

VMmark® 3.1.1 Results

Server Vendor & Model: Inspur InMerge1100 (Inspur NF5280M6)
Storage Vendor & Model: VMware vSAN 7.0 U3 - All Flash
Hypervisor: VMware ESXi 7.0 U3d, Build 19482537
Datacenter Management Software: VMware vCenter Server 7.0 U3d, Build 19480866

VMmark 3.1.1 Score =
25.74 @ 26 Tiles

| | | |
|--|--|---|
| Number of Hosts: 4 | Uniform Hosts [yes/no]: yes | Total sockets/cores/threads in test: 8/320/640 |
| Tested By: Inspur | | Test Date: 08-22-2022 |
| 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 | 3571.18 | 0.99 | 0.67 0.01 | 562.53 | 0.98 | 0.62 0.28 | 945.25 | 1.29 | 742.57 | 668.45 | 1.34 | 852.38 | 467.35 | 1.35 | 955.73 | 1.18 |
| p1 | 3571.18 | 0.99 | 0.63 0.00 | 559.70 | 0.98 | 0.55 0.27 | 950.10 | 1.29 | 734.46 | 693.70 | 1.39 | 845.68 | 514.95 | 1.48 | 928.81 | 1.21 |
| p2 | 3549.66 | 0.99 | 0.57 0.00 | 556.24 | 0.97 | 0.66 0.41 | 950.02 | 1.29 | 734.90 | 669.40 | 1.34 | 857.23 | 466.05 | 1.34 | 959.98 | 1.17 |
| 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 | 3583.29 | 1.00 | 0.53 0.00 | 569.90 | 1.00 | 0.79 0.49 | 973.73 | 1.33 | 679.39 | 716.02 | 1.43 | 784.50 | 506.77 | 1.46 | 867.61 | 1.22 |
| p1 | 3570.27 | 0.99 | 0.53 0.00 | 565.13 | 0.99 | 0.45 0.16 | 971.90 | 1.32 | 686.09 | 690.75 | 1.38 | 786.72 | 507.70 | 1.46 | 874.80 | 1.21 |
| p2 | 3555.46 | 0.99 | 0.54 0.00 | 560.91 | 0.98 | 0.59 0.34 | 976.58 | 1.33 | 668.57 | 695.55 | 1.39 | 775.60 | 487.25 | 1.40 | 862.05 | 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 | 3576.82 | 0.99 | 0.61 0.00 | 567.56 | 0.99 | 0.62 0.33 | 976.38 | 1.33 | 674.25 | 725.67 | 1.45 | 762.23 | 513.38 | 1.48 | 845.51 | 1.23 |
| p1 | 3569.24 | 0.99 | 0.62 0.00 | 567.84 | 0.99 | 0.58 0.31 | 974.55 | 1.33 | 673.02 | 693.67 | 1.39 | 774.94 | 508.40 | 1.47 | 853.86 | 1.22 |
| p2 | 3547.55 | 0.99 | 0.62 0.00 | 565.44 | 0.99 | 0.50 0.17 | 973.65 | 1.33 | 680.02 | 698.33 | 1.40 | 769.38 | 486.80 | 1.40 | 862.92 | 1.20 |
| 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 | 3571.59 | 0.99 | 0.47 0.00 | 568.05 | 0.99 | 0.50 0.25 | 982.15 | 1.34 | 662.35 | 750.20 | 1.50 | 750.48 | 538.08 | 1.55 | 833.62 | 1.25 |
| p1 | 3557.25 | 0.99 | 0.48 0.00 | 566.73 | 0.99 | 0.62 0.33 | 989.40 | 1.35 | 656.22 | 680.27 | 1.36 | 755.39 | 493.20 | 1.42 | 830.50 | 1.21 |
| p2 | 3549.88 | 0.99 | 0.61 0.01 | 564.02 | 0.99 | 0.47 0.24 | 973.60 | 1.33 | 679.02 | 716.05 | 1.43 | 773.90 | 511.18 | 1.47 | 850.85 | 1.22 |
| TILE_4 | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | GM |
| p0 | 3567.46 | 0.99 | 0.75 0.01 | 570.59 | 1.00 | 0.94 0.63 | 935.38 | 1.27 | 777.49 | 684.92 | 1.37 | 892.48 | 499.90 | 1.44 | 998.65 | 1.20 |
| p1 | 3549.16 | 0.99 | 0.58 0.00 | 567.59 | 0.99 | 0.95 0.69 | 950.85 | 1.29 | 731.15 | 671.95 | 1.34 | 851.39 | 465.90 | 1.34 | 969.48 | 1.18 |
| p2 | 3541.27 | 0.98 | 0.66 0.01 | 563.12 | 0.98 | 0.56 0.31 | 938.40 | 1.28 | 773.58 | 687.67 | 1.37 | 872.03 | 482.10 | 1.39 | 997.21 | 1.19 |
| 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 | 3578.18 | 0.99 | 0.58 0.00 | 561.82 | 0.98 | 0.60 0.35 | 983.25 | 1.34 | 663.58 | 724.17 | 1.45 | 756.38 | 518.00 | 1.49 | 835.62 | 1.23 |
| p1 | 3561.39 | 0.99 | 0.58 0.00 | 553.94 | 0.97 | 0.51 0.26 | 983.88 | 1.34 | 657.93 | 683.05 | 1.36 | 749.89 | 494.15 | 1.42 | 836.76 | 1.20 |

