VMmark® 3.1.1 Results

Server Vendor & Model: HPE ProLiant DL385 Gen11 Storage Vendor & Model: HPE ProLiant DL385 Gen10 Plus v2 Hypervisor: VMware ESXi 8.0 GA Build 20513097 Datacenter Management Software: VMware vCenter Server 8.0 GA Build 20519528	**VMmark 3.1.1 Score =** **34.22 @ 36 Tiles**

Number of Hosts: 4	Uniform Hosts [yes/no]: yes	Total sockets/cores/threads in test: 8/256/512

Tested By: Hewlett Packard Enterprise	Test Date: 10-31-2022

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	3567.49	0.99	1.49 | 0.09	571.60	1.00	0.38 | 0.00	942.50	1.28	834.93	661.10	1.32	982.49	469.25	1.35	1047.83	1.18
p1	3552.65	0.99	1.53 | 0.08	571.08	1.00	0.44 | 0.00	928.75	1.26	873.57	676.05	1.35	997.34	506.85	1.46	1084.04	1.20
p2	3543.15	0.98	1.76 | 0.12	570.13	1.00	0.50 | 0.01	931.88	1.27	873.77	646.85	1.29	1039.37	457.40	1.32	1142.26	1.16
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	3564.52	0.99	1.64 | 0.11	565.07	0.99	0.30 | 0.00	964.75	1.31	805.54	662.38	1.32	979.99	466.77	1.35	1077.55	1.18
p1	3550.95	0.99	1.68 | 0.09	563.52	0.98	0.30 | 0.02	950.85	1.29	835.66	686.17	1.37	985.42	512.35	1.48	1057.47	1.21
p2	3532.57	0.98	1.46 | 0.07	560.99	0.98	0.26 | 0.02	989.00	1.35	743.12	686.45	1.37	887.84	486.15	1.40	971.91	1.20
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	3565.92	0.99	1.08 | 0.03	565.89	0.99	0.33 | 0.02	931.48	1.27	881.05	640.77	1.28	1062.53	453.38	1.31	1153.14	1.16
p1	3560.34	0.99	1.14 | 0.01	563.85	0.99	0.35 | 0.01	914.05	1.24	936.41	655.12	1.31	1093.80	487.90	1.41	1217.76	1.17
p2	3546.03	0.99	1.18 | 0.01	563.49	0.98	0.34 | 0.00	924.77	1.26	915.04	633.77	1.27	1110.00	447.45	1.29	1201.77	1.15
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	3573.73	0.99	1.09 | 0.02	570.19	1.00	0.46 | 0.07	908.00	1.24	968.47	626.58	1.25	1145.04	436.95	1.26	1268.98	1.14
p1	3555.86	0.99	1.01 | 0.02	568.43	0.99	0.51 | 0.03	930.98	1.27	888.45	679.25	1.36	1014.35	506.68	1.46	1107.82	1.20
p2	3534.43	0.98	1.14 | 0.03	565.14	0.99	0.43 | 0.02	943.38	1.28	865.85	651.75	1.30	1031.02	431.70	1.24	1158.69	1.15
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	3566.66	0.99	1.54 | 0.23	569.38	1.00	0.41 | 0.00	945.55	1.29	841.36	656.42	1.31	994.58	464.57	1.34	1085.61	1.17
p1	3550.29	0.99	1.26 | 0.10	560.43	0.98	0.30 | 0.00	923.12	1.26	900.72	668.48	1.34	1040.92	494.40	1.43	1157.28	1.18
p2	3535.54	0.98	1.47 | 0.07	555.45	0.97	0.33 | 0.01	938.60	1.28	865.68	651.48	1.30	1023.61	437.27	1.26	1127.52	1.15
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	3582.42	1.00	0.95 | 0.01	567.22	0.99	0.27 | 0.01	1012.08	1.38	672.94	713.25	1.43	795.86	509.98	1.47	848.58	1.23
p1	3563.66	0.99	0.91 | 0.02	563.98	0.99	0.28 | 0.00	988.08	1.35	735.46	720.33	1.44	854.39	540.55	1.56	936.15	1.24

