

VMware® VMmark® V2.1.1 Results

Vendor and Hardware Platform: Huawei Tecal RH2285-12
 Virtualization Platform: VMware ESXi 5.0.0 Build 469512
 VMware vCenter Server: VMware vCenter Server 5.0.0 Build 455964

**VMmark V2.1.1 Score =
6.74 @ 6 Tiles**

Number of Hosts: 2	Uniform Hosts [yes/no]: yes	Total sockets/core/threads in test: 4/24/48
Tested By: Huawei Inc.		Test Date: 02-29-2012
Performance Section Performance	Configuration Section Configuration	Notes Section Notes for Workload

Performance

	mailserver			olio			dvdstoreA			dvdstoreB			dvdstoreC			
TILE_0	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	GM
p0	329.75	1.00	67.50	4742.52	1.02	108.30	3670.80	1.67	81.45	2580.15	1.70	91.12	1886.28	1.78	98.71	1.39
p1	328.10	0.99	64.00	4709.70	1.01	128.73	3644.15	1.66	83.28	2639.70	1.74	93.43	1849.85	1.75	102.85	1.38
p2	323.60	0.98	64.00	4645.68	1.00	204.36	3430.30	1.56	95.59	2496.90	1.64	104.86	1729.70	1.63	116.55	1.33
TILE_1	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	GM
p0	327.98	0.99	65.90	4691.73	1.01	157.81	3647.07	1.66	83.01	2564.80	1.69	93.16	1766.80	1.67	103.14	1.36
p1	326.88	0.99	72.25	4674.15	1.01	172.34	3300.03	1.50	104.33	2373.28	1.56	117.04	1639.38	1.55	130.98	1.29
p2	327.48	0.99	74.00	4672.18	1.01	184.36	3301.12	1.50	104.08	2378.18	1.57	117.38	1733.33	1.64	128.91	1.31
TILE_2	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	GM
p0	328.80	1.00	88.75	4684.35	1.01	169.85	3496.95	1.59	88.99	2476.82	1.63	97.46	1767.30	1.67	102.81	1.34
p1	327.55	0.99	84.00	4614.93	0.99	194.84	3430.38	1.56	93.00	2595.07	1.71	102.18	1894.53	1.79	107.18	1.36
p2	325.50	0.99	86.50	4602.02	0.99	247.70	3359.85	1.53	98.62	2341.62	1.54	111.12	1742.00	1.65	117.15	1.31
TILE_3	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	GM
p0	328.98	1.00	75.75	4685.32	1.01	156.79	3630.18	1.65	81.42	2722.43	1.79	86.13	1977.92	1.87	89.48	1.41
p1	324.95	0.98	74.00	4646.32	1.00	182.19	3473.43	1.58	90.03	2585.97	1.70	96.53	1959.55	1.85	100.14	1.37
p2	325.70	0.99	84.25	4634.88	1.00	225.57	3397.95	1.55	94.29	2416.40	1.59	102.55	1718.72	1.62	108.20	1.32
TILE_4	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	GM
p0	324.25	0.98	64.00	4685.60	1.01	163.43	3656.15	1.66	81.04	2669.18	1.76	90.04	1994.05	1.88	95.68	1.40
p1	327.60	0.99	64.00	4680.73	1.01	175.68	3697.53	1.68	79.65	2659.62	1.75	90.27	1920.95	1.82	95.20	1.40
p2	327.20	0.99	64.00	4608.27	0.99	222.57	3697.22	1.68	78.75	2596.00	1.71	88.52	1846.03	1.74	93.79	1.38
TILE_5	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	Actual	Ratio	QoS	GM
p0	327.73	0.99	72.97	4701.43	1.01	161.79	3631.43	1.65	82.68	2578.78	1.70	90.34	1915.72	1.81	96.09	1.39
p1	328.48	0.99	78.00	4666.32	1.01	163.93	3629.70	1.65	82.32	2650.47	1.75	91.56	1917.03	1.81	96.07	1.39