| | | | | | | | | | | | | | | | | |
|----------------|---------|-------|------------------|--------|-------|------------------|---------|-------|---------|--------|-------|---------|--------|-------|---------|------|
| p2 | 3547.83 | 0.99 | 0.54 0.00 | 554.49 | 0.97 | 0.61 0.32 | 988.35 | 1.35 | 652.48 | 734.50 | 1.47 | 747.82 | 541.33 | 1.56 | 826.03 | 1.24 |
| 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 | 3565.13 | 0.99 | 0.52 0.00 | 564.69 | 0.99 | 0.44 0.22 | 997.62 | 1.36 | 636.38 | 713.52 | 1.43 | 713.42 | 529.92 | 1.53 | 784.10 | 1.24 |
| p1 | 3553.54 | 0.99 | 0.55 0.00 | 566.93 | 0.99 | 0.55 0.25 | 1000.55 | 1.36 | 618.14 | 723.85 | 1.45 | 692.56 | 508.82 | 1.47 | 769.50 | 1.23 |
| p2 | 3527.96 | 0.98 | 0.57 0.00 | 565.37 | 0.99 | 0.61 0.34 | 982.80 | 1.34 | 657.67 | 733.65 | 1.47 | 738.67 | 546.52 | 1.58 | 808.41 | 1.25 |
| TILE_7 | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | GM |
| p0 | 3579.67 | 0.99 | 0.46 0.00 | 568.96 | 0.99 | 0.96 0.66 | 988.88 | 1.35 | 654.97 | 705.73 | 1.41 | 750.28 | 496.90 | 1.43 | 821.65 | 1.22 |
| p1 | 3560.48 | 0.99 | 0.48 0.00 | 567.15 | 0.99 | 1.06 0.67 | 970.48 | 1.32 | 690.71 | 690.58 | 1.38 | 790.25 | 509.52 | 1.47 | 865.49 | 1.21 |
| p2 | 3552.87 | 0.99 | 0.49 0.00 | 561.12 | 0.98 | 0.49 0.20 | 973.55 | 1.33 | 685.77 | 693.70 | 1.39 | 783.81 | 512.30 | 1.48 | 856.98 | 1.21 |
| 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 | 3575.18 | 0.99 | 0.70 0.01 | 569.35 | 1.00 | 1.02 0.74 | 946.90 | 1.29 | 741.61 | 666.40 | 1.33 | 868.71 | 465.25 | 1.34 | 963.28 | 1.18 |
| p1 | 3554.74 | 0.99 | 0.70 0.01 | 562.51 | 0.98 | 0.45 0.28 | 947.05 | 1.29 | 738.05 | 698.98 | 1.40 | 832.52 | 492.70 | 1.42 | 935.88 | 1.20 |
| p2 | 3547.93 | 0.99 | 0.70 0.01 | 561.87 | 0.98 | 0.63 0.28 | 948.20 | 1.29 | 746.52 | 669.52 | 1.34 | 863.21 | 486.38 | 1.40 | 960.62 | 1.19 |
| 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 | 3584.09 | 1.00 | 0.41 0.00 | 572.59 | 1.00 | 1.04 0.65 | 991.42 | 1.35 | 651.88 | 709.75 | 1.42 | 755.51 | 470.60 | 1.36 | 852.79 | 1.21 |
| p1 | 3568.13 | 0.99 | 0.41 0.00 | 568.87 | 0.99 | 0.68 0.43 | 976.27 | 1.33 | 688.60 | 724.73 | 1.45 | 774.68 | 532.62 | 1.54 | 875.36 | 1.24 |
| p2 | 3552.93 | 0.99 | 0.42 0.00 | 562.38 | 0.98 | 0.46 0.29 | 990.50 | 1.35 | 660.98 | 679.17 | 1.36 | 760.13 | 495.65 | 1.43 | 847.60 | 1.20 |
| 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 | 3582.86 | 1.00 | 0.35 0.00 | 562.09 | 0.98 | 0.47 0.21 | 1006.70 | 1.37 | 615.64 | 719.92 | 1.44 | 696.68 | 509.73 | 1.47 | 768.73 | 1.23 |
| p1 | 3564.82 | 0.99 | 0.37 0.00 | 560.94 | 0.98 | 0.52 0.23 | 999.33 | 1.36 | 621.98 | 742.00 | 1.48 | 695.17 | 557.30 | 1.61 | 760.75 | 1.26 |
| p2 | 3555.42 | 0.99 | 0.38 0.00 | 555.70 | 0.97 | 0.57 0.26 | 1000.40 | 1.36 | 630.15 | 712.27 | 1.42 | 721.26 | 502.25 | 1.45 | 800.97 | 1.22 |
| 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 | 3584.30 | 1.00 | 0.37 0.01 | 564.86 | 0.99 | 0.61 0.38 | 997.33 | 1.36 | 627.25 | 713.40 | 1.43 | 717.57 | 502.95 | 1.45 | 796.70 | 1.23 |
| p1 | 3571.44 | 0.99 | 0.38 0.00 | 560.54 | 0.98 | 0.57 0.36 | 993.02 | 1.35 | 648.10 | 733.90 | 1.47 | 730.85 | 547.12 | 1.58 | 799.98 | 1.25 |
