• **The 32-core HP ProLiant DL785 G5 is the highest performing server on the VMmark benchmark with a leadership score of 27.71@19 tiles.**

• **HP ProLiant DL785 with the new Quad-Core AMD Opteron™ Model 8384 processors (2.7 GHz) scores the largest number of virtual machines ever achieved on an x86 platform – again.**

• **Result shows 12% superior performance delta as compared to IBM System x3950 M2 and 26% performance increase as compared to the previous DL785 VMmark result with Quad-Core AMD Opteron processors Model 8360SE (2.5 GHz).**

Figure 1. VMmark benchmark comparison

The HP ProLiant DL785 G5 sets new world record in virtualization performance - again!

	Tiles	Score
HP ProLiant DL785 G5 (2.7GHz)	19	27.71
IBM System x3950 M2	18	24.62
Unisys ES7000 Model 7405R G1	15	21.96
HP ProLiant DL785 G5 (2.5GHz)	16	21.88

Each tile is a collection of 6 diverse workloads each running its own virtual machine

Table 1. VMmark configuration for system results.

System Description	VMmark Version	Score	Published Date
HP ProLiant DL785 G5 Quad-Core AMD Opteron 8384 2.7GHz 8 sockets/32 cores/32 total threads 256 GB RAM	VMmark v 1.1 VMware ESX v3.5.0 Update 3	27.71@19tiles	12/19/08
IBM System x3950 M2 Quad-Core Intel Xeon MP X7350 2.93 GHz 8 sockets/32 cores/32 total threads 128 GB RAM	VMmark v 1.1 VMware ESX v3.5.0 Update 2	24.62@18 tiles	10/02/08
Unisys ES7000 Model 7405R G1 Intel Xeon 2.0 GHz 8 sockets/32 cores/32 total threads 128 GB memory	VMmark v 1.1 VMware ESX v3.5.0 Update 2	21.96@15 tiles	11/05/08
HP ProLiant DL785 G5 Quad-Core AMD Opteron 8360 SE 2.5GHz 8 sockets/32 cores/32 total threads 128 GB RAM	VMmark v 1.1 VMware ESX v3.5.0 Update 1	21.88@16 tiles	08/18/08

Test results as of 12-19-08. 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 specially tuned 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 is an open standards effort that is agnostic toward hardware platforms and different virtualization software systems. 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

An HP authored overview of the VMmark benchmark on HP ProLiant servers and server blades:
ftp://ftp.compaq.com/pub/products/servers/benchmarks/VMmark_Overview.pdf

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

hp invent