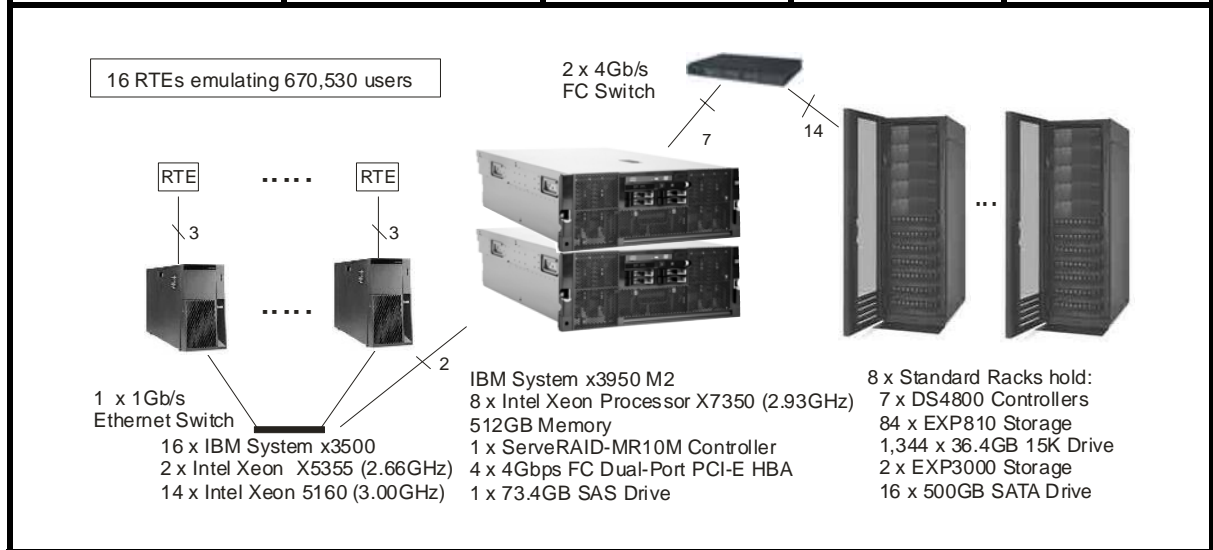


IBM Corporation	IBM® System x3950 M2 c/s Microsoft® SQL Server 2005 (SP2)		TPC-C Rev. 5.9
			Report Date 10/23/07
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$2,911,484 USD	841,809 tpmC	\$3.46 USD /tpmC	April 1, 2008
Database Server Processors/Cores/Threads	Database Manager	Operating System	Other Software
8/32/32 Intel® Xeon® Processor X7350 2.93 GHz	Microsoft SQL Server 2005 Enterprise x64 Edition (SP2)	Microsoft Windows® Server 2003 R2 Enterprise x64 Edition	Microsoft Visual Studio Standard 2005 Microsoft COM+
			670,530



System Component	Qty	Server	Qty	Each of 2 and 14 Clients, respectively
Processors/Cores/Threads	8/32/32	Intel Xeon Processor X7350 2.93 GHz	1/4/4 1/2/2	Quad-Core Intel Xeon X5355 (2.66GHz) Dual-Core Intel Xeon 5160 (3.00GHz)
Cache		2x4 MB L2		2x4MB L2 Cache 1x4MB L2 Cache
Memory	64	8GB ECC RDIMM	4	512MB PC2-5300 FBD
Disk Controllers	7 4 1	IBM System Storage DS4800 IBM DS4000 4Gbps FC PCI-E ServeRAID-MR10M		Integrated SAS Interface
Disk Drives	1,344 16 1	36.4GB 15K 4Gbps FC 500GB dual-Port H/S SATA II 73GB 15K SFF H/S SAS	1	73.4GB 15K SAS
Total Storage		52,412.74 GB		

Description	Part Number	Brand	Price Source	Unit Price	Quantity	Extended Price	3-Yr. Maint. Price
Server Hardware							
IBM System x3950 M2 (2 x Intel Xeon Processor X7350 with 2.93GHz/2x4MB L2 Cache, 4 Memory Cards, 8 x 1GB DIMM, onboard SAS enablement key, cables)	7141-4SU	IBM	1a *	19,469	2	38,938	
Intel Xeon Processor X7350 (2.93GHz/1066MHz FSB/2x4MB L2)	44E4243	IBM	1a	4,799	4	19,196	
16GB (2x8GB) 667MHz PC2-5300 ECC DDR2 SDRAM DIMM	43V7356	IBM	1a *	30,000	32	960,000	
ServeRAID-MR10M SAS/SATA Controller	43W4339	IBM	1a	1,049	1	1,049	
73.4GB 15K Hot Swap SAS	40K1043	IBM	1b	309	1	309	
IBM T115 15-inch TFT Display	494215U	IBM	1a	209	1	209	
IBM Preferred Pro USB Keyboard	40K9584	IBM	1b	29	1	29	
IBM 3-Button Optical Mouse - Black - USB	40K9201	IBM	1b	19	1	19	
NetXtreme II 1000 Express Ethernet Adapter	39Y6066	IBM	1b	279	2	558	
PRO/1000 PT Dual-Port Server Adapter	39Y6126	IBM	1b	269	1	269	
ServicePac for 3-Year 24x7x4 Support (x3950 M2)	96P2688	IBM	1b	3,390	2		6,780
ServicePac for 3-Year 24x7x4 Support (Display)	10N3110	IBM	1b	90	1		90
				Subtotal		1,020,576	6,870