| p2 | 3561.77 | 0.99 | 0.37 0.00 | 558.21 | 0.98 | 0.40 0.20 | 1005.83 | 1.37 | 625.99 | 712.05 | 1.42 | 721.92 | 479.30 | 1.38 | 800.30 | 1.21 |
| TILE_12 | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | GM |
| p0 | 3577.47 | 0.99 | 0.47 0.00 | 570.72 | 1.00 | 0.87 0.78 | 964.98 | 1.31 | 719.68 | 706.48 | 1.41 | 820.33 | 499.52 | 1.44 | 921.83 | 1.22 |
| p1 | 3563.77 | 0.99 | 0.46 0.00 | 567.39 | 0.99 | 0.87 0.68 | 973.12 | 1.33 | 687.05 | 688.08 | 1.37 | 806.06 | 506.90 | 1.46 | 886.76 | 1.21 |
| p2 | 3540.27 | 0.98 | 0.48 0.00 | 567.20 | 0.99 | 0.94 0.70 | 967.50 | 1.32 | 706.30 | 683.98 | 1.37 | 817.43 | 475.07 | 1.37 | 930.41 | 1.19 |
| 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 | 3566.16 | 0.99 | 0.41 0.00 | 565.72 | 0.99 | 0.58 0.44 | 986.10 | 1.34 | 661.79 | 726.42 | 1.45 | 753.85 | 513.35 | 1.48 | 844.92 | 1.23 |
| p1 | 3540.44 | 0.98 | 0.41 0.00 | 558.94 | 0.98 | 0.54 0.27 | 986.25 | 1.34 | 659.71 | 702.60 | 1.40 | 761.48 | 488.98 | 1.41 | 855.37 | 1.21 |
| p2 | 3525.91 | 0.98 | 0.41 0.00 | 557.17 | 0.97 | 0.52 0.30 | 988.30 | 1.35 | 654.60 | 703.23 | 1.41 | 749.45 | 515.35 | 1.49 | 839.51 | 1.22 |
| TILE_14 | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(nRT MaxPctF) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | Actual | Ratio | QoS(ms) | GM |
| p0 | 3580.88 | 1.00 | 0.35 0.00 | 568.47 | 0.99 | 0.79 0.52 | 1013.35 | 1.38 | 607.52 | 752.58 | 1.50 | 684.84 | 560.50 | 1.62 | 761.99 | 1.27 |
| p1 | 3565.58 | 0.99 | 0.35 0.00 | 561.97 | 0.98 | 0.61 0.32 | 1023.25 | 1.39 | 585.37 | 733.88 | 1.47 | 676.93 | 515.27 | 1.49 | 756.72 | 1.24 |
| p2 | 3556.53 | 0.99 | 0.36 0.00 | 560.97 | 0.98 | 0.47 0.18 | 1005.85 | 1.37 | 624.37 | 746.20 | 1.49 | 703.65 | 530.85 | 1.53 | 782.51 | 1.25 |
| 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 | 3582.06 | 1.00 | 0.41 0.00 | 566.49 | 0.99 | 0.62 0.31 | 988.85 | 1.35 | 645.74 | 730.48 | 1.46 | 721.62 | 548.10 | 1.58 | 797.92 | 1.25 |
| p1 | 3564.82 | 0.99 | 0.44 0.00 | 558.54 | 0.98 | 0.44 0.25 | 993.98 | 1.35 | 630.56 | 717.30 | 1.43 | 716.69 | 501.05 | 1.44 | 801.73 | 1.22 |
| p2 | 3550.13 | 0.99 | 0.44 0.00 | 557.64 | 0.97 | 0.53 0.23 | 988.35 | 1.35 | 652.44 | 733.50 | 1.47 | 728.27 | 522.75 | 1.51 | 808.91 | 1.23 |
| 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 | 3573.32 | 0.99 | 0.52 0.00 | 567.48 | 0.99 | 0.57 0.37 | 943.65 | 1.29 | 748.51 | 671.20 | 1.34 | 863.98 | 491.40 | 1.42 | 959.86 | 1.19 |
| p1 | 3555.94 | 0.99 | 0.54 0.00 | 562.97 | 0.98 | 0.50 0.25 | 959.98 | 1.31 | 718.10 | 679.17 | 1.36 | 828.18 | 470.20 | 1.36 | 934.56 | 1.19 |
| p2 | 3536.85 | 0.98 | 0.53 0.00 | 564.36 | 0.99 | 0.59 0.28 | 947.17 | 1.29 | 744.14 | 698.77 | 1.40 | 839.00 | 515.67 | 1.49 | 935.49 | 1.21 |
| 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 | 3576.99 | 0.99 | 0.44 0.00 | 570.24 | 1.00 | 0.70 0.62 | 994.88 | 1.35 | 636.69 | 714.00 | 1.43 | 726.19 | 524.83 | 1.51 | 811.12 | 1.24 |
| p1 | 3572.02 | 0.99 | 0.44 0.00 | 560.53 | 0.98 | 0.57 0.33 | 998.42 | 1.36 | 631.25 | 715.95 | 1.43 | 717.69 | 501.55 | 1.45 | 798.52 | 1.22 |
| p2 | 3553.53 | 0.99 | 0.46 0.00 | 558.99 | 0.98 | 0.47 0.23 | 994.67 | 1.35 | 641.21 | 739.70 | 1.48 | 713.95 | 552.08 | 1.59 | 790.40 | 1.25 |
