Performance

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</table>

| p0_score: | 8.21 |
| p1_score: | 8.37 |
| p2_score: | 8.41 |
| Unreviewed_VMmark_Score: | 8.37 |

Configuration

System Under Test (SUT)

Processor Vendor and Model: Quad-Core Intel Xeon E5450
Processor Speed (GHz): 3.00
# of Sockets/Corens per Socket: 2 Sockets / 4 Cores per Socket (8 Cores Total)
Primary Cache: 32KB(I) + 32KB(D) on chip, per core
Secondary Cache: 12MB(I+D) on chip, per chip, 6 MB shared/2 cores
Other Cache: None
Memory: 32GB (8x4GB) 667MHz ECC CL5 DDR2 FB-DIMM
Disk Subsystem: SATA (OS), FC SAN (VMs)
# of Disk Controllers: 1
Host Bus Adapters Vendor and Model: QLogic Corp QME2472
# of Host Bus Adapters: 2
# of Network Controllers: 2
### Network Controllers
- **Vendor and Model**: Broadcom NetXtreme II BCM5708 1000Base-T

### Network Speed
- **1000Base-T**

### Other Hardware
- **None**

### Other Software
- **None**

### Hardware Availability Date
- **Feb-2008**

### Software Availability Date
- **Dec-2007**

### Virtualization Platform
- **Vendor, Product, and Version**: VMware ESX Server V3.5.0 Build 64607
- **Virtualization Type**: Hardware Virtualization
- **Supplemental Software**: None
- **Virtualization Platform Availability Date**: Dec-2007

### Storage
- **Array Vendor and Model/Firmware Version**
  1. EMC CX300, version 02.26.300.5.005
  2. EMC CX300, version 02.26.300.5.005
  3. EMC CX300, version 02.26.300.5.005
  4. EMC CX300, version 02.26.300.5.005
- **Fibre Channel Switches Vendor and Model**: Brocade Silkworm 3800
- **Used GB**: 416
- **Array Cache GB**
  1. EMC CX300, 2048MB
  2. EMC CX300, 2048MB
  3. EMC CX300, 2048MB
  4. EMC CX300, 2048MB

### Number and Size of LUNs
- **LUN 1**: 120GB
- **LUN 2**: 120GB
- **LUN 3**: 120GB
- **LUN 4**: 120GB
- **LUN 5**: 120GB
- **LUN 6**: 120GB
- **LUN 7**: 260GB

### RAID Type
- **LUN 1**: RAID10
- **LUN 2**: RAID10
- **LUN 3**: RAID10
- **LUN 4**: RAID10
- **LUN 5**: RAID10
- **LUN 6**: RAID10
- **LUN 7**: RAID10

### Number of Members per RAID Set
- **LUN 1**: 10 members
- **LUN 2**: 10 members
- **LUN 3**: 10 members
- **LUN 4**: 10 members
- **LUN 5**: 10 members
- **LUN 6**: 10 members
- **LUN 7**: 16 members

### Disk Vendor and Model/Speed
- **Fujitsu Enterprise/15K**

### Clients
- **# of Clients**: 6
- **System Model**: PowerEdge 1650, 4 x PowerEdge 1750, PowerEdge 1850
- **Processor Vendor and Model**: Intel Xeon
- **Processor Speed (GHz)**: 1.40 (1650), 2 x 3.20 (1750), 2 x 3.06 (1750), 2.80 (1850)
- **# of Sockets/# of Cores**: 2/2 (1650), 2/2 (1750), 2/4 (1850)
- **Memory**: 2 GB
- **Network Controller Vendor and Model**: Intel PRO/1000 XT Network Connection (1650), 4 x Broadcom NetXtreme Gigabit Ethernet (1750), Intel PRO/1000 MT Network Connection (1850)
- **Operating System, Version, and Service Pack**: Microsoft Windows Server 2003 SP1
- **Other Hardware**: None
- **Other Software**: None

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**Notes for Workload**

**SUT Notes**
The onboard disk controller contained 1 80GB/7.2K drive for OS.
- BIOS settings: Hardware Prefetcher Disabled (default Enabled), Adjacent Sector Prefetch Disabled (default Enabled)

Virtualization Platform Notes

- Two vSwitch0 and vSwitch1 bound to vmnic0 and vmnic1 (physical NICs) respectively.
- Each vSwitch was configured to 120 ports (default 56).
- Service Console was shared with vSwitch0.
- Webserver VMs were attached to vSwitch1; the rest of the VMs were attached to vSwitch0.
- Database VMs were stored on LUN 7. For all other VMs, each tile was stored on its own LUN.

Operating System Notes

- Microsoft Windows Server 2003 virtual machines were updated to Service Pack 2, and KB 933360 was applied.

Software Notes

Client Notes

- KB 93360 was applied.

Other Notes

This is a full disclosure report for a VMmark benchmark result. All published VMmark results must be from fully-compliant tests for which a full disclosure report is publicly available.

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