
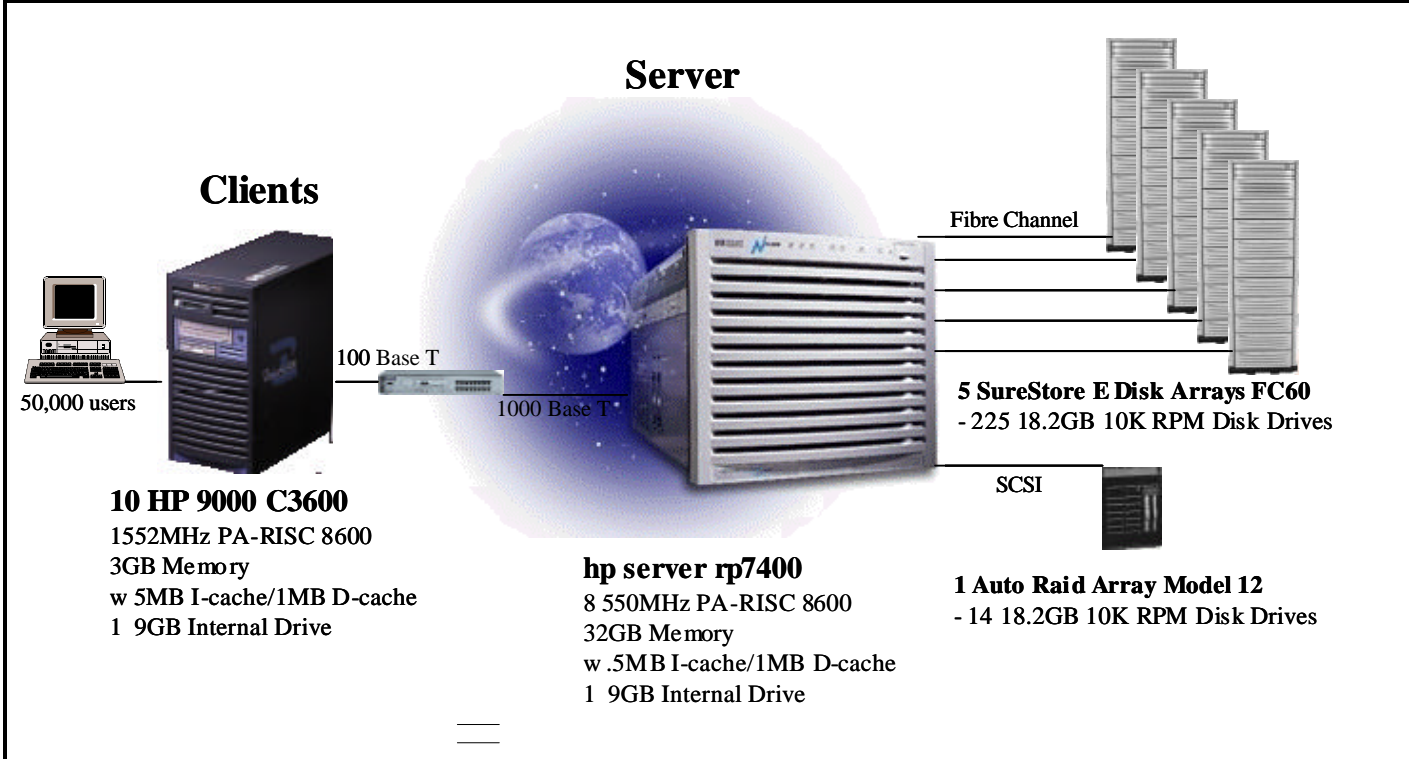
 invent 	hp server rp7400			TPC-C Revision 5
				Report Date: January 9, 2002
Total System Cost	TPC Throughput	Price/Performance		Availability Date
\$1,065,085	60,366.82 tpmC	\$17.64/tpmC		December 1, 2000
Processors	Database Manager	Operating System	Other Software	Number of Users
8 PA-RISC 8600 550MHz	Sybase Adaptive Server Enterprise 12.0	HP-UX 11.0 64-bit Extension Pack 9911	TUXEDO 6.4	50,000



System Components	Server (hp server rp7400)		Each Client (10 C3600)	
	Qty	Type	Qty	Type
Processors	8	550MHz PA-RISC 8600	1	552MHz PA-RISC 8600
Cache Memory	each	0.5 MB I-cache, 1 MB D-cache	each	0.5 MB I-cache/1 MB D-cache
Memory	32	GB	1	3 GB
Disk Controllers	10	HP-PCI Fibre Channel	1	Ultra2 SCSI LVD
Disk Drives	1	9.1GB Internal Drive	1	9 GB disk
	5	SureStore Disk Array FC60 with 225 18.2 10K RPM drives		
	1	HP AutoRaid Model 12H with 14 18.2 10K RPM drives		
Total Storage	3,963	GB		
Tape Drives	1	DVD ROM		
Terminals	1	Console Terminal		



