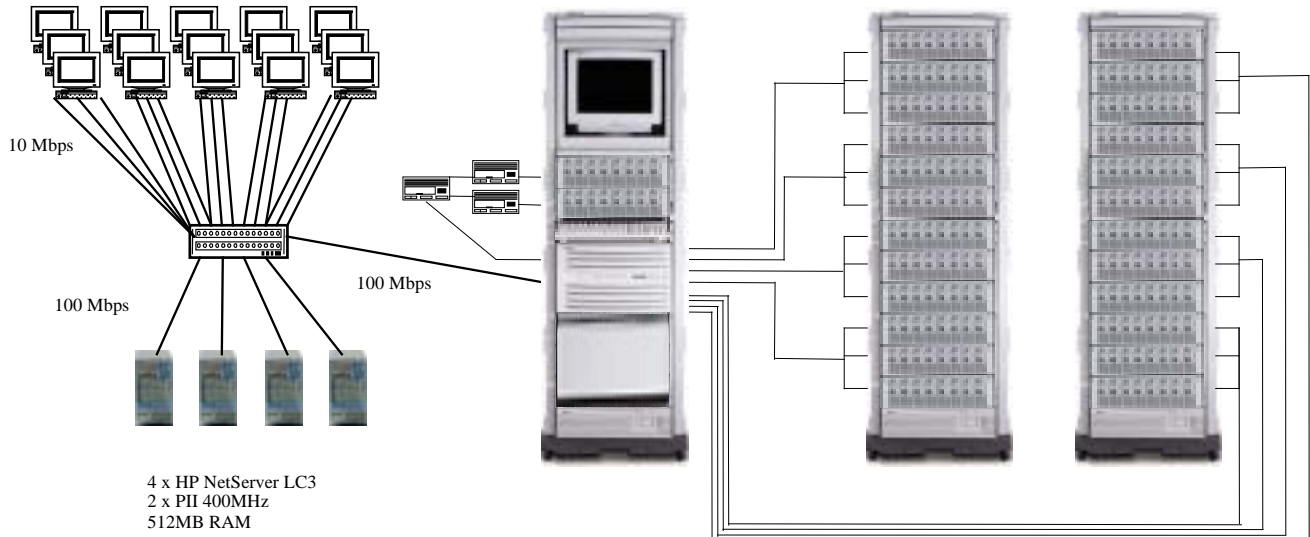
	<h1>HP NetServer LXr 8000</h1> <h2>Client/Server</h2>			TPC-C Revision 3.4
	Total System Cost	TPC Throughput	Price/Performance	Report Date
\$621,784	23143 tpmC	\$26.87 per tpmC	January 18, 1999	February 1, 1999
Processors	Database Manager	Operating System	Other Software	Number of Users
4 Intel Pentium II Xeon 450MHz 2 Mbyte L2	Microsoft SQLServer 7.0 Enterprise Edition	Microsoft NT 4.0 Enterprise Edition	Microsoft Visual C++ TUXEDO Transaction Monitor	18850

Total of 18,850 PCs

HP NetServer LXr8000
 4 x Pentium II Xeon 450MHz/2MB
 4 GB RAM
 8 x AMI 438-H RAID Controller
 3 x Mylex EDAC

Storage:
 HP NetServer Rack Storage /8



System Components	Server		Each Client	
	Qty	Type	Qty	Type
Processors	4	450MHz Intel Pentium II Xeon	2	400MHz Pentium II
Cache Memory	each	2 Mbyte L2 cache	each	512kbyte L2 Cache
Memory	4	Gbyte	512	Mbyte
Disk Controllers	8	AMI Series 438-H Super High Perform	1	HP SCSI-2 Controller
Disk Drives	184	HP Hot-swap 9Gbyte 10krpm SCSI	1	4 Gbyte disk
	24	HP Hot-swap 4Gbyte 10krpm SCSI		
	1	HP Hot-swap 9Gbyte Ultra2 10krpm SCSI		
Total Storage	1.67	TB		
Tape Drives	1	HP Surestore DAT24i		
Terminals	1	Console Terminal	1	Console Terminal

