

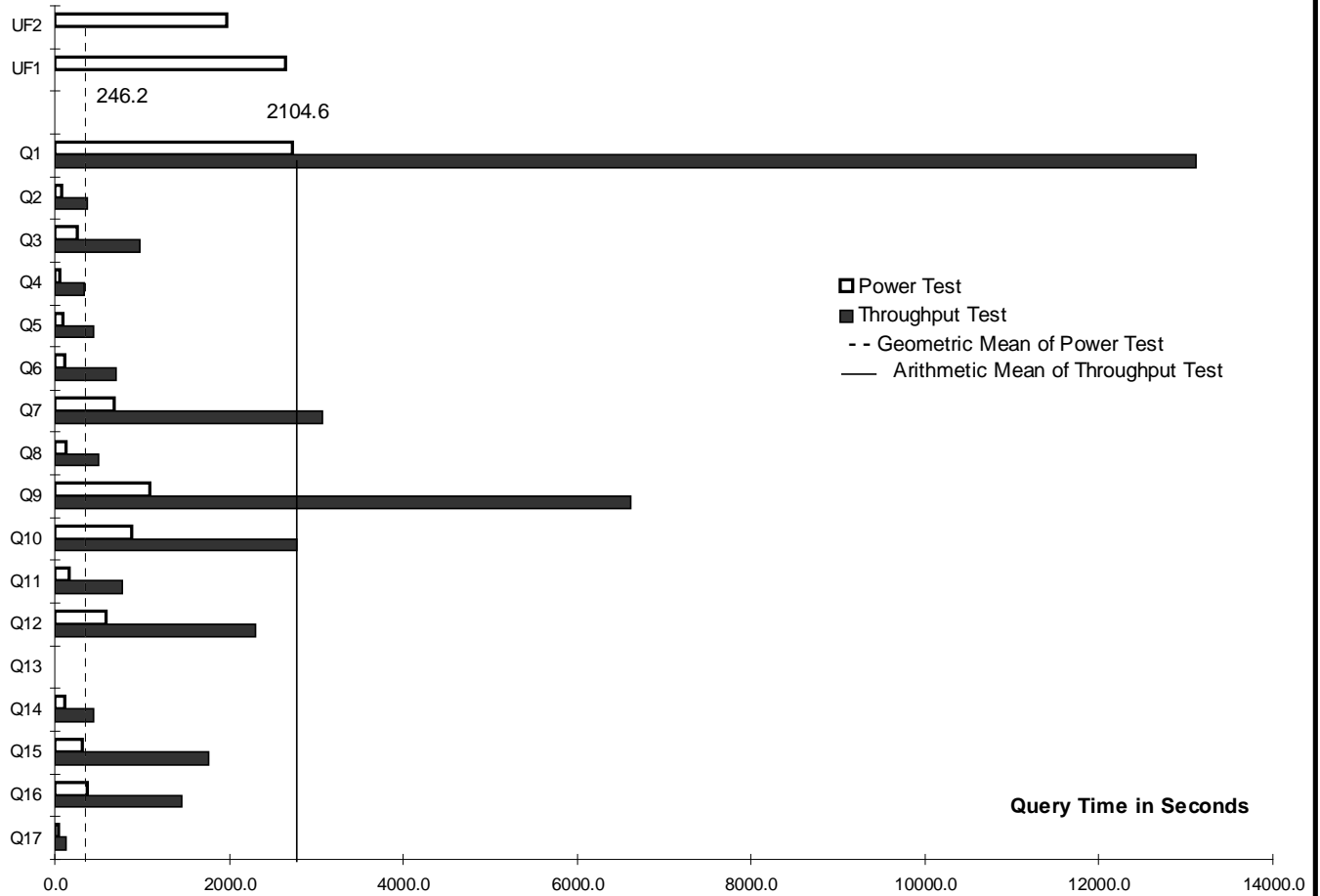


4400 1 Node System Using Teradata V2R2.1

TPC-D Rev 1.3.1

Report Date:
Oct. 2, 1998

Total System Cost	TPC-D Power	TPC-D Throughput	Price/Performance	
\$271,670	1462.4 QppD@100GB	564.9 QthD@100GB	\$299 per QphD@100GB	
Database Size	Database Manager	Operating System	Other Software	Availability Date
100GB	Teradata V2R2.1	UNIX SVR4 MP-RAS 03.02.00	None	HW Now SW: Now



Database Load Time = 42 Hrs 55 Mins	Total Data Storage / Database Size = 3.65	RAID = N
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1 4400 Node:

- 4 Intel Pentium II Xeon 400 MHz CPUs
- 2 GB Memory
- 2 Ultra SCSI Adapters
- 1 CD-ROM Unit, Floppy Drive & Tape Drive
- 1 Network card
- 3 9GB internal drives
- 4 Disk modules, each with 10 x 9 GB drives

