VMmark® 3.1.1 Results

Server Vendor & Model: Lenovo ThinkSystem SR665 V3 **Storage Vendor & Model: Lenovo ThinkSystem DM7100F Storage** **Hypervisor: VMware ESXi 8.0 GA Build 20513097** **Datacenter Management Software: VMware vCenter Server 8.0 U1, Build 21560480**	**VMmark 3.1.1 Score = 40.66 @ 42 Tiles**

Number of Hosts: 2	**Uniform Hosts [yes/no]: yes**	**Total sockets/cores/threads in test: 4/384/768**
Tested By: Lenovo	**Test Date: 05-23-2023**	

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	3560.33	0.99	1.53 | 0.14	567.94	0.99	0.36 | 0.00	952.60	1.30	777.18	664.75	1.33	927.17	469.02	1.35	1011.95	1.18
p1	3548.57	0.99	1.36 | 0.04	564.81	0.99	0.46 | 0.08	945.73	1.29	793.06	681.00	1.36	929.46	490.05	1.41	1006.76	1.19
p2	3532.32	0.98	1.38 | 0.04	559.81	0.98	0.40 | 0.03	953.35	1.30	761.42	667.52	1.33	896.43	494.15	1.42	979.62	1.19
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	3564.38	0.99	1.56 | 0.19	567.82	0.99	0.30 | 0.02	1010.92	1.38	647.34	714.95	1.43	758.99	505.50	1.46	830.51	1.23
p1	3555.52	0.99	1.45 | 0.08	563.66	0.99	0.34 | 0.02	1001.92	1.36	652.13	734.92	1.47	756.49	531.10	1.53	818.48	1.24
p2	3531.04	0.98	1.60 | 0.20	561.66	0.98	0.38 | 0.02	1006.95	1.37	645.94	711.58	1.42	759.99	529.88	1.53	811.41	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	3577.31	0.99	1.33 | 0.04	567.67	0.99	0.46 | 0.09	954.25	1.30	776.70	662.95	1.32	934.63	468.20	1.35	1021.83	1.18
p1	3564.96	0.99	1.43 | 0.04	563.58	0.98	0.35 | 0.03	955.12	1.30	767.72	692.77	1.38	901.25	492.45	1.42	984.56	1.20
p2	3544.31	0.99	1.45 | 0.08	562.17	0.98	0.41 | 0.03	967.35	1.32	732.39	677.67	1.35	872.63	477.02	1.38	956.55	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	3570.64	0.99	1.60 | 0.11	570.63	1.00	0.54 | 0.02	1019.95	1.39	622.14	720.83	1.44	736.32	507.70	1.46	815.70	1.24
p1	3552.69	0.99	1.47 | 0.11	564.69	0.99	0.35 | 0.01	1010.88	1.38	633.74	743.83	1.49	731.57	532.52	1.54	802.42	1.25
p2	3538.51	0.98	1.34 | 0.04	562.78	0.98	0.40 | 0.01	1017.62	1.39	619.90	718.15	1.43	733.61	534.52	1.54	796.58	1.24
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	3565.65	0.99	1.37 | 0.08	566.20	0.99	0.48 | 0.03	941.45	1.28	811.79	651.60	1.30	978.68	455.18	1.31	1088.55	1.17
p1	3556.31	0.99	1.41 | 0.05	562.83	0.98	0.30 | 0.03	933.80	1.27	832.79	673.17	1.34	975.06	477.02	1.38	1065.78	1.18
p2	3541.52	0.98	1.56 | 0.10	560.38	0.98	0.30 | 0.00	932.20	1.27	833.47	648.52	1.30	995.34	450.12	1.30	1109.42	1.16
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	3559.45	0.99	1.66 | 0.11	570.49	1.00	0.51 | 0.07	980.02	1.33	707.49	689.52	1.38	845.84	479.90	1.38	946.42	1.20

