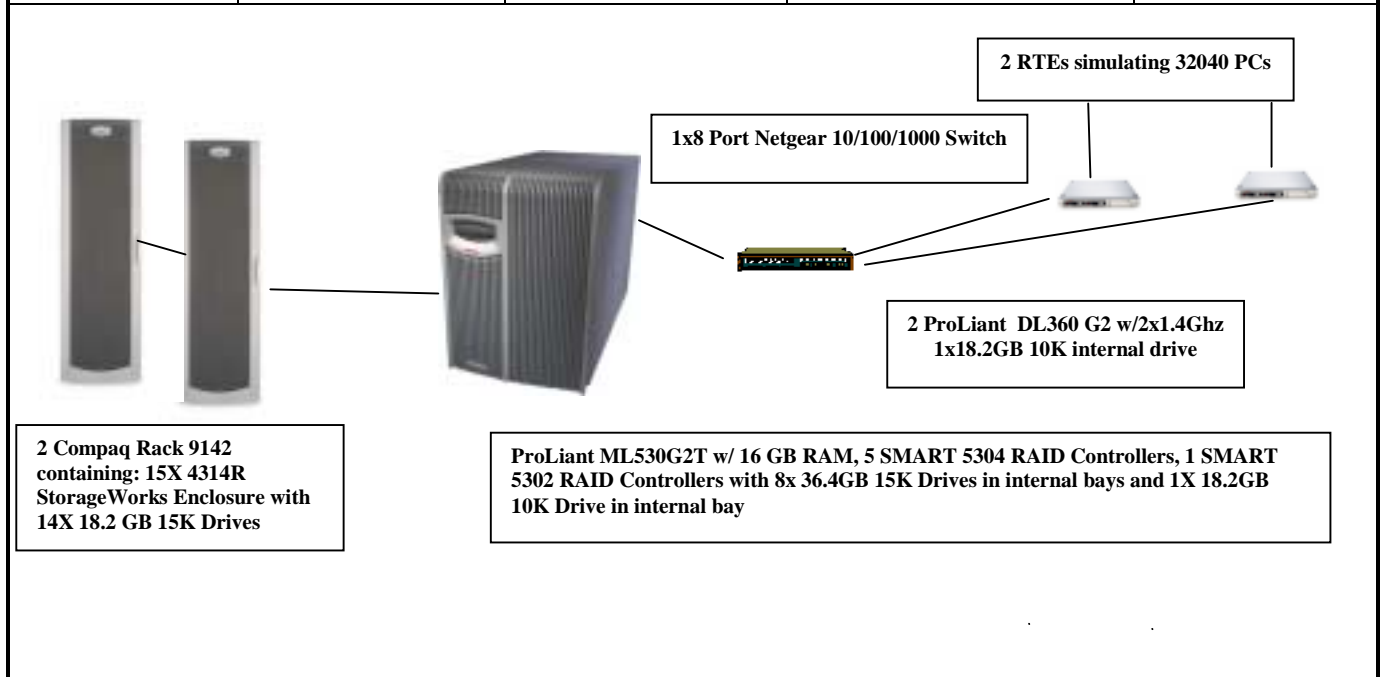


Hewlett-Packard Company	ProLiant ML530G2T 2P	TPC-C Rev. 5.0
	c/s with 2 ProLiant DL360 G2	Report Date: Jan 8, 2003

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$236,876	38,386.24	\$6.18	Mar 31, 2003

Processors	Database Manager	Operating System	Other Software	Number of Users
2 Intel Xeon 2.8 GHz – Server 4 Pentium III 1.4GHz – Client	Microsoft SQL Server 2000 Enterprise Edition (SP3)	Microsoft Windows .NET Enterprise Edition	Microsoft Visual C++ Microsoft COM+	32040



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processor	2	2.8 GHz Intel Xeon w/ 512K Cache	2	1.4GHz Pentium III w/ 256K cache
Memory	2	8 GB DDR (4x2GB)	2	512MB
Disk Controllers	1	Integrated Ultra-3 SCSI Controller	1	Integrated SMART Array Controller
	1	SMART 5302 Array Controller		
	5	SMART 5304 Array Controller		
Disk Drives	211	18.2 GB SCSI Drive	1	18.2GB SCSI Drive
	8	36.4 GB SCSI Drive		
Total Storage		3891.4 GB		18.2 GB
Tape Drives	1	12/24 GB DAT		

