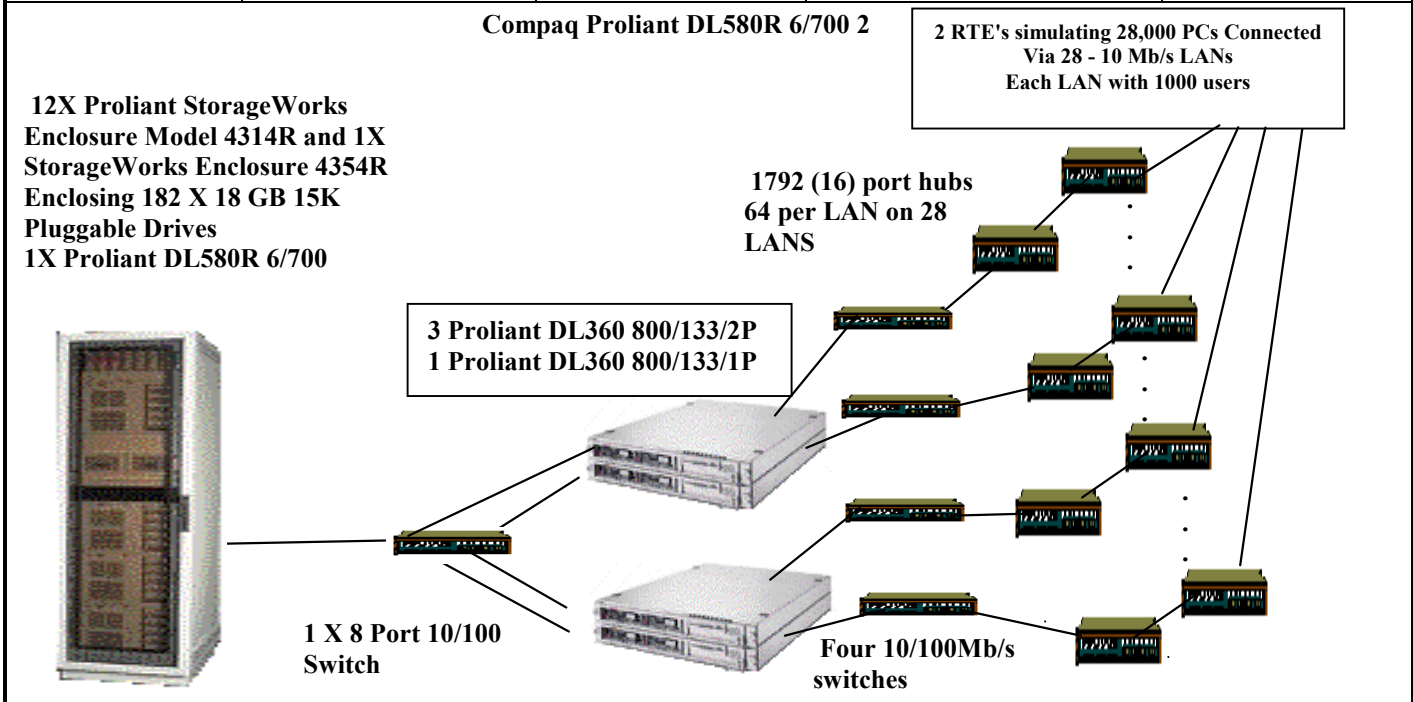


| | | |
|-----------------------------|---------------------------|--------------------------|
| Compaq Computer Corporation | ProLiant DL580R 6/700 2 | TPC-C Rev. 3.5 |
| | C/S with 4 ProLiant DL360 | Report Date: Mar 5, 2001 |

| | | | |
|-------------------|------------------|-------------------|--------------------|
| Total System Cost | TPC-C Throughput | Price/Performance | Availability Date |
| \$451,404 | 35213.27 | \$12.82 | Mar 5, 2001 |

| | | | | |
|-------------------------------|--|------------------------------|--|-----------------|
| Processors | Database Manager | Operating System | Other Software | Number of Users |
| 4 Pentium III Xeon 700 MHz | Microsoft SQL Server 2000 Enterprise Edition | Windows 2000 Advanced Server | Microsoft Visual C++ Microsoft COM+ | 28000 |



