



PowerEdge 4600

Client/Server w/1 PE1400 Front End

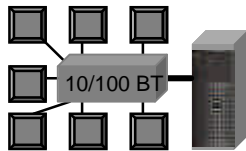
TPC-C Rev 5.0
Report Date
June 26, 2002

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$41,583	12,579.04 tpmC	\$3.31/ tpmC	JUN 26, 2002	
Processors	Database Manager	OS	Other Software	Number of Users
1 x Intel Xeon™ Processor 2.2 GHz 512KB L2 Cache	Microsoft SQL Server 2000 Standard Edition	Microsoft Windows 2000 Server	Windows 2000 Server w/ COM+ Internet Information Server 5.0 Microsoft Visual C++	10,080

PE4600

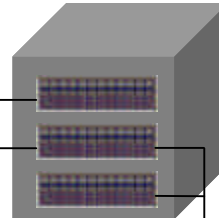
w/ 1 2.2 GHz Intel Xeon CPU
w/ 512KB L2 cache,
2.5GB RAM,
2 Mylex AcceleRAID 352 RAID
Controllers, and
1 On-board Adaptec AIC-7899 RAID
Controller
4 36GB 10K RPM U160 SCSI disks
2 Gigabit Ethernet adapters

3 PV220S Disk Pods
42 18GB 10K RPM U160 SCSI Disks



1 PowerEdge 1400SC Client

1 Pentium® III @ 1.13GHz
w/ 256 KB L2
512 MB RAM
1 9 GB Disk
2 Intel Pro100+ Ethernet NICs



System Component	Server		Each Client	
Processors	1	Intel Xeon @ 2.2GHz	1	Pentium® III w/ 256 KB L2
Cache		512KB cache		Client @ 1.13 GHz
Memory		2560 MB		512 MB
Disk Controllers	2	Mylex AcceleRAID 352	1	Adaptec On-Board
	1	Adaptec AIC-7899 On-Board		
Disk Drives	42	18 GB SCSI	1	18 GB
	4	36 GB SCSI		
	1	9 GB SCSI		
Total Storage		843 GB		18 GB
Other	2	1GB NIC	2	10/100MB BT NIC
	1	CD-ROM	1	CD-ROM
	1	DAT		

Dell	PowerEdge 4600			TPC-C REV 5.0 EXECUTIVE SUMMARY PAGE 2 OF 2			
		Client/Server		Report Date: 26-June-02			
Description	Part Number	Third Party		Unit Price	Qty	Extended Price	3 yr. Maint. Price
		Brand	Pricing				
Server Hardware							
Dell PowerEdge 4600	220-2124			1	2,442	2,442	898
2.0 GB,DDR, 4 x 512MB DIMMS	311-0997			1	1,599	1,599	-
512MB,DDR, 4 x 128MB DIMMS	311-1643			1	408	408	-
PERC3/Di 128MB (2 int ch)	340-2904			1	299	299	-
2x4 HD Backplane	311-1117			1	99	99	-
18 GB U160M SCSI 10K RPM Hard Drive	340-1937			1	249	249	-
Tape Backup Unit	340-9890			1	699	699	-
Dell 15" Monitor	320-0960			1	149	149	-
AcceleRAID 352 PCI SCSI 2 Channel RAID controller***	08P2420	Mylex		3	598	2,392	-
						Subtotal	898
PowerVault Disk Subsystem							
PV220S, U3 SCSI, PS, Tower	220-4477, etc.			1	2,450	7,350	1,800
SCSI Cables	310-0679			1	99	198	-
18 GB SCSI 10K RPM Hard Drive *	340-3079			1	249	10,458	-
36 GB SCSI 10K RPM Hard Drive *	340-3575			1	449	1,796	-
						Subtotal	1,800
Server Software							
SQL Server 2000 Standard Edition, Per processor licensing **	228-01079	Microsoft		2	4,999	4,999	5,850
Windows 2000 Server **	C11-00821	Microsoft		2	738	738	-
						Subtotal	5,850
Client Hardware							
Dell PowerEdge 1400SC, 1.13 GHz Pentium III w/ 256KB L2	220-2308			1	648	648	637
512MB RAM, 4 DIMMs	311-1194			1	408	408	-
18GB,U160,10K, SCSI Hard Drive,	340-1964			1	249	249	-
Ether Express PRO 100+ Ethernet Adapter	430-1970	Intel		1	59	59	-
Dell 15" Monitor	320-0960			1	149	149	-
						Subtotal	637
Client Software							
Windows 2000 Server, 5 Client Licenses **	C11-00821	Microsoft		2	738	738	-
Visual C++ Professional 6.0 Win32 **	048-00317	Microsoft		2	549	549	-
						Subtotal	-
User Connectivity							
Crossover cable	CLB514	LanAdapters		4	2	6	-
						Subtotal	6
						**** Discounts	(4,283)
						Total	9,185
Notes: * Maint. included in PowerVault 220S 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 - Computer Giants 4- LanAdapters **** Discount based upon total system cost as purchased by a regular customer. Pricing may be verified by calling 1-800-BUY-DELL referencing quote numbers 84559493 as complex quotes. Audited by Lorna Livingtree, Performance Metrics Inc.						Three-Year Cost of Ownership: \$41,583 tpmC Rating: 12579.04 \$/tpmC: 3.31	
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

12579.04
tpmC

Response Times (in seconds)

	Average	90th	Max
- Neworder	0.47	0.67	5.33
- Payment	0.21	0.33	3.22
- Order Status	0.33	0.48	5.35
- Delivery (interactive portion)	0.12	0.15	0.74
- Delivery (deferred portion)	0.92	1.50	3.47
- Stock-Level	2.08	4.53	11.43
- Menu	0.13	0.16	0.93

Response time delay added for emulated components

Menu 0.1
Resp 0.1

Transaction Mix, in percent of total transactions

- New-Order	44.85%
- Payment	43.02 %
- Order-Status	4.04 %
- Delivery	4.04 %
- Stock-Level	4.05 %

Keying/Think Times (in seconds),

	Min		Average		Max	
- New-Order	18.02	0.0	18.03	12.06	18.04	120.41
- Payment	3.02	0.0	3.03	12.03	3.05	120.41
- Order-Status	2.02	0.0	2.03	10.07	2.04	100.41
- Delivery	2.02	0.0	2.03	5.06	2.04	50.41
- Stock-Level	2.02	0.0	2.03	5.06	2.04	50.41

Test Duration

- Ramp-up time	4 minutes
- Measurement interval	120 minutes
- Number of checkpoints	4
- Checkpoint interval	30 minutes
- Number of transactions (all types) completed in measurement interval	3,501,645