

VMmark® 3.1.1 Results

Server Vendor & Model: Supermicro SuperServer SYS-220BT-DNTR
Storage Vendor & Model: VMware vSAN 7.0 U2 All Flash
Hypervisor: VMware ESXi 7.0 U2a Build 17867351
Datacenter Management Software: VMware vCenter Server 7.0 U3a Build 18778458

VMmark 3.1.1 Score =
 24.34 @ 24 Tiles

Number of Hosts: 4	Uniform Hosts [yes/no]: yes	Total sockets/cores/threads in test: 8/320/640
Tested By: Supermicro		Test Date: 06-18-2022
Performance Section Performance	Configuration Section Configuration	Notes Section Notes for Workload

Performance

	weathervane			weathervaneE			dvdstoreA			dvdstoreB			dvdstoreC			
TILE_0	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3562.11	0.99	0.89 0.03	565.82	0.99	0.61 0.27	1033.45	1.41	567.49	782.00	1.56	615.61	557.70	1.61	682.28	1.28
p1	3549.35	0.99	0.69 0.00	566.20	0.99	0.48 0.27	1038.00	1.41	561.59	754.33	1.51	627.59	556.00	1.60	692.41	1.27
p2	3537.02	0.98	0.74 0.02	561.20	0.98	0.59 0.28	1039.00	1.41	560.35	753.75	1.51	624.12	533.00	1.54	689.35	1.26
TILE_1	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3564.71	0.99	1.11 0.02	564.25	0.99	0.76 0.37	995.00	1.35	651.44	736.15	1.47	734.37	550.27	1.59	806.92	1.25
p1	3548.69	0.99	1.10 0.01	561.68	0.98	0.68 0.35	1002.05	1.36	647.30	710.65	1.42	744.99	501.50	1.45	826.62	1.22
p2	3522.94	0.98	1.05 0.01	559.93	0.98	0.67 0.24	987.83	1.35	657.53	740.05	1.48	731.93	522.85	1.51	820.52	1.24
TILE_2	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3569.93	0.99	0.86 0.05	570.30	1.00	1.12 0.71	976.60	1.33	686.96	698.35	1.40	783.92	509.43	1.47	881.68	1.22
p1	3555.54	0.99	0.67 0.00	565.70	0.99	0.65 0.39	1005.17	1.37	634.15	715.00	1.43	729.38	499.10	1.44	828.74	1.22
p2	3544.89	0.99	0.76 0.03	560.44	0.98	0.59 0.21	983.67	1.34	671.62	724.67	1.45	767.10	539.02	1.55	847.67	1.24
TILE_3	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3570.91	0.99	1.15 0.01	562.29	0.98	0.86 0.45	981.42	1.34	686.69	677.42	1.35	786.39	489.40	1.41	879.42	1.20
p1	3556.39	0.99	1.17 0.02	560.53	0.98	0.66 0.31	975.05	1.33	696.17	727.25	1.45	778.45	513.02	1.48	874.42	1.23
p2	3540.92	0.98	1.10 0.02	559.54	0.98	0.75 0.38	975.08	1.33	686.44	702.75	1.40	775.79	516.55	1.49	864.23	1.22
TILE_4	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3572.02	0.99	0.74 0.02	561.17	0.98	0.61 0.30	1043.85	1.42	542.80	731.62	1.46	612.06	513.10	1.48	670.90	1.25
p1	3546.96	0.99	0.61 0.00	561.27	0.98	0.50 0.19	1037.10	1.41	558.07	802.83	1.60	619.60	578.38	1.67	688.44	1.30
p2	3527.41	0.98	0.60 0.00	563.46	0.98	0.46 0.20	1038.92	1.41	551.66	723.75	1.45	634.26	529.62	1.53	693.02	1.25
TILE_5	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3555.07	0.99	1.02 0.10	568.26	0.99	0.69 0.28	988.40	1.35	656.04	712.65	1.42	725.43	526.30	1.52	801.35	1.23
p1	3534.96	0.98	1.01 0.03	568.17	0.99	0.57 0.12	989.10	1.35	659.98	705.88	1.41	745.68	522.90	1.51	821.75	1.23