	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p2	3548.74	0.99	1.09 | 0.02	564.17	0.99	0.29 | 0.00	992.88	1.35	725.73	689.67	1.38	878.54	466.57	1.35	964.60	1.20
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	3568.60	0.99	2.07 | 0.15	566.55	0.99	0.32 | 0.02	938.75	1.28	875.13	644.08	1.29	1056.11	451.90	1.30	1180.08	1.16
p1	3553.85	0.99	2.71 | 0.40	565.50	0.99	0.32 | 0.00	912.42	1.24	939.81	649.73	1.30	1108.72	482.02	1.39	1218.34	1.17
p2	3539.53	0.98	2.19 | 0.18	564.07	0.99	0.38 | 0.01	930.60	1.27	893.80	636.17	1.27	1085.40	423.25	1.22	1204.63	1.14
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	3567.10	0.99	2.49 | 0.29	572.78	1.00	0.66 | 0.20	923.48	1.26	915.93	625.38	1.25	1120.00	440.77	1.27	1227.18	1.15
p1	3545.77	0.99	2.21 | 0.50	566.65	0.99	0.44 | 0.02	928.10	1.26	899.09	661.20	1.32	1073.25	491.32	1.42	1164.45	1.18
p2	3536.15	0.98	2.01 | 0.28	567.55	0.99	0.31 | 0.00	921.17	1.25	931.00	623.88	1.25	1135.26	412.57	1.19	1279.07	1.13
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	3578.75	0.99	1.42 | 0.10	567.60	0.99	0.32 | 0.00	948.00	1.29	858.38	651.60	1.30	1019.54	453.52	1.31	1139.70	1.17
p1	3562.14	0.99	1.26 | 0.06	565.88	0.99	0.24 | 0.00	934.88	1.27	883.50	657.12	1.31	1101.80	465.10	1.34	1196.16	1.17
p2	3539.35	0.98	1.52 | 0.09	563.38	0.98	0.28 | 0.00	932.90	1.27	888.20	639.27	1.28	1060.18	442.07	1.27	1209.26	1.15
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	3564.45	0.99	1.46 | 0.07	571.27	1.00	0.57 | 0.16	941.70	1.28	854.01	653.83	1.31	1017.48	453.02	1.31	1179.08	1.17
p1	3555.24	0.99	1.40 | 0.06	566.17	0.99	0.42 | 0.00	958.75	1.31	806.93	685.23	1.37	973.73	490.73	1.42	1070.66	1.20
p2	3538.59	0.98	1.48 | 0.11	559.87	0.98	0.42 | 0.03	956.90	1.30	812.87	643.98	1.29	967.94	462.70	1.33	1102.22	1.17
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	3571.64	0.99	1.99 | 0.17	560.98	0.98	0.33 | 0.01	919.60	1.25	922.43	636.48	1.27	1086.33	463.95	1.34	1212.28	1.16
p1	3550.74	0.99	2.35 | 0.21	555.97	0.97	0.40 | 0.06	938.10	1.28	852.19	670.23	1.34	1021.84	474.10	1.37	1138.76	1.18
p2	3540.30	0.98	2.19 | 0.25	553.29	0.97	0.37 | 0.01	911.52	1.24	944.55	605.10	1.21	1139.53	431.02	1.24	1292.70	1.12
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	3575.27	0.99	1.75 | 0.20	563.09	0.98	0.35 | 0.02	912.27	1.24	971.14	621.50	1.24	1154.88	445.95	1.29	1319.69	1.14
p1	3557.89	0.99	1.51 | 0.09	560.05	0.98	0.31 | 0.05	941.17	1.28	862.48	644.27	1.29	1045.46	474.52	1.37	1147.09	1.17
p2	3541.70	0.98	1.41 | 0.07	557.25	0.97	0.36 | 0.01	933.70	1.27	900.69	635.38	1.27	1099.26	439.00	1.27	1242.38	1.14
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	3572.34	0.99	1.96 | 0.17	569.16	0.99	0.54 | 0.05	985.02	1.34	723.80	707.48	1.41	810.42	522.25	1.51	892.62	1.23
p1	3563.69	0.99	1.83 | 0.15	563.75	0.99	0.34 | 0.02	984.30	1.34	728.59	698.08	1.39	835.64	518.98	1.50	913.33	1.22
p2	3545.94	0.99	2.16 | 0.22	559.61	0.98	0.38 | 0.00	960.80	1.31	793.16	675.35	1.35	935.49	473.15	1.36	1046.46	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	3577.83	0.99	0.89 | 0.02	565.68	0.99	0.32 | 0.01	946.25	1.29	843.82	681.30	1.36	999.10	482.95	1.39	1099.64	1.19
p1	3562.60	0.99	0.92 | 0.01	561.78	0.98	0.31 | 0.00	947.55	1.29	860.81	648.65	1.30	1043.85	475.40	1.37	1147.30	1.17
p2	3538.16	0.98	0.98 | 0.02	557.24	0.97	0.29 | 0.01	966.27	1.32	797.83	668.30	1.34	959.70	469.88	1.35	1071.62	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	3573.54	0.99	0.95 | 0.01	568.25	0.99	0.64 | 0.24	913.10	1.24	962.02	646.17	1.29	1151.47	450.45	1.30	1296.67	1.16
p1	3553.17	0.99	1.04 | 0.01	561.90	0.98	0.37 | 0.08	909.45	1.24	977.94	616.70	1.23	1179.32	446.20	1.29	1323.54	1.14
p2	3544.63	0.99	1.10 | 0.01	561.21	0.98	0.34 | 0.01	900.65	1.23	1004.24	604.73	1.21	1239.30	413.12	1.19	1404.08	1.11
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

