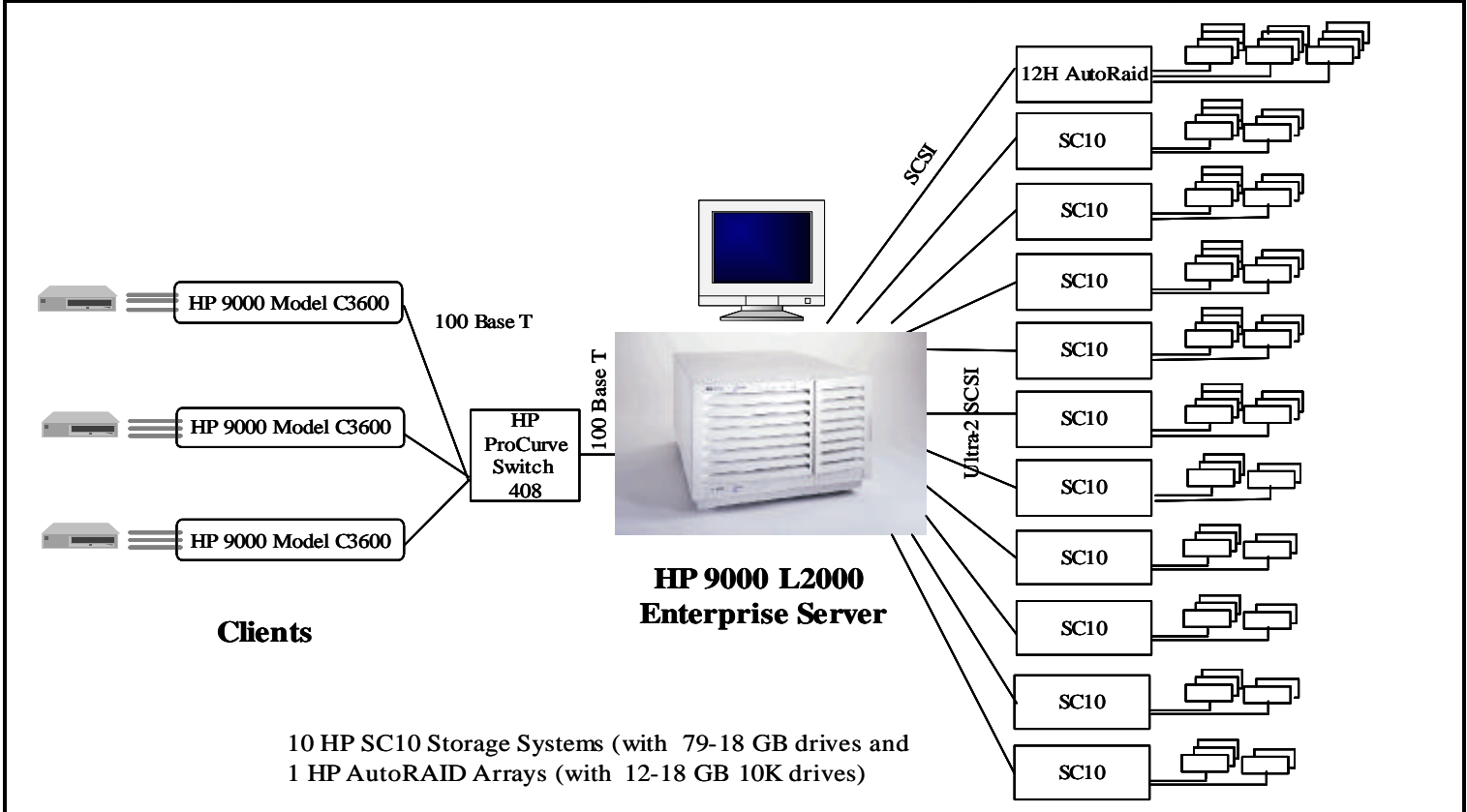
	HP 9000 L2000 Enterprise Server Client/ Server with 3 C3600 front-ends		TPC-C Revision 3.5
			Report Date: April 5, 2001
Total System Cost	TPC Throughput	Price/Performance	
\$446,842	22,422.50 tpmC	\$19.93/tpmC	
Processors	Database Manager	Operating System	Other Software
4 PA-RISC 8500 440MHz	Sybase Adaptive Server Enterprise 11.9.3	HP-UX 11.00 64-bit Extension Pack 9911	TUXEDO 6.4
			Number of Users
			18,180



System Components	Server (HP 9000 L2000 Enterprise Server)		Each Client (3 C3600)	
	Qty	Type	Qty	Type
Processors	4	440MHz PA-RISC 8500	1	552MHz PA-RISC 8600
Cache Memory	each	512 KB I-cache, 1 MB D-cache	each	0.5 MB I-cache/1 MB D-cache
Memory	8	GB	1	3 GB
Disk Controller	5	Dual Port Ultra-2 SCSI	1	Ultra2 SCSI LVD
	1	FW SCSI Adapter	1	9 GB LVD 10K RPM disk
Disk Drives	10	HP SC10 Storage System (79 18 GB drives)		
	1	HP Model 12H Auto Raid (12 18 GB 10K		
Total Storage	2,496	GB		
Tape Drives	1	DDS Storage System		
Terminals	1	Console Terminal		