p2	3520.28	0.98	0.99 0.03	566.89	0.99	0.68 0.23	979.15	1.33	664.13	703.08	1.40	757.71	497.27	1.43	828.91	1.21
TILE_6	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3566.62	0.99	0.80 0.01	567.30	0.99	0.70 0.34	997.67	1.36	642.60	741.60	1.48	727.68	527.80	1.52	796.03	1.25
p1	3556.38	0.99	0.70 0.00	566.41	0.99	0.51 0.13	1020.90	1.39	591.89	705.75	1.41	687.97	514.20	1.48	745.01	1.23
p2	3542.77	0.98	0.71 0.05	561.14	0.98	0.66 0.34	1005.80	1.37	621.90	748.40	1.50	703.02	538.92	1.55	766.04	1.25
TILE_7	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3570.54	0.99	0.52 0.00	565.07	0.99	0.48 0.15	1000.85	1.36	642.59	735.67	1.47	739.63	544.67	1.57	820.73	1.25
p1	3560.02	0.99	0.51 0.00	560.75	0.98	0.54 0.26	1005.67	1.37	634.62	714.85	1.43	734.28	474.18	1.37	841.91	1.21
p2	3545.63	0.99	0.53 0.00	559.87	0.98	0.54 0.22	995.30	1.36	650.30	740.25	1.48	732.61	544.95	1.57	823.13	1.25
TILE_8	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3576.32	0.99	0.65 0.02	570.65	1.00	0.94 0.53	1043.22	1.42	534.71	767.90	1.53	573.18	576.70	1.66	610.34	1.29
p1	3561.06	0.99	0.52 0.00	571.75	1.00	0.86 0.53	1046.62	1.43	533.66	770.02	1.54	572.77	548.98	1.58	622.08	1.28
p2	3541.66	0.98	0.59 0.00	569.16	0.99	0.70 0.60	1039.58	1.42	547.50	787.23	1.57	594.08	590.95	1.70	642.58	1.30
TILE_9	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3570.05	0.99	0.42 0.00	572.70	1.00	1.12 0.82	1043.70	1.42	559.14	749.67	1.50	649.52	526.40	1.52	725.99	1.26
p1	3554.72	0.99	0.44 0.00	571.50	1.00	1.01 0.63	1033.25	1.41	583.14	770.98	1.54	664.52	550.52	1.59	722.72	1.28
p2	3541.71	0.98	0.44 0.00	571.10	1.00	0.93 0.66	1029.72	1.40	592.50	732.38	1.46	693.62	536.95	1.55	764.61	1.26
TILE_10	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3574.28	0.99	0.79 0.01	566.61	0.99	0.91 0.71	967.40	1.32	715.85	690.38	1.38	815.36	480.57	1.39	919.00	1.20
p1	3561.86	0.99	0.66 0.00	560.52	0.98	0.63 0.23	978.98	1.33	691.52	717.15	1.43	794.51	532.65	1.54	880.72	1.23
p2	3548.32	0.99	0.71 0.01	559.77	0.98	0.61 0.26	987.27	1.34	663.65	703.75	1.41	762.91	492.12	1.42	852.02	1.21
TILE_11	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3563.08	0.99	1.24 0.06	568.90	0.99	0.98 0.85	960.23	1.31	733.48	714.70	1.43	818.49	508.98	1.47	907.33	1.22
p1	3553.94	0.99	1.13 0.02	565.97	0.99	0.76 0.45	965.58	1.31	713.50	688.62	1.38	813.38	483.68	1.39	902.72	1.20
p2	3545.91	0.99	1.08 0.02	557.02	0.97	0.70 0.32	963.27	1.31	719.90	691.23	1.38	815.15	506.93	1.46	905.14	1.21
TILE_12	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3584.20	1.00	0.68 0.02	572.14	1.00	0.91 0.51	1037.75	1.41	555.76	780.30	1.56	610.33	583.40	1.68	669.01	1.30
p1	3569.63	0.99	0.58 0.00	573.87	1.00	0.84 0.56	1051.10	1.43	534.02	760.45	1.52	600.84	538.50	1.55	672.58	1.27
p2	3556.02	0.99	0.62 0.01	572.21	1.00	0.62 0.54	1042.15	1.42	554.04	777.67	1.55	612.30	555.90	1.60	686.84	1.28
TILE_13	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3570.10	0.99	0.57 0.00	565.35	0.99	0.54 0.33	1050.03	1.43	554.25	748.92	1.50	640.06	553.27	1.60	707.49	1.27
p1	3553.90	0.99	0.54 0.00	562.39	0.98	0.64 0.28	1048.88	1.43	552.77	749.25	1.50	629.50	527.60	1.52	705.93	1.26
p2	3532.42	0.98	0.54 0.00	560.98	0.98	0.47 0.22	1028.00	1.40	594.13	761.08	1.52	678.35	565.60	1.63	754.24	1.27
TILE_14	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3575.17	0.99	0.75 0.01	567.93	0.99	0.88 0.40	994.92	1.35	637.13	714.77	1.43	722.06	503.40	1.45	805.48	1.23
p1	3553.78	0.99	0.66 0.00	563.17	0.98	0.59 0.21	1010.30	1.38	607.95	757.10	1.51	678.65	537.83	1.55	753.67	1.26
p2	3541.01	0.98	0.77 0.06	558.50	0.98	0.64 0.25	1002.98	1.37	623.16	722.85	1.44	702.38	531.70	1.53	775.20	1.24
TILE_15	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(nRT MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM

