



IBM RS/6000 Enterprise Server S70 c/s

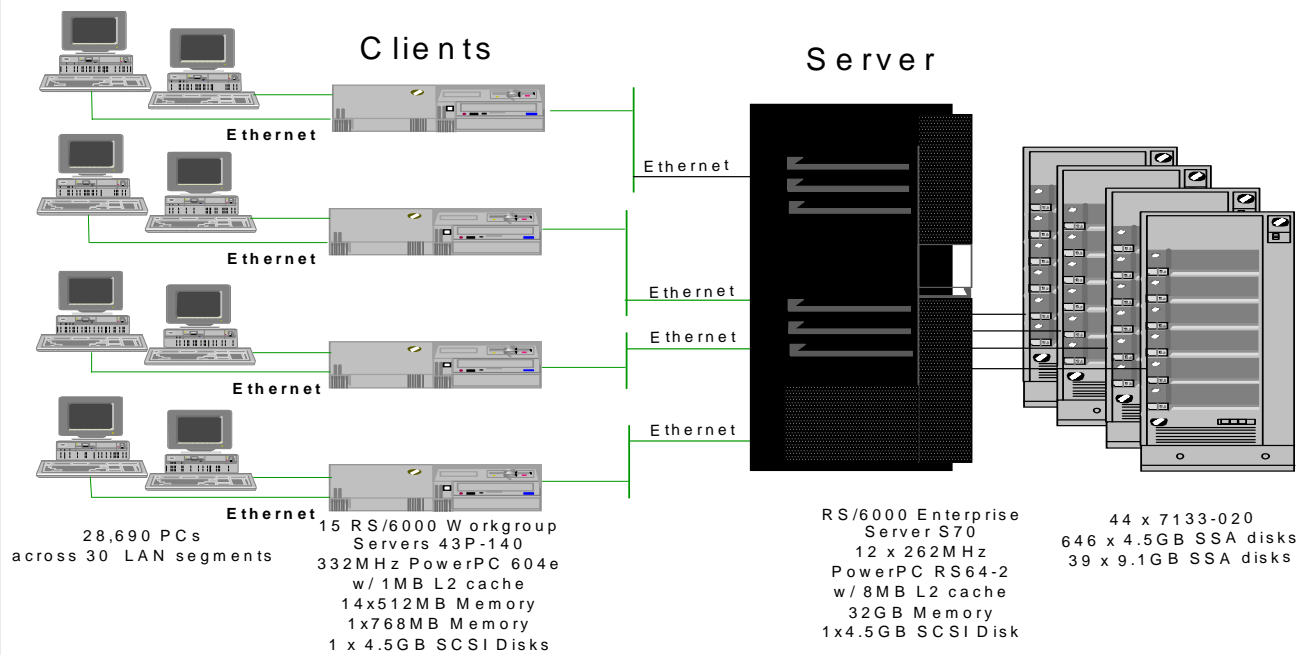
TPC-C Rev. 3.4

ORACLE

Report Date: Aug 11, 1998
Modified: Sept. 30, 1998

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$3,016,996	34,139.63tpmC	\$88.37/tpmC	January 21, 1999	
Processors	Database Manager	Operating System	Other Software	Number of Users
12 x 262MHz IBM PowerPC RS64-2	Oracle8 Enterprise Edition 8.0	AIX 4.3.1 + APAR IX 80057	IBM TXSeries 4.2 for AIX	28,690

RS/6000 Enterprise Server S70



System Components	Clients		Server	
	Quantity	Description	Quantity	Description
Processor	15	332MHz PowerPC 604e w/ 1MB L2 cache	12	262MHz PowerPC RS64-2 w/ 8MB L2 cache
Memory		14 - 512MB 1 - 768MB		32 GB
Disk Controllers	15	SCSI-2 Adapters	4 13	SCSI-2 Adapters SSA Adapters
Disk Drives	15	4.5GB SCSI	646 39	4.5GB SSA Disks 9.1 SCSI F/W Disks
Total Storage		4.5 GB each client		3066.28 GB
Terminals	15	System Console	1	System Console
Term. Connect	3,600	8 Port Ethernet Hubs + 10% spares		



