VMmark® 3.1.1 Results

Server Vendor & Model: Fujitsu Server PRIMERGY RX2450 M1 **Storage Vendor & Model: 5 x Fujitsu Server PRIMERGY RX2540 M4** **2 x Fujitsu Server PRIMERGY RX2540 M5** **Hypervisor: VMware ESXi 7.0 U2a Build 17867351** **Datacenter Management Software: VMware vCenter Server Appliance 7.0 U2 Build 17694817**	**VMmark 3.1.1 Score = 20.17 @ 21 Tiles**

Number of Hosts: 2	**Uniform Hosts [yes/no]: yes**	**Total sockets/cores/threads in test: 4/256/512**
Tested By: Fujitsu	**Test Date: 02-15-2022**	

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	3573.37	0.99	0.80 | 0.00	569.67	1.00	0.75 | 0.42	980.08	1.33	716.83	688.83	1.38	848.08	480.98	1.39	955.46	1.20
p1	3551.72	0.99	0.88 | 0.01	567.06	0.99	0.55 | 0.24	975.77	1.33	731.29	691.95	1.38	842.69	501.80	1.45	945.38	1.21
p2	3537.27	0.98	0.88 | 0.01	560.96	0.98	0.57 | 0.24	976.02	1.33	736.84	711.08	1.42	856.95	503.90	1.45	950.77	1.21
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	3564.95	0.99	0.75 | 0.01	565.75	0.99	0.36 | 0.15	967.65	1.32	763.33	656.50	1.31	906.94	444.35	1.28	1035.94	1.17
p1	3554.14	0.99	0.73 | 0.00	562.11	0.98	0.65 | 0.30	947.90	1.29	802.50	713.27	1.43	927.16	504.15	1.45	1053.96	1.21
p2	3537.80	0.98	0.76 | 0.01	554.18	0.97	0.54 | 0.24	967.17	1.32	766.49	646.80	1.29	925.97	463.65	1.34	1044.51	1.17
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	3568.68	0.99	0.69 | 0.00	564.76	0.99	0.56 | 0.27	987.98	1.35	712.22	696.90	1.39	825.84	483.57	1.39	940.72	1.21
p1	3555.70	0.99	0.69 | 0.01	560.86	0.98	0.48 | 0.16	976.52	1.33	727.73	712.08	1.42	849.84	501.93	1.45	968.18	1.22
p2	3539.62	0.98	0.66 | 0.00	559.75	0.98	0.51 | 0.21	983.27	1.34	725.19	688.95	1.38	853.86	475.93	1.37	980.30	1.19
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	3561.50	0.99	0.62 | 0.00	564.62	0.99	0.59 | 0.26	949.80	1.29	810.25	687.55	1.37	938.16	480.62	1.39	1082.53	1.19
p1	3548.32	0.99	0.64 | 0.00	565.80	0.99	0.43 | 0.13	962.75	1.31	780.79	668.27	1.34	937.84	482.77	1.39	1062.91	1.19
p2	3529.15	0.98	0.71 | 0.00	565.92	0.99	0.58 | 0.25	953.98	1.30	804.70	666.98	1.33	939.93	459.05	1.32	1080.71	1.17
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	3568.66	0.99	0.60 | 0.00	563.92	0.99	0.48 | 0.24	948.80	1.29	822.31	682.58	1.36	972.24	497.60	1.43	1096.81	1.20
p1	3548.54	0.99	0.65 | 0.00	562.11	0.98	0.45 | 0.22	956.00	1.30	797.97	666.23	1.33	945.37	434.98	1.25	1099.01	1.16
p2	3534.78	0.98	0.66 | 0.00	562.24	0.98	0.57 | 0.24	947.30	1.29	820.52	688.80	1.38	939.45	500.88	1.44	1070.38	1.20
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	3570.46	0.99	0.74 | 0.00	562.76	0.98	0.54 | 0.21	954.52	1.30	793.33	662.02	1.32	963.78	477.45	1.38	1098.09	1.18

