

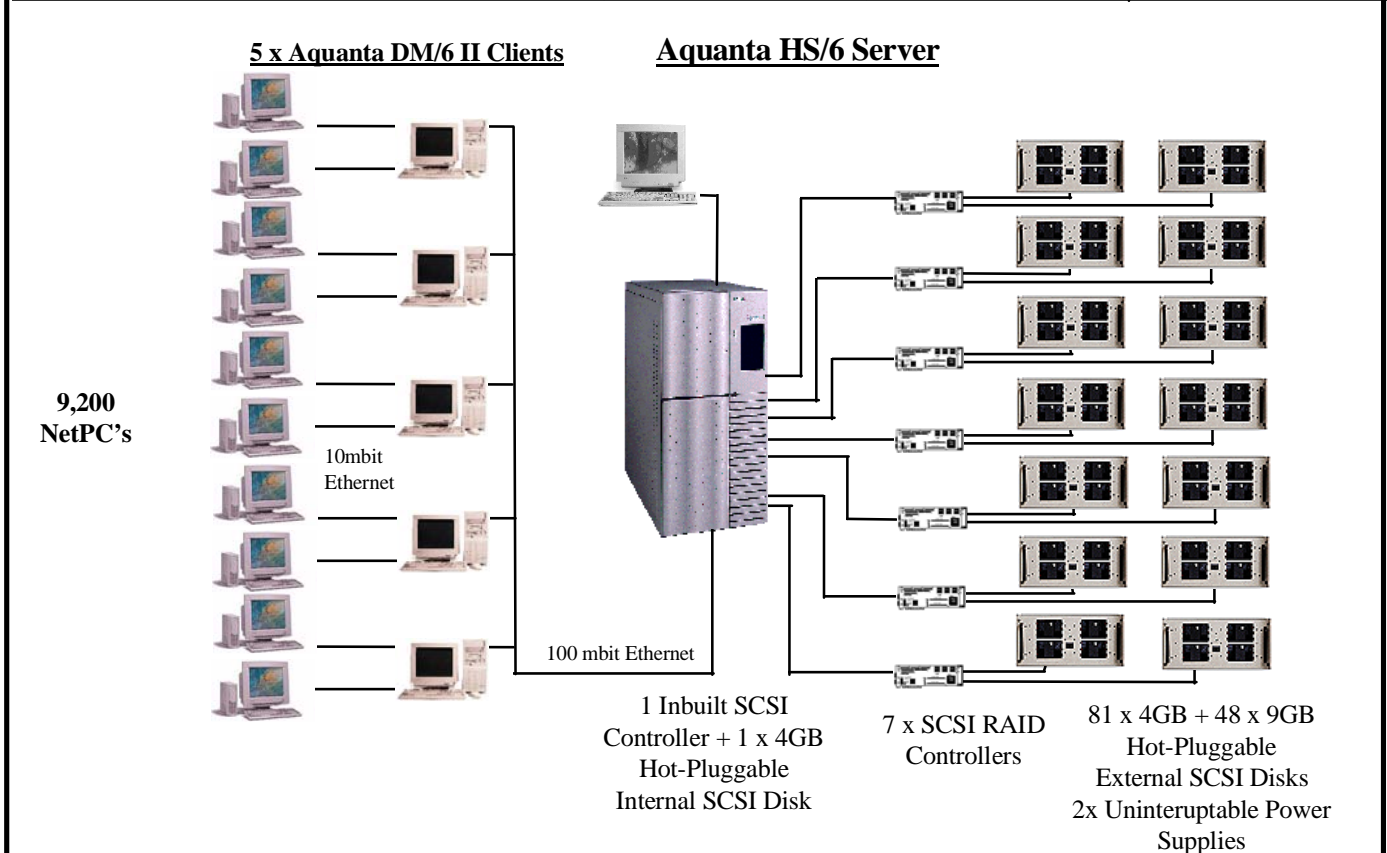


Aquanata HS/6 (4P) Server C/S

TPC- C Rev. 3.3

Report Date:
19- Dec- 1997

Total System Cost	TPC- C Throughput	Price/ Performance	Availability Date
\$449,979	11,327.47 tpmC	\$39.72 per tpmC	30-Jan-1998
Processors	Database Manager	Operating System	Other Software
4 Pentium® Pro 200 MHz 1MB L2 cache	Microsoft SQL Server 6.5 Enterprise Edition	Microsoft NT Server 4.0 Enterprise Edition	Microsoft IIS. 3.0 Tuxedo 6.3 CFS
Number of Users			
9,200			