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Description	Part Number	Third Party Brand Pricing	Unit Price	Qty	Extended Price	5 yr. Maint Price
Server Hardware						
RS/6000 Server Model S70	7017-S70	1	125,000	1	125,000	69,120
4 RS64-2 proc, 512MB Memory, 4.5gb SCSI, I/O Rack, I/O Drawer, 2-SCSI Adapter, 1.44 MB Diskette, CDROM						
Async/Terminal Cable	2934	1	45	1	45	0
Ethernet PCI Adapter	2985	1	195	16	3,120	0
Remote I/O Cable - Drawer to Drawer	3126	1	595	3	1,785	0
8GB R1 Memory (4x2GB cards)	4179	1	98,304	3	294,912	0
8GB R1 Memory (4x2B cards) Select	4180	1	84,480	1	84,480	0
4-way 262 MHz RS64-2 Proc Card, 8M	5312	1	75,000	1	75,000	40,320
4-way 262 MHz RS64-2 Proc Card, 8M	5313	1	75,000	1	75,000	40,320
Drawer to Drawer Power Control Cable	6006	1	60	3	180	0
SCSI-2 Fast/Wide PCI Adapter	6208	1	360	3	1,080	0
SSA RAID PCI Adapter	6215	1	3,000	13	39,000	0
SSA Fast Write Cache Option	6222	1	3,700	3	11,100	0
Add. SCSI Drawer in I/O Rack	6220	1	14,900	3	44,700	0
Prestige 6000 VA, UPS - CPU Drawer	9910-EP8	1	5,505	1	5,505	0
Prestige 3000 VA, UPS - I/O Drawers	9910-U33	1	3,822	1	3,822	0
ConnectUPS Thin Ethernet	2201	1	399	1	399	0
System Rack Model R00	7015-R00	1	3,110	8	24,880	11,904
SSA Disk Subsystem	7133-020	1	19,350	44	851,400	422,400
4.5GB Disk Drive Select	3404	1	incl	164	0	0
4.5 GB Disk Drive Modules	3401	1	2,100	482	1,012,200	0
9.1 GB Disk Drive Modules	3901	1	3,300	32	105,600	0
9.1 GB Disk Drive Modules Select	3904	1	2,700	7	18,900	0
SSA Cables	5006	1	45	44	1,980	0
Subtotal					2,780,088	584,064
Server Software						
AIX 4.3 for S70	5765-C34	1	240	1	240	0
AIX C compiler	5756-423	1	615	1	615	0
Performance Toolbox	5765-654	1	450	1	450	0
Oracle Version 8.0.4s		2	344,500	1	344,500	344,500
Subtotal					345,805	344,500
Client Hardware						
RS/6000 Model 43P-140, 332 MHz	7043-140	1	8,450	15	126,750	50,400
4.5gb Disk, Intg SCSI-2 FW, Intg Enet, 1MB L2 cache						
128MB DIMM Memory	4102	1	640	15	9,600	0
128MB DIMM Memory Expansion	4115	1	1,280	47	60,160	0
Async Terminal/Printer Cable	2934	1	45	15	675	0
Ethernet Adapter, PCI	2985	1	195	30	5,850	0
IBM ASCII Terminal, Keyboard	3153-BG3	1	577	16	9,232	10,560
Subtotal					212,267	60,960
Client Software						
AIX 4.2.1 Unlimited Users	5756-C34	1	3,660	15	54,900	0
IBM TXSeries 4.2 for AIX	5697-D17	1	3352.60	15	50,289	17,625
Subtotal					105,189	17,625
User Connectivity						
Ethernet Hub (8port) + 10% Spares	DEH2924	3	34.00	3960	134,640	0
Subtotal					134,640	0
Discounts					(1,367,475)	(200,667)
Total					2,210,514	806,482

Notes:

Pricing Sources:

1=Dickens Data Systems, 2=Oracle, 3=Data Comm Warehouse

Audited by: Francois Raab, Information Paradigm

Five-Year Cost of Ownership:

3,016,996

tpmC 34,139.63

\$/tpmC 88.37

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 terms, please inform the TPC at pricing@tpc.org. Thank you.

Numerical Quantities Summary for the IBM RS/6000 S70

MQTH, computed Maximum Qualified Throughput: 34,139.63 tpmC

Repeatability Run: 33855.60 tpmC [difference 0.08%]

Transaction Mix, in percent of total transactions Percent

New Order	44.76%
Payment	43.1%
Order-Status	4.04%
Delivery	4.03%
Stock-Level	4.04%

<u>Keying/Think Times (in seconds)</u>	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.01	18.01/12.01	18.12/120.31
Payment	3.00/0.01	3.01/12.02	3.12/120.31
Order-Status	2.00/0.01	2.01/10.03	2.10/100.31
Delivery	2.00/0.01	2.01/5.01	2.11/50.30
Stock-Level	2.00/0.01	2.01/5.03	2.09/50.31

Test Duration

Ramp-up Time	42 min 30 sec
Measurement interval	30 minutes
Transactions during measurement interval (all types)	2,288,061
Ramp-down time	10 minutes

Checkpointing

Number of checkpoints	1
Checkpoint interval	30