	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p0	3574.80	0.99	1.49 | 0.08	568.73	0.99	0.47 | 0.02	929.35	1.27	910.22	659.08	1.32	1092.40	463.62	1.34	1220.12	1.17
p1	3558.03	0.99	1.32 | 0.04	565.43	0.99	0.47 | 0.00	951.50	1.30	842.46	654.42	1.31	1033.54	481.00	1.39	1131.91	1.18
p2	3537.74	0.98	1.47 | 0.09	565.06	0.99	0.52 | 0.03	958.90	1.31	825.61	660.00	1.32	1002.19	459.93	1.33	1125.16	1.17
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	3567.84	0.99	1.65 | 0.09	566.10	0.99	0.33 | 0.06	918.77	1.25	911.25	654.30	1.31	1096.35	458.18	1.32	1233.79	1.16
p1	3546.15	0.99	1.61 | 0.09	565.23	0.99	0.31 | 0.02	931.30	1.27	902.78	631.15	1.26	1112.62	455.48	1.31	1254.81	1.15
p2	3531.68	0.98	1.85 | 0.15	558.60	0.98	0.31 | 0.00	925.00	1.26	922.71	628.12	1.25	1125.96	428.05	1.23	1312.43	1.13
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	3568.13	0.99	1.07 | 0.03	569.02	0.99	0.46 | 0.07	979.33	1.33	756.67	706.62	1.41	903.70	503.75	1.45	995.22	1.22
p1	3543.20	0.98	1.08 | 0.04	564.76	0.99	0.28 | 0.00	992.27	1.35	711.88	695.50	1.39	842.23	514.33	1.48	941.37	1.22
p2	3531.24	0.98	1.15 | 0.03	565.23	0.99	0.29 | 0.00	982.45	1.34	752.55	679.80	1.36	920.04	475.48	1.37	1020.15	1.19
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	3571.71	0.99	1.50 | 0.12	573.00	1.00	0.61 | 0.06	901.02	1.23	1009.65	634.98	1.27	1211.23	434.62	1.25	1406.17	1.14
p1	3549.17	0.99	1.39 | 0.07	564.88	0.99	0.38 | 0.01	900.12	1.23	993.15	610.95	1.22	1219.52	438.07	1.26	1364.36	1.13
p2	3527.48	0.98	1.68 | 0.10	560.31	0.98	0.46 | 0.05	903.75	1.23	993.75	604.23	1.21	1246.92	414.50	1.20	1401.77	1.11
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	3559.38	0.99	2.63 | 0.58	573.36	1.00	0.46 | 0.01	918.30	1.25	950.81	651.85	1.30	1133.87	448.57	1.29	1301.39	1.16
p1	3541.48	0.98	2.28 | 0.46	570.83	1.00	0.52 | 0.11	920.08	1.25	949.14	620.73	1.24	1161.74	449.43	1.30	1291.22	1.15
p2	3523.58	0.98	1.77 | 0.15	563.49	0.98	0.29 | 0.00	942.65	1.28	880.93	641.27	1.28	1078.60	434.18	1.25	1262.77	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	3571.68	0.99	1.33 | 0.06	565.00	0.99	0.40 | 0.02	899.85	1.23	981.71	656.67	1.31	1128.16	447.35	1.29	1310.07	1.15
p1	3554.18	0.99	1.65 | 0.10	562.11	0.98	0.26 | 0.01	912.12	1.24	941.00	623.17	1.25	1145.69	430.05	1.24	1284.85	1.13
p2	3546.24	0.99	1.39 | 0.03	561.02	0.98	0.35 | 0.02	903.70	1.23	974.38	631.45	1.26	1118.54	446.07	1.29	1316.51	1.14
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	3575.16	0.99	1.06 | 0.06	564.56	0.99	0.34 | 0.05	897.02	1.22	1009.01	635.17	1.27	1197.55	437.65	1.26	1375.44	1.14
p1	3561.22	0.99	0.96 | 0.02	564.42	0.99	0.29 | 0.00	927.02	1.26	895.49	630.65	1.26	1108.53	436.18	1.26	1262.86	1.14
p2	3546.57	0.99	1.09 | 0.05	563.78	0.99	0.31 | 0.01	919.50	1.25	926.27	630.73	1.26	1111.84	451.52	1.30	1267.76	1.15
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	3571.07	0.99	1.80 | 0.17	573.11	1.00	0.50 | 0.06	909.50	1.24	979.97	643.05	1.28	1178.63	461.50	1.33	1352.37	1.16
p1	3553.01	0.99	1.79 | 0.10	570.23	1.00	0.48 | 0.09	935.73	1.27	896.23	632.08	1.26	1112.81	436.23	1.26	1259.69	1.15
p2	3536.20	0.98	2.02 | 0.29	561.77	0.98	0.34 | 0.01	912.15	1.24	970.52	625.60	1.25	1151.47	447.73	1.29	1324.50	1.14
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	3560.77	0.99	2.56 | 0.43	563.77	0.99	0.32 | 0.00	917.60	1.25	948.05	655.67	1.31	1107.55	470.93	1.36	1270.77	1.17
p1	3549.16	0.99	2.03 | 0.23	560.06	0.98	0.32 | 0.02	936.00	1.27	887.48	610.50	1.22	1115.17	435.85	1.26	1257.40	1.14
p2	3533.12	0.98	2.25 | 0.36	559.72	0.98	0.29 | 0.01	943.83	1.29	867.84	671.55	1.34	1041.12	469.23	1.35	1184.97	1.18
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	3566.35	0.99	1.63 | 0.10	568.67	0.99	0.29 | 0.00	982.27	1.34	735.07	748.77	1.50	838.41	538.65	1.55	940.21	1.25

