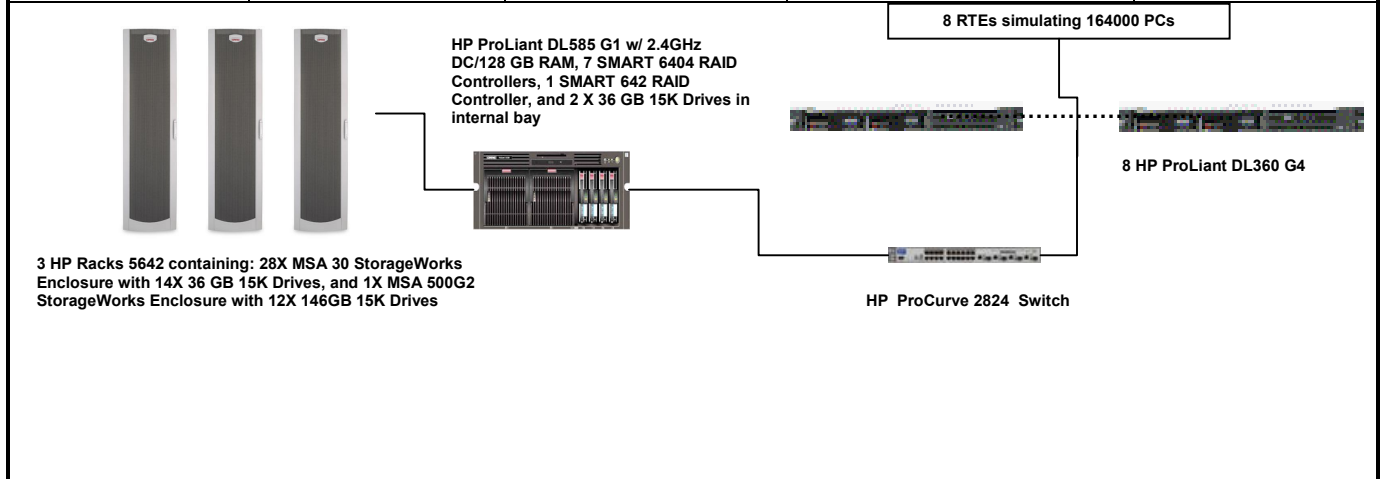


Hewlett-Packard Company	HP ProLiant DL585-G1 2.4GHz Dual Core 4P	TPC-C Rev. 5.5
	C/S with 8 HP ProLiant DL360G4	Report Date: Nov 4, 2005

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
USD \$472,539	206,181	USD \$2.30	Nov 7, 2005

Database Server Processors /Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
4/8/8 AMD Opteron 2.4 GHz DC	Microsoft SQL Server 2005 Enterprise (x64) Edition	Windows Server 2003, Enterprise (X64) Edition	Microsoft Visual C++ Microsoft COM+	164000



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processors/Cores/Threads	4/8/8	2.4 GHz DC AMD Opteron w/ 1M Cache	2/2/4	3.6 GHz Intel Xeon w/ 1MB cache
Memory	16	8 GB DDR (2 X 4 GB)	2	512MB
Disk Controllers	1	Integrated Smart 5i Controller	1	Integrated SMART 6i Controller
	7	SMART 6404 Array Controllers		
	1	SMART 642 Array Controller		
Disk Drives	12	146GB SCSI Drive	2	36 GB SCSI Drive
	394	36 GB SCSI Drive		
Total Storage		15,005.24 GB		33.9 GB