| 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 | 3576.74 | 0.99 | 0.44 0.00 | 561.85 | 0.98 | 0.64 0.38 | 999.48 | 1.36 | 628.07 | 692.88 | 1.38 | 714.28 | 504.57 | 1.45 | 792.95 | 1.22 |
| p1 | 3559.10 | 0.99 | 0.45 0.00 | 558.67 | 0.98 | 0.46 0.21 | 993.38 | 1.35 | 640.03 | 738.05 | 1.47 | 719.20 | 527.30 | 1.52 | 792.46 | 1.24 |
| p2 | 3543.28 | 0.98 | 0.48 0.00 | 556.33 | 0.97 | 0.53 0.24 | 985.25 | 1.34 | 654.22 | 704.60 | 1.41 | 746.07 | 521.30 | 1.50 | 822.09 | 1.22 |
| 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 | 3581.52 | 1.00 | 0.45 0.00 | 564.15 | 0.99 | 0.76 0.52 | 988.02 | 1.35 | 640.52 | 709.27 | 1.42 | 736.03 | 499.48 | 1.44 | 807.54 | 1.22 |
| p1 | 3567.74 | 0.99 | 0.47 0.00 | 561.10 | 0.98 | 0.50 0.17 | 982.15 | 1.34 | 659.18 | 727.17 | 1.45 | 736.12 | 525.00 | 1.51 | 800.88 | 1.23 |
| p2 | 3550.62 | 0.99 | 0.46 0.00 | 554.94 | 0.97 | 0.60 0.30 | 979.65 | 1.33 | 663.20 | 697.95 | 1.39 | 761.70 | 520.77 | 1.50 | 817.43 | 1.22 |
| 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 | 3580.60 | 1.00 | 0.55 0.00 | 571.35 | 1.00 | 0.90 0.63 | 954.85 | 1.30 | 729.76 | 672.95 | 1.34 | 848.98 | 467.77 | 1.35 | 954.22 | 1.19 |
| p1 | 3570.63 | 0.99 | 0.53 0.00 | 566.23 | 0.99 | 0.68 0.47 | 949.15 | 1.29 | 741.22 | 697.33 | 1.39 | 840.92 | 514.62 | 1.48 | 934.92 | 1.21 |
| p2 | 3556.60 | 0.99 | 0.54 0.00 | 564.80 | 0.99 | 0.45 0.29 | 952.85 | 1.30 | 731.38 | 670.62 | 1.34 | 849.29 | 468.80 | 1.35 | 959.07 | 1.18 |
| 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 | 3576.92 | 0.99 | 0.50 0.00 | 563.59 | 0.98 | 0.57 0.22 | 975.08 | 1.33 | 667.73 | 693.90 | 1.39 | 772.27 | 488.93 | 1.41 | 851.48 | 1.21 |
| p1 | 3565.33 | 0.99 | 0.53 0.00 | 563.18 | 0.98 | 0.49 0.25 | 966.98 | 1.32 | 682.54 | 719.25 | 1.44 | 770.92 | 536.55 | 1.55 | 842.70 | 1.23 |
| p2 | 3547.71 | 0.99 | 0.52 0.00 | 558.99 | 0.98 | 0.51 0.30 | 975.58 | 1.33 | 666.34 | 697.67 | 1.39 | 762.37 | 490.00 | 1.41 | 852.52 | 1.20 |
| 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 | 3583.79 | 1.00 | 0.45 0.00 | 569.75 | 1.00 | 0.96 0.68 | 1000.62 | 1.36 | 633.97 | 739.48 | 1.48 | 727.81 | 522.30 | 1.51 | 812.28 | 1.25 |
| p1 | 3559.45 | 0.99 | 0.45 0.00 | 567.31 | 0.99 | 0.99 0.64 | 998.30 | 1.36 | 643.85 | 709.52 | 1.42 | 736.28 | 522.35 | 1.51 | 821.41 | 1.23 |
| p2 | 3540.68 | 0.98 | 0.49 0.00 | 561.94 | 0.98 | 0.57 0.27 | 1001.98 | 1.36 | 632.76 | 713.52 | 1.43 | 725.08 | 499.02 | 1.44 | 818.20 | 1.22 |
| 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 | 3579.49 | 0.99 | 0.40 0.00 | 572.33 | 1.00 | 0.98 0.64 | 991.58 | 1.35 | 643.16 | 731.42 | 1.46 | 737.38 | 519.65 | 1.50 | 830.27 | 1.24 |
| p1 | 3560.94 | 0.99 | 0.41 0.00 | 567.47 | 0.99 | 0.50 0.29 | 981.23 | 1.34 | 680.12 | 694.95 | 1.39 | 776.61 | 510.48 | 1.47 | 865.76 | 1.22 |
| p2 | 3551.85 | 0.99 | 0.42 0.00 | 561.39 | 0.98 | 0.64 0.36 | 992.38 | 1.35 | 656.97 | 707.25 | 1.41 | 755.02 | 491.73 | 1.42 | 843.25 | 1.21 |
| 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 | 3571.56 | 0.99 | 0.71 0.00 | 566.26 | 0.99 | 0.85 0.52 | 936.23 | 1.27 | 781.97 | 707.50 | 1.41 | 886.83 | 500.27 | 1.44 | 1010.15 | 1.21 |

