

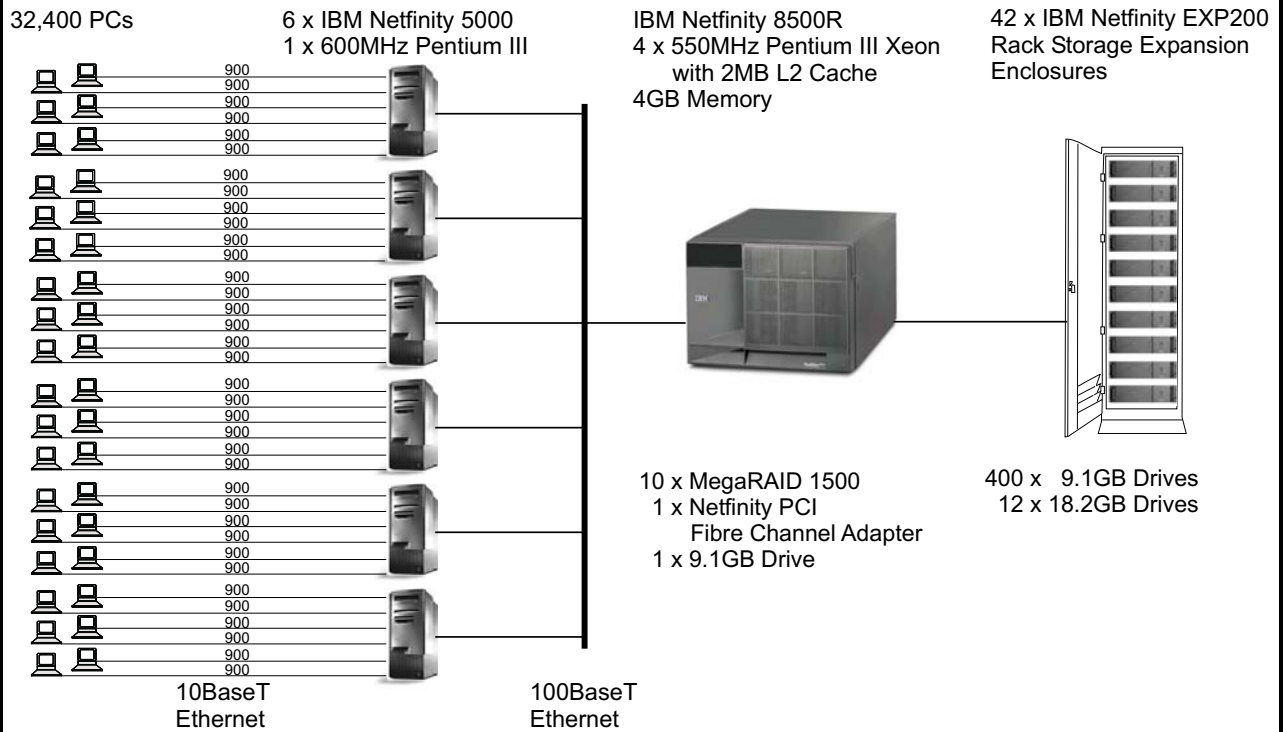
# IBM Netfinity 8500R c/s

TPC-C Rev 3.5

Report Date: Feb. 25, 2000

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
<b>\$763,922</b>	<b>40,251.15 tpmC</b>	<b>\$18.98/tpmC</b>	<b>Feb. 25, 2000</b>

Processors	Database Manager	Operating System	Other Software	Number of Users
<b>8 Intel Pentium III Xeon 550MHz 2MB L2 Cache</b>	<b>Microsoft SQL Server 7.0 Enterprise Edition</b>	<b>Microsoft Windows NT 4.0 Enterprise Edition</b>	<b>Microsoft Windows 2000 Server Microsoft Visual C++ 6.0</b>	<b>32,400</b>



