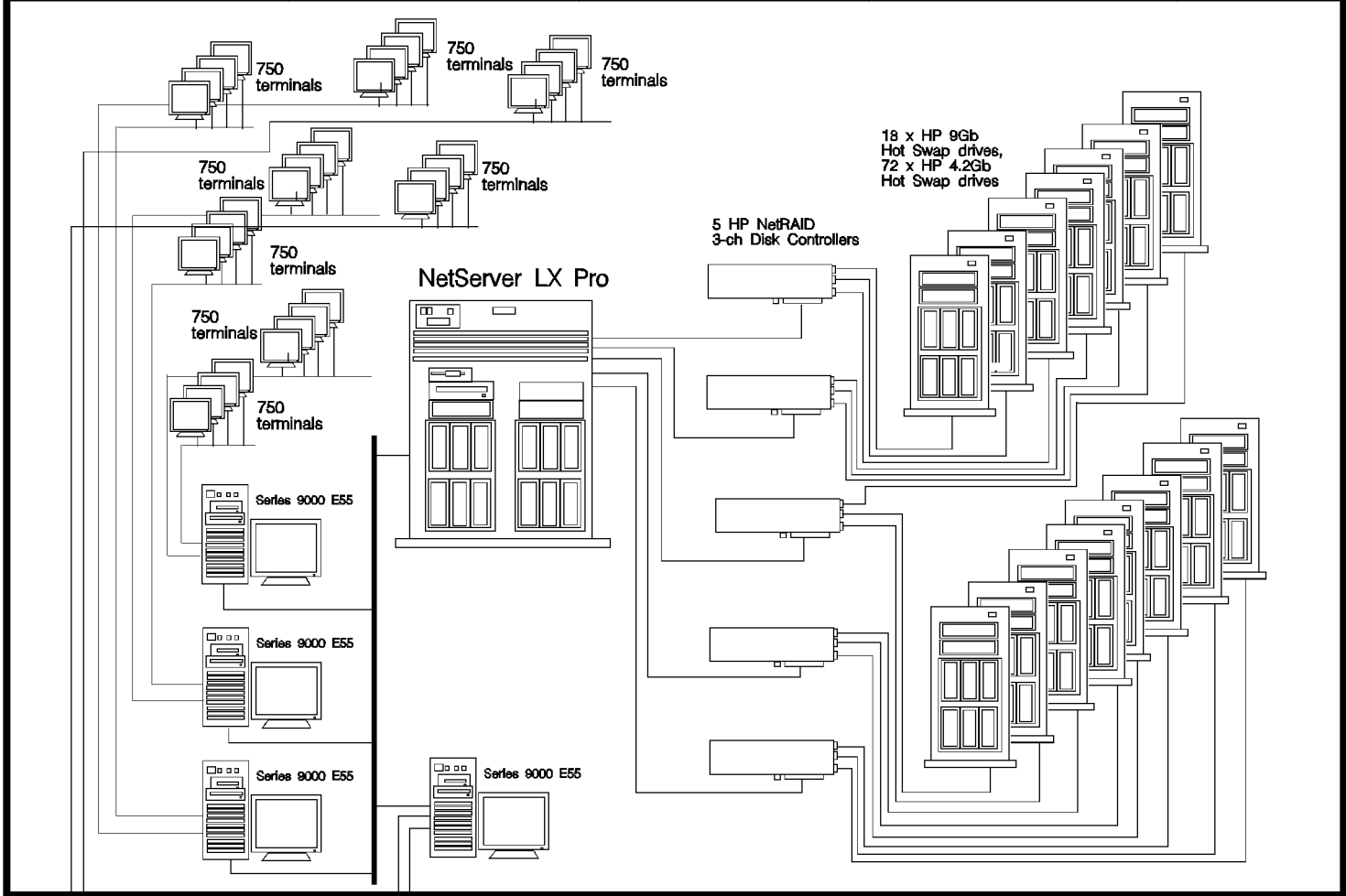


Hewlett Packard	NetServer LX Pro Client/Server Configuration		TPC-C Rev 3.2	
			Report Date: 1/17/97	
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$584,286	7351.50 tpmC	\$79.48 per tpmC	HW: Current SW: Feb. 28, 1997	
Processors	Database Manager	Operating System(s)	Other Software	# Users
4 Intel Pentium Pro ^R 200MHz	Microsoft SQL Server v. 6.5.SP3	Microsoft NT Server 4.0, HPUX 10.01	Microsoft C++ compiler, Visigenic ODBC Library (HPUX) TUXEDO TP Monitor	6000



