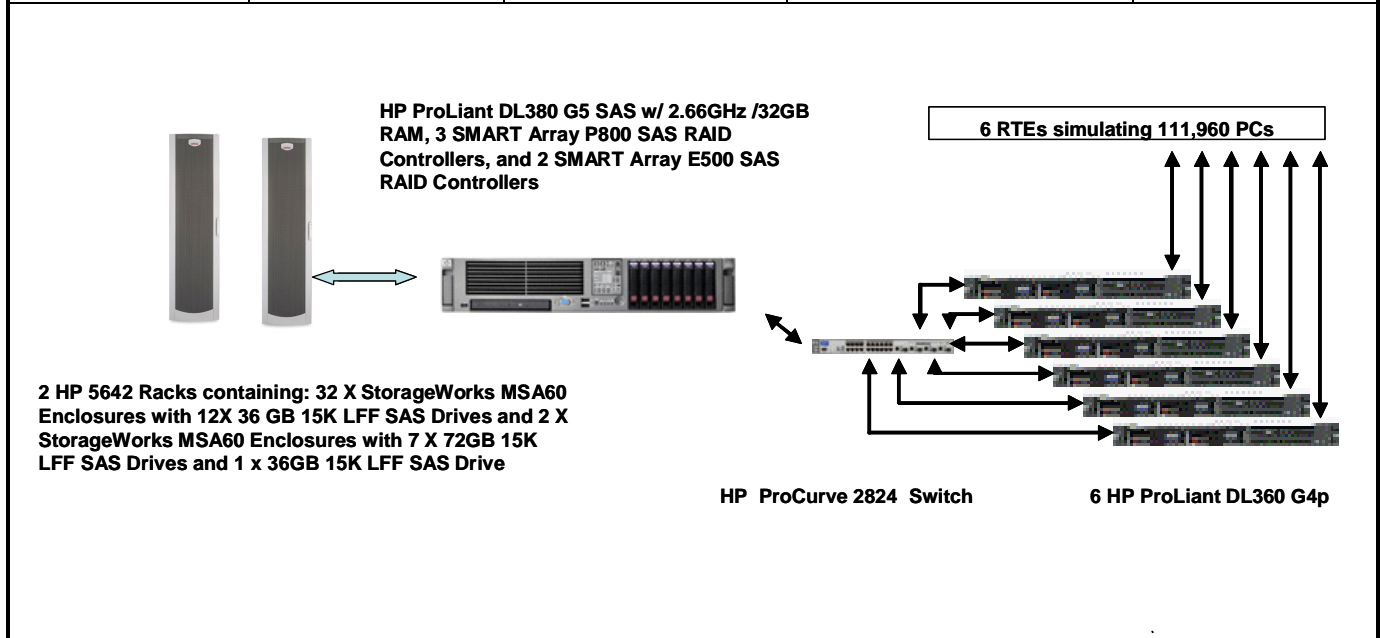


| | | |
|--|--|----------------------------|
| Hewlett-Packard Company | HP ProLiant DL380 G5 SAS Intel X5355 QC | TPC-C Rev. 5.8 |
| | C/S with 6 HP ProLiant DL360 G4p | Report Date: Feb. 13, 2007 |

| | | | |
|----------------------|------------------|-------------------|-----------------------|
| Total System Cost | TPC-C Throughput | Price/Performance | Availability Date |
| USD \$292,542 | 138,979 | USD \$2.12 | March 26, 2007 |

| | | | | |
|---|--|--|--|-----------------|
| Database Server Processors /Cores/Threads | Database Manager | Operating System | Other Software | Number of Users |
| 1/4/4 Intel X5355 2.66GHz QC | Microsoft SQL Server 2005 Enterprise x64 Edition SP1 | Windows Server 2003 Enterprise x64 Edition SP1 | Microsoft Visual C++ Microsoft COM+ | 111,960 |



| | Server | | Each Client | |
|--------------------------|-----------|--|-------------|--------------------------------------|
| System Components | Quantity | Description | Quantity | Description |
| Processors/Cores/Threads | 1/4/4 | 2.66GHz Intel X5355 QC w/ 8M Cache | 2/2/4 | 3.6 GHz Intel Xeon w/ 2MB cache |
| Memory | 4 | 8 GB DDR (2 X 4 GB) | 1 | 1024 MB |
| Disk Controllers | 3 2 | Smart P800 Controller Smart E500 Controller | 1 | Integrated Smart Array 6i Controller |
| Disk Drives | 14 386 | 72GB 15K LFF SAS Drives (log) 36 GB 15K LFF SAS Drives (data) | 2 | 36 GB SCSI Drive |
| Total Storage | | 13,981 GB | | 72 GB |

