
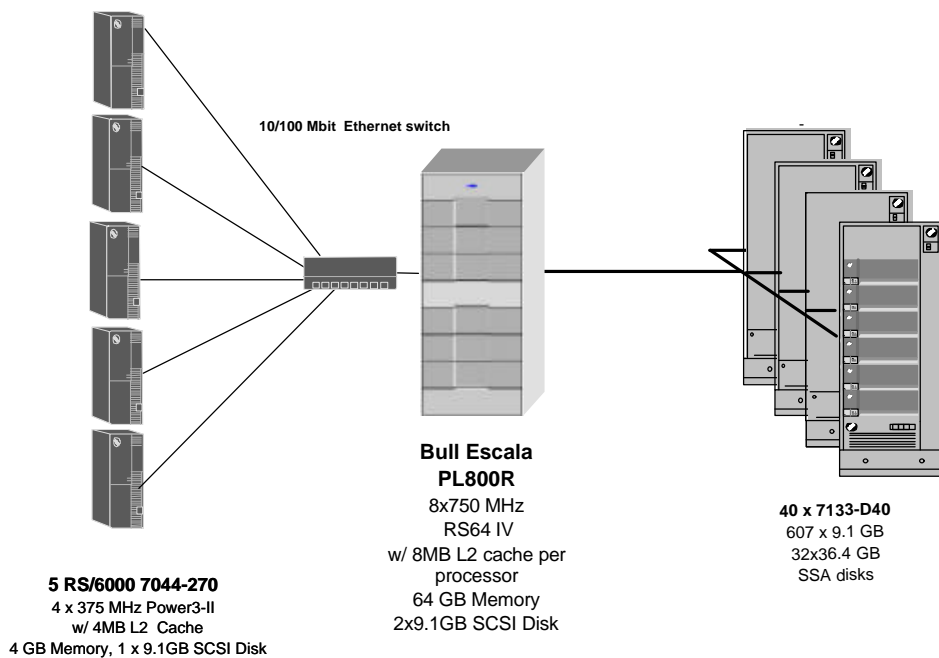
	Bull Escala		TPC-C Rev. 5.0	
	PL800R c/s		Report Date September 26, 2001	
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$2,668,861	105,025.02 tpmC	\$25.41/tpmC	Available	
Processors	Database Manager	Operating System	Other Software	No. Users
8 x Database 20 x Clients	Oracle9i Database Enterprise Edition 9.0.1 for AIX - Based System	AIX 4.3.3 +APAR IY22024	Websphere Application Server Enterprise Edition Version 3.0	85 000



System Components	Clients		Server	
	Quantity	Description	Quantity	Description
Processor	5	4 x 375 MHz Power3-II W/4MB L2 cache each	1	8 x 750 MHz IBM RS64 IV w/ 8MB L2 cache each
Memory		4 GB		64 GB
Disk Controllers	1	SCSI-2 (Integrated)	1	SCSI-2 (Integrated)
Disk Drives	1	9.1 GB SCSI each client	9	SSA Adapters
			607	9.1 GB SSA Disk
			32	36.4 GB SSA disk
			2	9.1 GB SCSI Disk
Total Storage		8.67GB each client		6,107 GB
Terminals	5	System Console	1	System Console



