



HP ProLiant DL380 G7

TPCE Rev 1.10.0

TPC Pricing 1.5.0

Report Date

May 11, 2010

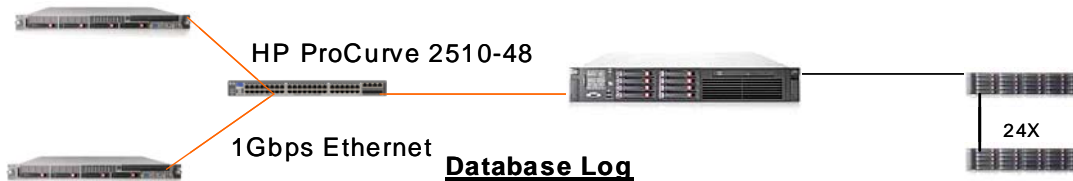
TPC-E Throughput	Price/Performance	Availability Date	Total System Cost
1,110.11	\$294 USD/tpsE	May 11, 2010	\$325,481 USD

Database Server Configuration

Operating System	Database Manager	Processor/Cores/Thread	Memory
Microsoft Windows Server 2008 R2 Enterprise Edition	Microsoft SQL Server 2008 R2 Enterprise Edition	2/12/24	96GB

Tier B: Server HP ProLiant DL380G7

2 x Intel Xeon Processor x5680
96GB Memory
2 x HP 72GB 3G SAS 10K SFF DP



Database Log

Tier A: Clients

2 x ProLiant DL360g5
2 x Quad-Core Intel Xeon processor E5420 2.50Ghz
8 x 72GB SAS 10K SFF DP
2 x Onboard 1Gbps Ethernet
2 x HP NC360T PCI-E Dual Port

4 x HP 300GB
6G SAS 10K SFF
DP (internal)

Storage

6 x HP Smart Array P411/512 MB
24 x HP StorageWorks MSA70 Array
528 x 72GB 6G SAS 15K SFF DP

Priced Configuration

Initial Database Size	Redundancy Level : 1	Storage
4761 GB	RAID10 : Log/ RAID10 : Data	528x72GB, 4x300GB



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Description	Part Number	Brand	Unit Price	Qty.	Extended Price	3 Yr Maint Price
Server Hardware (Tier B)						
HP DL380G7 SFF CTO Chassis	583914-B21	1	1,591	1	1,591	
Intel® Xeon® Processor x5680 DL380G7 Kit 3.33 GHz	587498-B21	1	2,299	2	4,598	
HP 8GB 2Rx4 PC3-8500R-7 Kit	516423-B21	1	990	12	11,880	
HP 72GB 3G SAS 10K SFF DP ENT HDD	384842-B21	1	259	2	518	
HP Smart Array P411/512 MB with BBWC Controller	462832-B21	1	649	6	3,894	
HP LE1851w 18.5-Inch wide Monitor	NK033AA#ABA	1	159	1	159	
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	1	39	
HP R1.5 kVA 1U NA UPS	AF419A	1	739	1	739	
HP 300GB SAS 10K SFF DP ENT HDD	512547-B21	1	499	4	1,996	
HP 3y 4h 24x7 ProLiant DL38x HW Support ,ProLiant Server DL38x	U4545E	1	837	1		\$837
			Subtotal		\$25,414	\$837
Server Software						
SQL Server 2008 R2 Enterprise Edition, Per Processor License	*	2	23,358	2	46,716	
Windows Server 2008 Enterprise Edition R2	P72-03868	2	2,320	1	2,320	
Microsoft Problem Resolution Services	N/A	2	259	1		259
			Subtotal		\$49,036	259
Storage						
HP StorageWorks MSA70 Array	418800-B21	1	3,199	24	76,776	
HP StorageWorks MSA70 Array (10% Spares)	418800-B21	1	3,199	3	9,597	
HP 146GB 6G SAS 15K SFF DP ENT HDD	512547-B21	1	579	0	0	
HP 72GB 6G SAS 15K SFF DP ENT HDD	512545-B21	1	349	528	184,272	
HP 72GB 6G SAS 15K SFF DP ENT HDD (10% Spares)	512545-B21	1	349	53	18,497	
HP 5642 Pallet Unassembled Rack	358254-B21	1	865	2	1,730	
			Subtotal		290,872	0
Client Hardware (Tier A)						
HP ProLiant DL360 G5 E5420 2.50GHz Quad Core 2GB Rack Server	457925-001	1	2,499	2	4,998	
HP 72GB 3G SAS 10K SFF DP ENT HDD	384842-B21	1	259	8	2,072	
HP NC360T PCI-E Dual Port Gigabit Server Adapter	412648-B21	1	229	2	458	
HP 3y 4h 24x7 ProLiant DL36x HW Support ,ProLiant DL36x	U4497E	1	698	2		1,396
			Subtotal		7,528	1,396
Client Software						
Microsoft Windows Server 2008 Standard (x64)	P73-04190	2	725	2	1,450	
			Subtotal		1,450	0
Infrastructure						
HP ProCurve Switch 2510-48	J9020A	1	759	1	759	
3-year, 4-hour onsite, 24x7 coverage for hardware	U4835E	1	227	1		227
HP 1.2m/4ft CAT5 RJ45 MM Ethernet Cable	C7533A	1	4	9	33	
			Subtotal		792	227
Total Extended Price					\$375,092	\$2,719
Large Purchase and Net 30 discount (See Note 1) 16.0%					Total Discounts	\$51,937
Grand Total					\$323,155	\$2,325
Pricing: 1=HP Direct 800-203-6748 2=Microsoft. Note 1: Discount based on HP Direct guidance applies to all lines where pricing = 1. Note 2: All the hardware are available to order. MS software part number * is available on May 6, 2010 - see MS quote in the FDR. Note 3: The benchmark results were audited by Loma Livingtree of Performance Metrics.					Three-year Cost of Ownership: USD	
					tpsE	\$325,481
					\$ USD/tpsE	1,110.11
						\$294
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 specifications. If you find that the stated prices are not available according to these terms, please inform at pricing@tpc.org. Thank you.						



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Numerical Quantities Summary

Reported Throughput	1,110.11	Configured Customers:		560,000
Response Times (in seconds)	Minimum Average 90th %tile Maximum			
Broker Volume	0.00	0.06	0.12	4.83
Customer Position	0.00	0.05	0.09	10.89
Market Feed	0.00	0.07	0.25	17.25
Market Watch	0.00	0.05	0.11	6.02
Security Detail	0.00	0.02	0.05	5.57
Trade Lookup	0.00	0.81	1.01	16.32
Trade Order	0.00	0.12	0.19	11.39
Trade Result	0.00	0.12	0.19	18.78
Trade Status	0.00	0.05	0.13	11.88
Trade Update	0.01	0.90	1.03	5.62
Data Maintenance	0.01	0.19		1.04
Transaction Mix	Transaction Count		Mix %	
Broker Volume	3,917,415		4.900%	
Customer Position	10,392,248		13.000%	
Market Feed	799,250		1.000%	
Market Watch	14,389,677		18.001%	
Security Detail	11,191,680		14.000%	
Trade Lookup	6,394,764		7.999%	
Trade Order	8,074,332		10.100%	
Trade Result	7,992,798		9.998%	
Trade Status	15,189,532		19.001%	
Trade Update	1,598,553		2.000%	
Data Maintenance	120			
Ramp-up Time	01:24:14			
Measurement Interval	2:00:00			
Business Recovery Time	01:12:23			
Total Number of Transactions Completed in Measurement Interval	79,940,249			