p1	3552.55	0.99	1.40 | 0.05	560.61	0.98	0.38 | 0.04	978.27	1.33	703.87	714.42	1.43	821.48	511.50	1.47	898.01	1.22
p2	3540.51	0.98	1.45 | 0.08	558.18	0.98	0.31 | 0.01	973.73	1.33	727.68	678.62	1.36	868.49	479.93	1.38	955.86	1.19
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	3561.77	0.99	2.37 | 0.39	571.94	1.00	0.67 | 0.13	954.98	1.30	780.24	659.60	1.32	943.77	441.52	1.27	1046.56	1.17
p1	3547.04	0.99	2.56 | 0.38	569.80	1.00	0.47 | 0.03	947.90	1.29	786.31	685.83	1.37	923.53	510.35	1.47	1011.92	1.21
p2	3533.00	0.98	2.21 | 0.24	568.24	0.99	0.45 | 0.02	954.50	1.30	768.98	664.67	1.33	922.45	470.30	1.36	1004.95	1.18
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	3571.04	0.99	1.74 | 0.17	567.10	0.99	0.46 | 0.11	1017.70	1.39	622.87	716.45	1.43	743.09	506.48	1.46	817.76	1.23
p1	3557.18	0.99	1.41 | 0.06	561.44	0.98	0.36 | 0.06	1004.77	1.37	647.37	736.23	1.47	753.35	529.80	1.53	826.48	1.24
p2	3542.33	0.98	1.37 | 0.05	558.05	0.98	0.41 | 0.04	1011.95	1.38	640.85	710.08	1.42	758.34	505.82	1.46	829.73	1.22
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	3557.31	0.99	2.40 | 0.26	563.28	0.98	0.36 | 0.03	954.92	1.30	775.06	659.88	1.32	936.64	439.73	1.27	1044.40	1.16
p1	3543.84	0.98	2.49 | 0.19	561.01	0.98	0.44 | 0.02	935.02	1.27	820.64	668.73	1.34	975.04	496.40	1.43	1079.69	1.19
p2	3526.51	0.98	2.64 | 0.40	559.41	0.98	0.39 | 0.08	946.35	1.29	803.70	634.27	1.27	957.53	456.00	1.31	1079.58	1.16
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	3569.11	0.99	1.44 | 0.09	570.12	1.00	0.54 | 0.09	1013.73	1.38	642.30	717.98	1.43	750.63	498.38	1.44	860.87	1.23
p1	3541.51	0.98	1.45 | 0.09	569.01	0.99	0.35 | 0.01	1001.55	1.36	656.52	732.00	1.46	767.27	549.10	1.58	841.34	1.25
p2	3534.43	0.98	1.36 | 0.03	567.49	0.99	0.40 | 0.03	1020.52	1.39	620.90	693.77	1.39	745.53	506.82	1.46	808.89	1.22
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	3561.84	0.99	2.59 | 0.50	564.01	0.99	0.39 | 0.02	953.90	1.30	774.10	668.23	1.34	911.11	462.25	1.33	1034.09	1.18
p1	3550.30	0.99	2.35 | 0.19	562.15	0.98	0.42 | 0.06	947.05	1.29	793.24	682.50	1.36	934.03	506.35	1.46	1030.14	1.20
p2	3538.03	0.98	2.24 | 0.22	561.27	0.98	0.38 | 0.01	959.25	1.31	770.98	645.00	1.29	924.93	462.38	1.33	1036.07	1.17
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	3571.61	0.99	1.38 | 0.13	563.88	0.99	0.31 | 0.00	987.83	1.35	695.17	669.17	1.34	822.33	483.07	1.39	923.32	1.20
p1	3556.65	0.99	1.27 | 0.09	559.76	0.98	0.32 | 0.02	980.75	1.34	703.50	739.70	1.48	815.77	534.73	1.54	899.13	1.24
p2	3549.65	0.99	1.24 | 0.06	555.26	0.97	0.38 | 0.09	988.70	1.35	691.40	669.17	1.34	825.21	487.25	1.40	920.17	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	3571.61	0.99	2.32 | 0.23	569.56	1.00	0.65 | 0.12	950.27	1.29	795.00	653.35	1.31	963.71	454.27	1.31	1077.11	1.17
p1	3545.35	0.99	2.47 | 0.19	565.51	0.99	0.46 | 0.03	935.85	1.27	833.75	672.25	1.34	979.18	487.68	1.41	1107.67	1.19
p2	3531.61	0.98	2.38 | 0.20	563.86	0.99	0.39 | 0.00	946.35	1.29	799.21	651.90	1.30	979.06	451.25	1.30	1101.95	1.16
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	3567.02	0.99	1.51 | 0.10	567.17	0.99	0.29 | 0.00	985.55	1.34	708.58	685.30	1.37	844.91	481.30	1.39	948.92	1.20
p1	3558.35	0.99	1.54 | 0.09	566.83	0.99	0.36 | 0.05	968.55	1.32	731.22	705.23	1.41	859.43	521.25	1.50	957.08	1.22
p2	3541.14	0.98	1.53 | 0.05	564.00	0.99	0.34 | 0.01	973.05	1.33	727.63	680.73	1.36	867.58	476.38	1.37	975.04	1.19
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	3564.35	0.99	2.05 | 0.17	572.15	1.00	0.63 | 0.08	955.12	1.30	773.80	662.48	1.32	939.99	458.25	1.32	1063.29	1.18