| Hewlett-Packard Company | HP ProLiant DL380 G5 | | | TPC-C Rev. 5.8 | | | |
|--|---------------------------|-------------|------------|----------------|--|--------------------|------------------|
| | Intel X5355 Client/Server | | | Report Date | 13-Feb-07 | | |
| Description | Part Number | Third Party | Unit Price | Qty | Extended Price | 3 yr. Maint. Price | |
| Server Hardware | | | | | | | |
| Brand Pricing | | | | | | | |
| HP DL380R05 ModX CTO Svr | 391835-B21 | 1 | 1,412 | 1 | 1,412 | | |
| HP X5355 Quad-Core DL380G5 Processor Kit | 437939-B21 | 1 | 1,849 | 1 | 1,849 | | |
| HP 8GB FBD PC2-5300 2x4GB Kit | 397415-B21 | 1 | 7,999 | 4 | 31,996 | | |
| HP s7540 17in. CRT Monitor | PF997AA#ABA | 1 | 139 | 1 | 139 | | |
| HP PS/2 2-Button Scroll Mouse | DD440B | 1 | 16 | 1 | 16 | | |
| HP PS/2 Standard Keyboard | DT527A#ABM | 1 | 30 | 1 | 30 | | |
| HP 5642 Pallet Unassembled Rack | 358254-B21 | 1 | 865 | 2 | 1,730 | | |
| UPS R1500 XR Low Voltage US | 204404-001 | 1 | 866 | 1 | 866 | | |
| HP Smart Array P800/512MB SAS Controller | 381513-B21 | 1 | 1,099 | 3 | 3,297 | | |
| HP Smart Array E500/256MB SAS Controller | 435129-B21 | 1* | 600 | 2 | 1,200 | | |
| HP StorageWorks MSA60 Array | 418408-B21 | 1 | 2,999 | 34 | 101,966 | | |
| HP StorageWorks MSA-60 Storage (10% Spares) | 418408-B21 | 1 | 2,999 | 4 | | 11,996 | |
| HP 36GB 15K SAS 3.5 Hot Plug Hard Drive | 375868-B21 | 1 | 269 | 386 | 103,834 | | |
| HP 36GB 15K SAS 3.5 Hot Plug Hard Drive (10% spares) | 375868-B21 | 1 | 269 | 39 | | 10,491 | |
| HP 72GB 15K SAS 3.5 Hot Plug Hard Drive | 375870-B21 | 1 | 379 | 14 | 5,306 | | |
| HP 72GB 15K SAS 3.5 Hot Plug Hard Drive (10% spares) | 375859-B21 | 1 | 379 | 2 | | 758 | |
| HP 3y 4h 24x7 ProLiant DL38x HW Support | U4545E | 1 | 919 | 1 | | 919 | |
| | | | | | Subtotal | 253,641 | 24,164 |
| Server Software | | | | | | | |
| Microsoft SQL Server 2005 Enterprise X64 Edition(per processor) | 810-03150 | Microsoft | 2 | 23,911 | 1 | 23,911 | Incl Below |
| Microsoft Visual C++ Standard | 254-00170 | Microsoft | 2 | 109 | 1 | 109 | Incl Below |
| Microsoft Windows 2003 Server, Enterprise Edition X64 | P72-00274 | Microsoft | 2 | 2,334 | 1 | 2,334 | Incl Below |
| Microsoft Problem Resolution Services | | Microsoft | 2 | 245 | 1 | | 245 |
| | | | | | Subtotal | 26,354 | 245 |
| Client Hardware | | | | | | | |
| HP DL360G4p X3.6GHz/2MB/1GB SCSI US Svr | 376236-001 | 1 | 3,099 | 6 | 18,594 | | |
| Dual Integrated Gigabit NIC, Integrated Smart Array Controller 6i | | | | | | | |
| Intel Xeon 3.6GHz 2MB DL360G4 Processor | 376242-B21 | 1 | 1,079 | 6 | 6,474 | | |
| 36GB 15K U320 Pluggable Hard Drive | 286776-B22 | 1 | 319 | 12 | 3,828 | | |
| HP CP 3Y 4H 24x7 HW Entry300 4-Hour 24 Hour x 7 Day Coverage 3 Years | 162675-002 | 1 | 599 | 6 | | 3,594 | |
| | | | | | Subtotal | 28,896 | 3,594 |
| Client Software | | | | | | | |
| Windows Server 2003, Standard Edition | P73-00295 | Microsoft | 2 | 719 | 6 | 4,314 | Incl. Above |
| | | | | | Subtotal | 4,314 | 0 |
| User Connectivity | | | | | | | |
| HP ProCurve Switch 2824 | J4903A#ABA | 1 | 2499 | 1 | 2,499 | | |
| HP CP for HP ProCurve Networking products 3 Yr 4 hr/24x7 | U2856E | 1 | 1000 | 1 | | 1,000 | |
| 10 foot Cat5E Non Booted Network Patch Cables (plus 10% spares) | cblc5ENB10 | 3 | 3 | 14 | 42 | | |
| | | | | | Subtotal | 2,541 | 1,000 |
| Large Purchase and Net 30 discount (See Note 1) | 16.0% | 1 | | | | (\$45,606) | (\$4,601) |
| | | | | | Total | \$270,140 | \$24,402 |
| Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated components. Individually negotiated discounts are not permitted. Special prices based on assumptions about past or future purchases are not permitted. All discounts reflect standard pricing policies for the listed components. For complete details, see the pricing sections of the TPC benchmark pricing specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you. | | | | | Three-Year Cost of Ownership: USD \$294,542 | | |
| | | | | | tpmC Rating: 138,979 | | |
| | | | | | \$/tpmC: USD \$2.12 | | |
| Pricing: 1=HP Direct 800-203-6748 2= Microsoft 3=LanAdapters.com | | | | | | | |
| Note 1 = Discount based on HP Direct guidance applies to all lines where pricing = 1 | | | | | | | |
| * = These components are not immediately orderable. See the FDR for more information. | | | | | | | |
| Note 2 = The benchmark results were audited by Lorna Livingtree of Performance Metrics | | | | | | | |

