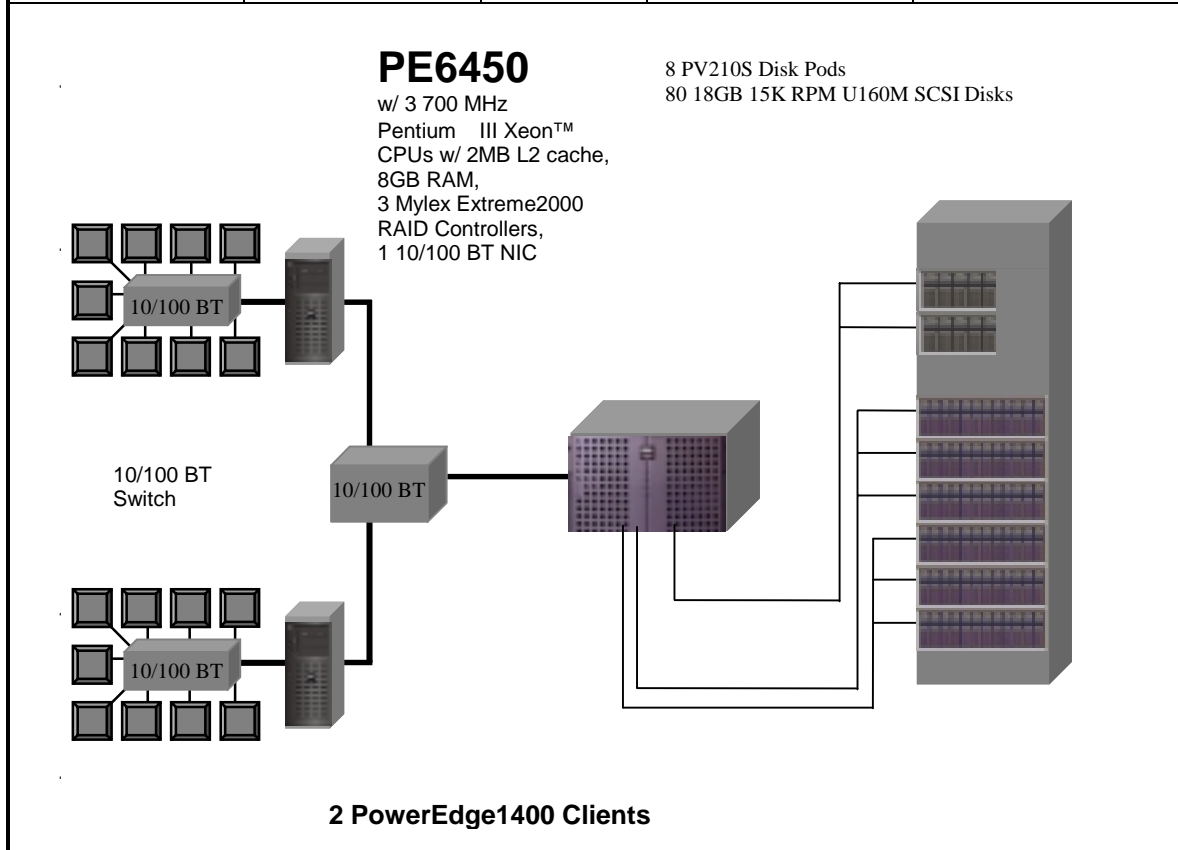




PowerEdge 6450-3P
 Client/Server w/2 PE1400 Front Ends
 Upgrade Date
 March 19, 2001

TPC-C Rev 5.0
 Upgrade from V3.5
 Report Date
 Dec 20, 2000

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$182,230	24925.43 tpmC	\$7.32/ tpmC	Dec 20, 2000	
Processors	Database Manager	OS	Other Software	Number of Users
3 x Pentium III Xeon™ Processors 700 MHz 2MB 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++	19,840



System Component	Server		Each Client	
Processors	3	Pentium III Xeon™ @ 700MHz	1	Pentium III @866MHz
Cache		2MB		w/ 256 KB L2
Memory		8192 MB		512 MB
Disk Controllers	3	Mylex ExtremeRAID 2000	1	Adaptec On-Board
	2	Adaptec On-Board		
Disk Drives	80	18 GB SCSI (16.758GB useable)	1	9 GB
	1	9 GB SCSI (8.195GB useable)		
Total Storage		1,348.95 GB		9 GB
Other	1	10/100 BT NIC	1	
	1	Internal 10/100 BT NIC	1	
	1	CD-ROM	1	
	1	External DAT		