	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(nRT|MaxPctF)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	Actual	Ratio	QoS(ms)	GM
p1	3550.20	0.99	1.79 | 0.15	567.34	0.99	0.29 | 0.01	992.65	1.35	716.06	680.17	1.36	831.57	493.60	1.42	922.64	1.21
p2	3547.60	0.99	1.47 | 0.06	567.11	0.99	0.26 | 0.00	967.98	1.32	779.50	709.60	1.42	899.95	500.68	1.44	1004.60	1.21
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	3574.29	0.99	1.29 | 0.06	565.30	0.99	0.28 | 0.02	946.58	1.29	847.68	707.12	1.41	993.72	497.75	1.44	1136.28	1.21
p1	3571.18	0.99	1.39 | 0.08	566.75	0.99	0.26 | 0.00	979.73	1.33	770.58	655.00	1.31	933.51	466.68	1.35	1075.20	1.18
p2	3556.59	0.99	1.40 | 0.10	563.72	0.99	0.31 | 0.02	953.45	1.30	831.14	686.60	1.37	991.95	477.12	1.38	1145.51	1.19
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	3573.24	0.99	1.99 | 0.27	564.37	0.99	0.34 | 0.01	899.02	1.22	996.06	638.52	1.28	1184.28	460.82	1.33	1335.97	1.15
p1	3556.02	0.99	1.90 | 0.24	560.87	0.98	0.39 | 0.01	894.42	1.22	1015.72	604.38	1.21	1252.52	412.20	1.19	1427.92	1.11
p2	3541.25	0.98	1.47 | 0.06	559.21	0.98	0.32 | 0.01	912.80	1.24	935.35	653.00	1.30	1107.25	452.25	1.30	1271.83	1.15
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	3569.39	0.99	1.95 | 0.26	571.35	1.00	0.46 | 0.00	924.75	1.26	914.04	658.10	1.31	1086.59	475.62	1.37	1249.33	1.18
p1	3549.10	0.99	1.54 | 0.10	563.00	0.98	0.31 | 0.09	947.02	1.29	863.05	649.80	1.30	1038.43	445.73	1.29	1198.22	1.16
p2	3541.34	0.98	1.41 | 0.05	560.97	0.98	0.32 | 0.02	946.05	1.29	846.48	677.35	1.35	1019.78	476.80	1.37	1152.14	1.18
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	3573.76	0.99	1.22 | 0.02	564.96	0.99	0.58 | 0.28	924.10	1.26	910.98	655.33	1.31	1096.24	477.55	1.38	1241.38	1.17
p1	3557.09	0.99	1.33 | 0.02	561.05	0.98	0.30 | 0.01	948.17	1.29	848.61	651.00	1.30	1034.83	446.12	1.29	1201.23	1.16
p2	3544.32	0.99	1.47 | 0.02	559.47	0.98	0.47 | 0.18	927.48	1.26	917.01	659.15	1.32	1083.39	463.55	1.34	1213.64	1.16
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	3575.60	0.99	1.05 | 0.03	565.69	0.99	0.32 | 0.00	965.52	1.31	803.43	697.77	1.39	955.07	512.20	1.48	1060.70	1.22
p1	3561.23	0.99	1.18 | 0.06	561.97	0.98	0.24 | 0.00	969.88	1.32	785.65	678.35	1.36	939.94	469.55	1.35	1058.37	1.19
p2	3548.12	0.99	1.22 | 0.04	561.50	0.98	0.30 | 0.02	970.92	1.32	790.11	699.48	1.40	946.78	491.27	1.42	1072.68	1.20
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	3565.13	0.99	1.85 | 0.18	564.88	0.99	0.36 | 0.02	909.83	1.24	965.54	651.55	1.30	1145.54	470.07	1.36	1303.42	1.16
p1	3554.57	0.99	1.79 | 0.14	562.48	0.98	0.36 | 0.02	907.62	1.24	972.47	615.48	1.23	1187.53	419.43	1.21	1367.10	1.12
p2	3539.74	0.98	1.86 | 0.13	559.41	0.98	0.33 | 0.01	906.00	1.23	959.52	647.00	1.29	1138.04	450.48	1.30	1299.25	1.15
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	3568.94	0.99	1.48 | 0.10	570.51	1.00	0.48 | 0.01	925.05	1.26	923.22	658.42	1.32	1091.80	480.50	1.39	1227.65	1.18
p1	3552.99	0.99	1.11 | 0.02	566.01	0.99	0.32 | 0.02	943.00	1.28	862.20	651.10	1.30	1040.12	446.57	1.29	1185.55	1.16
p2	3543.02	0.98	1.05 | 0.03	563.07	0.98	0.30 | 0.00	949.73	1.29	850.46	671.83	1.34	1028.95	472.18	1.36	1170.70	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	3570.28	0.99	2.57 | 0.54	571.15	1.00	0.34 | 0.00	931.23	1.27	908.34	660.23	1.32	1089.81	486.55	1.40	1217.35	1.18
p1	3557.35	0.99	2.20 | 0.32	566.26	0.99	0.32 | 0.01	960.60	1.31	819.02	659.23	1.32	1007.59	458.18	1.32	1137.23	1.17
p2	3537.52	0.98	2.51 | 0.55	562.27	0.98	0.27 | 0.02	936.23	1.27	890.07	669.70	1.34	1037.81	477.95	1.38	1140.93	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	3569.47	0.99	1.22 | 0.04	563.57	0.98	0.33 | 0.02	1008.88	1.37	669.13	734.83	1.47	801.14	547.48	1.58	885.06	1.25
p1	3563.94	0.99	1.41 | 0.07	557.75	0.97	0.30 | 0.00	1006.25	1.37	693.78	712.98	1.42	799.28	481.40	1.39	885.54	1.21
p2	3543.43	0.98	1.32 | 0.08	556.75	0.97	0.34 | 0.02	981.52	1.34	743.18	717.42	1.43	862.30	537.10	1.55	941.21	1.23

