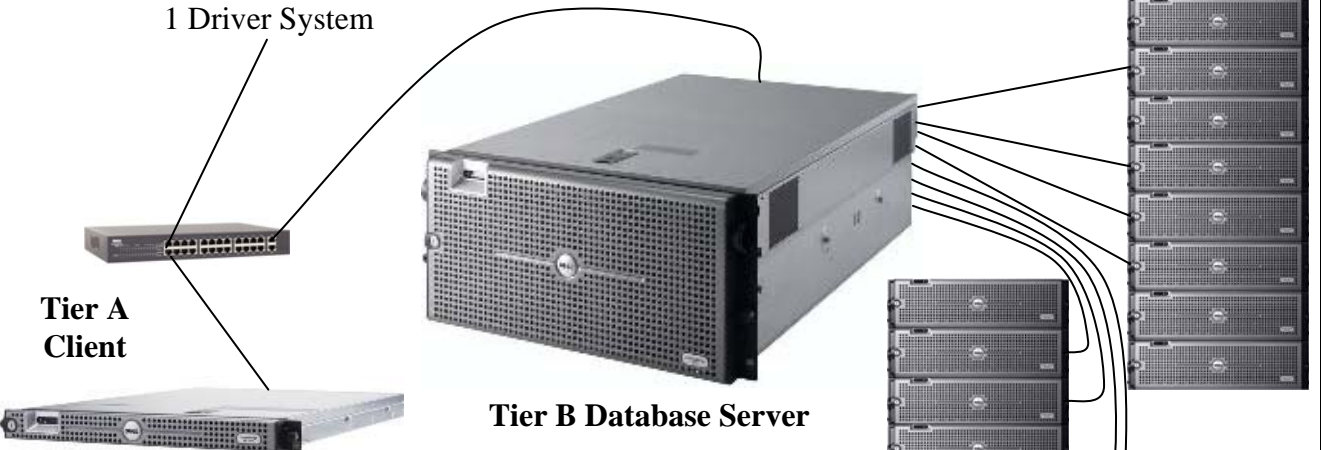
	PowerEdge™ R900 Server		TPC-E 1.5.1 TPC Pricing 1.3
			Report Date: August 19, 2008
TPC-E Throughput	Price/Performance	Availability Date	Total System Cost
671.35 tpsE	\$500.55 USD per tpsE	September 15, 2008	\$336,039 USD
Database Server Configuration			
Operating System	Database Manager	Processors/Cores/ Threads	Memory
Microsoft Windows Server 2008 Enterprise x64 Edition™	SQL Server 2008 Enterprise x64 Edition™	4/24/24	64GB
			
<p>1 Driver System</p> <p>Tier A Client</p> <p>...</p> <p>Client</p> <p>2 PowerEdge SC 1430 2 Quad Core Intel E5310 2x4MB/1.60GHz,1066FSB 4GB Memory 2 Broadcom Ethernet 1 80GB SATA 7.2K Disk</p>	<p>Tier B Database Server</p> <p>Server</p> <p>1 PowerEdge R900 4 X7460 Six Core Intel Xeon 16MB cache, 2.67GHz, 1066MHz FSB 64GB 667MHz(16x4GB), Dual Ranked Fully Buffered DIMM 2 Broadcom NetExtreme II Gigabit Ethernet 1 PERC6i SAS RAID Controller 6 MegaRAID SAS 8888ELP Cntrs 8 73GB 15k 2.5" SAS Disks 1 Intel(R) PRO/1000 PT Adapter</p>	<p>...</p> <p>Storage</p> <p>Storage</p> <p>24 PowerVault MD1000 SAS Enclosures 308 73GB 15k 3.5" 3GBPS SAS Disks 28 146GB 15k 3.5" 3GBPS SAS Disks</p>	
Initial Database Size 2,627.5GB	Redundancy Level: One	Storage 8 x 73GB 308 x 73GB, 28 x 146GB	



PowerEdge R900

TPC-E 1.5.1
TPC Pricing 1.3
 Report Date
 August 19, 2008
 Revision Date
 August 19, 2008
 Availability Date
 September 15, 2008