<b>System Component</b>	<b>Qty</b>	<b>Server</b>	<b>Qty</b>	<b>Each of Six Clients</b>
<b>Processors</b>	<b>8</b>	<b>550MHz Pentium III Xeon w/2MB L2 Cache</b>	<b>1</b>	<b>600MHz Pentium III w/512KB L2 Cache</b>
<b>Cache</b>				
<b>Memory</b>	<b>1</b>	<b>4096MB</b>	<b>1</b>	<b>512MB</b>
<b>Disk Controllers</b>	<b>10</b>	<b>MegaRAID 1500-H</b>	<b>1</b>	<b>Wide Ultra SCSI Onboard</b>
	<b>1</b>	<b>Fibre Channel PCI</b>		
<b>Disk Drives</b>	<b>401</b>	<b>9.1GB (10000 rpm)</b>	<b>1</b>	<b>9.1GB Hard Disk</b>
	<b>12</b>	<b>18.2GB (10000 rpm)</b>		
<b>Total Storage</b>		<b>3868GB</b>		
<b>Tape Drive</b>	<b>1</b>	<b>20/40GB SCSI Tape Drive</b>		

<b>IBM Corporation</b>		<b>Netfinity 8500R c/s</b>		<b>TPC-C Revision 3.5</b>			
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<b>Description</b>	<b>Order Number</b>	<b>Third-Party Brand</b>	<b>Pricing</b>	<b>Unit Price</b>	<b>Qty</b>	<b>Ext. Price</b>	<b>5-Yr. Maint.*</b>
<b>Server Hardware</b>							
Netfinity 8500R 550MHz/2MB Pentium III Xeon	86816RY		1	\$23,330	1	\$23,330	\$10,295
550MHz/2MB L2 Cache Processor Upgrade	33L5105		1	6,280	7	43,960	0
8500R Memory Expansion Card	28L4454		1	587	1	587	0
512MB ECC SDRAM RDIMM Memory Kit	20L0249		1	2,275	7	15,925	0
8500 >4-Way Enablement Kit (4X SRAM)	28L4727		1	1,990	1	1,990	0
AMI MegaRAID 1500-H 4-Channel Adapter***	4674536264A	AMI	3	1,750	12	21,000	1,050
Netfinity Fibre Channel RAID Controller Unit	35261RU		1	12,560	1	12,560	1,980
Netfinity Fibre Channel PCI Adapter	01K7297		1	1,675	1	1,675	0
Netfinity Fibre Channel 5M Short-Wave Cable	03K9306		1	127	1	127	0
9.1GB 10K Wide Ultra SCSI Drive	36L9748		1	469	1	469	0
Netfinity 4.2M Ultra2 SCSI Cable	03K9311		1	121	44	5,324	0
Ethernet 10/100 PCI Adapter	34L0201		1	58	1	58	0
IBM G42 14" (13.2" Viewable) Color Monitor*	654000N		1	169	1	169	215
20/40GB DLT SCSI Internal Tape Drive	01K1320		1	1,955	1	1,955	0
Netfinity Rack*	9306900		1	1,685	4	6,740	0
Side Panel Kit	94G6669		1	197	1	197	0
<b>Subtotal</b>						<b>\$136,066</b>	<b>\$13,540</b>
<b>Storage Hardware</b>							
Netfinity EXP200 Rack Storage Enclosure	35301RU		1	2,510	42	105,420	83,160
9.1GB 10K Wide Ultra SCSI Drive	36L9748		1	469	400	187,600	0
18.2GB 10K Wide Ultra SCSI Drive	36L9749		1	837	12	10,044	0
<b>Subtotal</b>						<b>\$303,064</b>	<b>\$83,160</b>
<b>Server Software</b>							
Microsoft SQL Server 7.0, Enterprise Edition, unlimited CALs		Microsoft	2	28,999	1	\$28,999	\$0
Microsoft Windows NT Server 4.0, Enterprise Edition, plus 25 CALs		Microsoft	2	3,999	1	3,999	0
Five-Year Maintenance for Software		Microsoft	2	10,475	1		10,475
<b>Subtotal</b>						<b>\$32,998</b>	<b>\$10,475</b>
<b>Client Hardware</b>							
IBM Netfinity 5000 / 600MHz/512KB Pentium III*	86596RY		1	3,035	6	\$18,210	\$34,170
9.1GB 10K Wide Ultra SCSI Drive	36L9748		1	471	6	2,826	0
128MB DIMMs	01K7262		1	417	18	7,506	0
Netfinity 10/100 Ethernet PCI Adapter	34L1501		1	101	12	1,212	0
Intel Pro/100+ Dual-Port Ethernet Adapter**		Intel	1	69	12	828	0
IBM G42 14" (13.2" Viewable) Color Monitor*	654000N		1	169	6	1,014	1,290
<b>Subtotal</b>						<b>\$31,596</b>	<b>\$35,460</b>
<b>Client Software</b>							
Microsoft Windows 2000 Server with COM+		Microsoft	2	809	6	4,854	0
Microsoft Visual C++ Professional 6.0		Microsoft	2	549	1	549	0
<b>Subtotal</b>						<b>\$5,403</b>	<b>\$0</b>
<b>User Connectivity</b>							
8-Port 10Mbps Hub***	DEH2924	Generic	1	25	4,475	111,875	0
NETLUX 8-Port 100Mbps Hub***	NX-H8TX	NETLUX	4	95	3	285	0
<b>Subtotal</b>						<b>\$112,160</b>	<b>\$0</b>
<b>Total</b>						<b>\$621,287</b>	<b>\$142,635</b>
Notes: * The standard 3-year warranty and the extended warranty on IBM hardware is for 7x24, on-site same day coverage. ** Five-year warranty. *** 10% or minimum 2 spares are added in place of on-site service (products have a 5-year return-to-vendor-warranty)						<b>Five-Year Cost of Ownership:</b> \$763,922	
Pricing: 1 - Software House International; 2 - Microsoft Corp.; 3 - American Megatrends.; 4 - NETLUX						<b>tpmC Rating:</b> 40,251.15	
						<b>\$ / tpmC:</b> \$18.98	
<b>Audited by Francois Raab of Info Sizing.</b>							
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 specification. If you find that stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.							