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	3576.98	0.99	2.05 | 0.20	572.11	1.00	0.46 | 0.01	929.60	1.27	907.24	662.60	1.32	1078.55	460.55	1.33	1227.28	1.17
p1	3560.88	0.99	2.78 | 0.52	564.97	0.99	0.39 | 0.07	953.30	1.30	808.15	660.50	1.32	991.51	465.62	1.34	1086.45	1.18
p2	3547.30	0.99	2.46 | 0.38	564.41	0.99	0.35 | 0.01	913.92	1.24	922.86	665.85	1.33	1066.10	483.77	1.39	1210.76	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	3574.70	0.99	1.85 | 0.13	569.01	0.99	0.37 | 0.00	945.40	1.29	859.60	672.17	1.34	1049.35	498.50	1.44	1161.91	1.20
p1	3557.14	0.99	1.54 | 0.05	563.07	0.98	0.33 | 0.02	954.95	1.30	817.21	638.02	1.27	996.10	435.38	1.26	1140.96	1.15
p2	3546.78	0.99	1.40 | 0.06	561.89	0.98	0.33 | 0.02	946.48	1.29	870.00	701.15	1.40	1030.56	496.05	1.43	1173.97	1.20

p0_score:	42.38
p1_score:	42.19
p2_score:	41.91

Infrastructure_Operations_Scores:	vMotion	SVMotion	XVMotion	Deploy
Completed_Ops_PerHour	56.00	52.00	42.00	16.00
Avg_Seconds_To_Complete	7.87	85.51	103.64	346.12
Failures	0.00	0.00	0.00	0.00
Ratio	2.15	2.89	2.33	2.00
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	42.19	
Unreviewed_VMmark3_Infrastructure_Score	2.32	
Unreviewed_VMmark3_Score	34.22	

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 GA Build 20519528 / 10-11-2022
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	HPE ProLiant DL385 Gen11
Processor Vendor and Model	AMD EPYC 9374F

Processor Speed (GHz) / Turbo Boost Speed (GHz)	3.5 / 4.1
Total Sockets/Total Cores/Total Threads	2 Sockets / 64 Cores / 128 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	256 MB I+D on chip per chip, 32 MB shared / 4 cores
BIOS Version	A55 v1.10 (10/14/2022)
Memory Size (in GB, Number of DIMMs)	1536 GB, 24
Memory Type and Speed	64 GB 2Rx4 PC5-4800 MHz RDIMM
Disk Subsystem Type	FC SAN
Number of Disk Controllers	1
Disk Controller Vendors and Models	HPE NS204i-u boot controller
Total Number of Physical Disks for Hypervisor	2
Disk Vendors, Models, Capacities, and Speeds	HPE 480 GB NVMe M.2 SSD
Number of Host Bus Adapters	1
Host Bus Adapter Vendors and Models	HPE SN1610Q 32 Gb 2p FC HBA
Number of Network Controllers	2
Network Controller Vendors and Models	Mellanox MCX623106AS 100GbE 2p QSFP56 Adptr
Other Hardware	None
Other Software	None
Hardware Availability Date (MM-DD-YYYY)	02-07-2023
BIOS Availability Date (MM-DD-YYYY)	02-07-2023
Software Availability Date (MM-DD-YYYY)	02-07-2023
Network	
Network Switch Vendors and Models	HPE SN2700M 100GbE 32QSFP28
Network Speed	VM network: 100 Gbps Management: 100 Gbps for SUT, 1 Gbps for Client vMotion: 100 Gbps for SUT, 1 Gbps for Client
Primary Storage	
Storage Category	SCSI Target
Storage Vendors, Models, and Firmware Versions	3 x HPE ProLiant DL385 Gen10 Plus V2