System Components	Server		Clients	
	Quantity	Type	Quantity	Type
Processors	4	200 MHz Pentium® Pro with 1MB Level 2 Cache	5	200MHz Pentium® Pro with 256KB Level 2 Cache
Memory	1	4096MB	5	256MB
Disk Controllers	7	SCSI RAID	5	Inbuilt IDE
	1	Inbuilt SCSI		
Disk Drives	82	4GB	5	1.5GB
	48	9GB		
Total Storage		739.22 GB		7.5GB
CD-ROM / Tape	1	CD-ROM Drive	5	CD-ROM Drive

Unisys Corporation		Aqunta HS/6 4P Client/Server				TPC-C Rev 3.3 19-Dec-1997	
Description	Style	Third Party Brand Pricing	Unit Price	Qty.	Extended Price	5 Years Maint.	
Server Hardware							
SYS: Aqunta HS/6, w/ CDROM, 0 Proc, 0MB Mem	HS6000122-BAS		\$9,985	1	\$9,985	\$864	
PROC:3x200MHz PentiumPro/1MB Cache + Riser card	HTC6200-1MB		\$13,630	1	\$13,630	\$2,832	
PROC:1x200MHz PentiumPro/1MB Cache	SXE6200-1MB		\$4,435	1	\$4,435	\$528	
MEM:ECC Memory Board, 0MB Mem	MEM641-DIM		\$395	1	\$395	\$72	
MEM:256 MB Memory Upgrade	DIM572-256		\$2,048	16	\$32,768	\$5,376	
CTRL:RAID Tri-SCSI-2 Ultra PCI	RAD3162-PCI		\$2,074	7	\$14,518	\$2,856	
CTRL: VGA, 16-bit ISA	VID11-ISA		\$106	1	\$106		
ETHERNET: 100Mbit/sec, PCI 32-bit	SF1001-FET		\$290	1	\$290	\$48	
CDROM: 16 Speed	CDR1200-SI		\$178	1	\$178	\$120	
ACC: 6 SCA Drive Cage	CAG61-ADV		\$425	1	\$425	\$120	
DRW: Disk Drive Drawer, w/ cables, 7U	P/N 11910190	ALR	\$1,795	16	\$28,720	\$6,896	
DISK: 4GB Drive + 10% spares	HDS4000-WC7		\$743	91	\$67,613	spared	
DISK: 9GB Drive + 10% spares	HDS9000-WC7		\$1,495	44	\$65,780	spared	
DISK: 9GB Drive + 10% spares	HDS9000-H10		\$1,602	10	\$16,020	spared	
MONITOR:14-inch Color	EVG142-COL		\$219	1	\$219		
KEYBD: 104 Key Spacesaver	PCK104-SKB		\$34	1	\$34		
MOUSE: 2 Button PS2	PWM1-PS2		\$25	1	\$25		
PWR: 2200VA UPS, 4U	UPD22001-SXR		\$2,380	2	\$4,760	\$1,248	
CAB: Rack Cabinet, w/ fill pnls, 36U	CAB361-SXR		\$1,530	3	\$4,590		
CAB: Link kit for 36U cabinets	LNK361-SXR		\$255	2	\$510		
CAB: Bezel kit 36U	BEZ3611-CAB		\$170	3	\$510		
CAB: Stabilizer kit 0U	WGT39581-SXR		\$120	3	\$360		
PNL: L&R side panels 36U	PAN3621-SXR		\$213	1	\$213		
Subtotal					\$266,084	\$20,960	
Server Software							
Microsoft NT Server 4.0 Enterprise Edition, incl 25 CALs		Microsoft	\$3,999	1	\$3,999	\$0	
Microsoft SQL Server 6.5 Enterprise Edition, incl 25 CALs		Microsoft	\$28,999	1	\$28,999	\$10,475	
Subtotal					\$32,998	\$10,475	
Client Hardware							
SYS: Aqunta DM/6 II, 0 Proc, 0MB Mem	CMT60072-ZFA		\$896	5	\$4,480	\$2,160	
PROC:1x200MHz PentiumPro/256KB Cache	PRC6200-256		\$726	5	\$3,630		
MEM: 64 MB Memory Upgrade	MTP6-64M		\$634	20	\$12,680	\$4,320	
CTRL: VGA, 64-bit with 2MB	PCV102-PCI		\$123	5	\$615		
DISK: 1.6GB IDE 3.5 Internal	HDI1600-5		\$219	5	\$1,095	\$840	
CDROM: Twelve Speed IDE	CDR1200-AI		\$126	5	\$630	\$360	
ETHERNET: 100Mbit/sec, PCI 32-bit	ETH101007-PCI		\$120	5	\$600		
ETHERNET: 10Mbit/sec, PCI 32-bit	ETH101-PCI		\$130	10	\$1,300		
MONITOR:14-inch Color	EVG142-COL		\$219	5	\$1,095		
KEYBD: 104 Key Spacesaver	PCK104-SKB		\$34	5	\$170		
MOUSE: 2 Button PS2	PWM1-PS2		\$25	5	\$125		
Subtotal					\$26,420	\$7,680	
Client Software							
Microsoft Windows NT Server 4.0, incl 5 CALs		Microsoft	\$809	5	\$4,045	\$0	
Microsoft SQL Workstation w/ Programmer's Toolkit		Microsoft	\$499	1	\$499	\$0	
Microsoft Visual C++ 32-bit edition (subscription)		Microsoft	\$499	1	\$499	\$0	
TUXEDO Core Functional Services 6.3 for NT		BEA	\$3,000	5	\$15,000	\$11,250	
Subtotal					\$20,043	\$11,250	
User Connectivity							
Ethernet Hub, 8-Port 100TX TrueFast + 10% spares	NX-H8TX	Netlux	\$299	3	\$897	spared	
Ethernet Hub, 16-Port 10Base-T + 1-Port BNC + 10% spares	NX-H16EZ	Netlux	\$84	633	\$53,172	spared	
Subtotal					\$54,069	\$0	
Total					\$399,614	\$50,365	
Notes:							
1. HW Maintenance - 1st 36 months included in Unisys product costs. The next 24 months are at the level: Standard Performance-Gold.					Five Year Cost of Ownership TPC-C Throughput \$/tpmC \$449,979 11,327.47 \$39.72		
2. All Microsoft maintenance is covered by the maintenance cost of Microsoft SQL Server.							
3. 10% or minimum 2 spares are added in place of onsite service (products have a five year return-to-vendor warranty)							
4. Pricing: 1 = Western Micro, 2= ALR, 3 = Microsoft, 4 = BEA, 5 = Netlux							
The benchmark results and test methodology were audited by Richard Gimarc of Performance Metrics, Inc.							
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 assumption 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 benchmarks specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org.							

