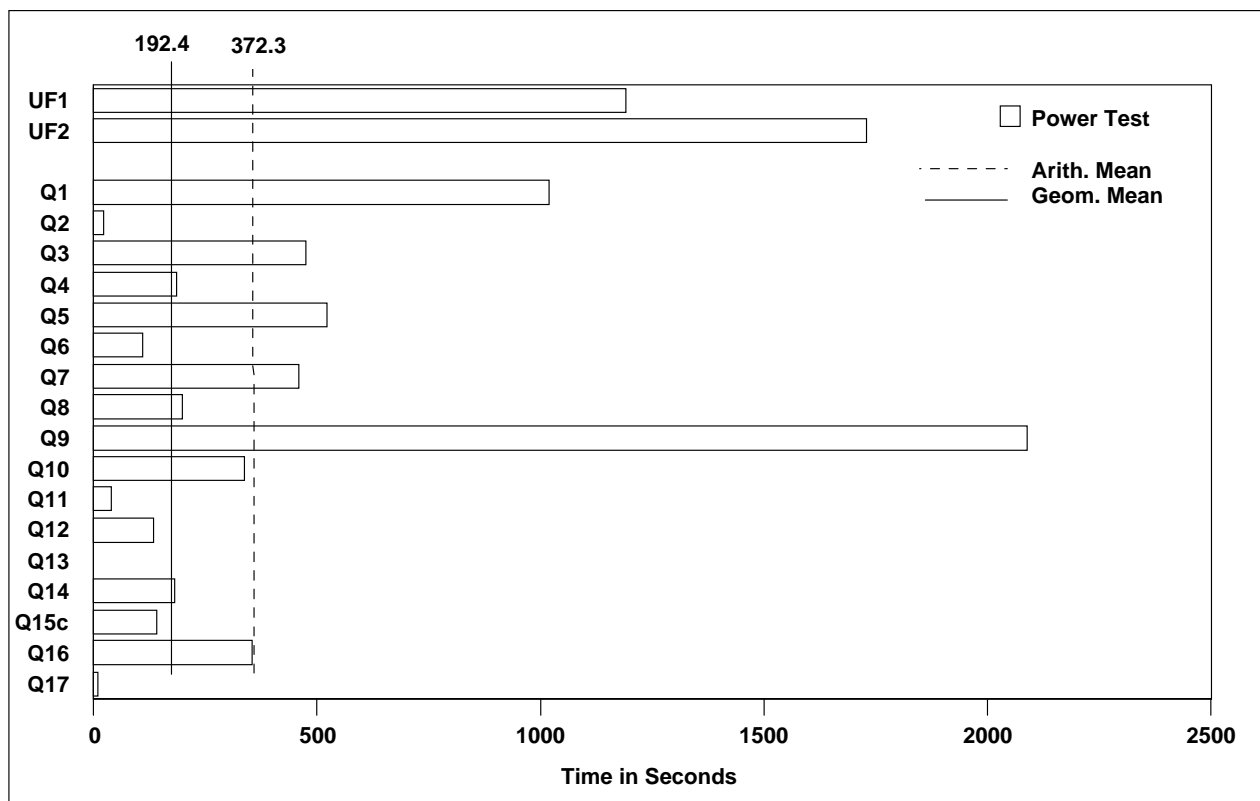


**IBM Netfinity 7000 M10
with DB2 UDB 5.2.0**

TPC-D Rev 1.3.1

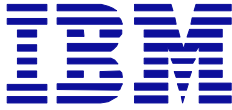
Report Date: 29 June 1998

Total System Cost		TPC-D Power	TPC-D Throughput	Price/Performance
\$270,526		1,871.1 QppD@100GB	661.3 QthD@100GB	\$243 per QphD@100GB
Database Size	Database Manager	Operating System	Other Software	Availability Date
100GB	DB2 UDB Enterprise Edition 5.2.0	Windows NT Enterprise Edition 4.0	Visual C++ 4.2	October 31, 1998



Database Load Time: 29h 24m 00s	Total Data Storage/Database Size: 7.46	RAID: Y
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Components	Qty	
Processors	4	400MHz Pentium II Xeon / 1MB L2 Cache
Memory	2	1024MB
Disk Controllers	5	IBM ServeRAID II Ultra SCSI Adapter
Disk Drives	80	9.1GB
	4	4.51GB
Total Storage		746.04GB