hp server rp7400

TPC-C Rev 5

Report Date: January 9, 2002

Description	Part Number	Brand	Price Key	Unit Price	Qty	Extended Price	3 Yr. Maint. Price
Server Hardware							
HP 9000 N4000 Enterprise Server	A3639C			19,900	1	19,900	17,420
Add'l 550 MHz PA-RISC 8600 CPUs	A5866A, Opt 0D1			13,000	8	104,000	48,696
Memory Carrier	A4882A, Opt. 0D1			1,200	4	4,800	
2 GB Memory	A5864A			14,000	16	224,000	
Processor Support Module	A5168A, Opt 0D1			1,200	4	4,800	
Dual Port Ultra 2 SCSI	A5150A Opt. 0D1			1,680	1	1,680	
18GB Internal Disk	A6739A			1,775	1	1,775	
Rack Installation Kit	A5170A, Opt. 0D1			410	1	410	
PCI Fibre Channel Adapter	A5158A, Opt. 0D1			2,240	10	22,400	
PCI 1000BT Lan Adapter	A4926A, Opt. 0D1			2,135	1	2,135	
HP Smart 2U Storage Enclosure	C4317A			450	1	450	
DVD-ROM	C4318SZ, Opt. 108			599	1	599	
.5m 68pin SCSI Terminator	Opt. 001			99	1	99	
WSE 68pin SCSI Terminator	Opt. 835			45	1	45	
HP-UX 11.0 Sys Media, CD-ROM	B3920EA, Opt. AAF			520	1	520	
6.5 kVA HP UPS Rackmount	A6584A			8,799	3	26,397	
1.25m Field Integrated Cabinet	A4900A			2,110	1	2,110	
Cabinet Depth Extension Kit	A5541AZ			0	1	0	
Cabinet Rear Door	A5211AZ			325	1	325	
Auto Raid Array Model 12	A3700AZ			6,220	1	6,220	6,104
Two 96 MB controllers with Auto Raid	Opt. 203			18,760	1	18,760	
18.2 GB disk modules, 10K RPM	A3714A			2,000	14	28,000	
SureStore E Disk Array FC60	A5277AZ			5,160	5	25,800	42,630
HP Rack System/E33 Inc. Rear & Foot	A4901A			2,240	5	11,200	
Dual Controllers	A5277A, Opt 204			32,080	5	160,400	
SureStore E Disk System SC10	A5294A			6,400	30	192,000	
16m Fibre Channel Cable	A5277A, Opt AFY			160	6	960	
18GB 10K RPM Disk Drive	A6272A			1,600	225	360,000	
Subtotal						1,219,785	114,850
Server Software							
Sybase Enterprise Adaptive Server 12.0	Runtime				2	150,000	72,000
Subtotal						150,000	72,000
Client Hardware							
Hewlett Packard Model C3600 Workstation	A5992A			11,500	10	69,000	38,810
512 MB memory module	A4995A			695	50	86,250	
700/96 Console	C1064GX			550	1	413	
100BaseT PCI Lan Adapter	B5509BA			273	10	2,048	
18GB LVD 10K RPM Disk	A4998A			595	10	6,188	
Subtotal						163,898	38,810
Client Software							
HP C/ANSI C Compiler	B3901BA, Option AH0			1,600	1	1,600	339
BEA Tuxedo 6.4		Bea Sys.		2,850	10	28,500	20,700
Subtotal						30,100	21,039
User Connectivity							
HP Procurve Swtich 2524	J4813A			1099	1	1,099	304
HP ProCurve Switch Gigabit-SX Module	J4113A			1,124	1	1,124	
Subtotal						2,223	304
Large Configuration Discount and Support Prepayment						(705,544)	(42,379)
Total						860,462	204,624
Notes: 1=HP, 2=Sybase 3=BEA Systems						Three Year Cost of Ownership:	
Audited by Lorna Livingston, Performance Metrics, Inc.						tpmC Rating: 60,366.82	
						\$/tpmC: \$17.64	

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 server rp7400

MQTH, Computed Maximum Qualified Throughput

60,366.82 tpmC

Response Times (in seconds)

	90th %-ile	Maximum	Average
New-Order	2.13s	12.32s	1.28s
Payment	2.03s	12.12s	1.19s
Order-Status	2.08s	11.01s	1.23s
Delivery (interactive portion)	0.08s	1.11s	0.07s
Delivery (deferred portion)	2.75s	12.02s	1.86s
Stock-Level	2.28s	11.12s	1.33s
Menu	0.10s	0.54s	0.002s

Transaction Mix, in percent of total transactions

New-Order	44.82%
Payment	43.04%
Order-Status	4.05%
Delivery	4.04%
Stock-Level	4.04%

Keying/Think Times

	Keying Time			Think Time		
	Min	Avg	Max	Min	Avg	Max
New-Order	18.02s	18.03s	18.09s	0.01s	12.13s	175.71s
Payment	3.01s	3.02s	3.08s	0.01s	12.07s	191.47s
Order-Status	2.01s	2.02s	2.08s	0.01s	10.13s	144.01s
Delivery (interactive)	2.01s	2.02s	2.08s	0.01s	5.06s	63.82s
Stock-Level	2.01s	2.02s	2.06s	0.01s	5.06s	64.91s

Test Duration

Ramp up time	24.6 minutes
Measurement interval	100 minutes
Transactions during measurement interval	13,467,854
Ramp down time	5.733 minutes

Checkpointing

Number of checkpoints in measurement interval	4
Checkpoint Interval	25 minutes

Reproducibility Run

Throughput	60,045.82 tpmC
Relative to MQTH	-0.53%