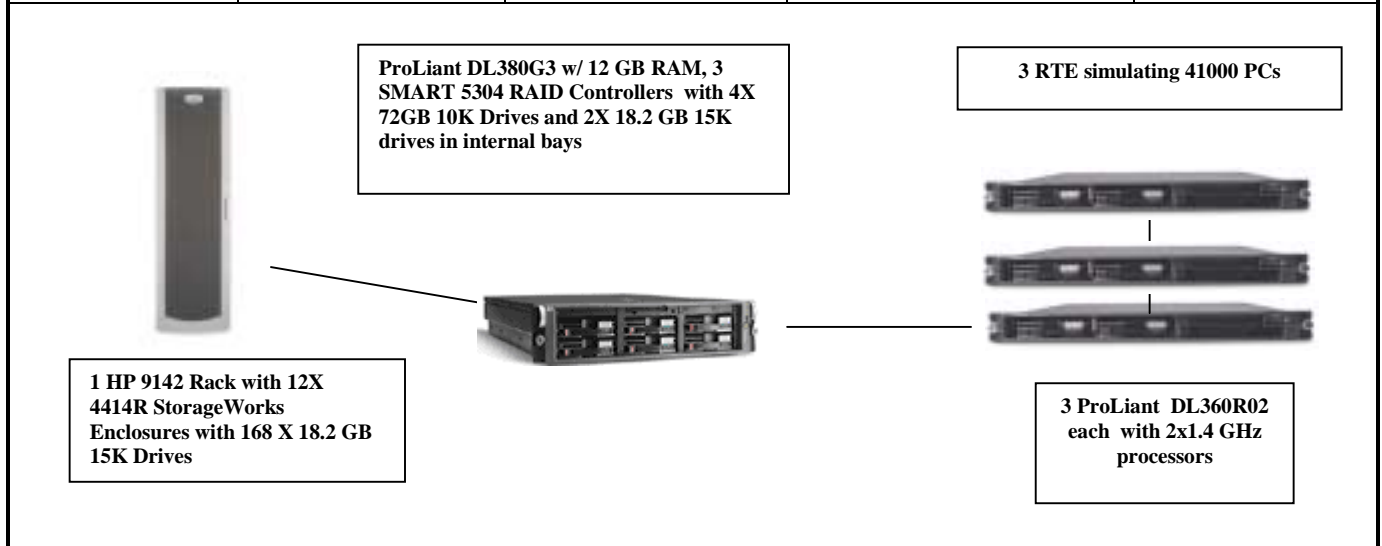


Hewlett Packard Company	ProLiant DL380-G3-1M 2P	TPC-C Rev. 5.1
	C/S with ProLiant DL360R02	Report Date: Oct 22, 2003

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
<b>\$163,924</b>	<b>51,226.96</b>	<b>\$3.20</b>	<b>Oct 22, 2003</b>

Processors	Database Manager	Operating System	Other Software	Number of Users
2 Intel Xeon 3.20 GHz – 1M L3 cache – Server 6 Pentium III 1.4 GHz – Clients	Microsoft SQL Server 2000 Enterprise Edition SP3	Microsoft Windows Server 2003, Enterprise Edition	Microsoft Visual C++ Microsoft COM+	<b>41000</b>



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processor	2	3.20 GHz Intel Xeon w/ 1M Cache	2	1.4 GHz Pentium III Xeon w/ 256K cache
Memory	6	2 GB DDR	1	1 GB (2x 512 MB)
Disk Controllers	1	Integrated Ultra-3 SCSI Controller	1	Integrated SMART Array Controller
	3	SMART 5304 Array Controller		
Disk Drives	2	18.2 GB SCSI Drives	1	18 GB SCSI Drive
	4	72.8 GB SCSI Drives		
	168	18.2 GB SCSI Drives		
Total Storage		3385.2 GB		18 GB
Tape Drives	1	12/24 GB DAT		