p1	3554.15	0.99	0.75 | 0.00	561.79	0.98	0.58 | 0.30	951.60	1.30	800.78	669.52	1.34	938.44	461.05	1.33	1074.95	1.17
p2	3539.35	0.98	0.82 | 0.01	561.60	0.98	0.44 | 0.22	948.52	1.29	821.50	677.42	1.35	984.26	475.48	1.37	1105.97	1.18
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	3577.13	0.99	0.72 | 0.00	567.38	0.99	0.90 | 0.53	989.80	1.35	711.27	691.30	1.38	850.01	474.75	1.37	981.57	1.20
p1	3565.15	0.99	0.71 | 0.00	561.97	0.98	0.42 | 0.14	977.83	1.33	735.03	713.62	1.43	851.77	498.43	1.44	973.93	1.22
p2	3544.43	0.99	0.78 | 0.01	559.04	0.98	0.57 | 0.28	981.65	1.34	733.84	685.33	1.37	885.89	493.55	1.42	1002.71	1.20
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	3573.22	0.99	0.72 | 0.00	569.29	0.99	0.49 | 0.42	970.50	1.32	758.83	676.73	1.35	902.01	464.40	1.34	1033.05	1.19
p1	3547.86	0.99	0.78 | 0.00	567.97	0.99	0.58 | 0.51	956.38	1.30	797.50	684.83	1.37	945.20	503.50	1.45	1076.32	1.20
p2	3529.85	0.98	0.78 | 0.00	562.99	0.98	0.45 | 0.17	974.23	1.33	755.03	678.42	1.36	914.61	462.35	1.33	1055.33	1.18
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	3557.28	0.99	0.77 | 0.00	569.58	1.00	0.93 | 0.54	939.12	1.28	836.47	680.75	1.36	968.57	473.55	1.37	1113.07	1.19
p1	3536.60	0.98	0.85 | 0.02	567.93	0.99	0.91 | 0.55	944.95	1.29	816.77	654.98	1.31	979.76	472.30	1.36	1117.54	1.17
p2	3526.25	0.98	0.85 | 0.01	566.49	0.99	0.73 | 0.57	951.20	1.30	803.02	665.33	1.33	946.20	457.95	1.32	1077.11	1.17
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	3565.07	0.99	0.81 | 0.00	568.41	0.99	0.78 | 0.41	949.95	1.29	807.86	683.92	1.37	948.90	503.38	1.45	1065.17	1.20
p1	3543.59	0.98	0.87 | 0.01	565.04	0.99	0.59 | 0.28	961.65	1.31	776.36	672.90	1.34	924.48	460.25	1.33	1068.73	1.18
p2	3521.73	0.98	0.83 | 0.00	561.04	0.98	0.55 | 0.26	949.35	1.29	800.35	691.30	1.38	933.20	481.02	1.39	1067.35	1.19
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	3574.34	0.99	0.64 | 0.00	564.10	0.99	0.35 | 0.21	950.50	1.29	815.84	655.75	1.31	984.11	471.48	1.36	1121.37	1.18
p1	3560.67	0.99	0.70 | 0.01	563.72	0.99	0.60 | 0.41	954.60	1.30	807.90	661.40	1.32	961.25	454.52	1.31	1105.44	1.17
p2	3541.30	0.98	0.72 | 0.01	561.17	0.98	0.45 | 0.23	943.50	1.28	836.49	680.60	1.36	990.48	492.20	1.42	1129.43	1.19
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	3574.04	0.99	0.87 | 0.01	568.22	0.99	0.56 | 0.26	971.52	1.32	770.72	671.15	1.34	926.72	462.43	1.33	1061.84	1.18
p1	3559.78	0.99	0.82 | 0.01	567.95	0.99	0.56 | 0.22	945.83	1.29	816.82	685.00	1.37	954.72	478.85	1.38	1083.60	1.19
p2	3552.80	0.99	0.85 | 0.02	563.25	0.98	0.40 | 0.10	964.30	1.31	782.85	662.70	1.32	956.87	482.12	1.39	1068.70	1.19
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	3569.87	0.99	0.83 | 0.01	568.42	0.99	1.11 | 0.75	955.95	1.30	792.19	666.85	1.33	933.53	462.55	1.33	1054.93	1.18
p1	3556.15	0.99	0.86 | 0.01	569.93	1.00	1.08 | 0.67	943.12	1.28	813.40	681.85	1.36	958.47	502.77	1.45	1063.38	1.20
p2	3539.03	0.98	0.89 | 0.02	568.10	0.99	0.75 | 0.50	958.60	1.31	771.40	670.95	1.34	921.67	465.23	1.34	1047.73	1.18
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	3565.51	0.99	0.78 | 0.01	564.27	0.99	0.44 | 0.13	962.23	1.31	779.88	695.60	1.39	910.95	488.12	1.41	1032.81	1.20
p1	3549.91	0.99	0.76 | 0.01	563.84	0.99	0.70 | 0.35	963.02	1.31	774.73	668.58	1.34	926.54	483.20	1.39	1056.59	1.19
p2	3542.14	0.98	0.82 | 0.01	560.54	0.98	0.63 | 0.22	961.83	1.31	775.75	673.62	1.35	916.08	463.82	1.34	1043.18	1.18
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	3575.77	0.99	0.82 | 0.01	565.39	0.99	0.62 | 0.27	980.83	1.34	738.51	705.88	1.41	870.30	519.70	1.50	978.12	1.23

