



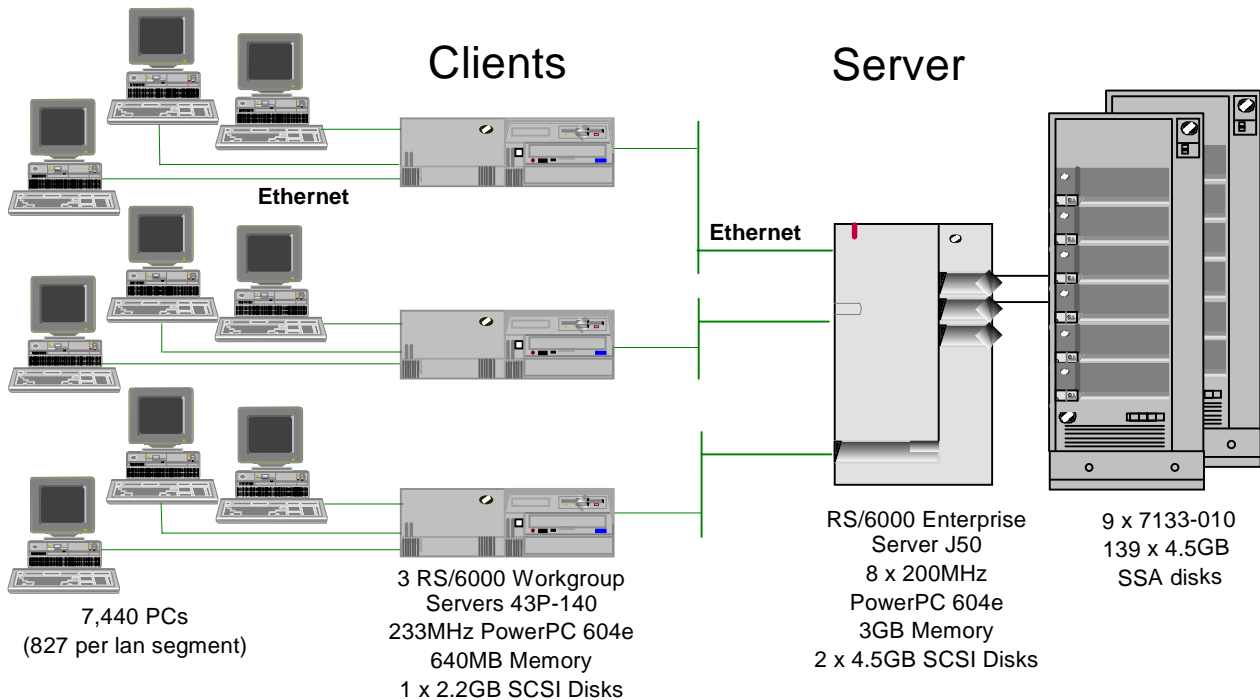
IBM RS/6000 Enterprise Server J50 c/s

TPC-C Rev. 3.3

Report Date: May 6, 1997

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$895,035	9,165.13 tpmC	\$97.66/tpmC	September 30,1997*	
Processors	Database Manager	Operating System	Other Software	Number of Users
8 x 200MHz IBM PowerPC 604e	Sybase SQL Server 11.1	AIX 4.2.1	Tuxedo 6.2 Sybase Open Client /C	7,440

RS/6000 Enterprise Server J50



*Sybase 11.1 available September 30, 1997, All other components available today.

System Components	Clients		Server	
	Quantity	Description	Quantity	Description
Processor	3	233MHz PowerPC 604e w/ 1MB L2 cache	8	200MHz PowerPC 604e w/ 2MB L2 cache
Memory		640MB @		3.0GB
Disk Controllers	3	SCSI-2 Adapters	1	SCSI-2 Adapter
			2	SSA Adapters
Disk Drives	3	2.2GB SCSI	141	4.5GB SSA Disks
Total Storage		2.2 GB each client		591.54 GB
Terminals	3	System Console	1	System Console
Term. Connect	341	CentreCOM 24 Port Ethernet Hubs + 10% spares		