NUMERICAL QUANTITIES SUMMARY

Unisys Aquanta HS/6 Server

Microsoft SQL Server 6.5 Enterprise Edition

MQTh, Computed Maximum Qualified Throughput:

11327.47

% throughput difference, reported & reproducibility runs:

0.07%

Transaction Mix

New Order	44.78%
Payment	43.04%
Delivery	4.05%
Stock-Level	4.07%
Order-Status	4.07%

Response Times

Transaction	Average	Maximum	90th %ile
New-Order	0.54	4.90	0.80
Payment	0.58	4.89	0.80
Delivery	0.38	4.00	0.70
Stock-Level	1.81	7.01	3.01
Order Status	0.94	4.71	1.40
Menu	0.21	2.60	0.30
Delivery (Deferred)	2.43	15.68	6.21

Response time delay added for emulated components (seconds)

RT Response time	0.1
Menu Response time	0.1

Keying/Think Time Times (seconds)

Transaction	Minimum	Average	Maximum
New-Order	18.00/0	18.01/12.03	19.26/120.4
Payment	3.00/0	3.01/12.03	4.28/120.4
Delivery	2.00/0	2/5.12	3.29/49.04
Stock-Level	2.00/0	2/5.05	3.19/50.7
Order-Status	2.00/0	2/10.05	3.2/100.91

Test Duration

Ramp up time	35 minutes
Measurement interval (M)	30 minutes
Transactions (all types) completed during measurement interval	758911
Ramp-down time	48 minutes

Checkpointing:

Number of checkpoints	1
Checkpoint interval	30 minutes