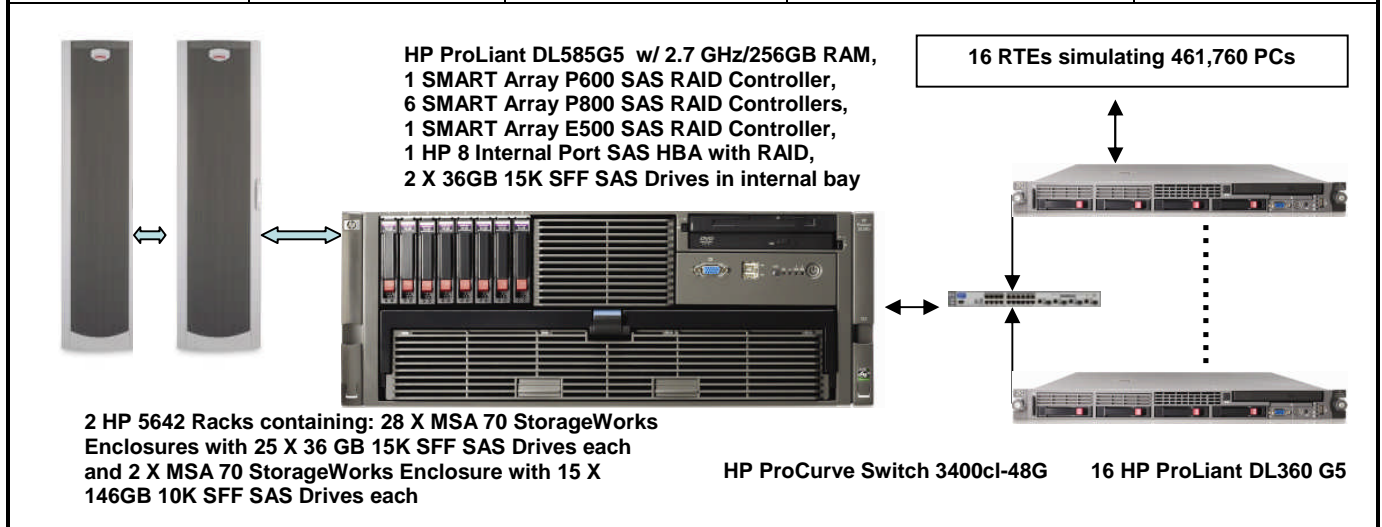


Hewlett-Packard Company	HP ProLiant DL585 G5 2.7GHz/2MB	TPC-C Rev. 5.9
	C/S with 16 HP ProLiant DL360 G5	Report Date: Nov 17, 2008

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
USD \$551,984	579,814	USD \$0.96	Nov 17, 2008

Database Server Processors /Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
4/16/16 AMD 8384 2.7 GHz QC	Microsoft SQL Server 2005 Enterprise x64 Edition SP2	Windows Server 2003 R2 Enterprise x64 Edition SP2	Microsoft Visual C++ Microsoft COM+	461,760



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processors/Cores/Threads	4/16/16	AMD 8384 2.7 GHz 2MB L2 cache 6MB L3	1/2/2	2.83 GHz Intel Xeon w/ 4MB cache
Memory	256GB	(32x 8GB) GB DDR2	1GB	1GB PC2-5300 FBD
Disk Controllers	1 6 1 1	Smart P600 Controller Smart P800 Controller Smart E500 Controller 8 Internal Port SAS HBA	1	Integrated Smart Array P400i Controller
Disk Drives	30 700 2	146GB 10K SFF SAS 36 GB 15K SFF SAS 36 GB 15K SFF SAS	2	36 GB SAS Drive
Total Storage		27,828.60 GB		36 GB