Storage Configuration Summary	FC SAN Switch:
	
	- 1 x HPE SN6600B 32 Gb 48 port FC Switch
	
	Storage Servers:
	
	- 3 x HPE DL385 Gen10 Plus V2
	  - OS storage
	    - HPE NS204i-p Gen10+ Boot Controller
	  - Workload Storage
	    - 12 x HPE 3.2 TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD

	2 x HPE 750GB NVMe Gen3 x4 High Performance Low Latency Write Intensive AIC HHHL P4800X SSD

Datacenter Management Server	
System Model	HPE ProLiant DL380 Gen10
Processor Vendor and Model	Intel Xeon Gold 6238
Processor Speed (GHz)	2.10
Total Sockets/Total Cores/Total Threads	2 Sockets / 44 Cores / 88 Threads
Memory Size (in GB, Number of DIMMs)	192, 12
Network Controller(s) Vendors and Models	HPE Ethernet 1Gb 4-port 331i Adapter
Operating System, Version, Bitness, and Service Pack	VMware ESXi 8.0 GA Build 20513097
Virtual Center VM Number of vCPUs	16
Virtual Center VM Virtual Memory (in GB)	39
Virtual Center VM Operating System, Version, Bitness, and Service Pack	VMware vCenter Server 8.0 GA Build 20519528
Other Hardware	None
Other Software	None

Clients	
Total Number of Virtual Clients / Virtual Client Hosts	37 / 4
System Model(s)	Hosts 1-2: HPE ProLiant DL385 Gen10 Plus v2 Hosts 3-4: HPE ProLiant DL385 Gen10
Processor Vendor(s) and Model(s)	Hosts 1-2: AMD EPYC 7763 Hosts 3-4: AMD EPYC 7702
Processor Speed(s) (GHz)	Hosts 1-2: 2.45 Hosts 3-4: 2.00
Total Sockets/Total Cores/Total Threads	8 Sockets / 512 Cores / 1024 Threads
Memory per Virtual Client Host	Hosts 1-2: 1 TB Hosts 3-4: 512 GB
Network Controller(s) Vendors and Models	Hosts 1-2: • 1 x Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE • 1 x Mellanox ConnectX-5 EN 100Gb/s 2-port Ethernet Adapter Hosts 3-4: • 1 x HPE 1Gb Ethernet 4-Port 331i Adapter • 1 x Mellanox ConnectX-5 EN 100Gb/s 2-port Ethernet Adapter
Virtual Client Networking Notes	Details in Networking Notes
Virtual Client Storage Notes	Details in Storage Notes
Other Hardware	1 x HPE SN1610Q 32 Gb 2p FC HBA
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 Eager Zeroed

Virtualization Software Notes

- Cluster DRS Automation Level set to Fully Automated
- vSphere DRS Migration Threshold level set to 2
- vSphere DRS Advanced Option AggressiveCPUActive set to 1
- Logical CPU layout changed for all multi-CPU VMs to 1 socket with multiple cores (default single core per socket)
- Logging was disabled for all VMs (default enabled)
- All DS3DB, ElasticDB, and ElasticLB VMs had CPU shares set to High (default Normal)
- All Standby VMs had CPU shares set to Low (default Normal)
- DS3DB0 was configured to not use the third virtual disk before building additional tiles.
- PrimeClient's second virtual disk configured to be 1 TB (default: 200 GB)

Advanced Settings:

- Cpu.CoschedCrossCall = 0 (default 1)
- 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.MaxPortRxQueueLen = 160 (default 80)
- Numa.LTermFairnessInterval = 0 (default 5)
- Numa.LargeInterleave = 0 (default 1)
- Numa.LocalityWeightActionAffinity = 0 (default 130)
- Numa.MigImbalanceThreshold = 57 (default 10)
- Numa.MigPreventLTermThresh = 20 (default 0)
- Numa.MigThreshold = 0 (default 2)
- Numa.MonMigEnable = 0 (default 1)
- Numa.PageMigEnable = 0 (default 1)
- Numa.PreferHT = 1 (default 0)
- Numa.RebalancePeriod = 60000 (default 2000)
- Numa.SwapLoadEnable = 0 (default 1)
- Numa.SwapLocalityEnable = 0 (default 1)
- Power.CpuPolicy = 'High Performance' (default Balanced)
- UserVars.HostClientCEIPOptIn = 2 (default 0) (only on SUT host 1)