Hewlett-Packard Company		ProLiant ML530G2T-2800X 2P			TPC-C Rev. 5.0		
Description		Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware							
Brand Pricing							
ProLiant ML530G2T 1GB 2P 2.8GHz	306489-001		1	5,658	1	5,658	
8GB (2x2GB) DDR ECC 200MHz Memory	202173-B21		1	25,333	2	50,666	
NC7770 PCI-X Gigabit Server Adapter	244948-B21		1	221	1	221	
StorageWorks Enclosure Model 4314R	190209-001		1	2,955	15	44,325	
2x1 Drive Cage with fan (ML530 G2)	244058-B21		1	370	1	370	
Smart Array 5302/64 Controller	124992-B21		1	1,367	1	1,367	
Smart Array 5304/128 Controller	158939-B21		1	2,052	5	10,260	
S5500 15 carbon / silver	261602-001		1	149	1	149	
12/24-Gigabyte DAT Drive (Internal)	295513-B22		1	682	1	682	
HP Rack Model 9142 (42U - Opal) - Flat Pallet	120663-B21		1	1,352	2	2,704	
HP Rack Sidewall Kit	120670-B21		1	207	1	207	
UPS R3000 XR	192186-001		1	1,665	1	1,665	
18.2GB Pluggable Ultra3 SCSI 10K 1" Universal HDD	142673-B22		1	311	1	311	
36.4GB Pluggable 1" Ultra3 SCSI 15K Hard Drive	232916-B22		1	605	8	4,840	
18.2-GB Pluggable 1" Universal WideUltra3 15K HDD	188122-B22		1	390	210	81,900	
18.2-GB Pluggable 1" Universal WideUltra3 15K HDD (10% spares)	188122-B22		1	390	21		8,190
FM-MI724-36 3YR 24X7 4HR 500 SERIES SVR	401782-002		1	1,795	1		1,795
FM-4E724-36 3YR 24X7/4HR EMPTY DISK ENCL	171242-002		1	157	15		2,355
Subtotal						205,325	12,340
Server Software							
Microsoft SQL Server 2000 Enterprise Edition(per processor)	810-00845	Microsoft	2	17,279	2	34,558	5,850
Microsoft Visual C++ .NET Standard	254-00170	Microsoft	2	109	1	109	Incl Above
Microsoft Windows .NET Enterprise Edition	n/a	Microsoft	2	2,699	1	2,699	Incl Above
Subtotal						37,366	5,850
Client Hardware							
ProLiant DL360R02 P1.4/133-512K 256MB	233271-001		1	1,925	2	3,850	
Two integrated Gigabit NIC, Integrated Smart Array Controller							
1.40GHz PIII Processor Option Kit (DL360 G2)	233273-B21		1	717	2	1,434	
1GB 133MHz SDRAM DIMM Memory (2x512MB)	201694-B21		1	644	2	1,288	
S5500 15 carbon / silver	261602-001		1	149	2	298	
Scroll Mouse-Carbon	231947-B21		1	5	2	10	
PS/2 Easy Access Internet Keyboard	265977-001		1	12	2	24	
18.2GB Pluggable Ultra3 SCSI 10K 1" Universal HDD	142673-B22		1	311	2	622	
FM-EL724-36 3YR 24X7 4HR ENTRY 300 SVR	162675-002		1	750	2		1,500
Subtotal						7,526	1,500
Client Software							
Microsoft Windows 2000 Server	C11-00821	Microsoft	2	738	2	1,476	Incl. Above
Subtotal						1,476	0
User Connectivity							
Netgear GS508T 8 port Copper Gigabit Switch	1058966	Netgear	3	508	3	1,524	
Subtotal						1,524	0
Large Purchase and Cash discount (See Note 1)	16.0%		1			(\$34,056)	(\$1,974)
Total						\$219,161	\$17,716
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: \$236,876	
						tpmC Rating: 38386.24	
						\$ / tpmC: \$6.18	
Pricing: 1=HP Direct 2= Microsoft 3=Compuplus.com							
Note 1 = Discount based on HP Direct guidance and large cash purchase level.							
Note: The benchmark results and test methodology were audited by Lorna Livingtree of Performance Metrics, Inc.							

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

38386.24 tpmC

Response Times (in seconds)	Average	90%	Maximum
New-Order	1.35	2.13	14.11
Payment	1.29	2.08	15.08
Order-Status	1.32	2.12	12.57
Delivery (interactive portion)	0.10	0.11	1.13
Delivery (deferred portion)	0.17	0.27	3.47
Stock-Level	1.79	2.63	13.09
Menu	0.10	0.11	1.14

Transaction Mix, in percent of total transaction

New-Order	44.88%
Payment	43.03%
Order-Status	4.02%
Delivery	4.04%
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	18.02/12.10	18.03/121.11
Payment	3.00/0.00	3.02/12.09	3.03/121.12
Order-Status	2.00/0.00	2.02/10.09	2.03/101.00
Delivery (interactive)	2.00/0.00	2.02/5.09	2.03/50.82
Stock-Level	2.00/0.00	2.02/5.08	2.03/50.81

Test Duration

Ramp-up time	51 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	10,677,768
Ramp down time	10 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	30 minutes