ORACLE

BULL Escala PL800R c/s

TPC-C Rev. 5.0

Report Date: September 26, 2001

Description	Part Number	Brand	Pricing	Unit Price	Quantity	Extended Price	3-year Maint. Price
Server Hardware							
ESCALA NODE PL800R including AIX 4.3.3 license	CPSG034-0000	Bull	1	16 135	1	16 135	14 940
MEMORY BOARD, 32 POSITION	MBRG006-0000	Bull	1	1 500	1	1 500	0
Remote I/O Cable - 3m	CBLG202-1000	Bull	1	595	1	595	0
Redundant Power Supply I/O Drawer (5EIA)	PSSG039-0000	Bull	1	725	1	725	0
32X (Max) SCSI-2 Internal CD ROM drive	CDRG016-0000	Bull	1	375	1	375	0
9.1 GB Ultra-SCSI Disk Drive (1"/7200rpm)	MSUG133-0000	Bull	1	1 160	2	2 320	0
ETHERNET 10/100Mb/s PCI ADAPTER	DCCG137-0000	Bull	1	275	1	275	0
8GB Memory (8x1024MB DIMMS°	CMMG174-0000	Bull	1	57 345	8	458 760	0
CPU Board with 4 RS64-4@750MHz - 8MB L2 cache	CPUG070-0000	Bull	1	105 350	2	210 700	38 520
PROCESSOR KIT RS64-4@750MHz	CKTG164-0000	Bull	1	2 850	1	2 850	0
Secondary I/O Drawer 5 EIA with :	DRWG017-0000	Bull	1	7 000	1	7 000	0
Internal IPL Disk Mounting Hardware	CKTG133-0000	Bull	1	100	1	100	0
Rack 36U (with one PDU)	RCKG005-0000	Bull	1	3 850	5	19 250	5 760
ADDITIONAL POWER DISTRIBUTION UNIT- SINGLE	PSSG028-0000	Bull	1	1 000	9	9 000	0
3.5M CABLE LOCAL RS232 (D25F/D25M)	CBLG104-1600	Bull	1	100	1	100	0
SYSTEM CONSOLE BQ 306 (White display, AZERTY)	CSKG004-000E	Bull	1	620	1	620	0
Advanced SerialRAID Adapter	6230	IBM	1	3 000	9	27 000	0
32MB Fast-Write Cache Option	6235	IBM	1	575	2	1 150	0
SSA disk Subsystem, Black Cover	7133-D40	IBM	1	13 000	40	520 000	176 640
50/60 Hz AC, 300 VDC Power Supply	8022	IBM	1	2 000	40	80 000	0
1GB Advanced DiskDriver Modules	8509	IBM	1	2 760	607	1 675 320	0
36.4GB Advanced DiskDriver Modules	8536	IBM	1	5 900	32	188 800	0
SSA Cables	8802	IBM	1	125	40	5 000	0
					Subtotal	3 227 575	235 860
Server Software							
AIX 4.3 (Maintenance only)		Bull	1		1	0	8 910
IBM C for AIX V5	CLGG023-WA0A	Bull	1	799	1	799	540
Oracle9i (TM) Database Enterprise Edition 9.0.1 for AIX		Oracle	2	149600	1	149 600	179 520
					Subtotal	150 399	188 970
Client Hardware							
RS/6000 Model 44P-270 w/ CD-ROM	7044-270	IBM	1	5649	5	28 245	8 400
Async Terminal/Printer Cable	2934	IBM		45	5	225	
9.1 GB 10K RPM Ultra SCSI Enhanced Hard Disk Drive	2906	IBM	1	1260	10	12 600	
10/100 Mbps Ethernet Adapter, PCI	2968	IBM	1	275	20	5 500	
Serial Port Converter Cable	3925	IBM	1	25	5	125	
Memory Expansion Feature	4098	IBM	1	1038	5	5 190	
512MB SDRAM DIMM Memory	4120	IBM	1	3072	40	122 880	
2-way 375 MHz Power3 , 4MB L2	4362	IBM	1	13000	10	130 000	16 800
IBM ASCII Terminal, Keyboard, Cable	3153-BG3	IBM	1	577	5	2 885	1 520
					Subtotal	307 650	26 720
Client Software							
AIX 4. Unlimited Users	5756-C34	IBM	1	50	5	250	17 280
IBM Websphere Applicaton Server Enterprise Edition Version 3.0 (encina only)	D5ALCLL	IBM	1	24941	5	124 704	23 094
					Subtotal	124 954	40 374
Third Party Hardware							
8-port 10/100 Ethernet switch	FS108NA	Netgear	3	108	3	324	0
					Subtotal	324	0
					Discounts	-1 591 323	-42 641
					TOTAL	2 219 579	449 283

Notes:

Pricing: 1-Bull 2-Oracle 3-Netgear

Three-Year Cost of Ownership: \$2 668 861

tpmC Rating: 105025,02

\$ / tpmC: 25,41

Audited by Francois Raab of InfoSizing

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 reflects 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 Bull Escala PL800R

MQTH, computed Maximum Qualified Throughput: 105,025.02 tpmC

<u>Response Times (in seconds)</u>	<u>90th %</u>	<u>Average</u>	<u>Maximum</u>
New Order	1.58	0.85	37.59
Payment	1.50	0.79	35.58
Order-Status	1.56	0.84	34.18
Delivery (interactive)	0.19	0.10	1.64
Delivery (deferred)	0.23	0.14	3.44
Stock-Level	1.68	0.95	34.10
Menu	0.00	0.01	5.31

Transaction Mix, in percent of total transactions

	<u>Percent</u>
New Order	44.91%
Payment	43.03%
Order-Status	4.02%
Delivery	4.01%
Stock-Level	4.01%

Keying/Think Times (in seconds)

	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.01	18.01/12.02	18.10/120.21
Payment	3.00/0.01	3.01/12.02	3.10/120.20
Order-Status	2.00/0.01	2.01/10.02	2.10/100.10
Delivery	2.00/0.01	2.01/5.02	2.10/50.20
Stock-Level	2.00/0.01	2.01/5.01	2.09/50.20

Test Duration

Ramp-up Time	41 min 06 sec
Measurement interval	2 hours
Transactions during measurement interval (all types)	28,060,471
Ramp-down time	10 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	29 min 40 sec