p1	3570.00	0.99	0.77 | 0.01	559.22	0.98	0.58 | 0.27	987.55	1.34	710.56	689.60	1.38	852.09	479.52	1.38	969.57	1.20
p2	3556.60	0.99	0.79 | 0.01	556.34	0.97	0.44 | 0.12	972.40	1.32	752.68	706.23	1.41	881.76	494.05	1.42	1006.66	1.21
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	3577.28	0.99	0.71 | 0.00	563.70	0.99	0.39 | 0.17	959.75	1.31	784.15	664.33	1.33	930.19	483.30	1.39	1048.41	1.19
p1	3553.91	0.99	0.71 | 0.00	563.30	0.98	0.67 | 0.29	963.83	1.31	775.07	675.23	1.35	920.09	463.57	1.34	1051.69	1.18
p2	3534.11	0.98	0.68 | 0.00	561.90	0.98	0.65 | 0.33	956.83	1.30	790.36	689.60	1.38	938.22	506.10	1.46	1050.10	1.20
TILE_16	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3574.32	0.99	0.78 | 0.00	571.62	1.00	1.02 | 0.64	947.40	1.29	821.77	632.77	1.26	985.55	449.77	1.30	1132.70	1.16
p1	3563.99	0.99	0.78 | 0.00	572.82	1.00	1.04 | 0.68	943.95	1.29	828.26	681.62	1.36	966.89	472.90	1.36	1101.86	1.19
p2	3547.72	0.99	0.80 | 0.02	567.89	0.99	0.50 | 0.19	945.30	1.29	815.48	655.58	1.31	978.47	473.65	1.37	1104.32	1.18
TILE_17	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3580.39	1.00	0.77 | 0.01	572.80	1.00	0.98 | 0.61	950.40	1.29	806.64	660.20	1.32	960.79	455.10	1.31	1106.52	1.17
p1	3563.35	0.99	0.80 | 0.00	573.06	1.00	0.94 | 0.64	933.62	1.27	855.94	673.23	1.35	994.01	489.75	1.41	1125.81	1.19
p2	3545.03	0.99	0.78 | 0.00	571.45	1.00	0.86 | 0.57	957.88	1.30	795.75	662.30	1.32	953.79	452.62	1.31	1110.08	1.17
TILE_18	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3576.79	0.99	0.82 | 0.01	569.30	0.99	0.74 | 0.36	943.02	1.28	817.95	686.05	1.37	953.97	476.00	1.37	1084.48	1.19
p1	3569.42	0.99	0.84 | 0.01	564.79	0.99	0.65 | 0.34	942.95	1.28	821.42	658.95	1.32	971.97	475.35	1.37	1094.88	1.18
p2	3558.94	0.99	0.78 | 0.00	560.58	0.98	0.55 | 0.21	954.73	1.30	797.80	665.90	1.33	949.64	458.73	1.32	1071.14	1.17
TILE_19	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3579.78	0.99	0.79 | 0.01	569.50	1.00	0.78 | 0.47	902.35	1.23	951.02	668.83	1.34	1116.29	469.05	1.35	1277.26	1.17
p1	3565.92	0.99	0.88 | 0.00	565.52	0.99	0.71 | 0.40	912.15	1.24	926.24	603.60	1.21	1122.10	428.00	1.23	1283.87	1.13
p2	3540.91	0.98	0.86 | 0.03	562.17	0.98	0.52 | 0.21	906.67	1.23	939.74	647.55	1.29	1100.31	453.25	1.31	1242.12	1.15
TILE_20	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3575.65	0.99	0.83 | 0.00	571.89	1.00	1.04 | 0.67	922.90	1.26	893.61	659.42	1.32	1062.83	456.60	1.32	1210.07	1.17
p1	3567.04	0.99	0.76 | 0.02	564.51	0.99	0.62 | 0.34	926.92	1.26	884.39	620.50	1.24	1060.26	436.30	1.26	1225.92	1.14
p2	3546.13	0.99	0.78 | 0.01	563.36	0.98	0.57 | 0.33	912.92	1.24	923.77	655.52	1.31	1080.84	474.85	1.37	1220.17	1.17

p0_score:	24.95
p1_score:	24.89
p2_score:	24.86

Infrastructure_Operations_Scores:	vMotion	SVMotion	XVMotion	Deploy
Completed_Ops_PerHour	28.50	27.00	22.00	12.00
Avg_Seconds_To_Complete	5.86	75.89	94.84	253.26
Failures	0.00	0.00	0.00	0.00
Ratio	1.10	1.50	1.22	1.50
Number_Of_Threads	1	1	1	1

Summary	Run_Is_Compliant	Turbo_Setting:0
	Number_Of_Compliance_Issues(0)*	Median_Phase(p1)
Unreviewed_VMmark3_Applications_Score	24.89	
Unreviewed_VMmark3_Infrastructure_Score	1.32	
Unreviewed_VMmark3_Score	20.17	