Hewlett-Packard		HP ProLiant DL585-G1 2.4GHz DC-4P			TPC-C Rev. 5.5		
Company		Client/Server			Report Date:	4-Nov-05	
Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price	
Server Hardware		Brand Pricing					
DL585 2.4GHz dual core (2P) 2GB PC2700/Dual port gigabit NIC/Smart 5i controller	397841-001	1	15,999	1	15,999		
DL585 2.4GHz/2700 dual core Processor Option Kit	397843-B21	1	5,699	2	11,398		
HP 8GB Reg PC2700 2x4GB Memory	395409-B21	1	7,499	16	119,984		
HP Storageworks MSA 30 SB Storage	302969-B21	1	2,829	28	79,212		
HP Modular Smart Array 500 G2 Storage includes 2 Smart Array 642 Adapters	335880-B21	1	4,499	1	4,499		
HP Modular Smart Array 500 G2 Controller	335881-B21	1	2,499	1	2,499		
HP Smart Array 6404/256MB Controller	273914-B21	1	1,899	7	13,293		
HP s7540 17in. CRT Monitor	PF997AA#ABA	1	149	1	149		
HP PS/2 Scroll Mouse carbonite	DG169AV	1	5	1	5		
HP Enhanced Keyboard	DG170AV#ABA	1	10	1	10		
HP 5642 Pallet Unassembled Rack	358254-B21	1	689	2	1,378		
UPS R1500 XR Low Voltage US	204404-001	1	866	1	866		
36GB 15K U320 Pluggable Hard Drive	286776-B22	1	299	394	117,806		
36GB 15K U320 Pluggable Hard Drive (10% spares)	286776-B22	1	299	40		11,960	
HP 146GB U320 10K Hot Plug Hard Drive	371535-B21	1	499	12	5,988		
HP CP 3Y 4H 24x7 HW 500 Srs 4-Hour 24 Hour x 7 Day Coverage 3 Years	401782-002	1	1,795	1		1,795	
HP Storageworks MSA 30 SB Storage (10% spares)	302969-B21	1	2,829	3		8,487	
HP 3y 4h 24x7 MSA500 HW Support	U6456E	1	1,950	1		1,950	
					Subtotal	373,086	24,192
Server Software							
Microsoft SQL Server 2005 Enterprise X64 Edition(per processor)	810-03134	Microsoft	2	23,432	4	93,728	Incl Below
Microsoft Visual C++ Standard	254-00170	Microsoft	2	109	1	109	Incl Below
Microsoft Windows 2003 Server, Enterprise Edition X64	P72-00274	Microsoft	2	2,334	1	2,334	Incl Below
Microsoft Problem Resolution Services		Microsoft	2	245	1		245
					Subtotal	96,171	245
Client Hardware							
HP DL360G4 X3.6GHz 1 1GB SCSI US Rack Server	360528-001	1	2,799	8	22,392		
Dual Integrated Gigabit NIC, Integrated Smart Array Controller 6i							
Intel Xeon 3.6GHz 1MB DL360G4 Processor	354583-B21	1	999	8	7,992		
36GB 15K U320 Pluggable Hard Drive	286776-B22	1	299	16	4,784		
HP CP 3Y 4H 24x7 HW Entry300 4-Hour 24 Hour x 7 Day Coverage 3 Years	162675-002	1	599	8		4,792	
					Subtotal	35,168	4,792
Client Software							
Windows Server 2000, Standard Edition	C11-00821	Microsoft	2	738	8	5,904	Incl. Above
					Subtotal	5,904	0
User Connectivity							
HP ProCurve Switch 2824	J4903A#ABA	1	2499	1	2,499		
HP CP for HP ProCurve Networking products 3 Yr 4 hr/24x7	U2856E	1	1000	1		1,000	
					Subtotal	2,499	1,000
Large Purchase and Cash discount (See Note 1)	16.0%	1				(\$65,720)	(\$4,797)
					Total	\$447,108	\$25,432
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: USD 472,539		
					tpmC Rating: 206,181		
					\$ / tpmC: USD 2.30		
Pricing: 1=HP Direct 2= Microsoft							
Note 1 = Discount based on HP Direct guidance with large purchase and Net 30 discount.Applies to all lines with 1 in pricing cc							
Note2: The benchmark results and test methodology were audited by Tom Sawyer of Performance Metrics, Inc.							
Note3: For ordering information call:							

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

206,181 tpmC

Response Times (in seconds)	Average	90%	Maximum
New-Order	0.28	0.54	5.18
Payment	0.26	0.52	5.05
Order-Status	0.27	0.53	5.09
Delivery (interactive portion)	0.10	0.11	0.90
Delivery (deferred portion)	0.16	0.22	4.45
Stock-Level	0.28	0.54	5.28
Menu	0.10	0.11	1.00

Transaction Mix, in percent of total transaction

New-Order	44.93%
Payment	43.02%
Order-Status	4.01%
Delivery	4.01%
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	18.02/0.00	18.03/12.07	18.36/120.64
Payment	3.02/0.00	3.03/12.07	3.32/120.64
Order-Status	2.02/0.00	2.03/10.07	2.31/100.63
Delivery (interactive)	2.02/0.00	2.03/5.08	2.31/50.63
Stock-Level	2.02/0.00	2.03/5.08	2.31/50.63

Test Duration

Ramp-up time	52 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	57,272,439
Ramp down time	5 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	30 minutes