Total GB of Storage = 365



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Product I.D.	Description	Qty	Unit Price	Extended Price	5 Year Maint
4400-4021-8090	WM4400D/SDW/2PIIX/1M,1GB,27GB	1	\$ 32,000	\$ 32,000	\$ 17,333
4400-F024	Processor, PII Xeon 400/1M w Heatsink	2	\$ 4,400	\$ 8,800	\$ 1,380
3498-2244-8090	Monitor 14" Color, MPR II, DDC	1	\$ 240	\$ 240	\$ 226
4400-F059	Cord, Power - US 120 V	4	\$ 20	\$ 80	\$ -
4400-F700	Keyboard - US 120V	1	\$ 41	\$ 41	\$ -
4400-F048	Board, VRM	6	\$ 41	\$ 246	\$ -
4400-F781	Mouse, 2 Button	1	\$ 16	\$ 16	\$ -
4400-F147	Adpt - PCI Ethernet 10/10	1	\$ 160	\$ 160	\$ -
4400-F118	Memory DIMM 1 GB EDO (4 x 256MB)	1	\$ 5,800	\$ 5,800	\$ -
4400-F129	Adapt - PCI - Quad	1	\$ 2,236	\$ 2,236	\$ -
Server Hardware				\$ 49,619	\$ 18,939
6282-1101	Entry level modular JBOD	4	\$ 2,250	\$ 9,000	\$ 16,641
6282-F129	EL 9.1 (1) 10000 RPM Disk Drive	36	\$ 1,350	\$ 48,600	\$ -
9100-K931	Symbios Cable Kit	4	\$ 1,688	\$ 6,750	\$ -
Storage Devices				\$ 64,350	\$ 16,641
F784-3332-0000	Teradata V2R2 4400 Up to 4 CPU	1	\$ 40,000	\$ 40,000	\$ 67,500
F784-5020-0000	Teradata Client for SMP	1	\$ 2,800	\$ 2,800	\$ 4,253
F481-6060-0000	UNIX MP-RAS	1	\$ 6,560	\$ 6,560	\$ -
F784-5021-0000	Teradata BTEQ for SMP	1	\$ 400	\$ 400	\$ 608
Software				\$ 49,760	\$ 72,361
Total				\$ 163,729	\$ 107,941
 Five Year Total Cost Of Ownership					\$ 271,670

"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 the TPC at pricing@tpc.org.

Thank you."

Audited by: Francois Raab
Information Paradigm



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Numerical Quantity Summary

Measurement Results:

Scale Factor	=	100
Total Data Storage / Database Size	=	3.65
Database Load Time	=	42 Hrs 55 Min
Query Streams for Throughput Test	=	5
Geometric Mean of Power Test	=	246.2
TPC-D Power Metric (QppD@100GB)	=	1462.4
TPC-D Throughput Metric (QthD@100GB)	=	564.9
Composite QphD@100GB	=	908.9
Total System Price Over 5 Years	=	\$271,670
TPC-D Price/Performance Metric	=	\$299

Measurement Intervals:

Measurement Interval in Throughput Test (Ts) = 54,170 seconds

Duration of stream execution:

StreamID	Seed	Start-Date	Start-Time	End-Date	End-Time	Total Time
Stream0	198005759	9/23/98	15:16:16	9/23/98	18:41:30	12,314
Stream1	198005760	9/23/98	18:41:30	9/24/98	4:38:40	35,830
Stream2	198005761	9/23/98	18:41:30	9/24/98	4:37:26	35,756
Stream3	198005762	9/23/98	18:41:30	9/24/98	4:49:21	36,471
Stream4	198005763	9/23/98	18:41:30	9/24/98	4:33:36	35,526
Stream5	198005764	9/23/98	18:41:30	9/24/98	4:29:56	35,306
Updates		9/23/98	18:41:30	9/24/98	9:44:20	54,170

TPC-D Timing Intervals (in seconds):

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Stream0	2719.3	66.8	257.8	58.6	98.4	107	678.7	123.4	1094.2	892.5
Stream01	12797.0	483.6	1024.9	447.3	485.0	729.9	2531.4	566.8	6366.0	2959.8
Stream02	12769.2	228.5	1142.7	274.4	518.8	811.1	2695.3	649.3	7125.1	2442.1
Stream03	14636.0	432.9	569.9	266.9	281.4	841.7	3686.2	525.7	6562.0	3340.2
Stream04	12833.9	382.3	1111.0	518.2	461.3	601.1	3227.8	357.0	6506.2	2406.4
Stream05	12548.3	271.6	1074.7	192.9	506.6	519.9	3274.5	365.1	6515.9	2745.2
Minimum	12548.3	228.5	569.9	192.9	281.4	519.9	2531.4	357.0	6366.0	2406.4
Average	13116.9	359.8	984.6	340.0	450.6	700.7	3083.0	492.8	6615.0	2778.7
Maximum	14636.0	483.6	1142.7	518.2	518.8	841.7	3686.2	649.3	7125.1	3340.2
	Q11	Q12	Q13	Q14	Q15	Q16	Q17	UF1	UF2	
Stream0	164.9	591.8	4.5	114.6	321.4	370.9	36.8	2644.5	1967.3	
Stream01	667.4	2668.3	9.4	465.5	2174.9	1369.1	84.2	38,196.9	1964.6	
Stream02	678.5	2629.0	28.3	659.0	1969.5	1046.2	88.9	1660.4	1965.5	
Stream03	948.5	598.8	8.0	119.1	1686.0	1715.6	252.8	1548.5	1994.7	
Stream04	759.7	2809.8	9.8	350.0	1508.3	1624.2	59.0	1436.6	2008.1	
Stream05	774.0	2773.6	9.9	580.6	1465.9	1537.9	149.5	1389.9	2004.9	
Minimum	667.4	598.8	8.0	119.1	1465.9	1046.2	59.0	1389.9	1964.6	
Average	765.6	2295.9	13.1	434.8	1760.9	1458.6	126.9	11162.9	1987.6	
Maximum	948.5	2809.8	28.3	659.0	2174.9	1715.6	252.8	49779.1	2008.1	