Configuration

Virtualization Software	
Hypervisor Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	Hypervisor: 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 Update 2, Build 17694817 / 03-09-2021
Supplemental Software	None
Servers	
Number of Servers in System Under Test (all subsequent fields in this section are per server)	2
Server Manufacturer and Model	Fujitsu Server PRIMERGY RX2450 M1
Processor Vendor and Model	AMD EPYC 7H12
Processor Speed (GHz) / Turbo Boost Speed (GHz)	2.6 / 3.3
Total Sockets/Total Cores/Total Threads	2 Sockets / 128 Cores / 256 Threads
Primary CPU Cache	32KB I+32KB D on chip per core
Secondary CPU Cache	512KB I+D on chip per core
Other CPU Cache	256MB I+D on chip per chip, 16MB shared/4 cores
BIOS Version	2.1.v2
Memory Size (in GB, Number of DIMMs)	2048, 32
Memory Type and Speed	64GB 2Rx4 DDR4 3200MHz RDIMM
Disk Subsystem Type	FC SAN
Number of Disk Controllers	1

Disk Controller Vendors and Models	Integrated SATA Controller
Total Number of Physical Disks for Hypervisor	1
Disk Vendors, Models, Capacities, and Speeds	Seagate ST1000NX0423 1000GB SATA-HDD 6Gbps
Number of Host Bus Adapters	2
Host Bus Adapter Vendors and Models	Emulex LPe35002 dual port 32Gb PCIe Adapter
Number of Network Controllers	3
Network Controller Vendors and Models	2 x Mellanox MCX4121A-ACAT dual port 25Gb SFP28 PCIe Adapters 1 x Intel I350 dual port 1Gb onboard controller
Other Hardware	None
Other Software	None
Hardware Availability Date (MM-DD-YYYY)	11-04-2021
BIOS Availability Date (MM-DD-YYYY)	11-04-2021
Software Availability Date (MM-DD-YYYY)	05-19-2021
Network	
Network Switch Vendors and Models	1 x Fujitsu SR-X340TR1 1 x Extreme Networks SLX 9150-48Y
Network Speed	1 x 1Gbps for SUT management, 1 x 25Gbps for vMotion, 3x 25Gbps for Client and VMs
Primary Storage	
Storage Category	SCSI Target
Storage Vendors, Models, and Firmware Versions	5 x Fujitsu Server PRIMERGY RX2540 M4, Firmware V5.0.0.12 R1.22.0 for D3384-A1x 2 x Fujitsu Server PRIMERGY RX2540 M5, Firmware V5.0.0.14 R1.15.0 for D3384-B1x

Storage Configuration Summary	FC switches: • 1 x Brocade G620 32Gb 48 port Storage Servers: • for OS storage ◦ 9 x Micron MTFDDAK480TDC 480GB SATA SSD ◦ 2 x Samsung MZ7KH480HAHQ 480GB SATA SSD • for Workload storage ◦ 21 x Intel P4800X 750GB PCIe SSD ◦ 1 x Intel P4600 2TB PCIe SSD ◦ 4 x Intel P4600 4TB PCIe SSD ◦ 2 x Intel P4610 3.2TB PCIe SSD

Datacenter Management Server	
System Model	Fujitsu Server PRIMERGY RX2540 M2
Processor Vendor and Model	Intel Xeon E5-2698 v4
Processor Speed (GHz)	2.2
Total Sockets/Total Cores/Total Threads	1 Sockets / 20 Cores / 40 Threads
Memory Size (in GB, Number of DIMMs)	Hypervisor: 64 GB, 8
Network Controller(s) Vendors and Models	Emulex OneConnect OCe14000 1GbE dual port Adapter
Operating System, Version, Bitness, and Service Pack	Hypervisor: VMware ESXi 6.7 EP 02a Build 9214924
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 Appliance 7.0 U2 Build 17694817
Other Hardware	None
Other Software	None

Clients	
Total Number of Virtual Clients / Virtual Client Hosts	22 / 6
System Model(s)	Fujitsu Server PRIMERGY RX2530 M2
Processor Vendor(s) and Model(s)	Intel Xeon E5-2699 v4 (for Client Host 1-3 and 6) Intel Xeon E5-2699A v4 (for Client Host 4 and 5)