| | | | | | | | | | | | | | | | | |
|--|---------|-------|------------------|--------|-------|------------------|---------------------------------|----------|----------|--------|-------|---------|------------------|-------|---------|------|
| p1 | 3573.37 | 0.99 | 0.70 0.00 | 559.65 | 0.98 | 0.47 0.19 | 955.88 | 1.30 | 735.72 | 649.20 | 1.30 | 864.59 | 464.27 | 1.34 | 975.76 | 1.17 |
| p2 | 3557.41 | 0.99 | 0.71 0.00 | 561.81 | 0.98 | 0.67 0.31 | 939.77 | 1.28 | 765.56 | 692.02 | 1.38 | 878.02 | 481.15 | 1.39 | 999.08 | 1.19 |
| 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 | 3573.44 | 0.99 | 0.41 0.00 | 566.47 | 0.99 | 0.62 0.40 | 974.05 | 1.33 | 676.35 | 720.15 | 1.44 | 768.90 | 531.10 | 1.53 | 852.17 | 1.24 |
| p1 | 3559.61 | 0.99 | 0.41 0.00 | 565.22 | 0.99 | 0.47 0.28 | 986.67 | 1.34 | 658.17 | 699.08 | 1.40 | 758.34 | 487.40 | 1.41 | 855.32 | 1.21 |
| p2 | 3543.65 | 0.98 | 0.40 0.00 | 563.46 | 0.98 | 0.49 0.20 | 979.62 | 1.33 | 669.67 | 725.48 | 1.45 | 758.80 | 510.68 | 1.47 | 852.31 | 1.23 |
| p0_score: | 31.77 | | | | | | | | | | | | | | | |
| p1_score: | 31.65 | | | | | | | | | | | | | | | |
| p2_score: | 31.53 | | | | | | | | | | | | | | | |
| Infrastructure_Operations_Scores: | | | | | | | vMotion | SVMotion | XVMotion | Deploy | | | | | | |
| Completed_Ops_PerHour | | | | | | | 54.00 | 38.00 | 34.00 | 19.00 | | | | | | |
| Avg_Seconds_To_Complete | | | | | | | 10.60 | 150.18 | 167.01 | 341.24 | | | | | | |
| Failures | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| Ratio | | | | | | | 2.08 | 2.11 | 1.89 | 2.38 | | | | | | |
| 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 | | | | | | | 31.65 | | | | | | | | | |
| Unreviewed_VMmark3_Infrastructure_Score | | | | | | | 2.11 | | | | | | | | | |
| Unreviewed_VMmark3_Score | | | | | | | 25.74 | | | | | | | | | |