p1	3545.73	0.99	2.54 | 0.35	568.26	0.99	0.63 | 0.05	939.35	1.28	820.82	670.15	1.34	977.41	496.43	1.43	1084.46	1.19
p2	3528.83	0.98	2.23 | 0.19	565.35	0.99	0.40 | 0.02	955.83	1.30	776.14	664.05	1.33	926.72	457.23	1.32	1064.85	1.17
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	3573.07	0.99	1.39 | 0.13	569.41	1.00	0.52 | 0.04	1004.65	1.37	660.01	702.48	1.40	789.44	492.90	1.42	890.92	1.22
p1	3560.22	0.99	1.52 | 0.27	566.06	0.99	0.30 | 0.00	998.70	1.36	654.83	731.62	1.46	764.72	545.05	1.57	845.22	1.25
p2	3550.74	0.99	1.72 | 0.13	565.35	0.99	0.37 | 0.01	1013.85	1.38	636.99	711.83	1.42	760.39	496.55	1.43	855.82	1.22
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	3562.38	0.99	2.42 | 0.28	566.69	0.99	0.56 | 0.06	958.00	1.30	783.35	656.45	1.31	946.45	457.80	1.32	1065.44	1.17
p1	3552.15	0.99	2.38 | 0.26	558.83	0.98	0.33 | 0.04	938.05	1.28	820.05	673.58	1.35	975.85	494.05	1.42	1085.00	1.19
p2	3526.53	0.98	2.34 | 0.26	558.55	0.98	0.39 | 0.01	942.95	1.28	809.03	651.85	1.30	981.04	428.75	1.24	1112.17	1.15
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	3550.39	0.99	1.45 | 0.05	569.19	0.99	0.33 | 0.03	1006.55	1.37	648.31	709.23	1.42	774.09	493.52	1.42	870.23	1.22
p1	3535.54	0.98	1.52 | 0.08	567.25	0.99	0.37 | 0.01	993.38	1.35	684.40	721.38	1.44	801.15	535.00	1.54	889.16	1.24
p2	3521.61	0.98	1.42 | 0.07	563.02	0.98	0.28 | 0.02	1014.48	1.38	635.65	715.90	1.43	752.62	497.35	1.43	850.42	1.22
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	3574.51	0.99	2.50 | 0.40	568.77	0.99	0.42 | 0.09	950.20	1.29	799.79	655.15	1.31	967.26	450.57	1.30	1109.54	1.17
p1	3561.35	0.99	2.52 | 0.23	567.68	0.99	0.45 | 0.04	932.77	1.27	842.40	669.52	1.34	999.44	487.80	1.41	1121.57	1.19
p2	3538.70	0.98	2.52 | 0.38	562.73	0.98	0.38 | 0.02	946.38	1.29	800.88	651.12	1.30	968.88	429.00	1.24	1106.79	1.15
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	3557.41	0.99	1.29 | 0.04	565.40	0.99	0.33 | 0.00	987.62	1.34	702.90	691.52	1.38	831.29	479.10	1.38	938.09	1.20
p1	3555.11	0.99	1.20 | 0.03	565.53	0.99	0.34 | 0.01	977.35	1.33	721.73	721.67	1.44	826.29	483.25	1.39	951.52	1.21
p2	3536.73	0.98	1.35 | 0.07	559.54	0.98	0.38 | 0.05	988.67	1.35	699.46	673.00	1.34	815.95	507.50	1.46	929.16	1.21
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	3556.38	0.99	2.20 | 0.13	562.23	0.98	0.35 | 0.02	947.30	1.29	802.58	658.75	1.32	949.41	455.52	1.31	1075.35	1.17
p1	3547.88	0.99	2.21 | 0.17	556.32	0.97	0.35 | 0.05	957.65	1.30	777.83	684.17	1.37	935.95	480.32	1.39	1050.49	1.19
p2	3531.17	0.98	2.01 | 0.13	553.71	0.97	0.31 | 0.02	950.70	1.29	786.82	663.20	1.33	932.47	457.20	1.32	1072.85	1.17
TILE_21	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3571.53	0.99	1.65 | 0.28	565.59	0.99	0.34 | 0.01	969.50	1.32	735.08	685.52	1.37	861.56	493.60	1.42	975.91	1.20
p1	3555.83	0.99	1.45 | 0.06	567.88	0.99	0.36 | 0.06	977.62	1.33	715.32	704.23	1.41	861.92	496.90	1.43	950.29	1.21
p2	3544.07	0.99	1.39 | 0.04	559.95	0.98	0.39 | 0.01	973.00	1.33	733.95	660.52	1.32	859.17	473.05	1.36	976.46	1.18
TILE_22	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3568.23	0.99	2.87 | 0.43	566.03	0.99	0.51 | 0.03	953.65	1.30	792.38	665.27	1.33	923.26	477.73	1.38	1066.83	1.18
p1	3553.77	0.99	2.17 | 0.12	565.41	0.99	0.45 | 0.13	944.88	1.29	809.34	675.55	1.35	968.61	472.65	1.36	1091.51	1.18
p2	3530.62	0.98	2.28 | 0.19	560.82	0.98	0.43 | 0.01	945.98	1.29	798.44	637.52	1.27	956.48	452.52	1.30	1096.39	1.16
TILE_23	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3562.56	0.99	1.47 | 0.11	570.00	1.00	0.56 | 0.07	1005.00	1.37	659.90	709.65	1.42	776.90	514.88	1.48	891.23	1.23