Processor Speed(s) (GHz)	2.2 (Intel Xeon E5-2699 v4) 2.4 (Intel Xeon E5-2699A v4)
Total Sockets/Total Cores/Total Threads	2 Sockets / 44 Cores / 88 Threads
Memory per Virtual Client Host	256 GB
Network Controller(s) Vendors and Models	1 x Emulex OneConnect OCe14000 1Gb dual port 1 x Emulex OneConnect OCe14000 10Gb dual port
Virtual Client Networking Notes	1 virtual adapter for management, 2 virtual adapters for workload traffic
Virtual Client Storage Notes	1 x 300GB SAS 10K TOSHIBA AL14SEB03EN HDD with RAID0 for Client Host OS 2 x 400GB SAS 12G TOSHIBA PX02SMF040 SSD with RAID0 for Client VMs
Other Hardware	None
Other Software	VMware ESXi 6.7 EP 08 Build 13473784

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	Not Vulnerable	Not Vulnerable
Spectre	2017-5715	Variant 2	Branch Target Injection	Not Vulnerable	Not Vulnerable	Not Vulnerable
Meltdown	2017-5754	Variant 3	Rogue Data Cache Load	N/A	Not Vulnerable	Not Vulnerable
Spectre-NG	2018-3640	Variant 3a	Rogue System Register Read	Not Vulnerable	N/A	N/A
Spectre-NG	2018-3639	Variant 4	Speculative Store Bypass	N/A	Not Vulnerable	Not Vulnerable
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	Not Vulnerable
Foreshadow-NG	2018-3646	Variant 5	L1 Terminal Fault - VMM	N/A	Not Vulnerable	N/A

Notes for Workload

Template deployed with disk type: Thick Lazy

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 shares set to high for all DS3DB, ElasticDB and ElasticLB VMs(default normal)
- MEM shares set to high for all DS3DB VMs (default normal)
- All memory reserved for DS3DB VMs (default non-reserved)
- sched.mem.lpage.enable1GPage set to TRUE for all DS3DB VMs (default FALSE)
- sched.mem.pin set to TRUE for all DS3DB VMs (default FALSE)
- CPU shares set to low for all Standby VMs (default normal)
- vSphere DRS Migration Threshold set to Fully Automated level 2
- CD/DVD device removed from all VMs (default present)

Changed in esx.conf:

- /adv/Cpu/CreditAgePeriod = 1000 (default 3000)
- /adv/Cpu/HTWholeCoreThreshold = 0 (default 800)
- /adv/DataMover/HardwareAcceleratedInit = 0 (default 1)
- /adv/DataMover/HardwareAcceleratedMove = 0 (default 1)
- /adv/Mem/CtlMaxPercent = 0 (default 65)
- /adv/Mem/ShareScanGHz = 0 (default 4)
- /adv/Numa/LTermFairnessInterval = 0 (default 5)
- /adv/Numa/PageMigEnable = 0 (default 1)
- /adv/Numa/RebalancePeriod = 60000 (default 2000)
- /adv/Numa/SwapLoadEnable = 0 (default 1)
- /adv/Numa/SwapLocalityEnable = 0 (default 1)
- /adv/Disk/ReqCallThreshold = 1 (default 8)
- /adv/Disk/IdleCredit = 64 (default 32)
- /adv/Power/CpuPolicy = High Performance (default balanced)
- /adv/VMFS3/HardwareAcceleratedLocking = 0 (default 1)
- /vmkernel/hyperthreadingMitigation = TRUE (default FALSE)

Server Notes

Server BIOS settings:

- Memory Speed set to 2933 (default: auto)
- Determinism Control = Manual (default: auto)
- Determinism Slider = Performance (default: auto)
- SMEE = Enabled (default: auto)
- L1 Stream HW Prefetcher = Disabled (default auto)
- L2 Stream HW Prefetcher = Disabled (default auto)

Networking Notes

vSwitch Configuration:

- vSwitch0 for Service Console on vmnic0 at 1Gb/s
- vSwitch1 for all workloads on vmnic2, vmnic3 and vmnic4 at 25Gb/s
- vSwitch2 for vMotion connection on vmnic5 at 25Gb/s

Storage Notes

First Fujitsu Server (PRIMERGY RX2540 M4) configured as a Fibre Channel Target:

- Hardware details:
  - 2 x Intel Xeon Gold 6134M@3.2GHz processors
  - 64 GB RAM (2 x 32GB 2Rx4 2666MHz DDR4 RDIMMs)
  - 2 x QLogic QLE2742 dual port 32Gb FC HBA used as FC target controller

    - 2 x 480GB SATA SSD Micron MTFDDAK480TDC
    - 1 x Intel P4600 4TB PCIe SSD
    - 3 x Intel P4800X 750GB PCIe SSD

- Software details:
    - Operating System: SUSE Linux Enterprise Server 12 SP3 - 4.4.162-94.72-default (64-bit)
    - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 12 SP3)