Server Notes

Server BIOS settings

- Workload Profile set to "Virtualization - Max Performance" (default: General Power Efficient Compute)
  - After setting this to "Virtualization - Max Performance", this was changed to "Custom" which does not change any other settings but unlocks settings to allow user to modify them.
- Determinism Control set to Manual (default: Auto)
- Memory PStates set to Disabled (default: Auto)
- NUMA memory domains per socket set to "One memory domain per socket" (default: Auto)
- Memory Patrol Scrubbing set to Disabled (default: Enabled)
- Maximum Memory Bus Frequency set to "4800 MHz" (default: Auto)
- Data Fabric C-State Enable set to "Force Enabled" (default: Disabled)
- XGMI Force Link Width set to x16 (default: Auto)
- XGMI Max Link Width set to x16 (default: Auto)
- AMD xGMI Link Speed set to "32 Gbps" (default: Auto)
- L1 Stream HW Prefetcher set to Disabled (default: Enabled)
- L2 Stream HW Prefetcher set to Disabled (default: Enabled)
- Package Power Limit Control Mode set to Manual (default: Auto)
- Package Power Limit Value set to 400 (default: 0)
- Thermal Configuration set to "Maximum Cooling" (default: Optimal Cooling)

Networking Notes

Distributed vSwitch configuration:

- All SUT and client hosts were part of the same distributed vSwitch.
- The MTU of the distributed vSwitch was set to 9000 (default 1500).
- 'Management' port group
  - Uplinks:
    - vmnic0 on SUT hosts and client hosts 3-4
    - vmnic2 on client hosts 1-2
  - Usage:
    - vmk0 for all client and SUT hosts - used for management
    - One virtual NIC port of PrimeClient VM
- 'vMotion' port group
  - Uplinks:
    - vmnic1 on SUT hosts and client hosts 3-4
    - vmnic3 on client hosts 1-2
  - Usage:
    - vmk1 for all client and SUT hosts - used for vMotion
- 'VM-network' port group
  - Uplinks: 3-6
    - SUT hosts: vmnic2, vmic3
    - client hosts 1-2: vmnic0, vmnic1
      - vmnic2 and vmnic3 also assigned, but no cables were connected to the physical NIC ports
    - client hosts 3-4: vmnic4, vmnic5
      - vmnic4 and vmnic5 also assigned, but no cables were connected to the physical NIC ports
  - Usage:
    - All VMs - including one virtual NIC port of PrimeClient VM

HPE SN2700M switch was configured for RoCE lossless and LLDP.

Storage Notes

OS Storage

- Each SUT host had VMware ESXi 8.0 GA installed on the HPE NS204i-u boot controller, which provides a RAID1 volume on 2 x 480 GB NVMe M.2 SSDs.
- For each client host, VMware ESXi 8.0 GA was installed on a RAID1 volume on 2 x HPE 400GB 12G SAS MU SFF SC DS SSDs.
  - Client hosts 1-3: HPE Smart Array P408i-a SR Gen10
  - Client host 4: HPE Smart Array E208i-a SR Gen10

FC SAN Storage: FC Channel Target via SCSI Target Server (LIO)

- All SUT and client hosts were configured to use Round Robin path policy (default Most Recently Used) with iops = 1 (default 1000).
- Three servers with identical hardware and software configurations were used to provide FC SAN storage for SUT and client hosts.
  - Hardware Details
    - HPE ProLiant DL385 Gen10 Plus V2
      - 2 x AMD EPYC 7763 (2.45 GHz)
      - 2048 GB memory (32 x 64 GB 2Rx4 PC4-3200 MHz RDIMMs)
      - 2 x HPE SN1610Q 32 Gb 2p FC HBA
      - OS Storage:
        - HPE NS204i-p Gen10 Plus Boot Controller
      - FC Target Storage:
        - 12 x HPE 3.2 TB NVMe Gen4 High Performance Mixed Use SFF BC U.3 PM1735 SSD
        - 2 x HPE 750GB NVMe Gen3 x4 High Performance Low Latency Write Intensive AIC HHHL P4800X SSD
  - Software Details:
    - Operating System: SUSE Linux Enterprise Server 15 SP4 - 5.14.21-150400.22-default x86_64
    - Fibre Channel Target SW: LIO (part of SUSE Linux Enterprise Server 15 SP4)
    - Unless otherwise specified, an entire disk device was configured as a single LUN.
- LIO server #1 - LUN Details
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Auction* VMs for tiles 6, 17, 22, 27, 32
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Auction* VMs for tiles 3, 8, 13, 18, 29, 34
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Auction* VMs for tiles 5, 10, 15, 20, 25, 30
  - 1 x 3.2 TB NVMe
    - 1 LUN: All DS3* VMs for tiles 1, 8, 15, 22, 29, 35
  - 1 x 3.2 TB NVMe
    - 1 LUN: All DS3* VMs for tiles 3, 10, 17, 24, 31
  - 1 x 3.2 TB NVMe
    - 1 LUN: All DS3* VMs for tiles 5, 12, 19, 26, 33
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Elastic* VMs for tiles 1, 6, 11, 16, 21, 26, 31
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Elastic* VMs for tiles 3, 8, 13, 18, 23, 28, 33
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Elastic* VMs for tiles 4, 9, 14, 19, 24, 29, 34
  - 1 x 3.2 TB NVMe
    - 1 LUN: unused datastore
  - 1 x 750 GB NVMe
    - 1 LUN: unused datastore
  - 1 x 750 GB NVMe
    - 1 LUN: unused datastore
- LIO server #2 - LUN Details
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Auction* VMs for tiles 0, 11, 16, 21, 26, 31
  - 1 x 3.2 TB NVMe

