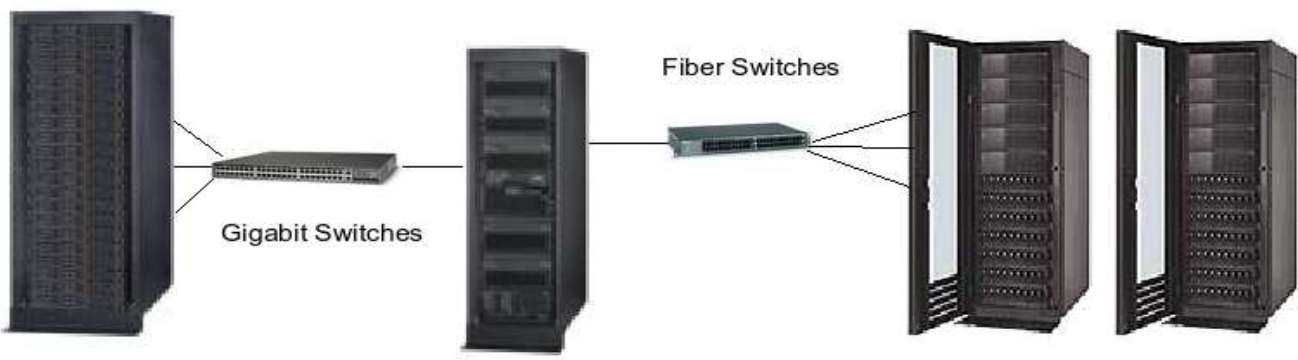
	IBM System x3850 M2 DB2® 9.5		TPC-C Rev. 5.9	
			Report Date: October 15, 2007	
Total System Cost	TPC-C Throughput	Price/Performance		Availability Date
\$1,337,458 USD	516,752	\$2.59 USD		March 14, 2008
Database Processors/Cores/Threads	Database Manager	Operating System	Other Software	No. Users
4/16/16 2.93 GHz Intel Xeon X7350	DB2 9.5	RHEL 5	Microsoft Visual C++ Microsoft COM+	420,160

Priced



<p><u>16 Clients</u> IBM® System x3250 1x Intel X3210 QC 2.13GHz 1GB Memory 73 GB Internal SAS Drive 2 Gb Ethernet</p>	<p><u>IBM® System x3850 M2</u> 4 x Intel Xeon X7350 (2.93GHz) 256GB Memory 5 x IBM Dual Port 4GB FC 2 x Integrated Gb Ethernet</p>	<p><u>Storage</u> 17 x IBM® DS3400 Storage Servers 48x IBM® EXP3000 DiskEnclosures 769 x 73 GB 15K RPM SAS Drives 6 x 146 GB 15K RPM SAS Drives</p>
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System Components	Each of the 16 Clients		Server	
	Quantity	Description	Quantity	Description
Processors/Cores/Threads	1/4/4	2.13GHz 8MB L2 Xeon 3210 Quad Core	4/16/16	2.93 GHz Intel Xeon X7350
Memory	1	1 GB	32	8 GB
Disk Controllers	1	SAS	1 5 16 1	Integrated SAS 4Gb dual-port FC Adapters IBM DS3400 Controllers for Data IBM DS3400 Controller for Log
Disk Drives	1	73 GB	769 6	73 GB 15K RPM SAS 146 GB 15K RPM SAS
Total Storage		1168 GB		57,013 GB
Terminals	1	System Console	1	System Console