Description	Part Number	Price Source	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
PER900,DUAL X7460,2.67GHz,130WV & 2 Broadcom NICs	223-4230	NIO	\$10,196.00	1	\$10,196.00	\$540.00
Upgrade to Quad X7460, 2.67GHz	311-9170	NIO	\$6,999.00	1	\$6,999.00	
64GB,667MHZ, 16X4GB	311-7857	1	\$5,241.00	1	\$5,241.00	
Intel PRO1000PT,Cu,2PT,PCle	430-0959	1	\$199.00	1	\$199.00	
PERC6i SAS RAID, Internal, Bat	341-5699	1	\$299.00	1	\$299.00	
MegaRAID SAS 8888ELP, 2X4 EXTERNAL	LS-8888ELP	3	\$676.04	8	\$5,408.32	
73GB,SAS,2.5-inch,15K RPM HD	341-4727	1	\$339.00	8	\$2,712.00	
DELL E157FP,15 IN,15.0 VIS	320-5090	1	\$189.00	1	\$189.00	
				Subtotal	\$31,243.32	\$540.00
Server Storage						
PV MD1000,RACK,3U,15 BAY,LBZL	222-2299	1	\$2,480.00	24	\$59,520.00	\$39,792.00
SINGLE ENCL MGT MODULE, SAS ONLY	420-5927	1	\$345.83	24	\$8,299.92	
73GB,3GBPS,SAS,3.5IN,15K	341-2818	1	\$299.00	308	\$92,092.00	
146G,3GBPS,SAS,3.5IN,15K	341-2820	1	\$349.00	28	\$9,772.00	
RACK-42U, CUST	340-4896	1	\$239.99	2	\$479.98	
				Subtotal	\$170,163.90	\$39,792.00
Server Software						
SQL Server 2008 Enterprise x64 Edition **	810-07507	2	\$23,432.00	4	\$93,728.00	
Windows Server 2008 Enterprise Edition (x64) **	P72-03168	2	\$2,310.00	1	\$2,310.00	
Professional Support (1 Incident)	N/A		\$245.00	1		\$245.00
				Subtotal	\$96,038.00	\$245.00
Client Hardware						
Dell PowerEdge SC 1430, 1.60GHZ/2x4MB,1066 FSB	222-6813	1-1S	\$561.00	2	\$1,122.00	\$492.00
Additional processor, E5310,2X4MB/1.6GHZ,1066FSB	311-6862	1-1S	\$349.00	2	\$698.00	
4GB,667MHZ,(2X2GB),2R,FBD	311-6254	1	\$448.00	2	\$896.00	
80GB,SATA,1IN,7.2K RPM,HD ,7.2K	341-3757	1	\$99.00	2	\$198.00	
BCOM NetX 5721,Gb,ETHERNET,NIC	430-1496	1	\$59.00	2	\$118.00	
				Subtotal	\$3,032.00	\$984.00
Client Software						
Windows Server 2008 Standard Edition (x64) **	P73-04165	2	\$711.00	1	\$711.00	
Windows Server 2008 Enterprise Edition (x64) **	P72-03168	2	\$2,310.00	1	\$2,310.00	
				Subtotal	\$3,021.00	\$0.00
Infrastructure						
PowerConnect 2216, 16port Switch	222-2259	1	\$69.00	1	\$69.00	
1M SAS Cable MegaRAID SAS 8888ELP	HI-MS-1MSB	3	\$34.10	12	\$409.20	
2M SAS Cable, MD1000	310-7083	1	\$40.00	12	\$480.00	
				Subtotal	\$958.20	\$0.00
				Other Discounts*	(\$9,979.00)	
				Total	\$294,477.43	\$41,561.00
Notes:						
One or more components of the measured configuration have been substituted in the Priced Configuration. See the FDR for details.						
*All hardware from Dell(1) is discounted 5% based on total dollar volume of this config.				Three-Year Cost of Ownership:	\$336,039	USD
** All Microsoft maintenance is covered by the maint. costs of Microsoft SQL Server				TPC-E Throughput:	671.35	tpsE
Price Source: 1=Dell, 2=Microsoft, 3=eMiz, NIO = Not Immediately Orderable				Price/Performance:	\$500.55	tpsE/USD
Pricing may be verified by calling 1-800-BUY-DELL and referencing quote # 444564052 as a complex quote.						
Audited by Lorna Livingtree, Performance Metrics Inc.						
<i>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.</i>						

Numerical Quantities Summary				
Reported Throughput: 671.35 tpsE		Configured Customers: 340,000		
Response Times (in seconds)	Minimum	Average	90th%tile	Maximum
Broker-Volume	0.01	0.08	0.24	0.57
Customer-Position	0.00	0.04	0.07	1.30
Market-Feed	0.00	0.06	0.21	0.67
Market-Watch	0.00	0.04	0.07	2.97
Security-Detail	0.00	0.02	0.03	0.55
Trade-Lookup	0.00	0.74	0.94	1.46
Trade-Order	0.00	0.11	0.17	2.44
Trade-Result	0.00	0.09	0.16	2.48
Trade-Status	0.00	0.04	0.10	0.57
Trade-Update	0.03	0.88	1.01	1.53
Data-Maintenance	0.00	0.15		2.43
Transaction Mix		Transaction Count		Mix %
Broker-Volume		2,368,580		4.900%
Customer-Position		6,283,850		13.000%
Market-Feed		483,373		1.000%
Market-Watch		8,700,974		18.000%
Security-Detail		6,767,690		14.001%
Trade-Lookup		3,866,907		8.000%
Trade-Order		4,882,160		10.100%
Trade-Result		4,833,730		10.000%
Trade-Status		9,184,614		19.001%
Trade-Update		966,696		2.000%
Data-Maintenance		120		
Test Duration and Timings				
Ramp-up Time (hh:mm:ss)			00:10:57	
Measurement Interval (hh:mm:ss)			02:00:00	
Business Recovery Time (hh:mm:ss)			00:43:33	
Total number of Transactions Completed in Measurement Interval			48,338,574	