VMmark® 3.1.1 Results

Server Vendor & Model: Dell PowerEdge T550 **Storage Vendor & Model: VMware vSAN 7.0 U3 All Flash** **Hypervisor: VMware ESXi 7.0 U3c Build 19193900** **Datacenter Management Software:VMware vCenter Server 7.0 U1c Build 17327586**	**VMmark 3.1.1 Score = 16.39 @ 16 Tiles**

Number of Hosts: 4	**Uniform Hosts [yes/no]: yes**	**Total sockets/cores/threads in test: 8/256/512**
Tested By: Dell Technologies	**Test Date: 06-14-2022**	

Performance Section	**Configuration Section**	**Notes Section**
Performance	Configuration	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	3577.30	0.99	0.37 | 0.00	564.70	0.99	0.53 | 0.40	1016.60	1.38	616.33	723.38	1.45	714.19	507.07	1.46	810.12	1.23
p1	3558.39	0.99	0.39 | 0.00	564.45	0.99	0.60 | 0.32	1004.00	1.37	637.72	737.88	1.47	738.02	551.80	1.59	810.86	1.26
p2	3546.96	0.99	0.39 | 0.00	557.89	0.98	0.64 | 0.36	1011.67	1.38	621.01	722.42	1.44	720.66	503.25	1.45	815.04	1.23
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	3589.43	1.00	0.44 | 0.00	564.56	0.99	0.53 | 0.25	1025.25	1.40	593.42	734.48	1.47	678.33	515.67	1.49	757.73	1.25
p1	3570.92	0.99	0.45 | 0.00	563.79	0.99	0.68 | 0.44	1022.05	1.39	598.67	756.90	1.51	687.89	564.88	1.63	753.76	1.27
p2	3560.51	0.99	0.46 | 0.00	560.36	0.98	0.52 | 0.44	1032.17	1.41	575.65	715.58	1.43	657.52	500.50	1.44	733.50	1.23
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	3573.54	0.99	0.35 | 0.00	568.46	0.99	0.44 | 0.24	1017.52	1.39	609.67	756.02	1.51	695.49	535.10	1.54	780.14	1.26
p1	3555.29	0.99	0.37 | 0.00	567.55	0.99	0.63 | 0.43	1020.52	1.39	612.30	723.58	1.45	705.43	535.20	1.54	782.22	1.25
p2	3547.79	0.99	0.38 | 0.00	561.54	0.98	0.59 | 0.42	1017.33	1.39	609.08	728.38	1.46	698.71	507.65	1.46	795.87	1.23
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	3581.76	1.00	0.50 | 0.00	569.23	0.99	0.62 | 0.38	1005.58	1.37	636.72	740.60	1.48	728.22	525.33	1.51	816.07	1.25
p1	3568.93	0.99	0.46 | 0.01	563.46	0.98	0.54 | 0.30	1003.45	1.37	630.07	719.12	1.44	730.08	527.38	1.52	808.47	1.24
p2	3557.79	0.99	0.45 | 0.00	562.19	0.98	0.55 | 0.40	1009.67	1.37	634.55	719.27	1.44	729.28	501.70	1.45	818.32	1.23
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	3570.29	0.99	0.34 | 0.00	567.69	0.99	0.91 | 0.73	1009.52	1.37	623.19	749.02	1.50	703.55	556.67	1.61	787.85	1.27
p1	3560.17	0.99	0.38 | 0.00	564.77	0.99	0.80 | 0.52	1012.40	1.38	610.05	725.92	1.45	697.61	507.90	1.46	795.71	1.23
p2	3544.39	0.99	0.36 | 0.00	560.37	0.98	0.42 | 0.30	1015.77	1.38	613.71	753.52	1.51	694.69	534.27	1.54	778.18	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	3571.04	0.99	0.46 | 0.00	564.03	0.99	0.75 | 0.51	1008.17	1.37	615.69	749.60	1.50	693.10	560.25	1.62	771.22	1.27
p1	3571.05	0.99	0.48 | 0.00	559.67	0.98	0.55 | 0.24	1018.08	1.39	596.72	730.65	1.46	684.05	513.95	1.48	774.98	1.24