System Components

Server

- > 1 HP NetServer LX Pro 6/200 SMP Model 1, which includes 2 Intel Pentium Pro^R 200MHz processors each with 512KB of 2nd level cache, 64Mb of ECC memory, 2 integrated Fast/Wide PCI SCSI-2 disk controllers, and one CDROM drive
- > 1 LX Dual Processor Card with 2 Pentium Pro^R Processors
- > 16 128Mbyte NetServer Memory Modules (Simms)
- > 5 HP NetRAID 3-ch PCI disk array controllers
- > 82 HP 4.2GB Hot Swap disk drives (database and log)
- > 18 HP 9.1GB Hot Swap disk drive (database)
- > 1 HP 4.2GB Fast SCSI-2 disk drive (NT boot/swap device)
- > 15 HP Storage System/6 external disk drive enclosures

Clients

- > 4 96 MHz HP series 9000 model E55, each including one 1GB SCSI disk drive with HP-UX v10.01, a MUX Personality card, 2 LAN/9000 Link, and 650Mb CDROM drive
- > 8 128Mb Series 9000 Memory Modules (2/client)
- > 4 Series 9000 System Consoles (1/client)

	Product Number	Third Party Brand	Pricing	Purchase Price			Support Price		
				Unit Price	Qty	Extended Price	Unit \$/Month	Qty	5 Year Support
Server Hardware									
HP NetServer LX Pro 6/200 SMP M 1 Array dual Pent	D4315A	HP	1	\$19,683	1	\$19,683			
3 year, on-site, next day warranty	incl								
2 200MHz Pentium Pro processors, 128 Mb memory	incl								
12 Hot swap disk bays	incl								
HP NetRaid Disk Array Controller - FW SCSI-2	incl								
Integrated dual PCI FW SCSI-2 cntrlrs & IDE controller	incl								
Integrated 1024x768 16 color video 512KB video memory	incl								
CD-ROM drive, 3.5-inch, 1.44MB floppy drive	incl								
1 parallel, 2 serial ports, keyboard & mouse	incl								
3 410W hot-swap power modules & redundant fans	incl								
HP NetServer Navigator, HP NetServer Assistant	incl								
HP Open View for VWindows	incl								
NetServer LX 6/200 Dual Processor card	D4866A	HP	1	\$856	1	\$856			
NetServer LX 6/200 Pentium Pro chip	D4867A	HP	1	\$2,532	2	\$5,064			
128Mbyte SIMM Module Memory Upgrade	D4893A	HP	3	\$3,969	16	\$63,504			
Support Pack-NetServer (upgds wrnty to same day, 4	H5520A	HP	3					1	\$5,396
15" VGA Monitor	D2808A	HP	1	\$372	1	\$372	\$7	1	\$168
HP 10/100 PCI Network Adaptor	J3171A	HP	1	\$121	1	\$121			\$0
Storage									
HP 3-Channel NetRAID PCI Array controller	D4943A	HP	1	\$2,117	4	\$8,468			
Internal SCSI cable (int 68-pin to ext 68pin conn) + 10	5182-6740	HP	3	\$65	4	\$260			
External SCSI cable (ext 68pin conn to SS/6) + 10% s	5182-6737	HP	3	\$100	17	\$1,700			
HP Storage System/6 + 10% spare	D3604A	HP	1	\$1,016	17	\$17,272			
HP 9GB SCSI-2 hot swap drives + 10% spares	D4289A	HP	1	\$2,337	20	\$46,740			
HP 4.2 GB SCSI-2 hot swap drive + 10% spares	D3583B	HP	1	\$1,281	91	\$116,571			
HP 4.2 GB SCSI-2 disk drive (common tray)	D4956A	HP	1	\$1,039	1	\$1,039			
HP SureStore Tape 6000i 8Gb Internal DAT	C1528F	HP	1	\$946	1	\$946			
Server Software									
Microsoft Windows NT Server 4.0		Microsoft	1	\$714	1	\$714			
Microsoft SQL Server 6.5, unlimited license		Microsoft	4	\$24,999	1	\$24,999		1	\$10,475
Communications									
NetLux 24-Port 10Base-T EtherNet Hub	DEH1487	NetLux	5	\$251	279	\$70,029			
HP/C ANSI Compiler, LTU	B2412A opt AHO	HP	8	\$1,575	1	\$1,575	\$1,175	1	\$1,175
Client Hardware									
HP series 9000 model E55 (with 2-User HPUX LTU bu	A3194AW	HP	8	\$6,800	4	\$27,200	\$32	3	\$4,608
MUX Personality card for base system I/O	A2442A opt 001	HP	8	\$150	4	\$600			\$0
1 GB SE SCSI2 disk drive with HPUX v10.01	A3349A opt OD1	HP	8	\$300	4	\$1,200	\$21	3	\$3,024
650Mb CDROM	A3184A opt ODZ	HP	8	\$250	4	\$1,000	\$11	3	\$1,584
Lan/9000 Link for HP-PB based servers	J2146A opt ODM	HP	8	\$750	8	\$6,000			\$0
System Console	C1064WX	HP	8	\$200	4	\$800	\$7	3	\$1,008
128MB memory module	A3131A opt ODZ	HP	8	\$2,850	8	\$22,800			\$0
Client Software									
Visigenic ODBC MS SQL Server Driver		Visigenic	6	\$7,980	4	\$31,920	\$31,920	1	\$31,920
Visigenic ODBC SDK		Visigenic	6	\$995	1	\$995			
Tuxedo 4.10		BEA Sys	7	\$7,500	4	\$30,000			\$22,500
Net purchase & support prices						\$502,428	\$81,858		