p1	3545.18	0.99	1.32 | 0.05	570.78	1.00	0.58 | 0.07	1001.33	1.36	668.49	702.62	1.40	793.91	511.23	1.47	896.28	1.23
p2	3530.56	0.98	1.31 | 0.07	566.27	0.99	0.44 | 0.02	1012.05	1.38	645.63	714.75	1.43	759.53	498.20	1.44	849.77	1.22
TILE_24	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3576.67	0.99	2.24 | 0.27	569.86	1.00	0.50 | 0.12	927.88	1.26	851.95	664.77	1.33	1010.75	464.15	1.34	1151.06	1.17
p1	3564.80	0.99	2.43 | 0.20	569.07	0.99	0.61 | 0.07	938.42	1.28	830.35	645.98	1.29	992.92	468.65	1.35	1117.39	1.17
p2	3547.56	0.99	2.11 | 0.09	562.55	0.98	0.46 | 0.08	940.65	1.28	818.18	650.85	1.30	980.04	449.15	1.30	1113.83	1.16
TILE_25	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3557.78	0.99	1.59 | 0.13	562.70	0.98	0.36 | 0.04	1009.98	1.38	652.83	739.48	1.48	759.65	521.98	1.51	856.96	1.24
p1	3546.04	0.99	1.32 | 0.05	563.26	0.98	0.37 | 0.06	1004.12	1.37	654.89	711.05	1.42	766.68	514.73	1.48	865.67	1.23
p2	3540.53	0.98	1.35 | 0.16	558.47	0.98	0.36 | 0.01	1003.80	1.37	655.89	711.75	1.42	766.91	493.20	1.42	874.29	1.22
TILE_26	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3565.37	0.99	2.67 | 0.34	568.11	0.99	0.47 | 0.09	940.15	1.28	814.76	675.27	1.35	967.23	473.90	1.37	1090.90	1.18
p1	3548.73	0.99	2.58 | 0.27	560.79	0.98	0.44 | 0.03	956.85	1.30	770.26	663.67	1.33	926.83	483.62	1.39	1016.55	1.18
p2	3539.07	0.98	2.63 | 0.53	555.21	0.97	0.42 | 0.03	952.00	1.30	782.86	656.98	1.31	943.92	457.48	1.32	1062.70	1.16
TILE_27	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3571.53	0.99	1.61 | 0.11	572.01	1.00	0.58 | 0.14	1014.17	1.38	633.28	743.38	1.49	737.07	526.02	1.52	827.49	1.25
p1	3561.69	0.99	1.41 | 0.05	567.85	0.99	0.54 | 0.03	1009.27	1.37	636.85	715.23	1.43	752.18	523.52	1.51	844.73	1.24
p2	3547.70	0.99	1.43 | 0.07	564.53	0.99	0.40 | 0.04	1008.35	1.37	640.82	712.35	1.42	757.64	501.05	1.44	849.17	1.22
TILE_28	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3565.95	0.99	2.88 | 0.39	569.56	1.00	0.60 | 0.06	942.27	1.28	804.33	683.80	1.37	948.54	476.98	1.38	1071.54	1.19
p1	3544.61	0.99	2.85 | 0.28	568.98	0.99	0.66 | 0.07	946.50	1.29	798.27	659.33	1.32	948.78	477.90	1.38	1060.43	1.18
p2	3543.87	0.98	2.67 | 0.41	567.32	0.99	0.63 | 0.06	949.25	1.29	785.33	657.98	1.31	945.57	458.43	1.32	1056.55	1.17
TILE_29	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3571.83	0.99	1.37 | 0.04	563.82	0.99	0.34 | 0.01	1005.23	1.37	653.50	739.38	1.48	753.01	522.60	1.51	852.67	1.24
p1	3548.22	0.99	1.32 | 0.03	560.13	0.98	0.34 | 0.01	1005.27	1.37	648.12	711.75	1.42	761.89	522.83	1.51	848.66	1.23
p2	3537.63	0.98	1.52 | 0.07	555.97	0.97	0.34 | 0.03	1011.10	1.38	646.80	714.35	1.43	758.61	499.07	1.44	855.56	1.22
TILE_30	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3559.73	0.99	2.13 | 0.12	567.02	0.99	0.47 | 0.07	940.23	1.28	817.83	679.62	1.36	964.81	474.20	1.37	1094.59	1.18
p1	3545.89	0.99	2.35 | 0.26	564.78	0.99	0.37 | 0.01	949.45	1.29	793.48	658.58	1.32	952.65	478.98	1.38	1063.85	1.18
p2	3532.81	0.98	2.07 | 0.11	564.25	0.99	0.42 | 0.03	957.62	1.30	774.68	662.35	1.32	932.84	460.85	1.33	1057.68	1.17
TILE_31	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3572.40	0.99	1.61 | 0.12	562.74	0.98	0.38 | 0.01	974.38	1.33	725.47	707.73	1.41	849.12	500.23	1.44	952.90	1.21
p1	3554.58	0.99	1.46 | 0.07	558.65	0.98	0.32 | 0.03	965.73	1.32	751.07	674.60	1.35	889.04	490.48	1.41	1015.22	1.19
p2	3543.60	0.98	1.47 | 0.05	557.90	0.98	0.35 | 0.03	958.98	1.31	764.67	670.75	1.34	909.32	462.65	1.33	1035.89	1.18
TILE_32	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3558.06	0.99	2.70 | 0.39	564.86	0.99	0.35 | 0.03	952.67	1.30	769.89	693.48	1.39	889.46	492.98	1.42	990.22	1.20