p2	3550.50	0.99	0.45 | 0.00	555.77	0.97	0.50 | 0.40	1017.05	1.39	605.90	756.38	1.51	678.89	537.20	1.55	759.00	1.25
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	3568.30	0.99	0.37 | 0.00	563.32	0.98	0.55 | 0.36	1025.80	1.40	594.15	732.23	1.46	685.51	536.75	1.55	766.59	1.25
p1	3556.53	0.99	0.36 | 0.00	561.62	0.98	0.59 | 0.35	1024.38	1.39	597.56	737.50	1.47	688.19	515.00	1.49	776.03	1.24
p2	3543.87	0.98	0.39 | 0.00	558.65	0.98	0.44 | 0.29	1021.45	1.39	607.09	757.50	1.51	688.87	561.52	1.62	763.18	1.27
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	3582.13	1.00	0.38 | 0.00	569.47	1.00	1.11 | 0.84	1011.70	1.38	617.81	724.65	1.45	711.12	532.23	1.53	792.86	1.25
p1	3565.98	0.99	0.37 | 0.00	566.08	0.99	1.04 | 0.79	1011.92	1.38	617.65	727.67	1.45	705.96	508.15	1.47	795.48	1.24
p2	3552.15	0.99	0.37 | 0.00	560.21	0.98	0.59 | 0.40	1006.92	1.37	635.05	744.08	1.49	727.17	551.83	1.59	806.86	1.26
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	3576.24	0.99	0.51 | 0.00	568.51	0.99	1.09 | 0.76	1008.00	1.37	616.51	724.50	1.45	696.73	510.75	1.47	774.31	1.24
p1	3573.11	0.99	0.47 | 0.00	566.60	0.99	1.09 | 0.90	997.85	1.36	631.98	748.38	1.50	710.32	532.45	1.54	781.12	1.25
p2	3561.80	0.99	0.48 | 0.00	565.05	0.99	0.68 | 0.55	1006.95	1.37	627.15	715.65	1.43	722.30	532.05	1.53	789.33	1.24
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	3573.02	0.99	0.35 | 0.00	571.81	1.00	1.14 | 0.87	1024.72	1.40	595.87	734.25	1.47	690.60	514.08	1.48	778.75	1.25
p1	3560.42	0.99	0.37 | 0.00	570.79	1.00	1.03 | 0.73	1029.47	1.40	589.86	761.80	1.52	663.23	542.62	1.56	748.94	1.27
p2	3544.54	0.99	0.37 | 0.00	566.47	0.99	0.52 | 0.25	1022.83	1.39	601.98	729.83	1.46	691.43	536.27	1.55	778.54	1.25
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	3587.11	1.00	0.44 | 0.00	571.12	1.00	1.16 | 0.88	1019.20	1.39	600.09	730.30	1.46	683.96	516.38	1.49	752.09	1.25
p1	3575.53	0.99	0.45 | 0.00	572.76	1.00	1.07 | 0.79	1003.95	1.37	623.85	744.90	1.49	711.44	559.42	1.61	769.56	1.27
p2	3555.79	0.99	0.43 | 0.00	569.81	1.00	0.97 | 0.81	1005.85	1.37	627.89	718.35	1.44	722.16	506.30	1.46	804.19	1.23
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	3576.18	0.99	0.37 | 0.00	565.27	0.99	0.73 | 0.47	1000.83	1.36	640.70	713.25	1.43	738.86	500.82	1.44	826.33	1.22
p1	3560.03	0.99	0.36 | 0.00	562.59	0.98	0.52 | 0.30	987.40	1.34	677.71	728.67	1.46	769.37	540.95	1.56	837.10	1.24
p2	3546.70	0.99	0.40 | 0.00	560.81	0.98	0.52 | 0.38	992.60	1.35	661.08	703.95	1.41	771.08	491.05	1.42	861.50	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	3570.30	0.99	0.49 | 0.00	568.55	0.99	1.16 | 0.89	1003.70	1.37	628.86	722.05	1.44	710.22	528.38	1.52	787.80	1.24
p1	3561.14	0.99	0.51 | 0.00	562.88	0.98	0.77 | 0.51	999.20	1.36	636.50	713.48	1.43	732.24	524.88	1.51	812.72	1.23
p2	3547.73	0.99	0.51 | 0.00	558.42	0.98	0.50 | 0.27	1004.58	1.37	628.12	719.42	1.44	716.48	503.80	1.45	806.45	1.22
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	3578.95	0.99	0.36 | 0.00	570.31	1.00	1.11 | 0.90	1026.45	1.40	592.35	761.35	1.52	674.66	538.95	1.55	761.08	1.27
p1	3557.98	0.99	0.39 | 0.00	562.65	0.98	0.85 | 0.52	1026.10	1.40	590.75	738.20	1.47	673.47	539.67	1.56	754.96	1.26
p2	3545.69	0.99	0.36 | 0.00	562.06	0.98	0.64 | 0.40	1034.33	1.41	574.41	740.10	1.48	660.60	518.42	1.49	743.33	1.25
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	3580.37	1.00	0.45 | 0.00	569.68	1.00	1.08 | 0.84	999.67	1.36	631.74	745.17	1.49	703.90	559.62	1.61	773.49	1.27
p1	3561.10	0.99	0.48 | 0.00	561.23	0.98	0.51 | 0.29	1000.62	1.36	637.85	688.73	1.38	732.45	501.07	1.44	816.91	1.21
p2	3548.14	0.99	0.45 | 0.01	558.71	0.98	0.47 | 0.34	984.58	1.34	667.20	732.60	1.46	758.74	518.50	1.50	837.28	1.23
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