<b>Numerical Quantities Summary</b>			
MQTh, Computed Maximum Qualified Throughput: % throughput difference, reported and reproducibility runs:			40,251.15 tpmC 1.35 %
<b>Response Times (in seconds)</b>	<b>90%</b>	<b>Average</b>	<b>Maximum</b>
New-Order	0.83	0.53	5.48
Payment	0.67	0.38	3.21
Order-Status	0.68	0.39	5.19
Delivery (Interactive)	0.13	0.12	1.04
Delivery (Deferred)	0.79	0.57	1.78
Stock-Level	2.72	2.29	6.78
Menu	0.13	0.12	1.49
<b>Transaction Mix (in percent of total transactions)</b>		<b>Total Occurrences</b>	<b>Percent</b>
New-Order		805,023	44.80
Payment		773,672	43.06
Order-Status		72,631	4.04
Delivery		73,118	4.07
Stock-Level		72,472	4.03
<b>Emulation Delay (in seconds)</b>	<b>Response Time</b>		<b>Menu</b>
New-Order	0.1		0.1
Payment	0.1		0.1
Order-Status	0.1		0.1
Delivery	0.1		0.1
Stock-Level	0.1		0.1
<b>Keying/Think Times (in seconds)</b>	<b>Minimum</b>	<b>Average</b>	<b>Maximum</b>
New-Order	18.01 / 0.00	18.03 / 12.01	18.08 / 120.32
Payment	3.01 / 0.00	3.03 / 12.01	3.08 / 120.32
Order Status	2.01 / 0.00	2.03 / 10.02	2.07 / 100.40
Delivery	2.01 / 0.00	2.03 / 5.04	2.08 / 50.31
Stock-Level	2.01 / 0.00	2.03 / 5.04	2.07 / 50.31
<b>Test Duration</b>			
Ramp-up time			47 minutes
Measurement interval			20 minutes
Number of transactions (all types) completed in measurement interval			1,796,916
Ramp-down time			11 minutes
Number of checkpoints in measurement interval			1
Checkpoint interval			20 minutes