**IBM Netfinity 7000 M10
with DB2 UDB 5.2.0**

TPC-D Revision 1.3.1

Report Date: 29 June 1998

Description	Part Number	Source	Unit Price	Qty	Ext. Price	5-Yr. Maint.**
Server Hardware						
IBM Netfinity 7000 M10 /400MHz / 1MB L2 Cache Pentium II Xeon (Rack Model)	8680-2RU	1	18,804	1	18,804	7,195
400MHz / 1MB L2 Cache Processor Upgrade	01K8007	1	7,295	3	21,885	0
1024 MB (4x256) Memory Expansion Kit	01K8046	1	6,555	2	13,110	0
Memory Card	01K8004	1	656	1	656	0
IBM ServeRAID II Ultra SCSI Adapter	76H3584	2	1,785	5	8,925	0
IBM 4.51GB 10K Wide Ultra SCSI Drive	01K7960	2	758	4	3,032	0
IBM 4.3M External .8mm SCSI Cable	01K8029	2	56	8	448	0
IBM Auto/4 PCI Token-Ring Adapter	41H8900	2	210	1	210	0
IBM G42 14" (13.2" Viewable) Color Monitor	654000N	2	209	1	209	408
20 / 40GB SCSI Tape Drive	76H0485	2	3,157	1	3,157	0
Netfinity Rack	9306900	2	1,733	1	1,733	0
Side Panel Kit	94G6669	2	201	1	201	0
Subtotal					\$72,370	\$7,603
Server Software						
DB2 UDB 5.2.0 Enterprise Edition		1	24,998	1	21,748	0
IBM Passport/Advantage Discount on DB2 UDB = 13%		1	(3,250)			
Microsoft Windows NT Enterprise Edition 4.0 with SP4		3	3,999	1	3,999	0
Microsoft Visual C++ and Subscription Service		3	499	1	499	0
Microsoft Priority Plus Database Server Support		3	2,095	5		10,475
Subtotal					\$26,246	\$10,475
Storage Devices						
IBM Netfinity EXP10 Rack Storage Expansion Enclosure	35201RU	2	2,699	8	21,592	14,400
IBM Netfinity EXP10 9.1GB 10K Wide Ultra SCSI Drive	01K8054	2	1,473	80	117,840	0
Subtotal					\$139,432	\$14,400
Total					\$238,048	\$32,478

Pricing: 1 - IBM Corp.; 2 - Entex Information Services; 3 - Microsoft Corp.

Five-Year Cost of Ownership: \$270,526

**** The standard 3-year warranty and the extended warranty on all hardware are for 7x24, on site same day coverage.**

QppD @ 100GB: 1,871.1

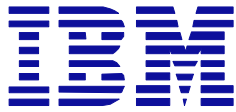
QthD @ 100GB: 661.3

Audited by Francois Raab of Information Paradigm.

QphD @ 100GB: 1,112.3

\$ / QphD @ 100GB: \$243

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 specification. If you find that stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.



**IBM Netfinity M10 7000
with DB2 UDB 5.2.0**

TPC-D Rev 1.3.1

Report Date: 29 June 1998

Measurement Results:

Database Scaling (SF/Size)	100
Total Data Storage/Database Size	7.46
Database Load Time	29:24:00
Query Streams for Throughput Test	0
TPC-D Power Metric (QppD@100GB)	1,871.1
TPC-D Throughput Metric (QthD@100GB)	661.3
Composite Query-per-Hour Rating (QphD@100GB)	1,112.3
Total System Price over 5 Years	\$270,526
TPC-D Price/Performance Metric (\$/QphD@100GB)	\$243

Measurement Intervals:

Measurement Intervals in Throughput Test (Ts) = 9,255 se conds

Duration of Stream Execution

Stream ID	Seed Used	Start Date	Start Time	End Date	End Time
UF1		06/17/98	04:23:49	06/17/98	04:43:43
Stream 0	25640	06/17/98	04:43:43	06/17/98	06:29:12
UF2		06/17/98	06:29:12	06/17/98	06:58:04

Timing Intervals (in seconds):

Stream ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Stream 00	1022.9	25.8	478.5	188.9	525.4	114.4	462.2	201.5	2092.9

Stream ID	Q10	Q11	Q12	Q13	Q14	Q15c	Q16	Q17	UF1	UF2
Stream 00	340.3	41.8	135.5	1.8	183.2	144.7	358.5	11.3	1194.0	1732.0