Configuration

| Virtualization Software | |
|---|--|
| Hypervisor Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY) | VMware ESXi 7.0 U3d, Build 19482537 / 03-29-2022 |
| Datacenter Management Software Vendor, Product, Version, and Build / Availability Date (MM-DD-YYYY) | VMware vCenter Server 7.0 U3d, Build 19480866 / 03-29-2022 |
| 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 | Inspur NF5280M6 |
| Processor Vendor and Model | Intel Xeon Platinum 8380 |
| Processor Speed (GHz) / Turbo Boost Speed (GHz) | 2.3 / 3.4 |
| Total Sockets/Total Cores/Total Threads | 2 Sockets / 80 Cores / 160 Threads |

| | |
|--|---|
| Primary CPU Cache | 32KB I + 48 KB D on chip per core |
| Secondary CPU Cache | 1280 KB I + D on chip per chip |
| Other CPU Cache | 60 MB I + D on chip per chip |
| BIOS Version | 06.00.03(01/28/2022) |
| Memory Size (in GB, Number of DIMMs) | 1024,32 |
| Memory Type and Speed | 32GB 2Rx4 PC4-3200 MHz RDIMM |
| Disk Subsystem Type | vSAN,iSCSI |
| Number of Disk Controllers | 1 |
| Disk Controller Vendors and Models | Intel Corporation Lewisburg SATA AHCI Controller |
| Total Number of Physical Disks for Hypervisor | 1 |
| Disk Vendors, Models, Capacities, and Speeds | Intel,M.2 SATA SSD,480G,6Gbps |
| Number of Host Bus Adapters | none |
| Host Bus Adapter Vendors and Models | none |
| Number of Network Controllers | 4 |
| Network Controller Vendors and Models | 1x I350 Gigabit Network Connection 1G 2-port 2x E810-XXVAM2 25G 2-port for SFP 1x E810-XXV 25G 2-port for SFP |
| Other Hardware | none |
| Other Software | none |
| Hardware Availability Date (MM-DD-YYYY) | 04-01-2022 |
| BIOS Availability Date (MM-DD-YYYY) | 01-28-2022 |
| Software Availability Date (MM-DD-YYYY) | 03-29-2022 |
| Network | |
| Network Switch Vendors and Models | ruijie RG-S5510-24GT/8SFP-E Mellanox Switch-Eth SN2410 48P 25GbE & 8P 100GbE |
| Network Speed | 1 Gb/s for management SUT host: 1x 25Gb/s for vMotion 1x 25Gb/s for vSAN 2x 25Gb/s for VMs 1x 25Gb/s for iSCSI Client host: 1x 25Gb/s for VMs |
| Primary Storage | |
| Storage Category | VMware vSAN |
| Storage Vendors, Models, and Firmware Versions | 4 x Inspur NF5280M6 servers in a VMware vSAN 7.0 U3 cluster |
| Storage Configuration Summary | VMware vSAN 2 x Disk Groups per host 1 x Intel P4510 4T U.2 SSD for vSAN cache per Disk Group 2 x Intel P4510 4T U.2 SSD for vSAN storage per Disk Group |
| Datacenter Management Server | |
| System Model | Inspur NF5280M6 |

| | |
|--|--|
| Processor Vendor and Model | Intel Xeon Platinum 8380 |
| Processor Speed (GHz) | 2.3 |
| Total Sockets/Total Cores/Total Threads | 2 Sockets / 80 Cores / 160 Threads |
| Memory Size (in GB, Number of DIMMs) | 1024,32 |
| Network Controller(s) Vendors and Models | 1x I350 Gigabit Network Connection 1G 2-port 1x E810-XXV 25G 2-port for SFP |
| Operating System, Version, Bitness, and Service Pack | VMware ESXi 7.0 U3c, Build 19193900 |
| Virtual Center VM Number of vCPUs | 4 |
| Virtual Center VM Virtual Memory (in GB) | 19 |
| Virtual Center VM Operating System, Version, Bitness, and Service Pack | VMware vCenter Server 7.0 U3d, Build 19480866 |
| Other Hardware | none |
| Other Software | none |