p1	3533.42	0.98	2.71 | 0.26	566.62	0.99	0.39 | 0.02	967.58	1.32	736.49	671.25	1.34	891.23	468.90	1.35	998.58	1.18
p2	3528.32	0.98	2.62 | 0.27	567.01	0.99	0.42 | 0.07	949.45	1.29	796.86	665.48	1.33	927.28	482.95	1.39	1041.86	1.18
TILE_33	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3558.03	0.99	1.62 | 0.11	568.96	0.99	0.49 | 0.04	971.48	1.32	735.98	709.80	1.42	847.26	519.40	1.50	973.05	1.23
p1	3551.98	0.99	1.50 | 0.07	564.86	0.99	0.39 | 0.01	975.52	1.33	717.78	675.83	1.35	870.54	473.20	1.36	982.88	1.19
p2	3540.43	0.98	1.45 | 0.05	560.07	0.98	0.28 | 0.02	972.95	1.32	740.02	682.10	1.36	864.24	493.20	1.42	984.93	1.20
TILE_34	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3572.25	0.99	2.05 | 0.16	570.02	1.00	0.58 | 0.07	936.73	1.28	817.02	680.95	1.36	944.45	480.48	1.39	1063.55	1.19
p1	3557.99	0.99	2.08 | 0.11	570.43	1.00	0.60 | 0.07	947.73	1.29	791.63	654.90	1.31	952.44	457.30	1.32	1064.94	1.17
p2	3542.11	0.98	2.34 | 0.26	566.67	0.99	0.55 | 0.04	948.92	1.29	785.26	666.23	1.33	925.97	483.10	1.39	1041.91	1.18
TILE_35	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3578.19	0.99	1.56 | 0.09	567.99	0.99	0.34 | 0.01	966.15	1.32	755.70	703.65	1.41	879.60	513.98	1.48	989.85	1.22
p1	3557.93	0.99	1.43 | 0.06	562.99	0.98	0.33 | 0.01	978.55	1.33	712.17	659.80	1.32	854.31	475.50	1.37	963.92	1.19
p2	3546.43	0.99	1.54 | 0.07	560.38	0.98	0.35 | 0.02	960.77	1.31	751.75	701.12	1.40	879.23	492.88	1.42	985.81	1.20
TILE_36	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3582.59	1.00	1.60 | 0.11	568.22	0.99	0.40 | 0.01	939.23	1.28	825.55	704.33	1.41	945.41	497.43	1.43	1084.58	1.21
p1	3568.18	0.99	1.52 | 0.03	567.88	0.99	0.43 | 0.02	952.67	1.30	779.31	641.70	1.28	931.56	457.25	1.32	1064.34	1.17
p2	3551.64	0.99	1.61 | 0.09	565.92	0.99	0.38 | 0.03	941.88	1.28	796.76	680.27	1.36	944.65	478.95	1.38	1064.77	1.19
TILE_37	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3549.04	0.99	1.54 | 0.08	565.48	0.99	0.33 | 0.08	971.45	1.32	731.09	709.15	1.42	846.69	525.98	1.52	935.13	1.23
p1	3532.87	0.98	1.47 | 0.10	562.81	0.98	0.30 | 0.00	979.85	1.33	711.35	685.92	1.37	849.91	477.57	1.38	955.57	1.19
p2	3526.76	0.98	1.52 | 0.07	560.56	0.98	0.42 | 0.08	970.30	1.32	732.15	703.65	1.41	863.35	501.32	1.45	956.86	1.21
TILE_38	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3564.96	0.99	1.96 | 0.13	568.88	0.99	0.49 | 0.03	945.83	1.29	789.46	691.73	1.38	912.88	510.95	1.47	1007.38	1.21
p1	3552.99	0.99	1.80 | 0.07	564.76	0.99	0.41 | 0.03	945.23	1.29	804.98	658.27	1.32	959.77	454.82	1.31	1087.37	1.17
p2	3539.79	0.98	1.90 | 0.15	562.56	0.98	0.43 | 0.07	950.55	1.29	784.33	690.75	1.38	907.97	490.62	1.41	1001.58	1.20
TILE_39	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3567.82	0.99	1.80 | 0.14	567.89	0.99	0.38 | 0.04	971.80	1.32	725.46	708.85	1.42	846.17	528.33	1.52	934.28	1.23
p1	3558.85	0.99	1.33 | 0.05	563.31	0.98	0.39 | 0.06	975.00	1.33	718.07	685.92	1.37	852.10	471.82	1.36	967.93	1.19
p2	3544.74	0.99	1.50 | 0.12	564.12	0.99	0.33 | 0.02	973.40	1.33	724.83	707.65	1.41	845.70	502.98	1.45	940.03	1.21
TILE_40	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3567.25	0.99	2.54 | 0.44	565.18	0.99	0.43 | 0.06	953.95	1.30	762.82	698.40	1.40	883.32	515.90	1.49	977.24	1.21
p1	3553.37	0.99	2.39 | 0.21	560.45	0.98	0.37 | 0.05	965.62	1.31	742.34	675.48	1.35	881.53	469.73	1.35	992.33	1.18
p2	3537.16	0.98	2.39 | 0.26	553.43	0.97	0.37 | 0.01	957.67	1.30	756.06	700.67	1.40	876.80	496.18	1.43	973.35	1.20
TILE_41	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3571.21	0.99	1.55 | 0.09	561.51	0.98	0.29 | 0.01	975.05	1.33	712.88	712.48	1.42	825.64	529.65	1.53	914.53	1.23