Hewlett-Packard Company	HP ProLiant DL585G5			TPC-C Rev. 5.9		
				Report Date	17-Nov-08	
Description	Part Number	Brand	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
HP ProLiant DL585 G5 Rack 2.7GHz 4P/8GB dual port NIC	500924-001	1	16,849	1	16,849	
16GB PC2-5300 2 x 8GB Kit	408855-B21	1	2,399	16	38,384	
HP Smart Array P800/512MB SAS Controller	381513-B21	1	949	6	5,694	
HP SA Cache Battery Kit	435129-B21	1	109	1	109	
HP Smart Array E500/256 SAS Controller	383280-B21	1	499	1	499	
HP 8 Internal Port SAS HBA with RAID	347786-B21	1	199	1	199	
HP SMART Array P600 3G SAS/SATA RAID Controller	337972-B21	1	729	1	729	
HP L1506 LCD Monitor	PX848AA#ABA	1	209	1	209	
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	1	39	
HP 5642 Pallet Unassembled Rack	358254-B21	1	865	2	1,730	
HP R1.5 kVA 1U NA UPS	AF419A	1	739	1	739	
HP 36GB 15k 2.5 Single Port HP SAS Drive	431933-B21	1	349	700	244,300	
HP 36GB 15k 2.5 Single Port HP SAS Drive (10% Spares)	431933-B21	1	349	70		24,430
HP 146 GB 3G SAS 10K SFF SP HDD	431958-B21	1	319	30	9,570	
HP 146 GB 3G SAS 10K SFF SP HDD (10% Spares)	431958-B21	1	319	3		957
HP 36GB 15k 2.5 Single Port HP SAS Drive	431933-B21	1	349	2	698	
HP StorageWorks MSA-70 Storage	418800-B21	1	3,199	30	95,970	
HP StorageWorks MSA-70 Storage (10% Spares)	418408-B21	1	3,199	3		9,597
HP 3y 4h 24x7 ProLiant D58x HW Support ,ProLiant Server DL58x	U4608E	1	1,575	1		1,575
Subtotal					415,718	36,559
Server Software						
Microsoft SQL Server 2005 Enterprise X64 Edition(per processor)	810-03134	2	23,432	4	93,728	Incl Below
Visual Studio Standard 2005	127-0012	2	250	1	250	Incl Below
Microsoft Windows 2003 Server R2 Enterprise X64 Edition	P72-01684	2	2,334	1	2,334	Incl Below
Microsoft Problem Resolution Services		2	245	1		245
Subtotal					96,312	245
Client Hardware						
HP DL360R05 E5440 2G US Svr	457923-001	1	2,799	16	44,784	
Dual Integrated Gigabit NIC, HP Smart Array P400i/256MB Controller						
HP 36GB 15k 2.5 Single Port HP SAS Drive	431933-B21	1	349	32	11,168	
HP L1506 LCD Monitor	PX848AA#ABA	1	209	1	209	
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	1	39	
HP CAT5 0x2x16 KVM Server Console Switch	336045-B21	1	1,099	1	1,099	
HP IP Console 8 pack Interface Adapter	262587-B21	1	709	2	1,418	
HP CP 3Y 4H 24x7 HW Entry300 4-Hour 24 Hour x 7 Day Coverage 3 Years	U4497E	1	596	16		9,536
Subtotal					58,717	9,536
Client Software						
Windows Server 2003 R2 Standard Edition	P73-01972	2	719	16	11,504	Incl. Above
Subtotal					11,504	0
User Connectivity						
HP ProCurve Switch 3400cl-48G	J4906A#ABA	1	6,899	1	6,899	
HP CP for HP ProCurve Networking products 3 Yr 4 hr/24x7	H2893E	1	1,700	1		1,700
CAT 6 7 Foot Gray Patch Cable	CB242-7G	3	2	34	68	
CAT 6 7 Foot Gray Patch Cable	CB242-7G	3	2	2		4
Subtotal					6,967	1,704
Large Purchase and Net 30 discount (See Note 1)	16.0%	1			(\$77,013)	(\$7,647)
Total					\$512,205	\$40,397
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	\$552,602
					tpmC Rating:	579,814
					\$/ tpmC: USD	\$0.96
Pricing: 1=HP Direct 800-203-6748 2= Microsoft 3= deepsurplus.com						
Note 1 = Discount based on HP Direct guidance applies to all lines where pricing = 1						
Note 2 = The benchmark results were audited by Lorna Livingtree of Performance Metrics						

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

579,814 tpmC

Response Times (in seconds)	Average	90%	Maximum
New-Order	0.31	0.57	8.56
Payment	0.28	0.54	5.09
Order-Status	0.32	0.57	9.43
Delivery (interactive portion)	0.12	0.14	3.48
Delivery (deferred portion)	0.14	0.19	5.00
Stock-Level	0.33	0.59	4.66
Menu	0.13	0.15	3.50

Transaction Mix, in percent of total transaction

New-Order	44.95%
Payment	43.02%
Order-Status	4.01%
Delivery	4.01%
Stock-Level	4.01%

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	18.03/12.05	18.60/120.33
Payment	3.02/0.00	3.03/12.04	3.60/120.34
Order-Status	2.02/0.00	2.03/10.04	2.47/100.33
Delivery (interactive)	2.02/0.00	2.03/5.05	2.54/50.33
Stock-Level	2.02/0.00	2.03/5.05	2.59/50.33

Test Duration

Ramp-up time	98 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	160,999,603
Ramp down time	2 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	30 minutes