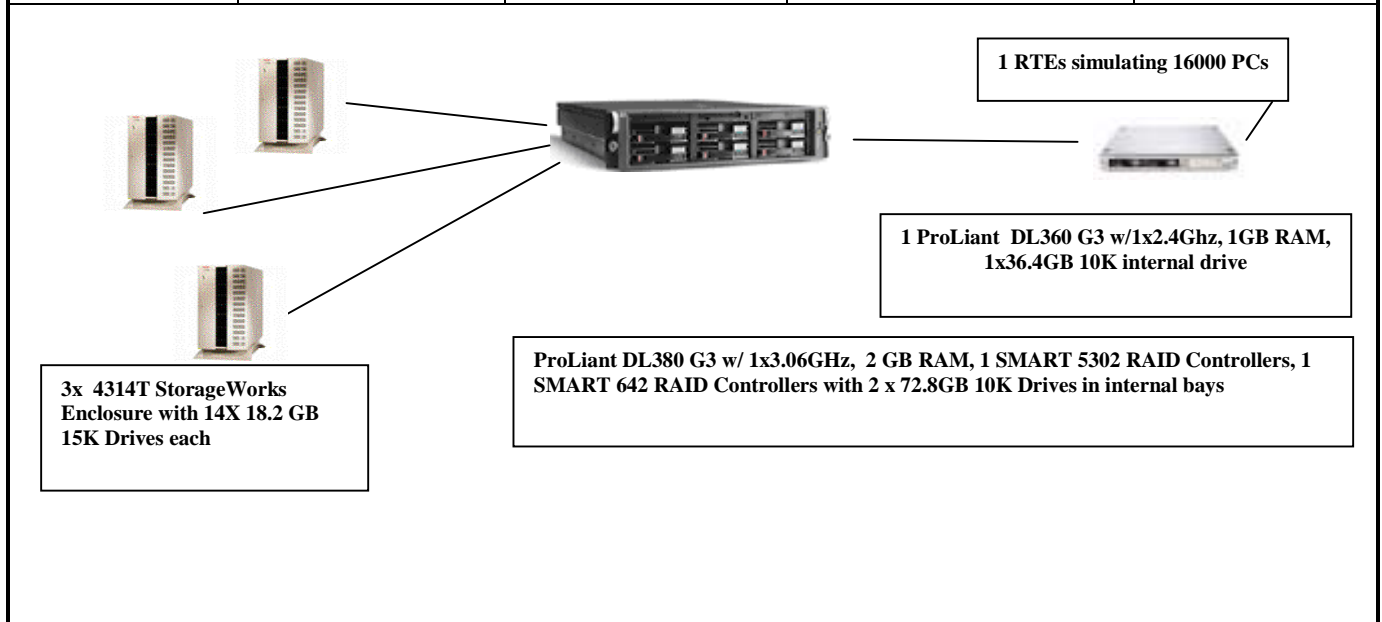


Hewlett-Packard Company	ProLiant DL380 G3 1P	TPC-C Rev. 5.1
	c/s with 1 ProLiant DL360 G3	Report Date: May 29, 2003

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$43,502	18,818.46	\$2.32	May 27, 2003

Processors	Database Manager	Operating System	Other Software	Number of Users
1 Intel Xeon 3.06GHz – Server 1 Intel Xeon 2.4GHz – Client	Microsoft SQL Server 2000 Standard Edition (SP3)	Microsoft Windows Server 2003 Standard Edition	Microsoft Visual C++ Microsoft COM+	16000



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processor	1	3.06 GHz Intel Xeon w/ 512K Cache	1	2.4 GHz Intel Xeon w/ 512K cache
Memory	2	1GB DDR (2x512MB)	2	512MB (2x256MB)
Disk Controllers	1	Integrated SMART Array Controller	1	Integrated SMART Array Controller
	1	SMART 5302 Array Controller		
	1	SMART 642 Array Controller		
Disk Drives	42	18.2 GB SCSI Drive	1	36.4GB SCSI Drive
	2	72.8 GB SCSI Drive		
Total Storage		910.0 GB		36.4 GB
Tape Drives	1	12/24 GB DAT		