p2_score:	29.73			
Infrastructure_Operations_Scores:	vMotion	SVMotion	XVMotion	Deploy
Completed_Ops_PerHour	56.00	50.00	40.00	28.00
Avg_Seconds_To_Complete	7.14	89.57	116.05	207.94
Failures	0.00	0.00	0.00	0.00
Ratio	2.15	2.78	2.22	3.50
Number_Of_Threads	2	2	2	2
Summary	Run_Is_Compliant			Turbo_Setting:0
	Number_Of_Compliance_Issues(0)*			Median_Phase(p1)
Unreviewed_VMmark3_Applications_Score	29.77			
Unreviewed_VMmark3_Infrastructure_Score	2.61			
Unreviewed_VMmark3_Score	24.34			

Configuration

Virtualization Software	
Hypervisor Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware ESXi 7.0 U2a Build 17867351 / 04-29-2021
Datacenter Management Software Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware vCenter Server Appliance 7.0 U3a Build 18778458 / 10-21-2021
Supplemental Software	None
Servers	
Number of Servers in System Under Test (all subsequent fields in this section are per server)	4
Server Manufacturer and Model	Supermicro SuperServer SYS-220BT-DNTR
Processor Vendor and Model	Intel Xeon Platinum 8380
Processor Speed (GHz) / Turbo Boost Speed (GHz)	2.30 / 3.40
Total Sockets/Total Cores/Total Threads	2 Sockets / 80 Cores / 160 Threads
Primary CPU Cache	32KB I + 48KB D on chip per core
Secondary CPU Cache	1280KB I+D on chip per core
Other CPU Cache	60MB I+D on chip per chip
BIOS Version	1.2
Memory Size (in GB, Number of DIMMs)	2048, 16
Memory Type and Speed	128GB DDR4 3200MHz
Disk Subsystem Type	VMware vSAN, NFS
Number of Disk Controllers	1

Disk Controller Vendors and Models	Supermicro AOC-SMG3-2M2-B
Total Number of Physical Disks for Hypervisor	2
Disk Vendors, Models, Capacities, and Speeds	Samsung, MZVL21T0HCLR-00B00, 1024GB, 8.0GB/s
Number of Host Bus Adapters	0
Host Bus Adapter Vendors and Models	None
Number of Network Controllers	1
Network Controller Vendors and Models	AOC-A25G-m2SM
Other Hardware	None
Other Software	None
Hardware Availability Date (MM-DD-YYYY)	04-06-2021
BIOS Availability Date (MM-DD-YYYY)	02-12-2022
Software Availability Date (MM-DD-YYYY)	04-29-2021
Network	
Network Switch Vendors and Models	Supermicro SSE-C3632S
Network Speed	32x 100Gb/s QAFP28 ports, each optionally configured to 4x 25 Gb/s
Primary Storage	
Storage Category	vSAN
Storage Vendors, Models, and Firmware Versions	4x Supermicro SYS-220BT-DNTR with VMware vSAN 7.0 U2
Storage Configuration Summary	VMware vSAN (caching tier): Intel Optane SSD DC P5800X Series SSDPF21Q016TB (1600GB 2.5") VMware vSAN (capacity tier): Intel DC P5510 SSDPF2KX038TZ 2.5" NVMe (3840GB 2.5") See Storage Notes for more details
Datacenter Management Server	
System Model	Supermicro SuperServer SYS-1029U-TN10RT
Processor Vendor and Model	Intel Xeon Platinum 8253 CPU
Processor Speed (GHz)	2.20
Total Sockets/Total Cores/Total Threads	2 Sockets / 32 Cores / 64 Threads
Memory Size (in GB, Number of DIMMs)	384, 12
Network Controller(s) Vendors and Models	Supermicro AOC-M25G-i2s
Operating System, Version, Bitness, and Service Pack	VMware ESXi 7.0 Update 3 Build 18644231
Virtual Center VM Number of vCPUs	4
Virtual Center VM Virtual Memory (in GB)	19
Virtual Center VM Operating System, Version, Bitness, and Service Pack	VMware vCenter Server 7.0 U3a Build 18778458
Other Hardware	none
Other Software	none
Clients	
Total Number of Virtual Clients / Virtual Client Hosts	25 / 2
System Model(s)	SYS-120U-TNR
Processor Vendor(s) and Model(s)	Intel Xeon Gold 6338