| System Components | Server | | Each Client | |
|-------------------|----------|-------------------------------------|-------------------------------------|----------------------------------|
| | Quantity | Description | Quantity | Description |
| Processor | 4 | 700MHz PentiumIII Xeon w/ 2MB Cache | 3 clients with 2 1 client with 1 | 800MhzPentium III w/ 256K cache |
| Memory | 16 | 512MB | 4 | 128MB |
| Disk Controllers | 5 | SMART 5304 Array Controller | 1 | Integrated Ultra SCSI Controller |
| Disk Drives | 1 182 | 9.1GB SCSI Drive 18GB SCSI Drive | 1 | 9.1GB SCSI Drive |
| Total Storage | | 3.08307 Terabytes | | 9.1GB |
| Tape Drives | 1 | 4/8 GB SLR Internal | | |

| Compaq Computer Corporation | | ProLiant DL580R X700 2MB | | | TPC-C Rev. 3.5 | | |
|--|--------------|--------------------------|----------------------|------------|----------------|-------------------------------------|--------------------|
| Description | | Part Number | Third Party | Unit Price | Qty | Extended Price | 5 yr. Maint. Price |
| Server Hardware | | | Brand Pricing | | | | |
| ProLiant DL580R X700 2MB 512 | 155618-001 | | 1 | 12,880 | 1 | 12,880 | |
| 2 Pentium III Xeon/700MHz 2MB Cache | | | | | | | |
| 512MB SDRAM Memory | | | | | | | |
| - CD-ROM 24X ,NC3134 Dual Port 10/100 NIC | | | | | | | |
| Pentium III Xeon/700MHz 2M S2 Processor kit | 174449-B21 | | 1 | 4,200 | 2 | 8,400 | |
| 2GB SDRAM (4x512) memory kit | 189082-B21 | | 1 | 5,712 | 4 | 22,848 | |
| Deskpro Easy Access Keyboard | 122660-006 | | 1 | 45 | 1 | 45 | |
| Compaq Scroll Mouse | 170299-B21 | | 1 | 24 | 1 | 24 | |
| StorageWorks Enclosure Model 4314R | 190209-001 | | 1 | 2,912 | 12 | 34,944 | |
| StorageWorks Enclosure Model 4354R | 190211-001 | | 1 | 3,472 | 1 | 3,472 | |
| Compaq SMART Array Controller 5304 - 4 SCSI Chan. | 158939-B21 | | 1 | 2,463 | 5 | 12,314 | |
| Compaq Rack Model 9142 (42U - Opal) - Shock Pallet | 120663-B22 | | 1 | 1,444 | 1 | 1,444 | |
| Side Panel Kit - 9142 Rack | 120670-B21 | | 1 | 209 | 1 | 209 | |
| R3000 UPS | 242705-001 | | 1 | 1,410 | 1 | 1,410 | |
| 1x8 Port Switch Box | 400337-001 | | 1 | 1,144 | 1 | 1,144 | |
| V710 Color Monitor | 187895-001 | | 1 | 291 | 1 | 291 | |
| 4/8-GB SLR Tape Drive - Internal | 295480-B22 | | 1 | 448 | 1 | 448 | |
| 9.1 GB Hot-Plug Wide U2 10K 1" | 328939-B22 | | 1 | 469 | 1 | 469 | |
| 18.2 GB Hot-Plug Wide U3 15K 1" | 188122-B22 | | 1 | 940 | 182 | 171,022 | |
| ProLiant Enterprise Server - Parts Exchange - 1 Year | PES-PE-1Y-SU | | 1 | 597 | 2 | | 1,194 |
| ProLiant Storage System - Parts Exchange - 1 Year | PSS-PE-1YEAR | | 1 | 255 | 26 | | 6,630 |
| Onsite 5x8 4 Hr Service Upgrade from Compaq Standard Service | OS-8X5X4-SU | Amherst | 1 | | | | 21,709 |
| | | | | | | Subtotal | 29,533 |
| Server Software | | | | | | | |
| Microsoft SQL Server 2000 Enterprise Edition (per processor) | 810-00846 | Microsoft | 2 | 16,541 | 4 | 66,164 | 10,475 |
| Microsoft Visual C++ 6.0 | 048-00317 | Microsoft | 2 | 549 | 1 | 549 | Incl Above |
| Microsoft Windows 2000 Advanced Server | C10-00475 | Microsoft | 2 | 2,399 | 1 | 2,399 | Incl Above |
| | | | | | | Subtotal | 10,475 |
| Client Hardware | | | | | | | |
| ProLiant DL360R P800/133 128 M1 | 161080-001 | | 1 | 3,921 | 4 | 15,684 | |
| PIII 800/133-256 Processor Kit | 161084-B21 | | 1 | 392 | 3 | 1,176 | |
| 128 Reg 133MHz SDRAM DIMM | 128277-B21 | | 1 | 242 | 12 | 2,903 | |
| 9.1 GB Hot-Plug Wide U2 10K 1" | 328939-B22 | | 1 | 469 | 4 | 1,877 | |
| ProLiant Workgroup Server - Parts Exchange - 1 Year | FM-LOPRT-12 | | 1 | 259 | 8 | | 2,072 |
| Onsite 5x8 4 Hr Service Upgrade from Compaq Standard Service | OS-8X5X4-SU | Amherst | 1 | | | | 1,731 |
| | | | | | | Subtotal | 3,803 |
| Client Software | | | | | | | |
| Microsoft Windows 2000 Server | C11-00821 | Microsoft | 2 | 738 | 4 | 2,952 | Incl. Above |
| | | | | | | Subtotal | 0 |
| User Connectivity | | | | | | | |
| NetCruiser Tech 17-port 10Mbps Ethernet hub | | Netcruiser | 3 | 36 | 1972 | 70,992 | See Note 1 |
| 10/100 Dual Speed 8PT RM Switch | 929051 | Linksys | 4 | 129 | 7 | 903 | See Note 1 |
| | | | | | | Subtotal | 0 |
| Large Purchase and Cash discount | 9.0% | | 1 | | | (\$26,370) | (\$3,000) |
| | | | | | | Total | \$40,811 |
| 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. | | | | | | Five-Year Cost of Ownership: | \$451,404 |
| | | | | | | tpmC Rating: | 35213.27 |
| | | | | | | \$ / tpmC: | \$12.82 |
| Pricing: 1=Amherst Computer Products 2=Microsoft 3=Netcruiser Tech 4=Combined Digital | | | | | | | |
| Note 1 = 5 Year warranty with 10% Spares - | | | | | | | |
| Note: The benchmark results and test methodology were audited by Tom Sawyer of Performance Metrics, Inc. | | | | | | | |

