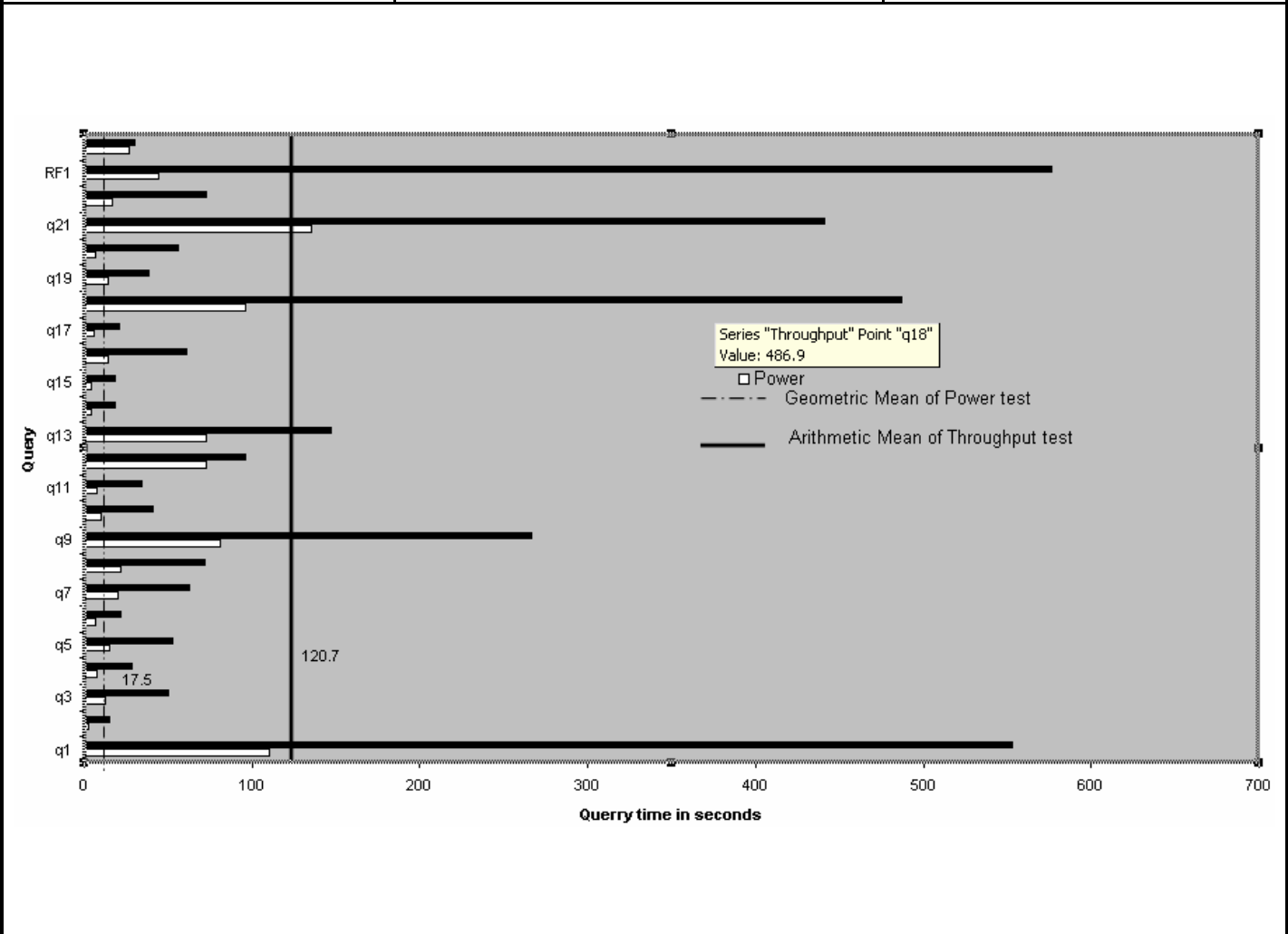
	DELL PowerEdge 6800 with SQL Server 2005 Enterprise x64 Edition™	TPC-H Revision 2.3.0
		Report Date: Aug 1, 2006
		Revision Date: Aug 1, 2006
Total System Cost \$218,609 USD	TPC-H Composite Query per Hour 16,320.1 QphH@100GB	Price/Performance \$13.40 USD/ QphH@100GB
Database Size 100GB	Database Manager SQL Server 2005 Enterprise x64 Edition™	Operating System Microsoft Windows Server 2003 Enterprise x64 Edition™
Other Software Visual C++ Standard Edition Visual Basic 2003 .Net Professional		Availability Date Aug 28, 2006



Database Load Time 1:18:28	Total Disk/Database Size 92.83	Load Includes Backup Y
RAID (Base tables only) N	RAID (Base tables and auxiliary data structures) N	RAID (Everything) N

System Configuration : 1 node
Processors (per node) : 4x Dual-Core Intel® Xeon™ MP 7140M/3.4GHz 16MB L3 Cache
Memory: (per node): 64GB RAM
Disk Drives: 270 – 36GB 15k SAS HDD & 8 – 73GB 10k SCSI HDD

"Database Size includes only raw data (e.g., no temp, index, redundant storage space, etc.)."