Notes:							5 Yr C-O-O	584,286
1. NetServer support for yrs 4-5 via HP contract support (order opt. 02A for 24 months), includes all HP components.							tpmC	7351.50
2. Support pack H5520A upgrades std NetServer 3 yr warranty to same day, 4-hr response, includes monitor/int components (mem,NIC							\$/tpmC	79.48
3. Series 9000 model E55 standard warranty is 1 yr, next day. Opt. 0S3 upgrades to next day								
For years 2 to 5, order service contract (O2A) for 48 month, includes:								
personality card, LAN link, and memory modules.								
4. Pricing: 1=Metropolitan, 3=HP Corporate Price List, 4=Microsoft, 5=NETLUX,								
6=Visigenic Software, 7=BEA Systems, 8=Forsythe Solutions								
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 HP NetServer LX Pro 6/200

MQTH Computed Maximum Qualified Throughput:		7351.50 tpmC®						
Response Times (in seconds)		90th %-ile			Maximum		Average	
New-Order		1.23			60.38		0.83	
Payment		0.73			44.87		0.43	
Order-Status		3.84			25.41		1.89	
Delivery (interactive portion)		0.22			0.33		0.12	
Delivery (deferred portion)		1.59			34.69		0.98	
Stock-Level		6.89			20.13		4.14	
Menu		-			0.2		0.01	
Transaction Mix, in percent of total transactions								
New-Order							44.81%	
Payment							43.04%	
Order-Status							4.05%	
Delivery							4.04%	
Stock-Level							4.05%	
Keying/Think Times (in seconds)		Keying Time			Think Time			
		Min.	Avg.	Max.	Min.	Avg.	Max.	
New-Order		18.01	18.02	29.65	0.01	12.12	154.51	
Payment		3.01	3.02	3.06	0.01	12.17	136.7	
Order-Status		2.01	2.02	2.06	0.01	10.26	92.58	
Delivery		2.01	2.02	2.06	0.01	5.17	68.86	
Stock-Level		2.01	2.02	2.06	0.01	5.18	59.86	
Test Duration								
Ramp-up time						32.4 minutes		
Measurement interval						30 minutes		
Transactions during measurement interval						492144		
Ramp down time						33 minutes		
Checkpointing								
Number of checkpoints in measurement interval						1		
Checkpoint interval						30 minutes		
Reproducibility Run				7325.9 tpmC®		-0.30%		