Server Storage							
IBM 4Gb FC Dual-Port PCI-E HBA for IBM System x	39R6527	IBM	1a	1,329	4	5,316	
IBM System Storage DS4800 Midrange Disk Subsystem	1815-82A	IBM	2	53,995	7	377,965	
4 Gbps SW SFP Transceiver 4 Pack	22R4897	IBM	1b	550	33	18,150	
IBM 1m LC-LC Fibre Channel Cable	39M5696	IBM	1b	79	168	13,272	
IBM 5m LC-LC Fibre Channel Cable	39M5697	IBM	1b	129	21	2,709	
IBM System Storage DS4000 EXP810 Storage Exp. Unit	1812-81A	IBM	2	6,000	84	504,000	
36.4GB 15K 4Gbps FC E-DDM Hot-Swap HDD	40K6812	IBM	2	892	1344	1,198,848	
IBM TotalStorage SAN16B-2	200516B	IBM	1b	4,120	2	8,240	
B16 4-Port Activation	22R4901	IBM	1b	1,570	2	3,140	
IBM System Storage EXP3000	172701X	IBM	1b	3,199	2	6,398	
500GB 3.5" Dual Port Hot-Swap SATA II	39M4558	IBM	1b	775	16	12,400	
IBM EXP3000 1m Cable	39R6529	IBM	1b	119	2	238	
IBM UPS 750TLV	2130R1X	IBM	1b	299	1	299	
IBM S2 42U Standard Rack	93074RX	IBM	1b	1,489	8	11,912	
ServicePac for 3-Year 24x7x4 Support (EXP810)	10N3651	IBM	2	960	84		80,640
ServicePac for 3-Year 24x7x4 Support (DS4800)	41C5953	IBM	2	3,200	7		22,400
ServicePac for 3-Year 24x7x4 Support (SAN16B-2)	41E9144	IBM	1b	1,120	2		2,240
ServicePac for 3-Year 24x7x4 Support (EXP3000)	41L2768	IBM	1b	760	2		1,520
ServicePac for 3-Year 24x7x4 Support (Rack)	41L2760	IBM	1b	300	8		2,400
				Subtotal		2,162,887	109,200
Server Software							
Microsoft SQL Server 2005 Enterprise x64 Edition	810-03134	Microsoft	3b	24,999	8	199,992	
Microsoft Windows Server 2003 R2 Enterprise x64 Edition	P72-01684	Microsoft	3b	3,999	1	3,999	
Microsoft Problem Resolution Services		Microsoft	3a	245	1		245
				Subtotal		203,991	245
Client Hardware							
x3500 with 2.66GHz/8MB Xeon X5355, 1GB (2x512) Memory	7977H2U	IBM	1b	2,959	2	5,918	
x3500 with 3.0GHz/2x2MB Xeon 5160, 1GB (2x512) Memory	797792U	IBM	1b	2,999	14	41,986	
1GB (2x512MB) PC2-5300 CL5 ECC DDR2 FBD 667MHz	39M5782	IBM	1b	349	16	5,584	
73GB 15K Hot Swap SAS	40K1043	IBM	1b	309	16	4,944	
PRO/1000 PT Dual-Port Server Adapter	39Y6126	IBM	1b	269	32	8,608	
ServicePac for 3-Year 24x7x4 Support (x3500)	21P2084	IBM	1b	689	16		11,024
				Subtotal		67,040	11,024
Client Software							
Microsoft Windows Server 2003 R2 Standard Edition	P73-01972	Microsoft	3b	999	16	15,984	
Microsoft Visual Studio Standard 2005	127-00012	Microsoft	3a	250	1	250	