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

138,979 tpmC

| Response Times (in seconds) | Average | 90% | Maximum |
|------------------------------------|----------------|------------|----------------|
| New-Order | 0.56 | 0.95 | 6.25 |
| Payment | 0.52 | 0.92 | 2.91 |
| Order-Status | 0.54 | 0.94 | 6.26 |
| Delivery (interactive portion) | 0.12 | 0.17 | 0.72 |
| Delivery (deferred portion) | 0.14 | 0.19 | 4.23 |
| Stock-Level | 0.54 | 0.94 | 3.11 |
| Menu | 0.12 | 0.18 | 0.90 |

Transaction Mix, in percent of total transaction

| | |
|--------------|--------|
| New-Order | 44.93% |
| Payment | 43.02% |
| Order-Status | 4.01% |
| Delivery | 4.01% |
| Stock-Level | 4.03% |

Emulation Delay (in seconds)

Resp.Time Menu

| | | |
|------------------------|------|------|
| New-Order | 0.10 | 0.10 |
| Payment | 0.10 | 0.10 |
| Order-Status | 0.10 | 0.10 |
| Delivery (interactive) | 0.10 | 0.10 |
| Stock-Level | 0.10 | 0.10 |

Keying/Think Times (in seconds)

Min. Average Max.

| | | | |
|------------------------|------------|-------------|--------------|
| New-Order | 18.01/0.00 | 18.03/12.06 | 18.49/120.53 |
| Payment | 3.02/0.00 | 3.03/12.06 | 3.49/120.53 |
| Order-Status | 2.02/0.00 | 2.03/10.07 | 2.49/100.53 |
| Delivery (interactive) | 2.02/0.00 | 2.03/5.07 | 2.46/50.53 |
| Stock-Level | 2.02/0.00 | 2.03/5.06 | 2.43/50.53 |

Test Duration

| | |
|--|-------------|
| Ramp-up time | 44 minutes |
| Measurement interval | 120 minutes |
| Transactions (all types) completed during measurement interval | 38,440,735 |
| Ramp down time | 7 minutes |

Checkpointing

| | |
|-----------------------|------------|
| Number of checkpoints | 4 |
| Checkpoint interval | 30 minutes |