p1	3557.37	0.99	1.23 | 0.05	561.57	0.98	0.29 | 0.05	972.52	1.32	728.57	684.88	1.37	852.58	473.27	1.36	986.69	1.19
p2	3537.95	0.98	1.35 | 0.10	563.32	0.98	0.34 | 0.01	957.80	1.30	772.15	694.25	1.39	905.43	486.07	1.40	1012.65	1.20

p0_score:	50.51
p1_score:	50.54
p2_score:	50.01

Infrastructure_Operations_Scores:	vMotion	SVMotion	XVMotion	Deploy
Completed_Ops_PerHour	29.00	26.00	21.00	9.50
Avg_Seconds_To_Complete	4.83	86.32	105.98	334.46
Failures	0.00	0.00	0.00	0.00
Ratio	1.12	1.44	1.17	1.19
Number_Of_Threads	1	1	1	1

Summary	Run_Is_Compliant	Turbo_Setting:0
	Number_Of_Compliance_Issues(0)*	Median_Phase(p0)
Unreviewed_VMmark3_Applications_Score	50.51	
Unreviewed_VMmark3_Infrastructure_Score	1.22	
Unreviewed_VMmark3_Score	40.66	

Configuration

Virtualization Software	
Hypervisor Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware ESXi 8.0 GA Build 20513097 / 10-11-2022
Datacenter Management Software Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY)	VMware vCenter Server 8.0 U1, Build 21560480 / 04-18-2023
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	Lenovo ThinkSystem SR665 V3
Processor Vendor and Model	AMD EPYC 9654

Processor Speed (GHz) / Turbo Boost Speed (GHz)	2.4 / 3.7
Total Sockets/Total Cores/Total Threads	2 Sockets / 192 Cores / 384 Threads
Primary CPU Cache	32 KB I + 32 KB D on chip per core
Secondary CPU Cache	1 MB I+D on chip per core
Other CPU Cache	384 MB I+D on chip per chip, 32MB shared/8 cores
BIOS Version	1.20
Memory Size (in GB, Number of DIMMs)	6144, 24
Memory Type and Speed	256GB, 2Rx4 DDR5-4800 MHz RDIMM
Disk Subsystem Type	FC SAN
Number of Disk Controllers	1
Disk Controller Vendors and Models	Details in Storage Notes
Total Number of Physical Disks for Hypervisor	1
Disk Vendors, Models, Capacities, and Speeds	Micron 480GB 2.5" SATA SSD
Number of Host Bus Adapters	3
Host Bus Adapter Vendors and Models	Two ThinkSystem QLogic QLE2772 32GB 2-Port PCIe Fibre Channel Adapters One Qlogic QLE2770 32Gb 1-Port PCIe Fibre Channel Adapter
Number of Network Controllers	1
Network Controller Vendors and Models	Broadcom 57508 100GbE QSFP56 2-port PCIe 4 Ethernet Adapter
Other Hardware	None
Other Software	None
Hardware Availability Date (MM-DD-YYYY)	03-13-2023
BIOS Availability Date (MM-DD-YYYY)	03-15-2023
Software Availability Date (MM-DD-YYYY)	01-30-2023
Network	
Network Switch Vendors and Models	ThinkSystem NE2572 RackSwitch
Network Speed	SUT hosts: 2 x 100Gb/s for Management, vMotion and VMs Client hosts: 2 x 25Gb/s for Client VMs
Primary Storage	

Storage Category	FC SAN Storage
Storage Vendors, Models, and Firmware Versions	Lenovo ThinkSystem DM7100F Storage, 13.6P1
Storage Configuration Summary	1 x Lenovo DB620S 32GB FC Switch 1 x Lenovo ThinkSystem DS7100F Storage • 2 x Lenovo ThinkSystem DM Series DM7100 Controller Nodes • 1 x Lenovo ThinkSystem DM 240S 2U24 SFF Expansion Enclosure • 4 x Lenovo ThinkSystem 23TB (6x 3.84TB, 2.5" NVMe SSD) Drive Packs for DM7100F