p2	325.82	0.99	82.25	4643.07	1.00	191.28	3525.57	1.60	87.32	2576.65	1.70	96.11	1835.67	1.73	103.25	1.36
p0_score:	8.29															
p1_score:	8.21															
p2_score:	7.99															
Infrastructure_Operations_Scores:										vmotion	svmotion	deploy				
Completed_Ops_PerHour										10.50	9.00	4.00				
Avg_Seconds_To_Complete										76.00	21.54	374.81				
Failures										0.00	0.00	0.00				
Ratio										0.66	1.00	1.00				
Number_Of_Threads										1	1	1				
Summary						Run_Is_Compliant	Number_Of_Compliance_Issues(0)*				Median_Phase(p1)					
Unreviewed_VMmark2_Applications_Score						8.21										
Unreviewed_VMmark2_Infrastructure_Score						0.87										
Unreviewed_VMmark2_Score						6.74										

Configuration

Virtualization Software	
Hypervisor Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware ESXi 5.0.0 Build 469512/08-24-2011
Datacenter Management Software Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware vCenter Server 5.0.0 Build 455964/08-24-2011
Supplemental Software	None
Servers	
Quantity	2
Server Manufacturer and Model	Huawei Tecal RH2285-12
Processor Vendor and Model	Intel Xeon X5670
Processor Speed (GHz)	2.93 GHz
Total Sockets/Total Cores/Total Threads	2 Sockets / 12 Cores / 24 Threads
Primary Cache	32KB I+32KB D on chip per core
Secondary Cache	256KB I+D on chip per core
Other Cache	12MB I+D on chip per chip L3

BIOS Version	V036
Memory Size (in GB, Number of DIMMs)	96 GB,12 * 8 GB
Memory Type and Speed	Dual rank PC3-10600 Registered ECC
Disk Subsystem Type	FC SAN
Number of Disk Controllers	1
Disk Controller Vendors and Models	1 x LSI 1068
Number of Host Bus Adapters	2
Host Bus Adapter Vendors and Models	QLE2560 single port 8Gb Fibre HBA
Number of Network Controllers	2
Network Controller Vendors and Models	Integrated Broadcom 1GbE BASE-T MC Server Adapter
Other Hardware	None
Other Software	None
Hardware Availability Date (MM-DD-YYYY)	07-23-2011
Software Availability Date (MM-DD-YYYY)	08-16-2011
Network	
Network Switch Vendors and Models	1 x Huawei NX110
Network Speed	1Gbps for SUT management and all VMs
Storage	
Array Vendors, Models, and Firmware Versions	2 x huaweisymantec Oceanspace Dorado2100
Fibre Channel Switch Vendors and Models	None
Disk Space Used	2104 GB
Array Cache Size	2 GB
Total Number of Physical Disks Used	48
Total Number of Enclosures/Pods/Shelves Used	2
Number of Physical Disks Used per Enclosure/Pod/Shelf	Two enclosures with 24 SSDs
Total Number of Storage Groups Used	4
Number of LUNs Used	4

LUN Size and Number of Disks Per LUN	1 disk group across 20x50GB SSDs,containing 1 LUNs,920GB 1 disk group across 20x50GB SSDs,containing 1 LUNs,920GB 1 disk group across 4x35GB SSDs,containing 1 LUNs,132GB 1 disk group across 4x35GB SSDs,containing 1 LUNs,132GB
RAID Type	Raid 0
Number of Members per RAID Set	2 Raid0 sets,each across 20 x 50GB SSDs 2 Raid0 sets,each across 4 x 35GB SSDs
Disk Vendors, Models, and Speeds	huaweismantec Dorado2100-STTZ01SSD50 SSD