				Subtotal		16,234	0
Network Components							
NetGear 24-Port Ethernet Switch (2 spares)	JGS524		4	243	3	729	
Ethernet Cable (2 spares)	A3L791-10-BLK		4	4	22	88	
				Subtotal		817	0
				Total		3,471,545	127,339
IBM Large Purchase Discount (See Note 1.)	19.00%		1b			32,110	
Compsat Technology Large Purchase Discount	29.15%		2			636,609	
Microsoft Open Program Discount Schedule	8.49%		3b			18,681	
Pricing: 1 - IBM - 1-888-SHOP-IBM, ext. 5821; 2 - Compsat Technology; 3- Microsoft; 4- newegg.com				Three-Year Cost of Ownership USD:		\$2,911,484	
Note 1: Discount based on IBM Direct guidance applies to all line items where Pricing=1b.				tpmC:		841,809	
Pricing is for this system or one of similar size.				\$ USD/tpmC:		\$3.46	
* These components are not immediately orderable. See the FDR for more information.							
Audited by Francois Raab, InfoSizing, Inc. (www.sizing.com)							
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 stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.							

IBM Corporation	IBM® System x3950 M2 c/s Microsoft® SQL Server 2005 (SP2)	TPC-C Rev. 5.9	
		Report Date 10/23/07	
Numerical Quantities Summary			
MQTh, Computed Maximum Qualified Throughput: 841,809 tpmC			
Response Times (in seconds)	90th Percentile	Average	Maximum
New Order	0.64	0.33	5.56
Payment	0.62	0.32	4.05
Delivery	0.22	0.14	1.03
Stock Level	0.80	0.46	4.55
Order Status	0.66	0.34	5.02
Delivery (Deferred)	0.52	0.26	5.28
Menu	0.20	0.14	1.02
Response Time Delay Added for Emulated Components: 0.1 Seconds			
Transaction Mix (in percent of total transactions)			Percent
New Order			44.95
Payment			43.02
Delivery			4.01
Stock Level			4.01
Order Status			4.01
Keying/Think Times (in seconds)	Minimum	Average	Maximum
New Order	18.00 / 0.00	18.00 / 12.04	18.00 / 120.31
Payment	3.00 / 0.00	3.00 / 12.04	3.00 / 120.31
Delivery	2.00 / 0.00	2.00 / 5.04	2.00 / 50.31
Stock Level	2.00 / 0.00	2.00 / 5.04	2.00 / 50.31
Order Status	2.00 / 0.00	2.00 / 10.04	2.00 / 100.31
Test Duration			
Ramp-up Time			77 minutes 47 seconds
Measurement Interval			120 minutes
Number of Checkpoints			4
Checkpoint Interval			30 minutes
Number of transactions (all types) completed in measurement interval			233,728,796