- RAID configuration:
    - SATA-SSD 1, 2 (RAID1):
        - LUN 1 : Storage system OS (480GB, this LUN is not counted in the Storage section)
    - First PCIe-SSD (4TB):
        - LUN 1 : AuctionNoSQL, ElasticDB for tile 0 (300GB)
        - LUN 2 : Deploy LUN (300GB)
        - LUN 3 : AuctionNoSQL, ElasticDB for tile 2 (300GB)
        - LUN 4 : AuctionNoSQL, ElasticDB for tile 3 (300GB)
        - LUN 5 : AuctionDB, ElasticLB for tile 0 (300GB)
        - LUN 6 : AuctionDB, ElasticLB for tile 1 (300GB)
        - LUN 7 : AuctionDB, ElasticLB for tile 2 (300GB)
        - LUN 8 : AuctionDB, ElasticLB for tile 3 (300GB)
        - LUN 9 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 0 (300GB)
        - LUN 10 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 1 (300GB)
        - LUN 11 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 2 (300GB)
        - LUN 12 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 3 (300GB)
    - Second PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 0 (600GB)
    - Third PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 1 (600GB)
    - Fourth PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 2 (600GB)

Second Fujitsu Server (PRIMERGY RX2540 M4) configured as a Fibre Channel Target:

- Hardware details:
    - 2 x Intel Xeon Gold 6134M@3.2GHz processors
    - 64 GB RAM (2 x 32GB 2Rx4 2666MHz DDR4 RDIMMs)
    - 2 x QLogic QLE2742 dual port 32Gb FC HBA used as FC target controller
    - 2 x 480GB SATA SSD Micron MTFDDAK480TDC
    - 1 x Intel P4600 4TB PCIe SSD
    - 3 x Intel P4800X 750GB PCIe SSD

- Software details:
    - Operating System: SUSE Linux Enterprise Server 12 SP3 - 4.4.162-94.72-default (64-bit)
    - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 12 SP3)

- RAID configuration:

    - SATA-SSD 1, 2 (RAID1):
        - LUN 1 : Storage system OS (480GB, this LUN is not counted in the Storage section)
    - First PCIe-SSD (4TB):
        - LUN 1 : AuctionNoSQL, ElasticDB for tile 4 (300GB)
        - LUN 2 : AuctionNoSQL, ElasticDB for tile 5 (300GB)
        - LUN 3 : AuctionNoSQL, ElasticDB for tile 6 (300GB)
        - LUN 4 : AuctionNoSQL, ElasticDB for tile 7 (300GB)
        - LUN 5 : AuctionDB, ElasticLB for tile 4 (300GB)
        - LUN 6 : AuctionDB, ElasticLB for tile 5 (300GB)
        - LUN 7 : AuctionDB, ElasticLB for tile 6 (300GB)
        - LUN 8 : AuctionDB, ElasticLB for tile 7 (300GB)
        - LUN 9 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 4 (300GB)
        - LUN 10 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 5 (300GB)
        - LUN 11 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 6 (300GB)
        - LUN 12 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 7 (300GB)
    - Second PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 3 (600GB)
    - Third PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 4 (600GB)
    - Fourth PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 5 (600GB)

Third Fujitsu Server (PRIMERGY RX2540 M4) configured as a Fibre Channel Target:

- Hardware details:
    - 2 x Intel Xeon Gold 6134M@3.2GHz processors
    - 64 GB RAM (2 x 32GB 2Rx4 2666MHz DDR4 RDIMMs)
    - 2 x QLogic QLE2742 dual port 32Gb FC HBA used as FC target controller
    - 2 x 480GB SATA SSD Micron MTFDDAK480TDC
    - 1 x Intel P4600 4TB PCIe SSD
    - 3 x Intel P4800X 750GB PCIe SSD

- Software details:
    - Operating System: SUSE Linux Enterprise Server 12 SP3 - 4.4.162-94.72-default (64-bit)
    - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 12 SP3)

- RAID configuration:
    - SATA-SSD 1, 2 (RAID1):
        - LUN 1 : Storage system OS (480GB, this LUN is not counted in the Storage section)
    - First PCIe-SSD (4TB):
        - LUN 1 : AuctionNoSQL, ElasticDB for tile 8 (300GB)
        - LUN 2 : AuctionNoSQL, ElasticDB for tile 9 (300GB)
        - LUN 3 : AuctionNoSQL, ElasticDB for tile 10 (300GB)
        - LUN 4 : AuctionNoSQL, ElasticDB for tile 11 (300GB)
        - LUN 5 : AuctionDB, ElasticLB for tile 8 (300GB)

        - LUN 6 : AuctionDB, ElasticLB for tile 9 (300GB)
        - LUN 7 : AuctionDB, ElasticLB for tile 10 (300GB)
        - LUN 8 : AuctionDB, ElasticLB for tile 11 (300GB)
        - LUN 9 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 8 (300GB)
        - LUN 10 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 9 (300GB)
        - LUN 11 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 10 (300GB)
        - LUN 12 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 11 (300GB)
    - Second PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 6 (600GB)
    - Third PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 7 (600GB)
    - Fourth PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 8 (600GB)