p0	3580.64	1.00	0.55 | 0.00	569.22	0.99	1.08 | 0.88	990.45	1.35	655.28	730.58	1.46	739.83	547.20	1.58	819.47	1.25
p1	3565.20	0.99	0.49 | 0.00	566.01	0.99	0.84 | 0.55	997.98	1.36	640.03	713.35	1.43	736.15	499.43	1.44	836.65	1.22
p2	3547.97	0.99	0.52 | 0.00	559.84	0.98	0.55 | 0.42	988.10	1.35	656.95	732.95	1.46	744.87	520.40	1.50	831.00	1.23

p0_score:	20.00
p1_score:	19.92
p2_score:	19.82

Infrastructure_Operations_Scores:	vMotion	SVMotion	XVMotion	Deploy
Completed_Ops_PerHour	57.00	48.00	28.00	23.00
Avg_Seconds_To_Complete	6.03	98.85	229.06	273.74
Failures	0.00	0.00	0.00	0.00
Ratio	2.19	2.67	1.56	2.88
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	19.92	
Unreviewed_VMmark3_Infrastructure_Score	2.26	
Unreviewed_VMmark3_Score	16.39	

Configuration

Virtualization Software	
Hypervisor Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware ESXi 7.0 U3c Build 19193900 / 01-27-2022
Datacenter Management Software Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware vCenter Server 7.0 U1c Build 17327586 / 12-17-2020
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	Dell PowerEdge T550
Processor Vendor and Model	Intel Xeon Gold 6338
Processor Speed (GHz) / Turbo Boost Speed (GHz)	2 / 3.20
Total Sockets/Total Cores/Total Threads	2 Sockets / 64 Cores / 128 Threads
Primary CPU Cache	32KB I + 48KB D on chip per core
Secondary CPU Cache	1.25MB I+D on chip per core
Other CPU Cache	48 MB I+D on chip per chip