IBM RS/6000

Enterprise Server J50 c/s

TPC-C Rev. 3.3

Report Date: May 6, 1997

Description	Part Number	Third Party Brand	Pricing	Unit Price	Qty	Extended Price	5 yr. Maint Price
Server Hardware							
RS/6000 Server Model J50	7013-J50			1	54,000	54,000	23,520
Dual 604e w 2 - 2MB L2, 256MB Memory, 4.5 GB Disk, SCSI-2 F/W Adapter, CDROM							
Async Terminal/Printer Cable (EIA-2)	2934			1	45	45	
Ethernet/FDX AUI/RJ-45 Adapter	2992			1	595	1,785	
4.5 GB Fast/Wide Disk Drive (3.5")	3001			1	2,700	2,700	
1 GB Select DIMMs on 1 GB Card	4162			1	17,000	17,000	
1 GB DIMMs on 1 GB Card	4167			1	29,500	59,000	
Dual 604e Processor Card	4324			1	12,000	36,000	17,280
Enhanced SSA 4-Port Adapter	6216			1	2,000	4,000	
System Rack Model R00	7015-R00			1	3,110	6,220	2,976
SSA Disk Subsystem (Rack-mount)	7133-010			1	17,500	157,500	75,600
4.5 GB Disk Drive Mod 16 Sel	3416			1	2,500	320,000	
4.5 GB Disk Drive Mod 8 Sel	3408			1	2,015	16,120	
4.5 GB Disk Drive Module	3401			1	3,900	11,700	
Power/Cooling	3003			1	1,600	14,400	
SSA Cables	5006			1	35	630	
Subtotal						701,100	119,376
Server Software							
AIX 4.2.1 J50 + Support	5765-655			1	incl	0	0
SQL Server, Version 11.1		Sybase		2	151,620	151,620	127,680
Subtotal						151,620	127,680
Client Hardware							
RS/6000 Model 43P-140, 233 MHz	7043-140			1	10,500	31,500	10,080
2.1gb Disk, Intg SCSI-2 FW, Intg Enet							
128MB DIMM Memory	4106			1	1,600	4,800	0
128MB DIMM Memory Expansion	4115			1	3,200	38,400	0
Async Terminal/Printer Cable	2934			1	45	135	0
Ethernet Adapter, PCI	2985			1	195	1,755	0
Subtotal						76,590	10,080
Client Software							
AIX 4.2.1 Unlimited Users	5756-030			1	3,400	10,200	0
Sybase Open Client		Sybase		2	755	755	636
Tuxedo EPT Ver 6.2, 43P Client		BEA		3	3,000	9,000	6,750
Subtotal						19,955	7,386
User Connectivity							
Ethernet Hub (24port)	AT3024TR	CentreCOM		4	215	66,650	0
Ethernet Hub 10% Spares	AT3024TR	CentreCOM		4	215	6,665	0
IBM ASCII Terminal, Keyboard	3153-BG3			1	577	2,308	2,160
Subtotal						75,623	2,160
Discounts						(355,589)	(40,946)
Total						669,299	225,736

Notes:

Pricing Sources:

1=Dickens Data, 2=Sybase, 3=BEA Systems, 4=Allied Telesyn International

Audited by: Francois Raab, Information Paradigm

Five-Year Cost of Ownership: 895,035

tpmC Rating: 9,165.13

\$/tpmC: 97.66

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.