HP 9000 L2000 Enterprise Server

TPC-C Rev 3.5

Report Date: April 5, 2001

Description	Part Number	Brand	Price Key	Unit Price	Qty	Extended Price	5 Yr Maint. Price
Server Hardware							
L-2000	A5191A			1	9,563	9,563	11,219
Add'l 440 MHz PARISC 8500 CPUs	A5522A			1	4,636	4,636	12,081
1 GB Memory	A5798A			1	6,806	6,806	
Processor Support Module	A5796A			1	761	761	
36GB Internal Disk	A6110A			1	2,603	2,603	
Dual port Ultra2 SCSI	A5150A, Opt. 0D1			1	1,260	1,260	
16 Bit FW SCSI Adapter	A3511A, Opt 003			1	971	971	
Internal 12GB DDS-2 DAT Drive	A5558A			1	728	728	
HP-UX 11.0 Sys Media, CD-ROM	B3920EA, Opt AAF			1	390	390	
25 ft cable	J3595A			1	116	116	
5.5 kVA HP UPS Rackmount	A3589B, Opt. 0D1			1	7,500	7,500	4,382
2.0m Field Integrated Cabinet	C2787A			1	1,425	1,425	
Auto Raid Array Model 12	A3700AZ			1	4,665	4,665	7,746
Two 96 MB controllers with Auto Raid	A3700AZ, Opt. 203			1	14,070	14,070	
Five 18 GB 10K disk modules	A3700AZ, Opt.185			1	7,500	7,500	
Four 18 GB 10K disk modules	A3700AZ, Opt.184			1	6,000	6,000	
Megatron base	A5272A			1	3,788	3,788	29,273
Add on BCC	A5272A, Opt. 001			1	900	900	
18 GB disk modules, 10% spares	A5282A			1	1,500	1,500	
0.9m 68-pin high density male connec.	A3700AZ, Opt 801			1	90	90	
Subtotal						327,671	64,701
Server Software							
Sybase Adaptive Server 11.9.3	Runtime	Sybase		2	34,995	34,995	28,000
Subtotal						34,995	28,000
Client Hardware							
Hewlett Packard Model C3600 Workstation	A4992A			1	6,900	6,900	15,525
256 MB memory module SDRAM	A4994A			1	863	863	
512 MB memory module SDRAM	A4995A			1	1,725	1,725	
Console	C1064GX			1	413	413	162
100BaseT PCI LAN Adapter	B5509BA			1	205	205	1,066
9 GB LVD 10K RPM Disk	A4997A			1	619	619	
Subtotal						54,633	16,753
Client Software							
HP C/ANSI C Compiler	B3901BA, Option AH0			1	1,200	1,200	1,757
BEA Tuxedo 6.4		Bea Sys.		3	3,000	9,000	7,200
Subtotal						10,200	8,957
User Connectivity							
(8+1) port 10Mbps Ethernet Hub, 10% spares		I-Market		4	20	80	51,800
HP ProCurve Switch 408	J4097			1	149	149	597
Subtotal						52,397	
Total						352,750	94,093
Large Configuration Discount and Prepayment Discount						(127,146)	(24,318)

Notes: 1=Solarcom, 2=Sybase
3=BEA Systems, 4=I-Market

Audited by Lorna Livingtree, Performance Metrics, Inc.

Five Year Cost of Ownership:	\$446,842
tpmC Rating:	22,422.50
\$/tpmC:	\$19.93

Prices used in TPC benchmarks reflect 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 HP 9000 L2000 Enterprise Server

MQTH, Computed Maximum Qualified Throughput

22,422.50 tpmC

Response Times (in seconds)

	90th %-ile	Maximum	Average
New-Order	1.77s	7.80s	0.74s
Payment	1.70s	7.72s	0.68s
Order-Status	1.84s	7.40s	0.79s
Delivery (interactive portion)	0.08s	0.86s	0.07s
Delivery (deferred portion)	1.97s	8.17s	0.94s
Stock-Level	2.34s	7.97s	1.06s
Menu	0.10s	1.24s	0.003s

Transaction Mix, in percent of total transactions

New-Order	44.76%
Payment	43.06%
Order-Status	4.07%
Delivery	4.05%
Stock-Level	4.06%

Keying/Think Times

	Keying Time			Think Time		
	Min	Avg	Max	Min	Avg	Max
New-Order	18.02s	18.03s	18.05s	0.01s	12.12s	186.2s
Payment	3.01s	3.02s	3.05s	0.01s	12.07s	160.59s
Order-Status	2.01s	2.02s	2.02s	0.01s	10.16s	116.5s
Delivery (interactive)	2.01s	2.02s	2.02s	0.02s	5.02s	77.46s
Stock-Level	2.01s	2.02s	2.03s	0.01s	5.04s	47.93s

Test Duration

Ramp up time	30 minutes
Measurement interval	30 minutes
Transactions during measurement interval	1,502,996
Ramp down time	4.3298 minutes

Checkpointing

Number of checkpoints in measurement interval	1
Checkpoint Interval	30 minutes

Reproducibility Run

Throughput	22,419.77 tpmC
Relative to MQTH	-0.01%