Dell	PowerEdge 6450-3P	TPC-C REV 5.0 EXECUTIVE SUMMARY UPGRADE OF REV 3.5 PAGE 2 OF 2
Upgrade Date: 19-March-01	Client/Server	Report Date: 20-Dec-00

Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
		Brand	Pricing			
Dell PowerEdge 6450	220-0663		1	5,933	1	5,933 1,299
Pentium III Xeon 700 MHz / 2MB L2 - 2 processors	311-0834		1	2,785	1	2,785 0
Pentium III Xeon 700 MHz / 2MB L2 - Customer kit	311-0893		1	2,785	1	2,785 0
8 GB RAM, 16 x 512MB DIMMS	311-4118		1	14,337	1	14,337 0
9 GB U160M SCSI 10K RPM Hard Drive	340-6647		1	269	1	269 0
Intel Pro 100+ NIC	430-0222	Intel	1	59	1	59 0
DDS4 Externl TBU	340-7420		1	999	1	999 0
Dell 15" Monitor	320-0077		1	199	1	199 0
Extreme RAID 2000 PCI SCSI 4 channel RAID controller***	E2000-4-32NB	Mylex	3	1,872	5	9,360 0
Back-UPS Office 650	001332	APC	1	200	10	2,000 392
Subtotal					38,726	1,691
PowerVault Disk Subsystem						
PV210S, U3 SCSI, PS, Rack mount	220-4099, etc.		1	2,399	8	19,192 6,112
SCSI Cables	310-0313		1	49	8	392 0
18 GB U160M SMRT SCSI 15K RPM Hard Drive *	340-3232		1	739	80	59,120 0
42U Rack	220-0605		1	1,682	1	1,682 0
Subtotal					80,386	6,112
Server Software						
SQL Server 2000 Ent Edition, Per processor licensing **		Microsoft	2	17,279	3	51,837 6,285
Windows 2000 Advanced Server, 25 Client Licenses **		Microsoft	2	2,399	1	2,399 0
Subtotal					54,236	6,285
Client Hardware						
Dell PowerEdge 1400, 866 MHz Pentium III w/ 256KB L2	220-1012		1	824	2	1,648 996
512MB RAM, 4 DIMMs	311-1194		1	587	2	1,174 0
9GB U160M SCSI Hard Drive,	340-1960		1	214	2	428 0
Ether Express PRO 100+ Ethernet Adapter	430-0222	Intel	1	59	2	118 0
Dell 15" Monitor	320-1502		1	199	2	398 0
Subtotal					3,766	996
Client Software						
Windows 2000 Server, 5 Client Licenses **		Microsoft	2	738	2	1,476 0
Visual C++ Professional 6.0 Win32 **		Microsoft	2	549	1	549 0
Subtotal					2,025	0
User Connectivity						
8 Port Ethernet Switch ***	CT2208D3	ArkPC	4	61	3	183 0
Subtotal					183	0
Other Discounts					(\$12,176)	0
Total					\$167,146	\$15,084

Notes: * Maint. included in PowerVault 210S disk pod or PV650F/630F fibre channel disk pod ** All Microsoft maintenance is covered by the maintenance costs of Microsoft SQL Server *** 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 Audited by Tom Sawyer, Performance Metrics Inc.	Three-Year Cost of Ownership:	\$182,230
	tpmC Rating:	24925
	\$ / tpmC:	7.32

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 24925.43
tpmC

% throughput difference, reported & reproducibility runs 0.11%

Response Times (in seconds)

	Average	90th	Max
- Neworder	0.30	0.43	2.82
- Payment	0.20	0.32	2.81
- Order Status	0.24	0.36	1.55
- Delivery (interactive portion)	0.12	0.15	1.21
- Delivery (deferred portion)	0.24	0.38	0.99
- Stock-Level	1.14	1.77	5.17
- Menu	0.13	0.15	1.21

Response time delay added for emulated components Menu 0.1
Resp 0.1

Transaction Mix, in percent of total transactions

- New-Order	44.86%
- Payment	43.00 %
- Order-Status	4.04 %
- Delivery	4.04 %
- Stock-Level	4.05 %

Keying/Think Times (in seconds),

	Min		Average		Max	
- New-Order	18.01	0.0	18.02	12.03	18.04	120.40
- Payment	3.01	0.0	3.02	12.04	3.04	120.41
- Order-Status	2.01	0.0	2.02	10.06	2.03	100.40
- Delivery	2.01	0.0	2.02	5.05	2.03	50.40
- Stock-Level	2.01	0.0	2.02	5.05	2.04	50.40

Test Duration

- Ramp-up time	5 minutes
- Measurement interval	30 minutes
- Number of checkpoints	1
- Checkpoint interval	30 minutes
- Number of transactions (all types) completed in measurement interval	1,734,129