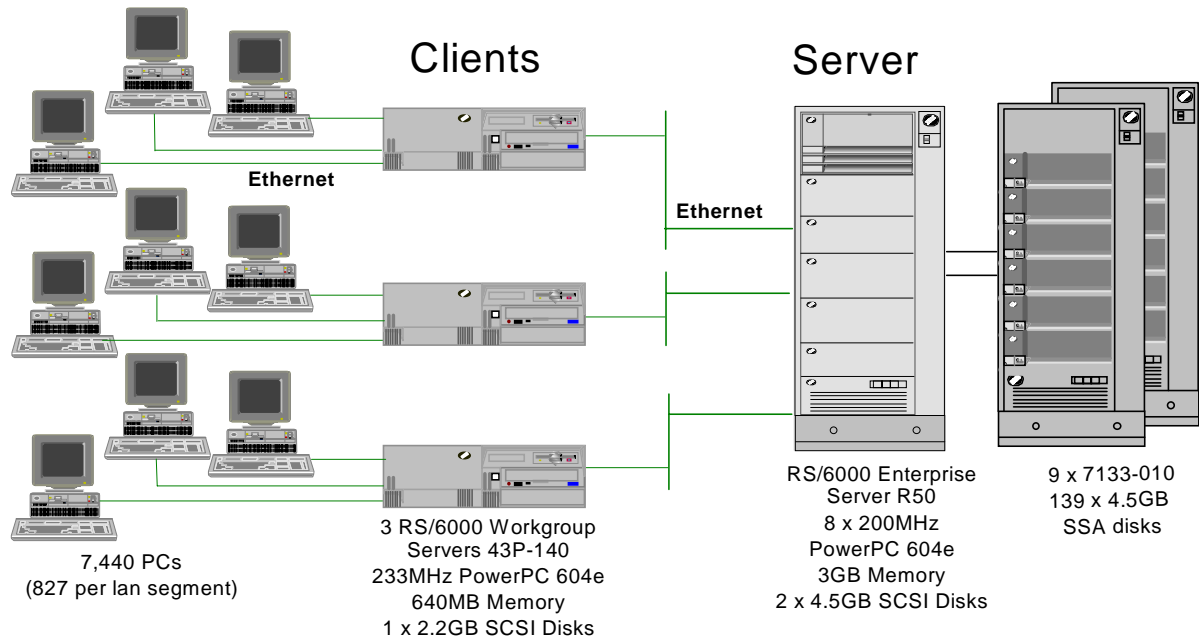


IBM RS/6000 Enterprise Server R50 c/s

TPC-C Rev. 3.3
Report Date: May 6, 1997

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$905,767	9,165.13 tpmC	\$98.83/tpmC	September 30,1997*	
Processors	Database Manager	Operating System	Other Software	Number of Users
8 x 200MHz IBM PowerPC 604e	Sybase SQL Server 11.1	AIX 4.2.1	Tuxedo 6.2 Sybase Open Client /C	7,440

RS/6000 Enterprise Server R50



*Sybase 11.1 available September 30, 1997, All other components available today.

System Components	Clients		Server	
	Quantity	Description	Quantity	Description
Processor	3	233MHz PowerPC 604e w/ 1MB L2 cache	8	200MHz PowerPC 604e w/ 2MB L2 cache
Memory		640MB @		3.0GB
Disk Controllers	3	SCSI-2 Adapters	1	SCSI-2 Adapter
Disk Drives	3	2.2GB SCSI	2	SSA Adapters
Total Storage		2.2 GB each client	141	4.5GB SSA Disks
Terminals	3	System Console	1	System Console
Term. Connect	341	CentreCOM 24 Port Ethernet Hubs + 10% spares		