Datacenter Management Server	
System Model	Lenovo ThinkSystem SR665
Processor Vendor and Model	AMD EPYC 7763
Processor Speed (GHz)	2.45
Total Sockets/Total Cores/Total Threads	2 Sockets / 128 Cores / 256 Threads
Memory Size (in GB, Number of DIMMs)	2048, 32
Network Controller(s) Vendors and Models	1 x Broadcom 57414 10/25GbE 2-port SFP28 PCIe Ethernet Adapter
Operating System, Version, Bitness, and Service Pack	VMware ESXi 7.0.3, Build 20842708
Virtual Center VM Number of vCPUs	8
Virtual Center VM Virtual Memory (in GB)	30
Virtual Center VM Operating System, Version, Bitness, and Service Pack	VMware vCenter Server 8.0 U1, Build 21560480
Other Hardware	None
Other Software	None

Clients	
Total Number of Virtual Clients / Virtual Client Hosts	43 / 2
System Model(s)	2x Lenovo ThinkSystem SR665 V3
Processor Vendor(s) and Model(s)	Client-Host1: AMD EPYC 9654 Client-Host2: AMD EPYC 9654
Processor Speed(s) (GHz)	Client-Host1: 2.4 GHz Client-Host2: 2.4 GHz
Total Sockets/Total Cores/Total Threads	Client-Host1: 2 Sockets / 192 Cores / 384 Threads Client-Host2: 2 Sockets / 192 Cores / 384 Threads
Memory per Virtual Client Host	Client-Host1: 1.5 TB Client-Host2: 1.5 TB

Network Controller(s) Vendors and Models	Client-Host1: 1x Broadcom 57504 10/25GbE SFP28 4-port PCIe Ethernet Adapter (Used 2 ports) Client-Host2: 1x Broadcom 57504 10/25GbE SFP28 4-port PCIe Ethernet Adapter (Used 2 ports)
Virtual Client Networking Notes	1x vmnic on standard vSwitch for management, vMotion and even Client VMs (25 Gb/s) 1x vmnic on standard vSwitch for odd Client VMs (25 Gb/s)
Virtual Client Storage Notes	Details in Client Notes
Other Hardware	Details in Client Notes
Other Software	VMware ESXi 8.0 GA, Build 20513097

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 Provision Lazy Zeroed

Virtualization Software Notes

- Cluster DRS Automation Level set to Fully Automated
- vSphere DRS Migration Threshold Level set to 2
- Logging disabled for all VMs (default: Enabled)
- CDROM removed from all VMs (default: Present)
- Floppy removed from all VMs (default: Present)
- Third virtual disk removed from DS3DB0 before cloning DS3DB VMs for other tiles
- VM scoreboard disabled for all VMs (default: Enabled)
- Logical CPU configuration changed for all multi-CPU VMs (except the PrimeClient, Client VMs) to 1 socket with multiple cores (default: Single core per socket)
- CPU and Memory shares set to low for all Standby VMs (default: Normal)
- CPU shares set to high all AuctionDB, DS3DB, DS3WebA, ElasticDB, ElasticLB VMs (default Normal)
- Memory shares set to high all AuctionDB, DS3DB, DS3WebA, DS3WebB, DS3WebC, ElasticDB, ElasticLB VMs (default Normal)
- All memory reserved for all DS3DB and Client VMs (default: Non-reserved)
- sched.mem.pin = "TRUE" for all DS3DB and Client VMs (default: FALSE)
- sched.mem.lpage.enable1GPage = "TRUE" for all DS3DB VMs (default: FALSE)

Advanced Settings

- Cpu.HTWholeCoreThreshold = 0 (default 800)
- Numa.LocalityWeightActionAffinity = 0 (default 130)
- Power.CpuPolicy = High Performance (default Balanced)
- UserVars.SuppressShellWarning = 1 (default 0)
- QLogic queue depth = 128 (default 64)
- UserVars.HostClientCEIPOptIn = 2 (default : 0)

Server Notes

Server BIOS Settings

- Operating Mode set to Maximum Performance, then Custom Mode (default Maximum Efficiency)
- L2 Stream HW Prefetcher set to Disabled (default Enabled)
- L2 Up/Down Prefetcher set to Disabled (default Enabled)
- DF C-states Control set to Disabled (default Enabled)
- DF P-states Control set to P0 (default Auto)
- PCIe Power Brake Disabled (default Proactive)

Networking Notes

vSwitch Configuration

- Standard vSwitch: vSwitch0 on vmnic0
  - Uplink: vmnic0 (100Gb/s)
  - vmk0 for Management and vMotion
  - "VM Network" port group for AuctionMSQ, Deploy, DS3WebA, Standby and Template
  - MTU set 9000 for the vSwitch, vmk0 and all uplinks

- Standard vSwitch: vSwitch1 on vmnic1
  - Uplink: vmnic1 (100Gb/s)
  - "PortGrp0" port group for all VMs except AuctionMSQ, Deploy, DS3WebA, Standby in Tile0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39
  - "PortGrp1" port group for all VMs except AuctionMSQ, Deploy, DS3WebA, Standby in Tile1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40
  - "PortGrp2" port group for all VMs except AuctionMSQ, Deploy, DS3WebA, Standby in Tile2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41
  - MTU set 9000 for the vSwitch, vmk0 and all uplinks