Dell		PowerEdge PE6800			TPC-H REV 2.3 EXECUTIVE SUMMARY		
		Server			Report Date: 1-Aug-06		
					Revision Date: 1-Aug-06		
Description	Part Number	Third Party		Unit Price	Qty	Extended Price	3 yr. Maint. Price
		Brand	Pricing				
Server Hardware							
Dell PowerEdge 6800 3.4GHz Dual Core XEON MP w/ 16MB L3 cache,800MHZ FSB, 2 onboard Gigabit NICs	911-1234		NIO	\$10,999.00	1	\$10,999.00	\$320.00
7140M,16MB L3/3.4GHz, Quad Proc	911-1235		NIO	\$10,999.00	1	\$10,999.00	
64GB,DDR2,400MHZ(16X4GB),2R	311-5706			\$53,238.00	1	\$53,238.00	
1.44 Floppy Drive	341-1308			\$30.00	1	\$30.00	
24X IDE CD-ROM Drive	313-2700			\$30.00	1	\$30.00	
PERC4e/Di 256MB	341-1903			\$299.00	1	\$299.00	
PERC5E,SAS,2x4,PCIe,ADPTR	341-3023			\$799.00	3	\$2,397.00	
73GB U320M SCSI 10K RPM Hard Drive (OS+LOG)	340-9372			\$299.00	8	\$2,392.00	
E773s 17-inch Color CRT Monitor	E7733YR			\$149.00	1	\$149.00	
					Subtotal	\$80,533.00	\$320.00
PowerVault Disk Subsystem							
PV MD1000,RACK,3U,15 BAY,LBZL	222-2299			\$3,180.00	18	\$57,240.00	\$29,664.00
TWO ENCL MGT MODULES, SAS/SATA	420-5927			\$345.83	18	\$6,224.94	
36GB,3GBPS,SAS,3.5IN,15K	341-2816			\$249.00	270	\$67,230.00	
RACK-111/24U/Dell	A0213544			\$479.95	2	\$959.90	
					Subtotal	\$131,654.84	\$29,664.00
Server Software							
SQL Server 2005 Enterprise x64 Edition **	810-04793	Microsoft	1	\$8,487.00	1	\$8,487.00	
SQL Server 2005 Client Licence **	359-01911	Microsoft	1	156	25	\$3,900.00	
Windows Server 2003 Enterprise x64 Server **	P72-00274	Microsoft	1	\$2,334.00	1	\$2,334.00	
Visual C++ Standard Edition **	254-00170	Microsoft	1	\$109.00	1	\$109.00	
Visual Basic 2003 Standard	046-00856	Microsoft	1	\$109.00	1	\$109.00	
Professional Support (1 Incident)		Microsoft	1	\$245.00	1		\$245.00
					Subtotal	\$14,939.00	\$245.00
All components from Dell are discounted 16% based on total dollar volume of this configuration.				Other Discounts (16%)		\$38,747.49	
					Total	\$188,379	\$30,229
Notes: * Maint. included in PowerVault MD1000 disk pod					Three-Year Cost of Ownership:		\$218,609 USD
** All Microsoft maintenance is covered by the maintenance costs of Microsoft SQL Server							
Pricing: NIO = These components are Not Immediately Orderable; 1 = Microsoft, all others are Dell					QphH@100G		16,320.1
Pricing may be verified by calling 1-800-BUY-DELL and referencing quote # 308815427 as a complex quote.							
Audited by Lorna Livingtree, Performance Metrics Inc.					\$ / QphH@100G:		\$13.40 USD
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 items, please inform the TPC at pricing@tpc.org.							