**HEWLETT®
PACKARD****HP NetServer LXr 8000****TPC-C Rev 3.4****Report Date: January 18,
1999**

Description	Part Number	Brand	Price Key	Unit Price	Qty	Extended Price	Maint. Price
HP NetServer LXr 8000	D6021A	HP	1	11,055	1	11055	
Pentium II Xeon 450MHz 2MB Cache	D6122A	HP	2	8899	4	35596	
1Gbyte DIMM kit	D6114A	HP	1	4280	4	17120	
Rkmt HP Ultra VGA 1280 17" Display	D2818A	HP	1,2	213	1	213	168
HP NetServer mini-DIN keyboard and mouse	D4950B/C3751B	HP	1	79	1	79	
HP 9.1 GB 10K HotSwap Wide Ultra2 SCSI Disk	D6107A	HP	1	1022	1	1022	
HP NetServer 10/100TX PCI LAN Adapter	D5013A	HP	1	82	1	82	
HP Keyboard Rack Mount Kit	E7713A	HP	1	150	1	150	
2.0 Meter Rack w/side panels,rear door+fan+pdu	J1487B/E4471A/E7	HP	1	1460	3	4380	
HP Power Distribution Unit 120-240V	E5929A	HP	1	234	5	1170	
HP 19" Plain Shelf, for racks	E3666A	HP	1	61	1	61	
APC Smart UPS 3000NS 208V 3000VA	588293	APC	1,6	1728	3	5184	1170
HP SureStore DAT24i Internal Tape Drive	C1555C	HP	1	960	1	960	
HP NetServer Lxr 8000 Warranty Upgrade	H5516A	HP	1,2				4286
Server Hardware Subtotal						77072	5624
HP NetServer Rack Storage/8+spares	D4902A	HP	1	2080	29	60320	
HP NetServer Rack Storage/8 Support	D4902A+02A	HP	2				27840
HP 4.2GB, 10krpm Hot-swap disk module+spares	D4903A	HP	1	657	27	17739	
HP 9GB, 10krpm Hot-swap disk module+spares	D6019A	HP	1	1030	203	209090	
AMI Series 438-H Super High Performance RAID Contr	4383508116	AMI	7	2075	10	20750	620
Mylex DACSXI EDAC 5 chnl 32MB	Z75091	Mylex	1,4	3569	5	17845	995
HP SCSI Cable 2.5m UDHTS 68/HDTS 68	D3637C	HP	1	82	18	1476	
HP SCSI Cable 2.5m HDTS68/HDTS68	D3636C	HP	1	82	13	1066	
HP SCSI Cable 0.9m	C2911A	HP	1	122	4	488	
HP Storage System/6	D3604B	HP	1,2	997	2	1994	3118
Storage Subtotal						330768	32573
Microsoft SQL Server 7.0 Enterprise Edition		MS	3	28999	1	28999	10475
Microsoft Windows NT Server 4.0 Enterprise Edition	Z75092	MS	1	3330	1	3330	
MKS Toolkit	323795	MKS	1	258	1	258	
Server Software Subtotal						32587	10475
HP Netserver LC 3	D6126T	HP	1	2455	4	9820	
HP Netserver LC 3 Warranty Upgrade	H5519A	HP	2				6956
LC 3 Pentium II 400-Mhz	D6092A	HP	1	1138	4	4552	
128MB DIMMs for LC 3	D6098A	HP	1	445	16	7120	
HP NetServer 10/100TX PCI LAN Adapter	D5013A	HP	1	82	4	328	
HP Ultra VGA 1280 17" Display	D2818A	HP	1,2	213	4	852	672
Client Hardware Subtotal						22672	7628
Microsoft Windows NT Server 4.0	Z75093	MS	1	568	4	2272	
Microsoft Visual C++	716856	MS	1	449	1	449	
Tuxedo Run Time		BEA	5	3000	4	12000	9000
Client Software Subtotal						14721	9000
HP Procurve Switch 2400M	J4122A	HP	1,2	1189	2	2378	1680
LANTech 8-port 10baseT hub (8+1 ports)		Lantech	1	28.75	2595	74606	
Connectivity Subtotal						76984	1680
Total						\$554,804	\$66,980

Notes: Price key: 1=Software House, 2=Price from HP Corporate Price list**3=Microsoft, 4=Mylex, 5=BEA, 6 = APC, 7 = AMI****Audited by Tom Sawyer Performance Metrics, Inc.****5-yr Cost of Ownership: \$621,784****tpmC: 23143.00****\$/tpmC: 26.87**

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 NetServer LXr 8000

MQTH, Computed Maximum Qualified Throughput **23143.00 tpmC**

Response Times (in seconds)

	90th %-ile	Maximum	Average
New-Order	0.92s	13.35s	0.58s
Payment	0.69s	3.16s	0.39s
Order-Status	0.80s	12.82s	0.48s
Delivery (interactive portion)	0.38s	1.80s	0.22s
Delivery (deferred portion)	0.99s	2.69s	0.65s
Stock-Level	3.61s	8.62s	2.91s
Menu	0.60s	2.63s	0.28s

Response time delay added for emulated components 0.1 seconds

Transaction Mix, in percent of total transactions

New-Order	44.87%
Payment	43.02%
Order-Status	4.03%
Delivery	4.03%
Stock-Level	4.05%

Keying/Think Times

	Keying Time			Think Time		
	Min	Avg	Max	Min	Avg	Max
New-Order	18.02s	18.03s	18.18s	0.01s	12.15s	164.79s
Payment	3.01s	3.02s	3.17s	0.01s	12.17s	176.39s
Order-Status	2.01s	2.02s	2.16s	0.01s	10.18s	117.89s
Delivery (interactive)	2.01s	2.02s	2.16s	0.01s	5.16s	55.92s
Stock-Level	2.01s	2.02s	2.17s	0.01s	5.2s	58.92s

Test Duration

Ramp up time	63.13 minutes
Measurement interval	29 minutes
Transactions during measurement interval	1495660
Ramp down time	37.87 minutes

Checkpointing

Number of checkpoints in measurement interval	1
Checkpoint Interval	29 minutes

Reproducibility Run

Throughput	23038.69 tpmC
Relative to MQTH	-0.45%