Hewlett-Packard	HP ProLiant DL380 G3 1P		TPC-C Rev. 5.1			
Company	Client/Server		Report Date:	29-May-03		
Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
Brand Pricing						
ProLiant DL380 G3 1x3.06GHz/533MHz FSB (512KB L2), 512MB (2x256MB), Two integrated Gigabit NIC, Integrated Smart Array Controller	310587-001		1	3,299	1	3,299
1GB PC2100 DDR (2x512MB)	300679-B21		1	550	2	1,100
StorageWorks Enclosure Model 4314T- Tower	190210-001		1	3,182	3	9,546
Smart Array 5302/128 Controller	283552-B21		1	1,299	1	1,299
Smart Array 642 Controller	291967-B21		1	699	1	699
S5500 15 carbon / silver monitor	261602-001		1	129	1	129
3-Button Mouse-Carbon	231947-B21		1	5	1	5
PS/2 Easy Access Internet Keyboard	265977-001		1	12	1	12
TR5 10/20-Gigabyte Tape Drive - Carbon	294243-B22		1	299	1	299
Pro UPS 500 (500VA/300 Watts; 110-127 VAC, 60Hz)	136386-001		1	146	1	146
18.2GB 15Krpm U320 UNI HDD	286775-B22		1	299	42	12,558
18.2GB 15Krpm U320 UNI HDD (10% spares)	286775-B22		1	299	5	
72.8GB 10Krpm U320 UNI HDD (internal log)	286714-B22		1	489	2	978
HP CP 3Y 4H 24x7 HW 300 Srs 4-Hour 24 Hour x 7 Day Coverage 3 Yea	162657-002		1	949	1	949
FM-4E724-36 3YR 24X7/4HR EMPTY DISK ENCL	171242-002		1	157	3	471
Subtotal					30,070	2,915
Server Software						
Database Server Support Package	-PRORS-16U-01	Microsoft	2	1,950	3	5,850
SQL Server 2000 Standard Edition 32-bit	228-01079	Microsoft	2	4,999	1	4,999 Incl Above
Visual C++ .Net Standard	254-00170	Microsoft	2	109	1	109 Incl Above
Windows Server 2003 Standard Edition	P73-00295	Microsoft	2	738	1	738 Incl Above
Subtotal					5,846	5,850
Client Hardware						
ProLiant DL360 G3 1x2.4GHz, 512MB (2x256MB), Two integrated Gigabit NIC, Integrated Smart Array Controller	292887-001		1	2,199	1	2,199
36.4GB 10Krpm U320 UNI HDD (internal OS drive)	286713-B22		1	339	1	339
FM-EL724-36 3YR 24X7/4HR ENTRY 300 SVR	162675-002		1	599	1	599
Subtotal					2,538	599
Client Software						
Windows 2000 Server 32-bit	C11-00821	Microsoft	2	738	1	738 Incl. Above
Subtotal					738	0
User Connectivity						
7 ft. CAT5e Patch cable	CBLC57	LanAdapter	3	1	3	3
Subtotal					3	0
Large Purchase and Net 30 discount (See Note 1)	14.0%		1			(\$4,565) (\$492)
Total					\$34,630	\$8,872
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 pricing 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.				Three-Year Cost of Ownership: \$43,502		
				tpmC Rating: 18818.46		
				\$ / tpmC: \$2.32		
Pricing: 1=HP 2= Microsoft 3=LanAdapters.com						
Note 1 = Discount based on HP Direct guidance with large purchase and Net 30 discount.						
Note: The benchmark results and test methodology were audited by Lorna Livingtree of Performance Metrics, Inc.						

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

18,818.46 tpmC

Response Times (in seconds)	Average	90%	Maximum
New-Order	0.65	0.99	6.19
Payment	0.38	0.68	6.54
Order-Status	0.49	0.81	5.53
Delivery (interactive portion)	0.10	0.11	0.53
Delivery (deferred portion)	1.14	1.58	3.47
Stock-Level	3.84	4.79	11.64
Menu	0.10	0.11	0.93

Transaction Mix, in percent of total transaction

New-Order	44.90%
Payment	43.03%
Order-Status	4.02%
Delivery	4.02%
Stock-Level	4.03%

Emulation Delay (in seconds)

	Resp.Time	Menu
New-Order	0.10	0.10
Payment	0.10	0.10
Order-Status	0.10	0.10
Delivery (interactive)	0.10	0.10
Stock-Level	0.10	0.10

Keying/Think Times (in seconds)

	Min.	Average	Max.
New-Order	18.00/0.00	18.02/13.24	18.04/132.50
Payment	3.00/0.00	3.02/13.24	3.04/132.50
Order-Status	2.00/0.00	2.02/11.04	2.04/110.50
Delivery (interactive)	2.00/0.00	2.02/5.57	2.04/55.50
Stock-Level	2.00/0.00	2.02/5.56	2.04/55.50

Test Duration

Ramp-up time	12 min 39 sec
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	5,231,518
Ramp down time	31 seconds

Checkpointing

Number of checkpoints	9
Checkpoint interval	Ave 14 min 58 sec