

<b>DELL</b>		<b>PowerEdge 6600</b>		TPC-C Rev 5.1 Report Date Apr 21, 2003	
Total System Cost		TPC-C Throughput		Price/Performance	
<b>\$378,356</b>		<b>78,116.87 tpmC</b>		<b>\$4.85/ tpmC</b>	
Processors		Database Manager		OS	
Other Software		Number of Users			
4 x Intel Xeon™ MP Processors 2.0 GHz 2MB L2 Cache		Microsoft SQL Server 2000 Enterprise Edition SP3		Microsoft Windows .NET Enterprise Server	
Windows 2000 Server w/ COM+ Internet Information Server 5.0 Microsoft Visual C++		<b>62,000</b>			
<p><b>PE6600</b> 4 2.0 GHz Intel Xeon MP CPUs w/ 2MB L2 cache, 32 GB RAM, 6 MegaRAID 1650-H SCSI Controllers, 1 18GB 15K RPM SCSI disk, and 1 QLA 2350</p> <p>22 PV220S Disk Pods 280 18GB 15K RPM SCSI Disks 12 36GB 15K RPM SCSI Disks</p> <p>6 PowerEdge 1600SC</p>					
<b>System Component</b>		<b>Server</b>		<b>Each Client</b>	
Processors		4 Intel Xeon MP @ 2.0GHz		1 Pentium® III w/ 512 KB L2	
Cache		2MB cache		6 clients @ 1.13 GHz	
Memory		32,768 MB		512 MB	
Disk Controllers		6 MegaRAID 1650-H SCSI 1 Adaptec On-Board		1 Adaptec On-Board	
Disk Drives		280 18 GB SCSI 12 36 GB SCSI		1 18 GB	
Total Storage		5,146.82 GB		18 GB	
Other		1 QLA 2350 1 1000/100/10 BT 1 CD-ROM 1 DAT		1 QLA 2350 1 10/100MB BT NIC 1 CD-ROM	

Dell		PowerEdge 6600		TPC-C REV 5.1 EXECUTIVE SUMMARY PAGE 2 OF 2			
		Client/Server		Report Date: 21-Apr-03			
Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price	
<b>Server Hardware</b>							
		<b>Brand</b>	<b>Pricing</b>				
Dell PowerEdge 6600	220-1828		1	7,626	1	7,626	1,299
Intel Xeon MP 2.0GHz / 1MB L2 - 4 processors	311-2348		1	14,999	1	14,999	-
32 GB,DDR, 16 x 2048MB DIMMS	311-2352		1	71,000	1	71,000	-
18 GB U160M SCSI 10K RPM Hard Drive	340-1937		1	249	1	249	-
Tape Backup Unit	340-7297		1	699	1	699	-
Dell 15" Monitor	320-0960		1	149	1	149	-
SANBlade FC-IV Adapter	A0107651	Qlogic	1	1,655	1	1,655	0
MegaRAID series Enterprise 1650-H SCSI RAID controller	5034536264A	LSI	3	2,998	8	23,984	0
					<b>Subtotal</b>	<b>120,361</b>	<b>1,299</b>
<b>PowerVault Disk Subsystem</b>							
PV220S, U3 SCSI, PS, Rack mount	220-4476, etc.		1	2,756	22	60,632	13,200
SCSI Cables	310-0679		1	99	11	1,089	-
18 GB SCSI 15K RPM Hard Drive *	340-3087		1	349	280	97,720	-
36 GB SCSI 15K RPM Hard Drive *	340-8249		1	549	12	6,588	-
42U Rack	220-4492		1	964	2	1,928	-
					<b>Subtotal</b>	<b>167,957</b>	<b>13,200</b>
<b>Server Software</b>							
SQL Server 2000 Ent Edition, Per processor licensing **	810-00846	Microsoft	2	16,541	4	66,164	5,850
Windows .NET Enterprise Server 2003 **	P72-00264	Microsoft	2	2,399	1	2,399	-
					<b>Subtotal</b>	<b>68,563</b>	<b>5,850</b>
<b>Client Hardware</b>							
Dell PowerEdge 1600SC, 1.8 GHz Pentium III w/ 512KB L2**	221-0916		1	1,467	6	8,802	4,788
512MB RAM, 4 DIMMs	311-1928		1	348	6	2,088	-
18GB,U160,10K, SCSI Hard Drive,	340-9450		1	249	6	1,494	-
SANBlade FC-IV Adapter	A0107651	Qlogic	1	1,655	6	9,930	-
Dell 15" Monitor	320-0960		1	149	6	894	-
					<b>Subtotal</b>	<b>23,208</b>	<b>4,788</b>
<b>Client Software</b>							
Windows 2000 Server, 5 Client Licenses **	C11-00821	Microsoft	2	738	6	4,428	-
Visual C++ .Net Standard **	254-00170	Microsoft	2	109	1	109	-
					<b>Subtotal</b>	<b>4,537</b>	<b>-</b>
<b>User Connectivity</b>							
SAN Fibre Channel 8-port switch	A0090822	Qlogic	1	4,925	1	4,925	2,800
SFP module	340-5916		1	175	7	1,225	-
LC-LC cable	310-1625		1	75	7	525	-
					<b>Subtotal</b>	<b>6,675</b>	<b>2,800</b>
					<b>Other Discounts</b>	<b>(40,882)</b>	<b>-</b>
					<b>Total</b>	<b>350,419</b>	<b>27,937</b>

Notes: \* Maint. included in PowerVault 220S disk pod or PV650F/630F fibre channel disk pod

Three-Year Cost of Ownership: \$378,356

**MQTh**, computed Maximum Qualified Throughput 78,116.87  
tpmC

**Response Times** (in seconds)

	Average	90th	Max
- Neworder	0.24	0.35	42.27
- Payment	0.17	0.22	38.05
- Delivery (interactive portion)	0.11	0.12	13.75
- Stock-Level	0.66	0.93	14.50
- Order Status	0.18	0.23	14.70
- Delivery (deferred portion)	0.14	0.22	1.59
- Menu	0.11	0.12	63.09

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	43.04 %
- Order-Status	4.03 %
- Delivery	4.04 %
- Stock-Level	4.04 %

**Keying/Think Times** (in seconds),

	Min		Average		Max	
- New-Order	18.01	0.0	18.02	12.04	18.67	120.45
- Payment	3.01	0.0	3.02	12.03	3.66	120.45
- Order-Status	2.01	0.0	2.02	10.03	2.47	100.42
- Delivery	2.01	0.0	2.02	5.05	2.37	50.44
- Stock-Level	2.01	0.0	2.02	5.05	2.36	50.42

**Test Duration**

- Ramp-up time	14 minutes
- Measurement interval	120 minutes
- Number of checkpoints	4
- Checkpoint interval	30 minutes
- Number of transactions (all types) completed in measurement interval	21,744,892