BIOS Version	1.5.4
Memory Size (in GB, Number of DIMMs)	1024,16
Memory Type and Speed	64 GB 2Rx4 DDR4 3200MHz RDIMM
Disk Subsystem Type	vSAN,FC SAN
Number of Disk Controllers	1
Disk Controller Vendors and Models	Dell HBA355i Front
Total Number of Physical Disks for Hypervisor	1
Disk Vendors, Models, Capacities, and Speeds	Dell 1.92TB SSD SATA
Number of Host Bus Adapters	1
Host Bus Adapter Vendors and Models	QLE2692 Dual Port 16Gb FC Adapter
Number of Network Controllers	3
Network Controller Vendors and Models	Broadcom Gigabit Ethernet BCM5720 Two Broadcom 57414 25GbE Dual Port Adapters
Other Hardware	None
Other Software	None
Hardware Availability Date (MM-DD-YYYY)	09-29-2021
BIOS Availability Date (MM-DD-YYYY)	03-11-2022
Software Availability Date (MM-DD-YYYY)	01-27-2022
Network	
Network Switch Vendors and Models	1xDell PowerConnect 6248 1xDell S5048F-ON 25Gb SFP
Network Speed	1x1Gbps for SUT management 4x25Gbps workload VMs,vMotion and vSAN
Primary Storage	
Storage Category	VMware vSAN
Storage Vendors, Models, and Firmware Versions	4xDell PowerEdge T550 servers with VMware vSAN 7.0 U3
Storage Configuration Summary	VMware vSAN • 1 Disk group per host • 1xDell 3.84TB U2 NVMe G4 P5500 for vSAN cache tier • 5xDell 3.84TB U2 NVMe G4 P5500 for vSAN capacity tier

Datacenter Management Server	
System Model	Dell PowerEdge R740xd
Processor Vendor and Model	Intel Xeon Platinum 8280 CPU
Processor Speed (GHz)	2.70
Total Sockets/Total Cores/Total Threads	2 Sockets / 56 Cores / 112 Threads
Memory Size (in GB, Number of DIMMs)	768,24
Network Controller(s) Vendors and Models	Broadcom 57414 25GbE Dual Port Adapter
Operating System, Version, Bitness, and Service Pack	VMware ESXi 7.0 U2 Build 17867351
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 U1c Build 17327586
Other Hardware	None
Other Software	None

Clients	
Total Number of Virtual Clients / Virtual Client Hosts	17 / 2
System Model(s)	2xDell PowerEdge R740xd(ClientHost2,ClientHost3)
Processor Vendor(s) and Model(s)	• ClientHost2:Intel Xeon Platinum 8280 • ClientHost3:Intel Xeon Platinum 8280
Processor Speed(s) (GHz)	• ClientHost2:2.7GHz • ClientHost3:2.7GHz
Total Sockets/Total Cores/Total Threads	• ClientHost2:2 Sockets/56 Cores/112 Threads • ClientHost3:2 Sockets/56 Cores/112 Threads
Memory per Virtual Client Host	• ClientHost2:768GB • ClientHost3:768GB
Network Controller(s) Vendors and Models	• ClientHost2:QLogic 10G/GbE 57800 (1 port used for used for vmnic0), Broadcom 57414 25GbE Dual Port Adapter(1 port used for vmnic4) • ClientHost3:Broadcom BCM5720 GbE Ethernet (1 port used for used for vmnic0), Broadcom 57414 25GbE Dual Port Adapter(1 port used for vmnic5)
Virtual Client Networking Notes	• vSwitch0 on vmnic0 for Management(1Gbps) • vSwitch1 on vmnic4 for VMs(25Gbps) for ClientHost2 • vSwitch1 on vmnic5 for VMs(25Gbps) for ClientHost3
Virtual Client Storage Notes	All Virtual Clients are stored on Dell PowerVault ME4024 FC SAN storage
Other Hardware	None
Other Software	All the client hosts used VMware 7.0 U2 Build 17867351 for operating system

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, AuctionLB, AuctionDB, ElasticDB and ElasticLB VMs (default normal)
- CDROM removed from all VMs except PrimeClient,client and template VMs
- All memory reserved for AuctionLB, AuctionDB and DS3DB VMs (default non-reserved)
- CPU shares set to low for all Standby VMs (default normal)
- vSphere DRS Migration Threshold set to Fully Automated level 1
- Logging has been disabled for all VMs except PrimeClient
- sched.mem.pin set to TRUE for all DS3DB VMs (default False)