Clients

| | |
|--|--|
| Total Number of Virtual Clients / Virtual Client Hosts | 27 / 3 |
| System Model(s) | host1:Inspur NF5280M6 host2:Inspur NF5280M6 host3:Inspur NF8480M6 |
| Processor Vendor(s) and Model(s) | host1:Intel Xeon Platinum 8380 host2:Intel Xeon Platinum 8358 host3:Intel Xeon Gold 6348H |
| Processor Speed(s) (GHz) | host1: 2.3 GHz host2: 2.6 GHz host3: 2.3 GHz |
| Total Sockets/Total Cores/Total Threads | host1: 2 Sockets / 80 Cores / 160 Threads host2: 2 Sockets / 64 Cores / 128 Threads host3: 4 Sockets / 96 Cores / 192 Threads |
| Memory per Virtual Client Host | host1: 1TB host2: 896GB host3: 3TB |
| Network Controller(s) Vendors and Models | host1: 1x I350 1G for management 1x E810-XXV 25G for Client host2: 1x Intel 82599 run at 1G for management 1x E810-XXV 25G for Client host3: 1x I350 1G for management 1x E810-XXV 25G for Client |
| Virtual Client Networking Notes | host1:vSwitch0 on vmnic0 for management (1G),vSwitch1 on vmnic2 for VMs (25G) host2:vSwitch0 on vmnic0 for management (1G),vSwitch1 on vmnic3 for VMs (25G) host3:vSwitch0 on vmnic0 for management (1G),vSwitch1 on vmnic14 for VMs (25G) |
| Virtual Client Storage Notes | host1:1 x P4510 4T for Client,1 x Intel M.2 SATA SSD 480G for OS host2:1 x P4510 1.6T for Client,1x P4510 1.6T for OS host3:1 x P4510 4T for Client,1 x P4510 4T for OS |
| Other Hardware | none |
| Other Software | host1&host2:VMware ESXi 7.0 U3d, Build 19482537 host3:VMware ESXi 7.0 U3c, Build 19193900 |

Security Mitigations

| Vulnerability | CVE | Exploit Name | Public Vulnerability Name | Mitigated | | |
|---------------|-----------|--------------|---------------------------|-----------------|------|----------|
| | | | | Server Firmware | ESXi | Guest OS |
| Spectre | 2017-5753 | Variant 1 | Bounds Check Bypass | N/A | Yes | Yes |

| | | | | | | |
|---------------|-----------|------------|----------------------------|-----|-----|-----|
| Spectre | 2017-5715 | Variant 2 | Branch Target Injection | Yes | Yes | Yes |
| Meltdown | 2017-5754 | Variant 3 | Rogue Data Cache Load | N/A | Yes | Yes |
| Spectre-NG | 2018-3640 | Variant 3a | Rogue System Register Read | Yes | N/A | N/A |
| Spectre-NG | 2018-3639 | Variant 4 | Speculative Store Bypass | N/A | Yes | Yes |
| Foreshadow | 2018-3615 | Variant 5 | L1 Terminal Fault - SGX | N/A | N/A | N/A |
| Foreshadow-NG | 2018-3620 | Variant 5 | L1 Terminal Fault - OS | N/A | N/A | Yes |
| Foreshadow-NG | 2018-3646 | Variant 5 | L1 Terminal Fault - VMM | N/A | Yes | N/A |

Notes for Workload

Template deployed with disk type: Thin

Virtualization Software Notes

-Logical CPU configuration changed for all multi-CPU VMs to 1 socket with multiple cores (default single core per socket)

-Memory shares set to high for all DS3DB,ElasticDB,Client (default normal)

-CPU shares set to high for all DS3DB,Client and all Elastic VMs (default normal)

-CDROM removed from all VMs except for Elastic, PrimeClient, and template VMs.

-All memory reserved for DS3DB,ElasticDB (default non-reserved)

-sched.mem.pin was set to "TRUE" for DS3DB,ElasticDB VMs

-CPU shares set to low for all Standby VMs (default normal)

-vSphere DRS Migration Threshold set to Fully Automated level 1

Advanced settings:

-Cpu.CreditAgePeriod = 1000 (default 3000)

-Cpu.HTWholeCoreThreshold = 0 (default 800)

-DataMover.HardwareAcceleratedInit = 0 (default 1)

-DataMover.HardwareAcceleratedMove = 0 (default 1)

-Disk.IdleCredit = 64 (default 32)

-Disk.ReqCallThreshold = 1 (default 8)

-Mem.CtlMaxPercent = 0 (default 65)

-Mem.ShareScanGHz = 0 (default 4)

-Net.MaxNetifTxQueueLen = 1000 (default 2000)

-Net.MaxPortRxQueueLen = 160 (default 80)

-Numa.LTermFairnessInterval = 0 (default 5)

-Numa.MigImbalanceThreshold = 57 (default 10)

-Numa.PageMigEnable = 0 (default 1)

-Numa.RebalancePeriod = 6000 (default 2000)

-Numa.SwapLoadEnable = 0 (default 1)

-Numa.SwapLocalityEnable = 0 (default 1)

-Power.CpuPolicy = High Performance (default Balanced)