IBM Corporation	IBM System x3850 M2 c/s			TPC-C Revision 5.9				
	DB2 9.5			Report Date: October 15, 2007				
Description	Part Number	Third Party Brand	Pricing	Unit Price	Quantity	Extended Price	3-Yr. Maint. Price	
Server Hardware								
IBM System x3850 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)	7141-4RU	IBM	1a	19,249	1	19,249		
Intel Xeon Processor X7350 (2.93GHz/1066MHz FSB/2x4MB L2)	44E4243	IBM	1a	6,269	2	12,538		
16GB (2x8GB) 667MHz PC2-5300 ECC DDR2 SDRAM DIMM	43V7356	IBM	1a*	30,000	16	480,000		
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		
ServicePac for 3-Year 24x7x4 Support (x3850 M2)	96P2688	IBM	1b	3,390	1		3,390	
ServicePac for 3-Year 24x7x4 Support (Display)	30L9183	IBM	1b	90	1		90	
Subtotal						512,044	3,480	
Server Storage								
IBM 4-Gbps FC Dual-Port PCI-E HBA	39R6527	IBM	1b	1,899	5	9,495		
IBM System Storage DS3400 Express	1726-42E	IBM	1b	8,749	17	148,733		
IBM 3M SAS cable	39R6531	IBM	1b	135	96	12,960		
IBM System Storage EXP3000	1727-01X	IBM	1b	3,199	48	153,552		
IBM Hot-Swap 3.5 inch 73.4GB 15K SAS HDD	40K1043	IBM	1b	309	769	237,621		
IBM Hot-Swap 3.5 inch 146GB 15K SAS HDD	40K1044	IBM	1b	549	6	3,294		
IBM TotalStorage SAN32M-2 Express Model	202632E	IBM	1b	10,490	2	20,980		
8-Port FlexPort Expansion Kit (1 per Switch)	22R5906	IBM	1b	4,720	2	9,440		
IBM S2 42U Standard Rack	93074RX	IBM	1b	1,489	4	5,956		
DS3400 Software Feature Pack	42C2143	IBM	1b	995	16	15,920		
DS3000 EXP3000 Expansion License	39R6537	IBM	1b	1,995	16	31,920		
ServicePac for 3-Year 24x7x4 Support (DS3400)	44J8073	IBM	1b	1,300	17		22,100	
ServicePac for 3-Year 24x7x4 Support (EXP3000)	41L2768	IBM	1b	760	48		36,480	
ServicePac for 3-Year 24x7x4 Support (SAN32M-2)	41E9167	IBM	1b	3,300	2		6,600	
ServicePac for 3-Year 24x7x4 Support (Rack)	41L2760	IBM	1b	300	4		1,200	
Subtotal						649,871	66,380	
Server Software								
DB2 ESE 9.5		IBM	2	278.52	800	222,816		
Extended Systems - SW License and Maintenance 12 Months								
SW Maintenance Renewal - 1 Year		IBM	2	13.27	1600		21,232	
Red Hat Enterprise Linux Advanced Platform, Premium (Unlimited Sockets)		Red Hat	3	2,499	3	7,497		
Subtotal						230,313	21,232	
Client Hardware								
Linksys ProConnect KVM Switch - 2 ports (2 spares)	430446		6	42	3	126		
IBM System x3250 with Quad-Core Intel Xeon Processor X3210 (2.13GHz) and 2x512MB Memory	43658BU	IBM	1b	2,105	16	33,680		
73.4GB 15K SAS Hot-Swap Drive	40K1043	IBM	1b	309	16	4,944		
ServicePac for 3-Year 24x7x4 Support (x3250)	40M7080	IBM	1b	219	16		3,504	
Subtotal						38,750	3,504	
Client Software								
Microsoft Windows Server 2003 Web Edition with COM+	484143	Microsoft	6	296	16	4,736		
Microsoft Visual C++ Professional 6.0		Microsoft	8	200	1	200		
Microsoft Problem Resolution Services		Microsoft	4	245	1		245	
Subtotal						4,936	245	
Network Components								
D-LINK DGS-1024D 24-Port 10/100/1000 Switch (2 spares)	DGS1024D		5	203	3	609		
Ethernet Cable (2 spares)	CC5E-B14B		7	3	20	60		
Subtotal						669		
Total						1,436,583	94,841	
Large Purchase Discount (See Note 1b.)	25.46%		1					
Pricing: 1a and 1b - IBM - 1-888-SHOP-IBM, ext. 5821; 2 - IBM; 3 - Red Hat; 4 - Microsoft; 5 - compuplus.com; 6 - CDW.com; 7 - newegg.com; 8 - pricegrabber.com					Three-Year Cost of Ownership USD:			\$1,337,458
Note 1b: Discount based on IBM Direct guidance applies to all line items where Pricing=1b. Pricing is for this system or one of similar size.					tpmC:			516,752
* This component is not immediately orderable. See the FDR for more information.					\$ USD/tpmC:			\$2.59
Note 2: Pricing for DB2 9.5 is based on Value Units (VUs) as shown in the price quote in Appendix D.								
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.								

Numerical Quantities Summary for the IBM System x3850 M2

MQTH, computed Maximum Qualified Throughput: 516,752 tpmC

<u>Response Times (in seconds)</u>	<u>90th %</u>	<u>Average</u>	<u>Maximum</u>
New Order	1.80	0.59	4.60
Payment	1.80	0.57	5.63
Order-Status	1.80	0.59	4.57
Delivery (interactive)	1.02	0.34	3.16
Delivery (deferred)	0.31	0.21	2.41
Stock-Level	1.80	0.58	4.36
Menu	1.02	0.34	3.44

Response time delay added for emulated components was 0.1 seconds

<u>Transaction Mix, in percent of total transactions</u>	<u>Percent</u>
New Order	44.95%
Payment	43.02%
Order-Status	4.01%
Delivery	4.01%
Stock-Level	4.01%

<u>Keying/Think Times (in seconds)</u>	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.00	18.00/12.04	18.02/120.32
Payment	3.00/0.00	3.00/12.04	3.02/120.32
Order-Status	2.00/0.00	2.00/10.04	2.02/100.32
Delivery	2.00/0.00	2.00/5.04	2.02/50.32
Stock-Level	2.00/0.00	2.00/5.04	2.02/50.32

Test Duration

Ramp-up Time	1 hour 28 minutes
Measurement interval	2 hours 00 minutes
Transactions during measurement interval (all types)	137,952,403

Checkpoints

Number of checkpoints	N/A
Checkpoint interval	N/A