Processor Speed(s) (GHz)	2.00
Total Sockets/Total Cores/Total Threads	2 Sockets / 64 Cores / 128 Threads
Memory per Virtual Client Host	1024
Network Controller(s) Vendors and Models	AOC-S25G-i2s
Virtual Client Networking Notes	All management traffic and workload traffic running on vmnic0 and vmnic1
Virtual Client Storage Notes	All clients mounted on NFS datastore
Other Hardware	None
Other Software	VMware ESXi 7.0 U2a Build 17867351

Security Mitigations

Vulnerability	CVE	Exploit Name	Public Vulnerability Name	Mitigated		
				Server Firmware	ESXi	Guest OS
Spectre	2017-5753	Variant 1	Bounds Check Bypass	N/A	Yes	Yes
Spectre	2017-5715	Variant 2	Branch Target Injection	Yes	Yes	Yes
Meltdown	2017-5754	Variant 3	Rogue Data Cache Load	N/A	Yes	Yes
Spectre-NG	2018-3640	Variant 3a	Rogue System Register Read	Yes	N/A	N/A
Spectre-NG	2018-3639	Variant 4	Speculative Store Bypass	N/A	Yes	Yes
Foreshadow	2018-3615	Variant 5	L1 Terminal Fault - SGX	N/A	N/A	N/A
Foreshadow-NG	2018-3620	Variant 5	L1 Terminal Fault - OS	N/A	N/A	Yes
Foreshadow-NG	2018-3646	Variant 5	L1 Terminal Fault - VMM	N/A	Yes	N/A

Notes for Workload

Template deployed with disk type: Thin

Virtualization Software Notes

- Logical CPU configuration changed for all multi-CPU VMs except for PrimeClient to 1 socket with multiple cores (default single core per socket)
- CPU and Memory shares set to high for all DS3DB,ElasticDB and ElasticLB VMs (default normal)
- CDROM removed from all VMs except for PrimeClient, client, and template VMs.
- All memory reserved for DS3DB VMs (default non-reserved)
- Added sched.mem.lpage.enable1GPage to TRUE for all DS3DB VMs (default normal)
- sched.mem.pin set to TRUE for DS3DB
- CPU shares set to low for all Standby VMs (default normal)
- vSphere DRS Migration Threshold set to Fully Automated level 1
- Cluster DRS Automation level set to Fully Automated.
- vSphere DRS Advanced Options: AggressiveCPUActive = 1 (default 0).
- Added driver iavmd 2.7-1OEM
- Added network driver nmlx5-core and nmlx5-rdma 4.21 to ESXi 7.0u2. Installation was done from USB Flash Drive.

Advanced Settings:

- Cpu.CreditAgePeriod = 1000 (default 3000)
- Cpu.HTWholeCoreThreshold = 0 (default 800)

- DataMover.HardwareAcceleratedInit = 0 (default 1)
- DataMover.HardwareAcceleratedMove = 0 (default 1)
- Disk.IdleCredit = 64 (default 32)
- Disk.ReqCallThreshold = 1 (default 8)
- Mem.CtlMaxPercent = 0 (default 65)
- Mem.ShareScanGHz = 0 (default 4)
- Misc.TimerMaxHardPeriod = 4000 (default 500000)
- Net.MaxNetifTxQueueLen = 1000 (default 2000)
- Net.MaxPortRxQueueLen = 160 (default 80)
- Numa.LTermFairnessInterval = 0 (default 5)
- Numa.MigImbalanceThreshold = 57 (default 10)
- Numa.PageMigEnable = 0 (default 1)
- Numa.RebalancePeriod = 6000 (default 2000)
- Numa.SwapLoadEnable = 0 (default 1)
- Numa.SwapLocalityEnable = 0 (default 1)
- VMFS3.HardwareAcceleratedLocking = 0 (default 1)
- VMkernel.Boot.hyperthreadingMitigation = true (default false)
- All SUT hosts have /adv/UserVars/SuppressShellWarning = 1 (default 0)
- UserVars.HostClientCEIPOptIn= 1(default 0)

Server Notes

- Intel Hyper Threading enabled (default).
- Intel Turbo Boost Enabled (Default).
- Power Management Setting: Extreme Performance (Default: OS Controls Power Management).
- Intel VMD Mode Enabled on all disks (Default: Disabled).