-VMFS3.HardwareAcceleratedLocking = 0 (default 1)

-VMkernel.Boot.hyperthreadingMitigation = true (default false)

-UserVars.HostClientCEIPOptIn= 2(default 0)

-UserVars.SuppressShellWarning = 1 (default 0)

Server Notes

-Sub Numa Clustering set to Disabled (default : Enabled)

-DCU Stream Prefetcher set to Disabled (default : Enabled)

-DCU IP Prefetcher set to Disabled (default : Enabled)

-LLC Prefetch set to Enabled (default : Disabled)

-LLC Dead Line Allocation set to Disabled (default : Enabled)

-Stale A to S set to Enabled (default : Disabled)

Networking Notes

-vSwitch0 for Service Console on vmnic0 at 1Gbps

vmk0 connected with vSwitch0 for management

-vSwitch1 for Auction, DS3, Standby, DeployVM,ElasticLB, VMs on vmnic2 at 25Gbps

MTU 9000 (default 1500)

-vSwitch2 for all Elastic except ElasticLB VMs on vmnic6 at 25Gbps

MTU 9000 (default 1500)

-Distributed Virtual Switch DSwitch1 for vMotion on vmnic5 at 25Gbps

vmk1 connected with DSwitch1 for vMotion

MTU 9000 (default 1500)

-Distributed Virtual Switch DSwitch for vSAN on vmnic4 at 25Gbps

vmk2 connected with DSwitch

MTU 9000 (default 1500)

-iscsi Virtual Switch for iSCSI on vmnic3 at 25Gbps

vmk3 connected with iscsi

Storage Notes

VMware vSAN 7.0 U3

-Capacity: 58.22TB

-Cache: 11.64TB

-Hardware Configuration:

Each host had 2 disk group

each group has 1 x P4510 4TB for cache and 2 x P4510 4TB for storage

iSCSI

-hardware:Inspur NF5280M6

-OS:Windows Server Datacenter 2019

-Network: 1 x E810-XXV 25G

LUN1: 4 x P4510 4T RAID 5

LUN2: 4 x P4510 4T RAID 5

Datacenter Management Server Notes

none

Operating System Notes

none

Software Notes

none

Client Notes

-Client-host1: Client15,Client16,Client17,Client18,Client19,Client20,Client21,Client22,Client23,Client25,PrimeClient,VMware vCenter Server

-Client-host2: Client9,Client10,Client11,Client12,Client13,Client14

-Client-host3: Client0,Client1,Client2,Client3,Client4,Client5,Client6,Client7,Client8,Client24,ntp

Advanced Settings:

-Power.CpuPolicy = High Performance (default Balanced)

-UserVars.HostClientCEIPOptIn = 2 (default 0)

-UserVars.SuppressShellWarning = 1 (default 0)

Server notes:

- Sub Numa Clustering set to Disabled (default : Enabled)
- DCU Stream Prefetcher set to Disabled (default : Enabled)
- DCU IP Prefetcher set to Disabled (default : Enabled)
- LLC Prefetch set to Enabled (default : Disabled)
- LLC Dead Line Allocation set to Disabled (default : Enabled)
- Stale A to S set to Enabled (default : Disabled)

Networking notes:

- Client-host1:vSwitch0 on vmnic0 connected with vmk0 for management at 1Gbps
vSwitch1 on vmnic2 for VMs at 25Gbps MTU 9000 (default 1500)
- Client-host2: vSwitch0 on vmnic0 connected with vmk0 for management at 1Gbps
vSwitch1 on vmnic3 for VMs at 25Gbps MTU 9000 (default 1500)
- Client-host3: vSwitch0 on vmnic0 connected with vmk0 for management at 1Gbps
vSwitch1 on vmnic14 for VMs at 25Gbps MTU 9000 (default 1500)

Storage notes:

- Client-host1: 1 x P4510 4T for Client , 1 x Intel M.2 SATA SSD 480G for OS
- Client-host2: 1 x P4510 1.6T for Client, 1 x P4510 1.6T for OS
- Client-host3: 1 x P4510 4T for Client, 1 x P4510 4T for OS

Other Notes

Changes to VMmark3.properties file:

- TileDelay = 30 (default 60)

This is a full disclosure report for a VMmark benchmark result. All published VMmark results must be from fully-compliant tests for which a full disclosure report is publicly available.

For information about VMmark and the rules regarding its usage visit www.vmware.com/products/vmmark.

VMware and VMmark are trademarks or registered trademarks of VMware, Inc. VMmark is a product of [VMware, Inc.](http://www.vmware.com) VMmark utilizes the SPEC Power and Temperature Daemon (SPEC PTDaemon), which is available from the Standard Performance Evaluation Corporation (SPEC). VMmark results are not SPEC metrics and cannot be compared to SPEC metrics in any way.