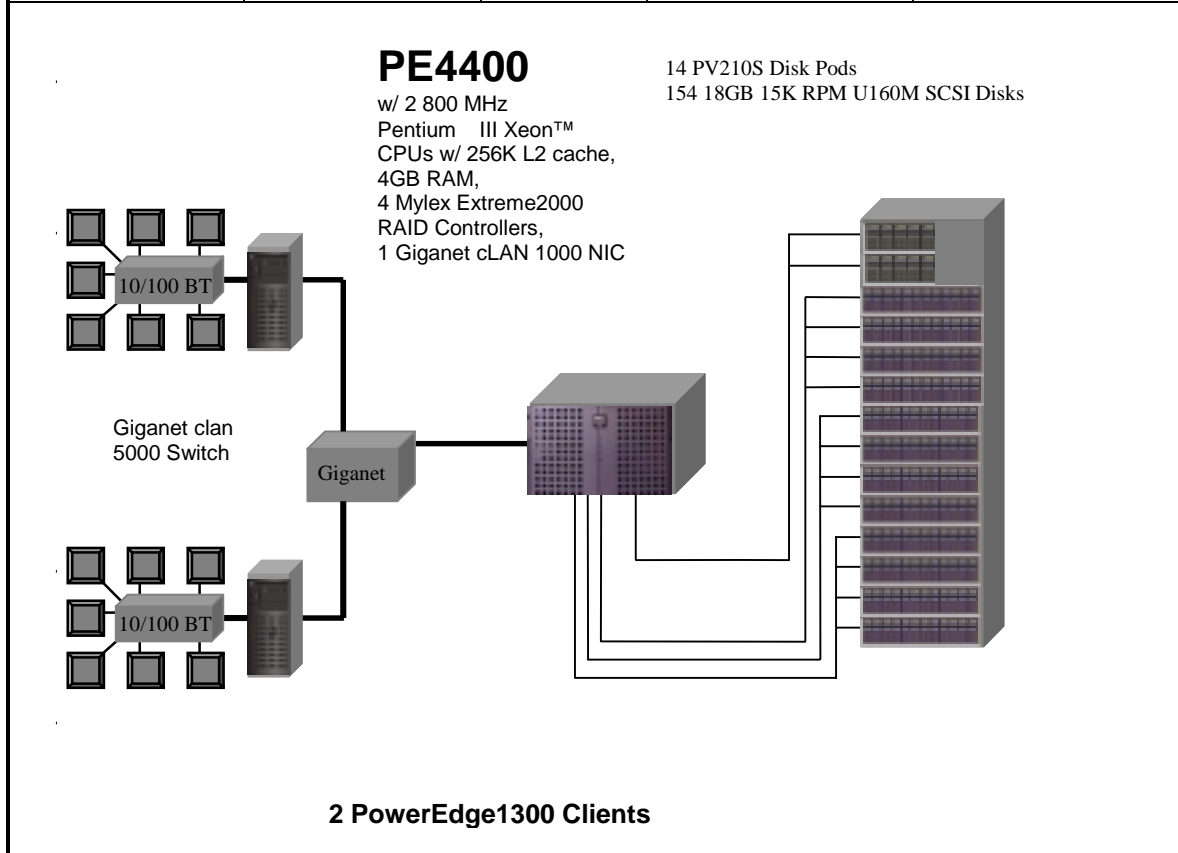


DELL	PowerEdge 4400 Client/Server w/2 PE1300 Front Ends Upgrade date: March 30, 2001		TPC-C Rev 5.0 Upgrade from V3.5 Report Date DEC 1, 2000
	Total System Cost	TPC-C Throughput	Price/Performance
\$233,532	16,262.90 tpmC	\$14.36/ tpmC	DEC 1, 2000

Processors	Database Manager	OS	Other Software	Number of Users
2 x Pentium III Xeon™ Processors 800 MHz 256K L2 Cache	Microsoft SQL Server 2000 Enterprise Edition	Microsoft Windows 2000 Advanced Server	Windows 2000 Server w/ COM+ Internet Information Server 5.0 Microsoft Visual C++	12,950



System Component	Server		Each Client	
Processors	2	Pentium III Xeon™ @ 800MHz	1	Pentium III w/ 512 KB L2
Cache		256K		2 clients @ 600MHz
Memory		4096 MB		512 MB
Disk Controllers	4	Mylex ExtremeRAID 2000	1	Adaptec On-Board
	2	Adaptec On-Board		
Disk Drives	154	18 GB SCSI (16.938GB useable)	1	9 GB
	1	9 GB SCSI (8.470GB useable)		
Total Storage		2,588 GB		9 GB
Other	1	Giganet cLAN 1000 NIC	1	
	1	CD-ROM	1	
	1	Internal DAT		

Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price
		Brand Pricing				
Server Hardware						
Dell PowerEdge 4400 Server / Pentium 800 Mhz,256Kb L2****	220-0466		2,482	1	2,482	1,309
Additional Pentium III Xeon 800 / 256KB L2 ****	311-6537		1,199	1	1,199	0
Non-Redundant Pwr Supply	310-3562		295	1	295	0
4GB RAM, 8 x 512MB DIMMS	311-4116		7,168	1	7,168	0
9 GB Ultra-2 LVD SCSI 10K RPM Disk	340-6647		269	1	269	0
cLAN 1000 NIC, PCI 32/64-bit	430-0302	Giganet	695	1	695	0
cLAN Giganet 10m Cable	310-0499	Giganet	150	1	150	0
6 Bay HD Backplane	311-0485		249	1	249	0
DDS4 Internal TBU	340-7418		799	1	799	0
Dell M570 15" Monitor	320-1502		199	1	199	0
ExtremeRAID 2000 ***	E2000-4-32NB	Mylex	1,872	6	11,232	0
Back-UPS 650***	1332	APC	200	16	3,200	686
Subtotal					27,937	1,995
PowerVault Disk Subsystem						
PV210S,ESEM,PS,Rack mount	220-4099 etc		2,399	14	33,586	10,696
SCSI Cables	310-0313		49	14	686	0
18 GB U160M SMRT SCSI 15K RPM Hard Drive *	340-2769		739	154	113,806	0
42U Rack	220-0605		1,682	1	1,682	0
Subtotal					149,760	10,696
Server Software						
Windows 2000 Advanced Server, 25 Client Licenses		Microsoft	2,399	1	2,399	0
SQL Server 2000 Version 8, Ent. Ed., Per Processor Licensing		Microsoft	17,279	2	34,558	6,285
Subtotal					36,957	6,285
Client Hardware						
Dell PowerEdge 1300, 600 MHz Pentium III w/ 512KB L2*****	220-1017		824	2	1,648	996
512MB RAM, 2 DIMMs	311-0440		587	2	1,174	0
9GB LVD SCSI Disk Drive,	340-1466		214	2	428	0
Ether Express PRO 100+ ENET Adapter	430-0111	Intel	59	2	118	0
cLAN 1000 NIC, PCI 32/64-bit	430-0302	Giganet	695	2	1,390	0
cLAN Giganet 2m Cable	310-0497	Giganet	99	2	198	0
Dell M570 15" Monitor	320-1502		199	2	398	0
Subtotal					5,354	996
Client Software						
Windows 2000 Server w/ 25 CAL **		Microsoft	738	2	1,476	0
Visual C++ Professional 6.0 Win32 **		Microsoft	549	1	549	0
Subtotal					2,025	0
User Connectivity						
cLAN Giganet Switch	220-4191	Giganet	5,848	1	5,848	3,600
Subtotal					5,848	3,600
Other Discounts					(17,921)	0.00
Total					209,960	23,572.00

<p>Notes: * Maintenance included in PowerVault 210S disk pod</p> <p>** All Microsoft maintenance is covered by the maintenance costs of Microsoft SQL Server</p> <p>*** 10% or minimum 2 spares are added in place of onsite service (products have a five year return-to-vendor warranty) Pricing: 1 - Dell 2 - Microsoft 3 - Mylex 4 - ArkPC 5 - MicroBarn</p> <p>**** Substituted with Pentium 3/866Mhz/256KB Processors</p> <p>***** Substituted with PE1400/866Mhz P3/256KB L2</p> <p>Audited by Tom Sawyer, Performance Metrics Inc.</p>	<p>Three-Year Cost of Ownership: 233,532</p> <p>tpmC Rating: 16,262.90</p> <p>\$ / tpmC: 14.36</p>
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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 specifications. If you find that the stated prices are not available according to these items, please inform the TPC at pricing@tpc.org.

MQTh, computed Maximum Qualified Throughput

16,262.90

tpmC

% throughput difference, reported & reproducibility runs

0.47%

Response Times (in seconds)

	Average	90th	Max
- Neworder	0.32	0.52	5.35
- Payment	0.25	0.44	3.00
- Order Status	0.28	0.47	5.50
- Delivery (interactive portion)	0.10	0.11	0.34
- Delivery (deferred portion)	0.27	0.44	1.09
- Stock-Level	0.99	1.47	3.40
- Menu	0.10	0.11	0.36

Response time delay added for emulated components

Menu 0.1

Resp 0.1

Transaction Mix, in percent of total transactions

- New-Order	44.92%
- Payment	43.01 %
- Order-Status	4.02 %
- Delivery	4.01 %
- Stock-Level	4.04 %

Keying/Think Times (in seconds),

	Min		Average		Max	
- New-Order	18.02	0.0	18.03	12.03	18.04	120.41
- Payment	3.02	0.0	3.03	12.04	3.04	120.41
- Order-Status	2.02	0.0	2.03	10.08	2.04	98.58
- Delivery	2.012	0.0	2.03	5.04	2.04	50.41
- Stock-Level	2.012	0.0	2.03	5.05	2.04	50.40

Test Duration

- Ramp-up time	20 minutes
- Measurement interval	20 minutes
- Number of checkpoints	1
- Checkpoint interval	20 minutes
- Number of transactions (all types) completed in measurement interval	753,093