Fourth Fujitsu Server (PRIMERGY RX2540 M4) configured as a Fibre Channel Target:

- Hardware details:
    - 2 x Intel Xeon Gold 6134M@3.2GHz processors
    - 64 GB RAM (2 x 32GB 2Rx4 2666MHz DDR4 RDIMMs)
    - 2 x QLogic QLE2742 dual port 32Gb FC HBA used as FC target controller
    - 2 x 480GB SATA SSD Micron MTFDDAK480TDC
    - 1 x Intel P4600 4TB PCIe SSD
    - 3 x Intel P4800X 750GB PCIe SSD

- Software details:
    - Operating System: SUSE Linux Enterprise Server 12 SP3 - 4.4.162-94.72-default (64-bit)
    - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 12 SP3)

- RAID configuration:
    - SATA-SSD 1, 2 (RAID1):
        - LUN 1 : Storage system OS (480GB, this LUN is not counted in the Storage section)
    - First PCIe-SSD (4TB):
        - LUN 1 : AuctionNoSQL, ElasticDB for tile 12 (300GB)
        - LUN 2 : AuctionNoSQL, ElasticDB for tile 13 (300GB)
        - LUN 3 : AuctionNoSQL, ElasticDB for tile 14 (300GB)
        - LUN 4 : AuctionNoSQL, ElasticDB for tile 15 (300GB)
        - LUN 5 : AuctionDB, ElasticLB for tile 12 (300GB)
        - LUN 6 : AuctionDB, ElasticLB for tile 13 (300GB)
        - LUN 7 : AuctionDB, ElasticLB for tile 14 (300GB)
        - LUN 8 : AuctionDB, ElasticLB for tile 15 (300GB)
        - LUN 9 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 12 (300GB)
        - LUN 10 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 13 (300GB)
        - LUN 11 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 14 (300GB)
        - LUN 12 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 15 (300GB)
    - Second PCIe-SSD (750GB):

        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 9 (600GB)
    - Third PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 10 (600GB)
    - Fourth PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 11 (600GB)

Fifth Fujitsu Server (PRIMERGY RX2540 M4) configured as a Fibre Channel Target:

- Hardware details:
    - 2 x Intel Xeon Gold 6134M@3.2GHz processors
    - 64 GB RAM (2 x 32GB 2Rx4 2666MHz DDR4 RDIMMs)
    - 2 x QLogic QLE2742 dual port 32Gb FC HBA used as FC target controller
    - 1 x 480GB SATA SSD Micron MTFDDAK480TDC
    - 1 x Intel P4600 2TB PCIe SSD
    - 3 x Intel P4800X 750GB PCIe SSD

- Software details:
    - Operating System: SUSE Linux Enterprise Server 12 SP3 - 4.4.162-94.72-default (64-bit)
    - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 12 SP3)

- RAID configuration:
    - SATA-SSD 1 (RAID0):
        - LUN 1 : Storage system OS (480GB, this LUN is not counted in the Storage section)
    - First PCIe-SSD (2TB):
        - LUN 1 : SvMotion Target LUN (300GB)
        - LUN 2 : XvMotion Target LUN (300GB)
        - LUN 3 : vmmark3.1.1-template-031420 (300GB)
        - LUN 4 : DS3DB backup (300GB, this LUN is not counted in the Storage section)
        - LUN 5 : DepolyVM LUN (300GB)
    - Second PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 12 (600GB)
    - Third PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 13 (600GB)
    - Fourth PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 14 (600GB)

Sixth Fujitsu Server (PRIMERGY RX2540 M5) configured as a Fibre Channel Target:

- Hardware details:
    - 2 x Intel Xeon Gold 6234@3.3GHz processors
    - 128 GB RAM (4 x 32GB 2Rx4 2933MHz DDR4 RDIMMs)
    - 2 x QLogic QLE2742 dual port 32Gb FC HBA used as FC target controller
    - 1 x 480GB SATA SSD Micron MTFDDAK480TDC
    - 1 x Intel P4610 3.2TB PCIe SSD
    - 3 x Intel P4800X 750GB PCIe SSD

- Software details:
  - Operating System: SUSE Linux Enterprise Server 15 SP1 - 4.12.14-197.56-default (64-bit)
  - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 15 SP1)