- - - 1 LUN: All Auction* VMs for tiles 2, 7, 12, 23, 28, 33
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Auction* VMs for tiles 4, 9, 14, 19, 24, 35
  - 1 x 3.2 TB NVMe
    - 1 LUN: All DS3* VMs for tiles 0, 7, 14, 21, 28, 35
  - 1 x 3.2 TB NVMe
    - 1 LUN: All DS3* VMs for tiles 2, 9, 16, 23, 30
  - 1 x 3.2 TB NVMe
    - 1 LUN: All DS3* VMs for tiles 4, 11, 18, 25, 32
  - 1 x 3.2 TB NVMe
    - 1 LUN: All DS3* VMs for tiles 6, 13, 20, 27, 34
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Elastic* VMs for tiles 0, 5, 10, 15, 20, 25, 30, 35
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Elastic* VMs for tiles 2, 7, 12, 17, 22, 27, 32
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Standby VMs for all even tile numbers
  - 1 x 3.2 TB NVMe
    - 1 LUN: All Standby VMs for all odd tile numbers
  - 1 x 3.2 TB NVMe
    - 1 LUN (800 GB): SVMotion target
    - 1 LUN (800 GB): XVMotion target
    - 1 LUN (800 GB): deploy target
    - 1 LUN (400 GB): template VMs
  - 1 x 750 GB NVMe
    - 1 LUN: unused datastore
  - 1 x 750 GB NVMe
    - 1 LUN: unused datastore
- LIO server #3 - LUN Details
  - 1 x 3.2 TB NVMe
    - 1 LUN: PrimeClient VM
  - 1 x 3.2 TB NVMe
    - 1 LUN: All client VMs for tiles 0, 7, 10, 13, 16, 23, 26, 29, 32
  - 1 x 3.2 TB NVMe
    - 1 LUN: All client VMs for tiles 1, 4, 11, 14, 17, 20, 27, 30, 33
  - 1 x 3.2 TB NVMe
    - 1 LUN: All client VMs for tiles 2, 5, 8, 15, 18, 21, 24, 31, 34
  - 1 x 3.2 TB NVMe
    - 1 LUN: All client VMs for tiles 3, 6, 9, 12, 19, 22, 25, 28, 35
  - 6 x 3.2 TB NVMe
    - 1 LUN for each NVMe: unused datastores

Datacenter Management Server Notes

VMware vCenter Server Appliance 8.0 GA, Build 20519528 was hosted on a HPE ProLiant DL380 Gen10 system that was not part of the client or SUT clusters.

Operating System Notes

Client hosts used the HPE customized ISO (VMware-ESXi-8.0.0-20513097-HPE-800.0.0.10.10.0.41-Oct2022.iso) for VMware ESXi 8.0 GA installation. This customized ISO is not supported for use on HPE ProLiant Gen11 servers.

SUT hosts used the HPE customized ESXi 8.0 GA ISO for ProLiant Gen11 servers for OS installation. This is a pre-released version, which will be publicly released and available for customers to access by November 30, 2022.

Software Notes

None

Client Notes

Advanced ESXi settings:

- Power.CpuPolicy = High Performance (default Balanced)
- UserVars.HostClientCEIPOptIn = 2 (default 0) on client hosts 1-3.

Server BIOS settings:

- HPE Workload Profile set to "Virtualization - Max Performance" (default: General Power Efficient Compute)

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

- Client host 1: PrimeClient VM, Client VMs for tiles 4, 14, 15, 22, 23, 29, 32, 35
- Client host 2: Client VMs for tiles 0, 3, 5, 8, 11, 16, 19, 24, 25, 27, 31
- Client host 3: Client VMs for tiles 1, 6, 7, 9, 12, 17, 20, 28, 33
- Client host 4: Client VMs for tiles 2, 10, 13, 18, 21, 26, 30, 34

Client storage is described in the Storage Notes section.

Other Notes

VMmark3.properties file modifications:

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

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