IBM RS/6000

Enterprise Server R50 c/s

TPC-C Rev. 3.3

Report Date: May 6, 1997

Description	Part Number	Third Party Brand	Pricing	Unit Price	Qty	Extended Price	5 yr. Maint Price
Server Hardware							
RS/6000 Server Model R50	7015-R50			1 64,000	1	64,000	28,320
Dual 604e w 2 - 2MB L2, 256MB Memory							
4.5GB Disk, SCSI-2 F/W Adapter. CDR0M							
Async Terminal/Printer Cable (EIA-2)	2934			1 45	1	45	
Ethernet/FDX AUI/RJ-45 Adapter	2992			1 595	3	1,785	
4.5 GB SCSI-2 F/W Disk Drive (1")	3000			1 2,600	1	2,600	
1 GB Select DIMMs on 1 GB Card	4162			1 17,000	1	17,000	
1 GB DIMMs on 1 GB Card	4167			1 29,500	2	59,000	
Dual 604e Processor Card	4324			1 12,000	3	36,000	17,280
Enhanced SSA 4-Port Adapter	6216			1 2,000	2	4,000	
System Rack Model R00	7015-R00			1 3,110	2	6,220	2,976
Deep Door for Rack with MP	6096			1 500	1	500	
Cluster Power Controller	6175			1 3,100	1	3,100	
SSA Disk Subsystem (Rack-mount)	7133-010			1 17,500	9	157,500	75,600
4.5 GB Disk Drive Mod 16 Select	3416			1 2,500	128	320,000	
4.5 GB Disk Drive Mod 8 Select	3408			1 2,015	8	16,120	
4.5 GB Disk Drive Mod	3401			1 3,900	3	11,700	
Power/Cooling	3003			1 1,600	9	14,400	
SSA Cables	5006			1 35	18	630	
Subtotal						714,600	124,176
Server Software							
AIX 4.2.1 J50 + Support	5765-655			1 incl	1	0	0
SQL Server, Version 11.1		Sybase		2 151,620	1	151,620	127,680
Subtotal						151,620	127,680
Client Hardware							
RS/6000 Model 43P-140, 233 MHz	7043-140			1 10,500	3	31,500	10,080
2.1gb Disk, Intg SCSI-2 FW, Intg Enet							
128MB DIMM Memory	4106			1 1,600	3	4,800	
128MB DIMM Memory Expansion	4115			1 3,200	12	38,400	
Async Terminal/Printer Cable	2934			1 45	3	135	
Ethernet Adapter, PCI	2985			1 195	9	1,755	
Subtotal						76,590	10,080
Client Software							
AIX 4.2.1 Unlimited Users	5756-030			1 3,400	3	10,200	
Sybase Open Client		Sybase		2 755	1	755	636
Tuxedo EPT Ver 6.2, 43P Client		BEA		3 3,000	3	9,000	6,750
Subtotal						19,955	7,386
User Connectivity							
Ethernet Hub (24port)	AT3024TR	CentreCOM		4 215	310	66,650	
Ethernet Hub 10% Spares	AT3024TR	CentreCOM		4 215	31	6,665	
IBM ASCII Terminal, Keyboard	3153-BG3			1 577	4	2,308	2,160
Subtotal						75,623	2,160
Discounts						(361,664)	(42,439)
Total						676,724	229,043

Notes:

Pricing Sources:

1=Dickens Data, 2=Sybase, 3=BEA Systems, 4=Allied Telesyn International

Audited by: Francois Raab, Information Paradigm

Five-Year Cost of Ownership: 905,767

tpmC Rating: 9,165.13

\$/tpmC: 98.83

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 J50 & R50

MQTH, computed Maximum Qualified Throughput: 9,165.13 tpmC

Repeatability measurement: 9,085.23 tpmC 0.9% difference

<u>Response Times (in seconds)</u>	<u>90th Percentile</u>	<u>Average</u>
New Order	1.28	0.66
Payment	1.21	0.56
Order-Status	1.25	0.65
Delivery (interactive)	0.3	0.19
Delivery (deferred)	2	1.22
Stock-Level	3.23	1.75
Menu	0.01	0.01

<u>Transaction Mix, in percent of total transactions</u>	<u>Percent</u>
New Order	44.43%
Payment	43.26%
Order-Status	4.12%
Delivery	4.08%
Stock-Level	4.08%

<u>Keying/Think Times (in seconds)</u>	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.01	18.00/12.11	18.09/121.00
Payment	3.00/0.01	3.00/12.11	3.09/121.00
Order-Status	2.00/0.01	2.00/10.07	2.08/101.00
Delivery	2.00/0.01	2.00/5.11	2.08/51.00
Stock-Level	2.00/0.01	2.00/5.07	2.08/51.00

Test Duration

Ramp-up Time	34 min 02 sec
Measurement interval	30 minutes
Transactions during measurement interval (all types)	618,817
Ramp-down time	15 minutes

Checkpointing

Number of checkpoints	1
Checkpoint interval	30