- RAID configuration:
  - SATA-SSD 1 (RAID0):
    - LUN 1 : Storage system OS (480GB, this LUN is not counted in the Storage section)
  - First PCIe-SSD (3.2TB):
    - LUN 1 : AuctionNoSQL, ElasticDB for tile 16 (300GB)
    - LUN 2 : AuctionNoSQL, ElasticDB for tile 17 (300GB)
    - LUN 3 : AuctionDB, ElasticLB for tile 16 (300GB)
    - LUN 4 : AuctionDB, ElasticLB for tile 17 (300GB)
    - LUN 5 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 16 (300GB)
    - LUN 6 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 17 (300GB)
  - Second PCIe-SSD (750GB):
    - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 18 (600GB)
  - Third PCIe-SSD (750GB):
    - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 19 (600GB)
  - Fourth PCIe-SSD (750GB):
    - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 20 (600GB)

Seventh Fujitsu Server (PRIMERGY RX2540 M5) configured as a Fibre Channel Target:

- Hardware details:
  - 2 x Intel Xeon Gold 6234@3.3GHz processors
  - 128 GB RAM (4 x 32GB 2Rx4 2933MHz DDR4 RDIMMs)
  - 2 x QLogic QLE2742 dual port 32Gb FC HBA used as FC target controller
  - 1 x 480GB SATA SSD Micron MTFDDAK480TDC
  - 1 x Intel P4610 3.2TB PCIe SSD
  - 3 x Intel P4800X 750GB PCIe SSD

- Software details:
  - Operating System: SUSE Linux Enterprise Server 15 SP1 - 4.12.14-197.56-default (64-bit)
  - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 15 SP1)

- RAID configuration:
  - SATA-SSD 1 (RAID0):
    - LUN 1 : Storage system OS (480GB, this LUN is not counted in the Storage section)
  - First PCIe-SSD (3.2TB):
    - LUN 1 : AuctionNoSQL, ElasticDB for tile 18 (300GB)
    - LUN 2 : AuctionNoSQL, ElasticDB for tile 19 (300GB)
    - LUN 3 : AuctionNoSQL, ElasticDB for tile 20 (300GB)
    - LUN 4 : AuctionDB, ElasticLB for tile 18 (300GB)
    - LUN 5 : AuctionDB, ElasticLB for tile 19 (300GB)
    - LUN 6 : AuctionDB, ElasticLB for tile 20 (300GB)

        - LUN 7 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 18 (300GB)
        - LUN 8 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 19 (300GB)
        - LUN 9 : AuctionWebA, AuctionWebB, AuctionAppA, AuctionAppB, AuctionLB, AuctionMSQ, ElasticWebA, ElasticWebB, ElasticAppA, ElasticAppB, Standby for tile 20 (300GB)
    - Second PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 15 (600GB)
    - Third PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 16 (600GB)
    - Fourth PCIe-SSD (750GB):
        - LUN 1 : DS3DB, DS3WebA, DS3WebB, DS3WebC for tile 17 (600GB)

All LUNs were configured as block devices; no system memory was used for caching.

Datacenter Management Server Notes

- Virtual Center realized as a VM running on a dedicated Hypervisor system:
    - Number of vCPUs: 4 (Four vSocket)
    - Size of vRAM: 19GB
- The host operating system VMware ESXi 6.7.0 EP 02a Build 9214924 was installed using 'Fujitsu Custom Image for VMware ESXi 6.7.0 EP 02a' named VMware-ESXi-6.7.0-9214924-Fujitsu-v451-1.iso

Operating System Notes

- VMware ESXi 7.0 U2a Build 17867351 was installed using 'VMware Image for VMware ESXi 7.0 U2a' named VMware-ESXi-7.0.2.update02-17867351-Fujitsu-v520-1.iso (released on 05-19-2021)
- NIC driver was installed using 'Mellanox-nmlx5_4.21.71.1-1OEM.702.0.0.17473468_17858163'

Software Notes

None

Client Notes

The location of Client VMs:

- Client Host 1: Client0, Client4, Client8, Client12
- Client Host 2: Client1, Client5, Client9, Client13
- Client Host 3: Client2, Client6, Client10, PrimeClient
- Client Host 4: Client3, Client7, Client11, Client14
- Client Host 5: Client15, Client16, Client17, Client18
- Client Host 6: Client19, Client20

vSwitch Configuration

- vSwitch0 for Service Console on vmnic0 at 1Gb/s
- vSwitch1 for all workloads on vmnic2 and vmnic3 at 10GBs

Changes in esx.conf:

- /adv/Power/CpuPolicy = High Performance (default balanced)

- The host operating system VMware ESXi 6.7.0 EP 08 Build 13473784 was installed using 'Fujitsu Custom Image for VMware ESXi 6.7U2' named VMware-ESXi-6.7.0-13473784-Fujitsu-v470-1.iso

Other Notes

- VMmark3.properties was renamed as VMmark3-run21tiles_report.properties
- VCscratchDir = /root/VMmark3/results/scratch (default:/root/VMmark3/samples/)
- Debuglevel = 3 (default:0)