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

35213.27 tpmC

% throughput difference, reported & reproducibility runs

0.05%

Response Times (in seconds)

| | Average | 90% | Maximum |
|--------------------------------|---------|------|---------|
| New-Order | 0.23 | 0.30 | 4.32 |
| Payment | 0.16 | 0.22 | 2.08 |
| Order-Status | 0.18 | 0.24 | 4.28 |
| Delivery (interactive portion) | 0.10 | 0.11 | 0.73 |
| Delivery (deferred portion) | 0.18 | 0.33 | 0.58 |
| Stock-Level | 0.99 | 1.40 | 2.45 |
| Menu | 0.10 | 0.11 | 0.80 |

Transaction Mix, in percent of total transaction

| | |
|--------------|--------|
| New-Order | 44.89% |
| Payment | 43.04% |
| Order-Status | 4.02% |
| Delivery | 4.05% |
| Stock-Level | 4.00% |

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 | 18.00/0.00 | 18.02/12.12 | 18.03/121.11 |
| Payment | 3.00/0.00 | 3.02/12.09 | 3.03/121.11 |
| Order-Status | 2.00/0.00 | 2.02/10.14 | 2.03/101.00 |
| Delivery (interactive) | 2.00/0.00 | 2.02/5.09 | 2.03/51.81 |
| Stock-Level | 2.00/0.00 | 2.02/5.10 | 2.03/50.81 |

Test Duration

| | |
|--|------------|
| Ramp-up time | 34 minutes |
| Measurement interval | 30 minutes |
| Transactions (all types) completed during measurement interval | 2353226 |
| Ramp down time | 5 minutes |

Checkpointing

| | |
|-----------------------|------------|
| Number of checkpoints | 1 |
| Checkpoint interval | 30 minutes |