Datacenter Management Server

System Model	Huawei Tecal E6000
Processor Vendor and Model	Intel Xeon E5620
Processor Speed (GHz)	2.40Ghz
Total Sockets/Total Cores/Total Threads	2 Sockets / 8 Cores / 16 Threads
Memory	32 GB
Network Controller(s) Vendors and Models	1 x Integrated Broadcom 1GbE BASE-T MC Server Adapter
Operating System, Version, and Service Pack	Microsoft Windows 2008 R2 Enterprise(64bit)
Other Hardware	None
Other Software	None

Clients

Number of Clients	2 physical server (One physical server is Prime client,another one is a ESXi host,and 5 virtual clients were ran on it)
System Model(s)	Huawei Tecal E6000
Processor Vendor(s) and Model(s)	Intel Xeon E5620
Processor Speed(s) (GHz)	2.40Ghz
Total Sockets/Total Cores/Total Threads	2 Sockets / 8 Cores / 16 Threads
Memory per Client	Prime client: 10 GB Physical client :48 GB
Network Controller(s) Vendors and Models	1 x Integrated Broadcom 1GbE BASE-T MC Server Adapter
Operating System, Version, and Service Pack	Prime client:Microsoft Windows 2008 R2 Enterprise(64bit) Physical Clients:VMware ESXi 5.0.0(Build 469512) Virtual Clients:Microsoft Windows 2008 R2 Enterprise(64bit)
Other Hardware	None
Other Software	None

Notes for Workload

Virtualization Software Notes

All multiprocessor VMs (except OlioWeb) are using the CPU-scheme single socket with multiple cores

All VMs except mailservers used virtual hardware V7, mailservers used virtual hardware v8

Logging was disabled for all VMs (default Enabled)

Ethernet adapter type set to VMXNET3 for all vms (default VMXNET2)

Advanced Setting

Disk.SchedNumReqOutstanding = 128 (default 32)

Mem.BalancePeriod = 0 (default 15)

Mem.SamplePeriod = 0 (default 60)

Misc.TimerMaxHardPeriod=4000 (default 100000)

Misc.TimerMinHardPeriod=2000 (default 2000)

Net.MaxNetifRxQueueLen = 500 (default 100)

Net.MaxNetifTxQueueLen=1000 (default 500)

Net.NetTxCompletionWorldlet = 0 (default 1)

Net.NetTxWorldlet = 0 (default 2)

Numa.LTermFairnessinterval = 0 (default 5)

Numa.MonMigEnable = 0 (default 1)

Numa.SwapLoadEnable = 0 (default 1)

Numa.SwapLocalityEnable = 0 (default 1)

Server Notes

Adjacent Cache Line Prefetch : Disabled (default Enabled)

Hardware Prefetch : Disabled (default Enabled)

Networking Notes

vSwitch Configuration:

vSwitch 0 for the Service Console and vmkernel vMotion connection on vmnic0 of two hosts at 1 Gb/s

vSwitch 1 for all VMs on vmnic1 of two hosts at 1 Gb/s

Storage Notes

2 LUNs each contained all VMs for 3 tiles

The target for the sVMotion and Deploy operations was a single dedicated LUN

The Deploy Template was on a single dedicated LUN

Datacenter Management Server Notes

None

Operating System Notes

All Mailserver VMs running Microsoft Windows Server 2008 R2 Enterprise(64-bit)

All Standby VMs running Microsoft Windows Server 2003 R2 Enterprise SP2(32-bit)

Software Notes

None

Client Notes

One physical client was prime client

One physical client ran five client virtual machines

Prime client was running VMware vSphere PowerCLI-4.1.1-332441

All clients were run on virtual machines that were each defined with 4vCPU,4GB memory,1 VMXNET3 network and 32GB disk space

All client operating systems were Microsoft Windows Server 2008 R2 Enterprise(64-bit)

Other Notes

None

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.

For information about VMmark and the rules regarding its usage visit www.vmware.com/products/vmmark.

VMware and VMmark are trademarks or registered trademarks of VMware, Inc. VMware® VMmark® is a product of [VMware, Inc.](http://www.vmware.com).