Hewlett-Packard		ProLiant DL380G3-1M-2P		TPC-C Rev. 5.1			
Company		Client/Server		Report Date:		22-Oct-03	
Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price	
<b>Server Hardware</b>		<b>Brand Pricing</b>					
DL380G3 X3.2GHz/533 1M 1GB 1P Rck US, Integrated NIC	345101-001		1	3,649	1	3,649	
X3.20GHz /533MHz Processor Option Kit - DL380G3	333714-B21		1	1,699	1	1,699	
2GB x 1 PC2100 DDR	301044-B21		1	1,999	6	11,994	
S5500 15 carbon / silver monitor	261602-001		1	129	1	129	
3-Button Mouse (PS/2)	304786-B21		1	5	1	5	
PS/2 Easy Access Keyboard	304788-001		1	10	1	10	
StorageWorks Enclosure Model 4414R - Rack-mountable	302969-B21		1	3,209	12	38,508	
Rack Model 9142 (42U - Opal) - Flat Pallet	120663-B21		1	1,321	1	1,321	
Side Panel Kit - 9142 Rack	120670-B21		1	207	1	207	
Smart Array 5304/256 Controller	283551-B21		1	2,247	3	6,741	
12/24-Gigabyte DAT Drive (Internal)	295513-B22		1	682	1	682	
UPS R1500 XR ERM WW	218971-B21		1	631	1	631	
18.2GB 15Krpm U320 UNI HDD	286775-B22		1	299	168	50,232	
18.2GB 15Krpm U320 UNI HDD (10% spares)	286775-B22		1	299	17	5,083	
18.2GB 15K U320 Pluggable Hard Drive (OS)	286775-B22		1	299	2	598	
72GB 10K U320 UNI HDD ALL (internal log drives)	286714-B22		1	489	4	1,956	
CarePaq Service - 300 Series Servers 3Yr,7x24,4hr	162657-002		1	949	1	949	
FM-4E724-36 3YR 24X7/4HR EMPTY DISK ENCL	171242-002		1	157	12	1,884	
					<b>Subtotal</b>	<b>118,362</b>	<b>7,916</b>
<b>Server Software</b>							
Microsoft SQL Server 2000 Enterprise Edition(per processor)	810-00845	Microsoft	2	17,279	2	34,558	
Visual C++ .Net Standard	254-00170	Microsoft	2	109	1	109 Incl Above	
Microsoft Windows 2003 Server, Enterprise Edition	P72-00264	Microsoft	2	2,399	1	2,399 Incl Above	
Database Server Support Package	PRO-PRORS-16U-01	Microsoft	2	1,950	3	5,850	
					<b>Subtotal</b>	<b>37,066</b>	<b>5,850</b>
<b>Client Hardware</b>							
ProLiant DL360R02 P1.40/133-256K 3-Pack	251247-001		1	5,277	1	5,277	
Two integrated Gigabit NIC, Integrated Smart Array Controller							
1GB 133MHz SDRAM DIMM Memory (2x512MB)	201694-B21		1	600	3	1,800	
P1400/133-512 DL360G2 Processor Option Kit (DL360 G2)	233273-B21		1	717	3	2,151	
S5500 15 carbon / silver monitor	261602-001		1	129	3	387	
3-Button Mouse (PS/2)	304786-B21		1	5	3	15	
PS/2 Easy Access Keyboard	304788-001		1	10	3	30	
18.2GB 15Krpm U320 UNI HDD	286775-B22		1	299	3	897	
HP CP 3Y 4H 24x7 HW 300 Srs 4-Hour 24 x 7 Coverage 3 Years	162657-002		1	949	3	2,847	
					<b>Subtotal</b>	<b>10,557</b>	<b>2,847</b>
<b>Client Software</b>							
Microsoft Windows 2000 Server	C11-00821	Microsoft	2	738	3	2,214 Incl. Above	
					<b>Subtotal</b>	<b>2,214</b>	<b>0</b>
<b>User Connectivity</b>							
Netgear GS508T 8 port Copper Gigabit Switch	GS508TNA	Netgear	3	485	3	1,455	
7ft CAT 5e Network Patch Cables	CBLC57	LanAdapters	4	1	6	6	
					<b>Subtotal</b>	<b>1,461</b>	<b>0</b>
Large Purchase and Net 30 discount (See Note 1)	16.0%		1			(\$20,627) (\$1,722)	
					<b>Total</b>	<b>\$149,033</b>	<b>\$14,891</b>
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 <a href="mailto:pricing@tpc.org">pricing@tpc.org</a> . Thank you.					<b>Three-Year Cost of Ownership: \$163,924</b>		
Pricing: 1=HP 2=Microsoft 3=Compulplus.com 4=LanAdapters.com					<b>tpmC Rating: 51,226.96</b>		
Note 1 = Discount based on HP Direct guidance with large purchase and Net 30 discount.					<b>\$/ tpmC: \$3.20</b>		
Note:The benchmark results and test methodology were audited by Loma Livingtree of Performance Metrics, Inc.							

## Numerical Quantities Summary

**MQTH, Computed Maximum Qualified Throughput**

**51,226.96 tpmC**

<b>Response Times (in seconds)</b>	<b>Average</b>	<b>90%</b>	<b>Maximum</b>
New-Order	0.38	0.60	7.02
Payment	0.27	0.46	5.17
Order-Status	0.29	0.48	7.08
Delivery (interactive portion)	0.10	0.11	0.13
Delivery (deferred portion)	0.25	0.41	1.24
Stock-Level	1.37	1.83	5.38
Menu	0.10	0.11	0.33

### **Transaction Mix, in percent of total transaction**

New-Order	44.88%
Payment	43.05%
Order-Status	4.03%
Delivery	4.01%
Stock-Level	4.03%

<b>Emulation Delay (in seconds)</b>	<b>Resp.Time</b>	<b>Menu</b>
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

<b>Keying/Think Times (in seconds)</b>	<b>Min.</b>	<b>Average</b>	<b>Max.</b>
New-Order	18.00/0.00	18.02/12.11	18.04/121.12
Payment	3.00/0.00	3.02/12.11	3.04/121.11
Order-Status	2.00/0.00	2.02/10.09	2.04/101.00
Delivery (interactive)	2.00/0.00	2.02/5.09	2.04/50.82
Stock-Level	2.00/0.00	2.02/5.08	2.04/50.81

### **Test Duration**

Ramp-up time	39 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	14,245,436
Ramp down time	32 minutes

### **Checkpointing**

Number of checkpoints	4
Checkpoint interval	30 minutes