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SPARC SERVERS

SPARC AND SOLARIS LEADERSHIP IN THE CLOUD

Oracle's SPARC systems and Solaris OS are co-engineered to provide efficient virtualization technology. SPARC virtualization is "Built into Firmware" which reduces costs and improves performance.

Oracle has proved its virtualization performance advantages through rigorous public testing. SPEC[1], the performance standards group, defined the SPECvirt_sc2010 benchmark to uniformly measure the end-to-end performance of all system components that make up a virtualized environment. The SPECvirt_sc2012 benchmark is a good indicator of virtualization performance, which is critical for any cloud environment.

HIGHLIGHTS

Demonstrated Virtualization and Java Leadership

- SPARC and Solaris are 2.3x faster than VMware and x86
- Java workloads on 2-chip SPARC servers are 1.8x faster than the latest x86 2-chip servers[2]
- Customer result:
  $2.8M OPEX savings
  2.5x faster deployment
  7x better $/performance

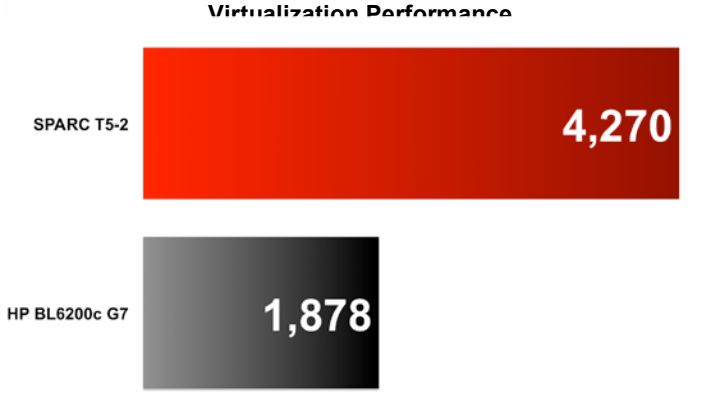

Figure 1. SPARC T5-2 is 2.3x faster in the SPECvirt_sc2010 benchmark versus the best VMware result on an HP BL620c G7 two-processor x86-based blade server.

Oracle's SPARC T5-2 server running Oracle Solaris 11 delivered a two-socket world-record SPECvirt_sc2010 result of 4270 @ 264 VMs. This result demonstrates the superiority of Oracle's SPARC T5 processors with Oracle Solaris virtualization and demonstrates the leadership SPARC servers provide in large-scale environments.

SPARC Customer Successes

Large Communications Provider utilizing the Oracle Optimized Solution for Enterprise Cloud Infrastructure, running on SPARC T5 Servers, realized **2.5x faster** virtual server deployment versus bare metal for faster time-to-user and administrative productivity.

Regional Water Company realized **7x better** cost/performance for virtualized Java, and **2x faster** data warehouse performance and order-entry transactions than IBM running Oracle Solaris, Database, Applications and Middleware on SPARC T5 servers with Oracle VM for SPARC versus competitive systems.

Oil and Gas Company running Oracle Database, PeopleSoft, and SAP on Oracle SPARC T5 servers achieved **3x faster** provisioning of new services and OPEX savings of **$2.8M** using Oracle VM for SPARC.

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Oracle SPARC T5-2 Server

Utilizing modular design architecture and powered by either one or two SPARC T5 processors—Oracle's most powerful SPARC processors ever—the SPARC T5-2 server delivers exceptional single- and multi-thread performance. With 16 cores and 16 memory slots per SPARC T5 processor, the SPARC T5-2 server provides extreme compute density, with up to 32 cores and 1 TB of system memory within a 3U enclosure. Oracle has also proven that the SPARC T5-2 is the fastest server for Java applications, which is critical in many cloud deployments. The SPARC T5-2 is **1.8x faster** than the best Intel 2-chip x86 E5 v2 Ivy-Bridge-based Cisco UCS C240 M3 server.

Conclusion

The SPARC T5 server running Oracle Solaris 11 utilizes embedded virtualization products, such as the Oracle VM Server for SPARC and Oracle Solaris Zones, which provide a low overhead, flexible, scalable and manageable virtualization environment with no extra cost for customers that have Oracle premier support.

For more information about SPARC and Solaris performance, please visit http://www.oracle.com/benchmarks.

Benchmark Disclosures

1) SPEC and the benchmark names SPECvirt_sc are registered trademarks of the Standard Performance Evaluation Corporation (SPEC). Results from http://www.spec.org as of 3/6/2014. Solaris SPARC T5-2, SPECvirt_sc2010 4270 @ 264 VMs; VMware ESXi4.1 HP Proliant BL620c G7, SPECvirt_sc2010 1878 @ 120 VMs.

2) SPARC T5-2 114,492 SPECjbb2013-MultiJVM max-jOPS, 43,963 SPECjbb2013-MultiJVM critical-jOPS; Cisco UCS C240 M3 63,079 SPECjbb2013-MultiJVM max-jOPS, 23,797 SPECjbb2013-MultiJVM critical-jOPS.

Contact Us

For more information about Oracle SPARC Servers, visit **oracle.com/SPARC** or call **+1.800.ORACLE1** to speak to an Oracle representative.

Oracle is committed to developing practices and products that help protect the environment

Hardware and Software, Engineered to Work Together

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