DELL
PowerEdge 6800
w/ SQL Server 2005
Enterprise x64 Edition™

TPC-H Revision 2.3.0

Report Date: **Aug 1, 2006**

Revision Date: **Aug 1, 2006**

Numerical Quantities Summary

Measurement Results:

Database Scale Factor	100
Total Data Storage/Database Size	92.83
Start of Database Load	2006-07-27 02:46:06
End of Database Load	2006-07-27 04:04:33
Database Load Time	1:18:28
Query Streams for Throughput Test	5
TPC-H Power	20,538.8
TPC-H Throughput	12,967.9
TPC-H Composite Query-per-Hour Metric (QphH@100GB)	16,320.1
Total System Price Over 3 Years	\$218,609
TPC-H Price Performance Metric (\$/QphH@100GB)	\$13.40

Measurement Interval:

Measurement Interval in Throughput Test (Ts) = 3,053.7 seconds

Duration of stream execution:

	Seed	Start Date/Time	End Date/Time	Duration
Stream00	727040433	7/27/06 4:19:55	7/27/06 4:31:37	0:11:41
Stream01	727040434	7/27/06 4:32:06	7/27/06 5:16:04	0:43:58
Stream02	727040435	7/27/06 4:32:06	7/27/06 5:16:53	0:44:47
Stream03	727040436	7/27/06 4:32:06	7/27/06 5:17:13	0:45:07
Stream04	727040437	7/27/06 4:32:06	7/27/06 5:15:15	0:43:09
Stream05	727040438	7/27/06 4:32:06	7/27/06 5:16:17	0:44:11
Refresh00		7/27/06 4:19:10	7/27/06 4:19:55	0:00:45
		7/27/06 4:31:37	7/27/06 4:32:04	0:00:27
Refresh01		7/27/06 4:32:06	7/27/06 5:18:19	0:46:14
Refresh02		7/27/06 5:18:23	7/27/06 5:19:27	0:01:04
Refresh03		7/27/06 5:19:30	7/27/06 5:20:39	0:01:09
Refresh04		7/27/06 5:20:42	7/27/06 5:21:50	0:01:08
Refresh05		7/27/06 5:21:53	7/27/06 5:22:59	0:01:07



DELL
PowerEdge 6800
SQL Server 2005
Enterprise x64 Edition™

TPC-H Revision 2.3.0

Report Date: Aug 1, 2006

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Numerical Quantities Summary

Timing Intervals in Seconds:

Query	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
Stream00	110.4	2.4	12.8	7.6	14.8	6.9	19.9	22.0
Stream01	535.5	14.2	64.8	25.1	55.7	17.2	65.4	68.3
Stream02	561.0	15.3	50.5	22.7	47.7	29.8	60.3	56.0
Stream03	558.7	26.5	12.1	32.8	61.3	21.9	67.0	79.8
Stream04	531.1	9.9	61.1	29.7	59.2	16.9	60.8	98.2
Stream05	579.6	10.5	61.0	31.6	40.2	21.6	58.7	54.9
Min Qi	531.1	9.9	12.1	22.7	40.2	16.9	58.7	54.9
Max Qi	579.6	26.5	64.8	32.8	61.3	29.8	67.0	98.2
Avg Qi	553.2	15.3	49.9	28.4	52.8	21.5	62.4	71.4

Query	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Stream00	81.3	10.0	7.2	72.7	35.0	4.4	4.1	14.2
Stream01	212.8	45.4	36.1	128.0	143.3	16.5	16.8	60.8
Stream02	365.7	42.8	35.5	100.8	155.9	19.9	20.4	71.1
Stream03	244.3	34.2	39.5	49.9	154.7	19.4	15.0	52.5
Stream04	254.4	41.2	29.0	71.7	130.0	20.6	19.7	65.0
Stream05	254.8	42.0	30.1	129.2	152.4	16.9	17.5	54.1
Min Qi	212.8	34.2	29.0	49.9	130.0	16.5	15.0	52.5
Max Qi	365.7	45.4	39.5	129.2	155.9	20.6	20.4	71.1
Avg Qi	266.4	41.1	34.0	95.9	147.3	18.7	17.9	60.7

Query	Q17	Q18	Q19	Q20	Q21	Q22	RF1	RF2
Stream00	6.1	95.7	14.2	7.1	135.6	17.1	44.3	26.6
Stream01	18.9	451.3	32.0	104.2	464.2	61.5	2745.3	27.8
Stream02	26.7	464.3	40.2	33.8	382.6	84.1	32.1	28.5
Stream03	24.3	609.3	38.0	43.8	443.8	78.3	37.3	30.3
Stream04	16.7	454.4	38.4	57.8	449.0	74.4	35.4	31.3
Stream05	19.7	455.3	45.2	41.5	467.5	67.0	31.1	30.5
Min Qi	16.7	451.3	32.0	33.8	382.6	61.5	31.1	27.8
Max Qi	26.7	609.3	45.2	104.2	467.5	84.1	2745.3	31.3
Avg Qi	21.3	486.9	38.8	56.2	441.4	73.1	576.2	29.7