Storage Notes

- SUT Host OS installed on 1 x Micron 480GB SATA SSD
- 1 x Lenovo ThinkSystem DM7100F Storage Controller with 2 nodes

  - Physical Configuration:
    - Data ONTAP Release 9.11.1P1
    - 2 x DM7100F Transform Nodes
    - 2 x DM7100F Transform 2-port 32Gb Fibre Channel HBAs per node
    - 24 x 3.84TB NVMe SSDs

    - The Lenovo ThinkSystem DM7100F Storage System is VAAI capable
    - Storage Volume Efficiency was disabled on all VMmark3 volumes
    - NVMe-over-FC namespaces for all VM workload volumes

- Software Configuration:
    - All LUNs were deployed on 2 Tiers, with each Tier distributed across all 24 x 3.84TB NVMe SSDs and configured with RAID-DP
    - First Tier
        - 21 x 1TB namespaces striped across disk tier. One for each even tile VMs except all AuctionDB, AuctionMSQ, DS3DB, DS3WebA, ElasticDB and Standby
        - 21 x 1TB namespaces striped across disk tier. One for each odd tile database VMs including AuctionDB, DS3DB and ElasticDB
        - 1 x 2TB namespace striped across disk tier for all AuctionMSQ VMs
        - 1 x 1TB namespace striped across disk tier dedicated for Deploy VM Infrastructure Operation
        - 1 x 512GB namespace striped across disk tier dedicated for XVMotion Infrastructure Operation
    - Second Tier
        - 21 x 1TB namespaces striped across disk tier. One for each odd tile VMs except all AuctionDB, AuctionMSQ, DS3DB, DS3WebA, ElasticDB and Standby
        - 21 x 1TB namespaces striped across disk tier. One for each even tile database VMs including AuctionDB, DS3DB and ElasticDB
        - 1 x 4TB namespace striped across disk tier for all DS3WebA VMs
        - 1 x 4TB namespace striped across disk tier for all Standby VMs
        - 1 x 512GB namespace striped across disk tier dedicated for Storage vMotion Infrastructure Operation
        - 1 x 256GB namespace striped across disk tier dedicated for Deploy Template Infrastructure Operation

Datacenter Management Server Notes

- VMware EVC is enabled for SUT and Client Clusters (default EVC disabled)
- Mode AMD Zen 4 Generation

Operating System Notes

All SUTs and Clients hosts were installed using Lenovo customized ESXi 8.0 GA, Build 20513097 ISO available at https://vmware.lenovo.com/content/2023_01/Lenovo_Custom_ISO/8.0/VMware-ESXi-8.0.0-20513097-LNV-20230111.iso

Software Notes

None

Client Notes

Client BIOS Settings

- Operating Mode set to Maximum Performance, then Custom Mode (default Maximum Efficiency)
- L2 Stream HW Prefetcher set to Disabled (default Enabled)
- L2 Up/Down Prefetcher set to Disabled (default Enabled)
- DF C-states Control set to Disabled (default Enabled)
- DF P-states Control set to P0 (default Auto)
- PCIe Power Brake Disabled (default Proactive)

Client Storage

- 1 x Intel 1.92TB NVMe SSD for hypervisor per client host
- 1 x Lenovo ThinkSystem DE4000H 2U24 Hybrid SFF Array
- 24 x Toshiba 740GB SAS SSDs
- 1 x 2TB LUN for odd Client VMs
- 1 x 2TB LUN for even Client VMs

Location of Client VMs

- Client Host 1: Client1, 2, 5, 6, 9, 10, 13, 14, 17, 18, 21, 22, 25, 26, 29, 30, 33, 34, 37, 38, 41, Prime Client
- Client Host 2: Client0, 3, 4, 7, 8, 11, 12, 15, 16, 19, 20, 23, 24, 27, 28, 31, 32, 35, 36, 39, 40

Client Host Advanced Settings

- UserVars.HostClientShowOnlyRecentObjects = 0 (default : 1)
- HyperthreadingMitigation = true (default : false)
- UserVars.SuppressShellWarning = 1 (default 0)
- QLogic queue depth = 128 (default 64)

Client Host vSwitch Configuration

- The management and vMotion interface were connected to vmk0 on vSwitch0 on vmnic6
- Prime Client VM was connected to Portgroup "Primeclient" on vSwitch1 on vmnic7
- All even client VMs were connected to Portgroup "VM Network" on vSwitch0 on vmnic6
- All odd client VMs were connected to Portgroup "Client Odd Network" on vSwitch1 on vmnic7
- Each port is connected to the switch at 25Gb/s
- MTU set 9000 for all vSwitches, vmk0 and uplinks (default: 1500)

Other Notes

Changes to VMmark3.properties file:

- TileDelay was set to 5 (default: 60)
- ErrorImmediate was set to true (default: false)
- ScrubConfigFile was set to true (default: false)
- VCscratchDir = /root/VMmark3/results/scratch (default: /root/VMmark3/samples)

Changes to PrimeClient VM Staf.cfg file:

- "numthreads" was changed to 300 (default: 200)