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)
- 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)
- UserVars.HostClientCEIPOptIn = 1 (default 0)
- Power.CpuPolicy = High Performance (default Balanced)
- LSOM.lsomEnableRebuildOnLSE = 2 (default 1)
- VSAN.TrimDisksBeforeUseGranularity = 1 (default 0)

Server Notes

Server BIOS Settings:
- Hardware Prefetcher = Disabled (default enabled)
- DCU Streamer Prefetcher = Disabled (default enabled)
- DCU IP Prefetcher = Disabled (default enabled)
- LLC Dead Line Alloc = Disabled (default enabled)
- LLC Prefetch = Enabled (default disabled)

Networking Notes

vSwitch Configuration:

SUT cluster
- vSwitch0 for Service Console on vmnic0 at 1Gbps
- vSwitch0 for Standby0-Standby15 VMs on vmnic0 at 1Gbps
- vSwitch1 for DS3*0-DS3*15 and Elastic*12-Elastic*15 VMs on vmnic2 at 25Gbps
- vSwitch1 for template and deploy VMs

- vSwitch2 for Auction*0-Auction*15 on vmnic5 at 25Gbps
- Distributed Virtual Switch DSwitch for vSAN and Elastic*0-Elastic*5 on vmnic3 at 25Gbps
- Distributed Virtual Switch DSwitch2 for vMotion and Elastic*6-Elastic*11 on vmnic4 at 25Gbps

vSwitch0,vSwitch1,vSwitch2,DSwitch,Dswitch2 on all the SUT hosts had MTU set to 9000(default 1500)

Client cluster
- vSwitch0 for Service Console,Prime Client and VMware vCenter Server on vmnic0 at 1Gbps
- vSwitch1 for Client VMs and Prime Client on vmnic4 (ClientHost2)and vmnic5 (ClientHost3) at 25Gbps

vSwitch0 and vSwitch1 on all client hosts had MTU set to 9000 (default 1500)

Storage Notes

Host OS installed on Dell 1.92TB SSD SATA

Primary Storage - VMware vSAN

- VMware vSAN 7.0 U3
- Capacity : 69.88TB
- Cache : 13.97TB

Hardware Configuration:
Each Host has one disk group. Each disk group used:
- Caching device : 1xDell 3.84TB U2 NVMe G4 P5500
- Capacity device : 5xDell 3.84TB U2 NVMe G4 P5500
- SUT vSAN datastore was used for all SUT VMs and template VMs
- Automatic Rebalance was enabled on the vSAN Cluster

Secondary Storage - Dell PowerVault ME4024 Array

First Dell EMC PowerVault ME4024 configured with Fiber Channel connectivity
- 24x SAMSUNG Model MZILT3T8HBLS0D3 3.8 TB SSD
- ME4024 Storage Controller(hardware version 8.1,firmware version GTS28R10-10)
- Deploy and Deploy1 used for deploy operations
- svMotion and svMotion1 used for svMotion and xvMotion infrastructure operations
- LUN1 and LUN2 not used

Second Dell Power Vault ME4024 configured with Fiber Channel connectivity
- 10x Toshiba Model KPM5XRUG3T84 3.8TB SSD
- ME4024 Storage Controller(hardware version 8.1,firware version GTS280R10-10)
- LUN4 used for Clients VMs for tiles 0-15, VMware vCenter Server and Prime Client
- LUN3 not used

Datacenter Management Server Notes

None

Operating System Notes

The vmware-fdm software vib package has been installed on all the SUT hosts after the OS was installed

Software Notes

None

Client Notes

The Client VMs were distributed across the client hosts as follows:

- ClientHost2:Client0,Client1,Client3,Client5,Client8, Client10,Client12,Client14,Client15,Prime Client and VMware vCenter Server
- ClientHost3:Client2,Client4,Client6,Client7,Client9,Client11,Client13
- UserVars.HostClientCEIPOptIn = 1 (default 0)

Other Notes

Changes to VMmark3.properties file:
TileDelay=30 (default 60)