Networking Notes

- Single Distributed Switch with two uplinks.
- These two uplinks were backed by vmnic0 and vmnic1 respectively.
- Uplink1 contains the following distributed portgroups: Management Network, VMNetwork, and vMotion.
- Uplink2 contains the following distributed portgroups: vSAN.
- All virtual machines used VMNetwork for traffic.
- All vSAN traffic is only run on Uplink2 on its own dedicated vmnic.
- MTU set to 9000 (default 1500) for the DSwitch, vmk0, vmk1, vmk2, vmk3, and all uplinks

Storage Notes

- All client server OS installed on SATADOM.
- All SUT hosts OS installed on a RAID1 of 2 m.2 drives via Supermicro AOC-SMG3-2M2-B-P.
- NFS Folder configuration:
 - All folders are backed by the same NFS server on a single striped zfs array, mounted storage device detailed in the "Secondary Storage section."
 - Deploy1 datastore -> /data/VMmark2021/deploy1
 - Deploy2 datastore -> /data/VMmark2021/deploy2
 - NFS datastore -> /data/VMmark2021
 - vMotion1 datastore -> /data/VMmark2021/vmotion1
 - vMotion2 datastore -> /data/VMmark2021/vmotion2
- System under Test configuration

- Intel Xeon Platinum 8380 2.30GHz processors
 - 2048GB Memory (16 x 128GB 3200MHz)
 - 2 x Intel P5800x 1600GB NVMe (shelf)
 - 4 x Intel P5510 3.84TB NVMe (Shelf)
- Software configuration
 - All Flash vSAN.
 - Two diskgroups per host.
 - Each disk group contains 1 x Intel P5800x for caching and 2 x P5510 for capacity.
 - vSAN Default Storage Policy used.
- Virtual Machine LUN Distribution:
 - vsanDatastore contains the following workloads:
 - AuctionAppA*
 - AuctionAppB*
 - AuctionDB*
 - AuctionLB*
 - AuctionMSQ*
 - AuctionNoSQL*
 - AuctionWebA*
 - AuctionWebB*
 - DS3DB*
 - DS3WebA*
 - DS3Webb*
 - DS3WebC*
 - ElasticAppA*
 - ElasticAppb*
 - ElasticDB*
 - ElasticLB*
 - ElasticWebA*
 - ElasticWebB*
 - Standby*

Secondary Shared Storage Device:

- Hardware:
 - SuperServer SYS-1029P-N32R
 - 768GB Memory 12x 72ASS8G72LZ-2G6D2 64GB 2666 DIMM @ 2666MHz; 1DPC
 - 2x MCX455A-ECAT - Single Port; bonded 100G LACP
 - 2x Xeon 6230; Turbo Enabled, H0 Stepping
 - 24x Intel 4TB P4500 (SSDPE2KX040T7) NVMe SSD's
 - 1x SuperMicro SSD 32GB SATADOM
- Firmware:
 - BIOS - 3.1a
 - IPMI - 1.56
 - MCX455A-ECAT - 12.27.1016 (MT_2180110032)
 - 4TB P4500 (SSDPE2KX040T7) - QDV101D0
 - SuperMicro SSD 32GB SATADOM - SOB20R
- Software:

- Ubuntu 18.04.4 w/ Updates as of 04/09/2020
- Kernel 4.15.0-91-generic
- zfs module - 0.7.5-1ubuntu16.11
- zfs release - 0.7.5-1ubuntu16.11
- Configuration:
 - 3x raidz3 pools on one large pool over all 24 disks, mounted to /data
 - MCX455A-ECAT set to MTU 9000
 - LACP Bond of MCX455A-ECAT set to MTU 9000
 - ufw disabled
 - nfs-kernel-server modified /etc/default/nfs-kernel-server `RPCNFSDCOUNT=40`
- Virtual Machine LUN Distribution:
 - deploy1 contains the following workload: deploy1
 - deploy2 contains the following workload: deploy2

Datacenter Management Server Notes

None

Operating System Notes

None

Software Notes

None

Client Notes

- Primeclient VM configured with a 200GB sized second disk.
- NFS contains all the client and PrimeClient virtual machines.
- /adv/UserVars/SuppressShellWarning = 1 (default : 0)
- Set VMkernel.Boot.hyperthreadingMitigation = true (default : false)
- MTU set to 9000 (default 1500) for the DSwitch, vmk0, vmk1, vmk2, and all uplinks
- Host1 contains the following workloads: Client0, Client2, Client4, Client6, Client8, Client10, Client12, Client14, Client16, Client18, Client20, Client22, PrimeClient
- Host2 contains the following workloads: Client1, Client3, Client5, Client7, Client9, Client11, Client13, Client15, Client17, Client19, Client21, Client23

Other Notes

None

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