

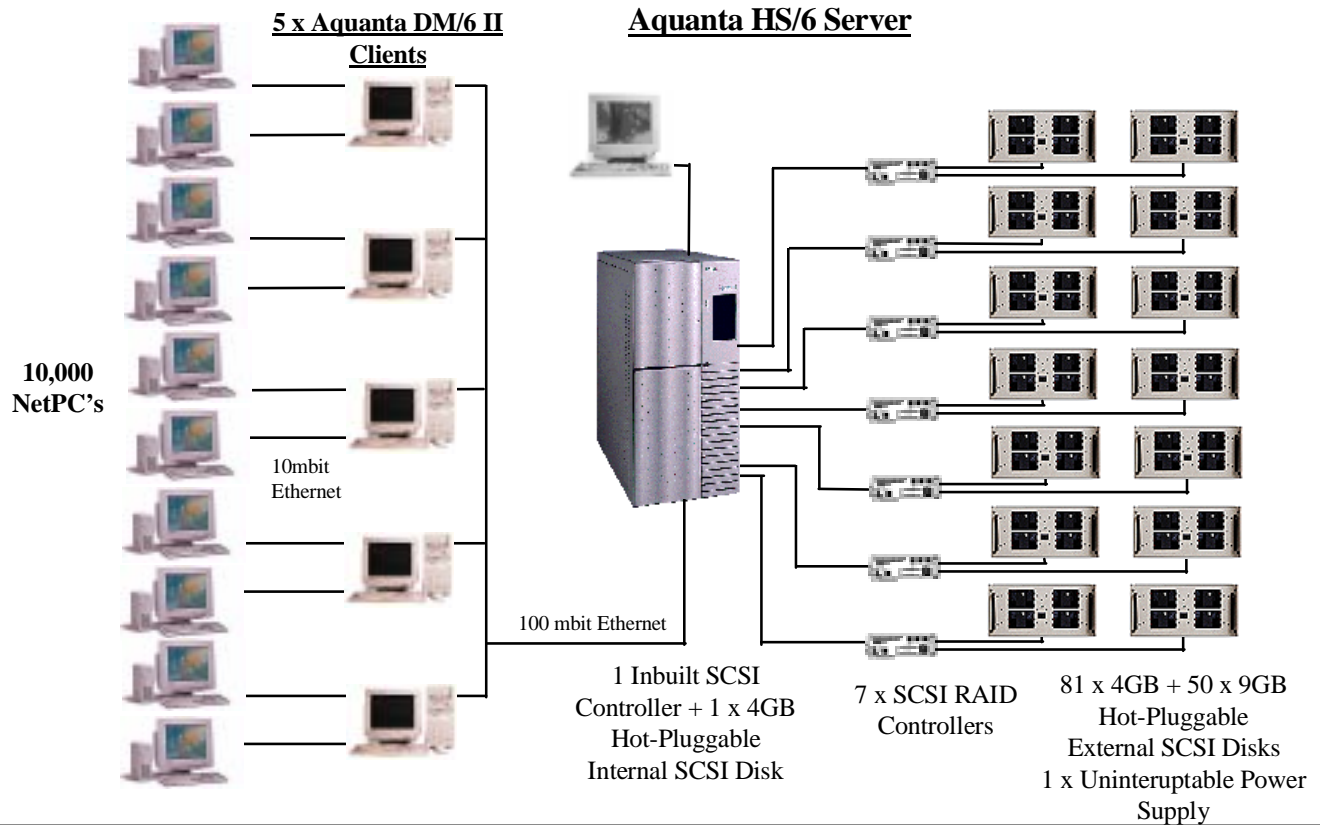


## Aquila HS/6 Server C/S

TPC-C Rev. 3.3

Report Date:  
18-Aug-1997

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
<b>\$473,567</b>	<b>12,026.07 tpmC</b>	<b>\$39.38 per tpmC</b>	<b>30-Nov-1997</b>
Processors	Database Manager	Operating System	Other Software
6 Pentium® Pro 200 MHz 1MB L2 cache	Microsoft SQL Server 6.5 Enterprise Edition	Microsoft NT Server 4.0 Enterprise Edition	Microsoft IIS. Tuxedo 6.3 CFS
<b>Number of Users</b>			
<b>10,000</b>			



System Components	Server		Clients	
	Quantity	Type	Quantity	Type
Processors	6	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
	50	9GB		
Total Storage		756.2 GB		7.5GB
CD-ROM / Tape	1	CD-ROM Drive	5	CD-ROM Drive

Unisys Corporation		Aquila HS/6 Client/Server				TPC-C Rev 3.3 18-Aug-1997	
Description	Style	Third Party Brand Pricing	Unit Price	Qty.	Extended Price	5 Years Maint.	
<b>Server Hardware</b>							
SYS: Aquanta HS/6, w/ CDRom, 0 Proc, 0MB Mem	HS6000121-BAS		\$11,839	1	\$11,839	\$1,008	
PROC:3x200MHz PentiumPro/1MB Cache	HX36210-CPU		\$8,976	2	\$17,952	\$3,984	
CTRL: 3-CPU Riser Card	HX62-3CP		\$300	1	\$300	\$72	
MEM:ECC Memory Board, 0MB Mem	MEM641-DIM		\$348	1	\$348	\$96	
MEM:256 MB Memory Upgrade	DIM672-256		\$3,210	16	\$51,360	\$3,072	
CTRL:RAID Tri-SCSI-2 Ultra PCI	RAD3162-PCI		\$1,304	7	\$9,128	\$3,360	
CTRL: VGA, 16-bit ISA	VID11-ISA		\$91	1	\$91		
ETHERNET: 100Mbit/sec, PCI 32-bit	SF1001-FET		\$170	1	\$170	\$48	
ACC: 6 SCA Drive Cage	CAG61-ADV		\$374	1	\$374	\$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		\$813	91	\$73,983	spared	
DISK: 9GB Drive + 10% spares	HDS9000-WC7		\$1,391	55	\$76,505	spared	
MONITOR:14-inch Color	EVG142-COL		\$210	1	\$210		
KEYBD: 104 Key Spacesaver	PCK104-SKB		\$29	1	\$29		
MOUSE: 2 Button PS2	PWM1-PS2		\$21	1	\$21		
PWR: 2200VA UPS, 4U	UPD22001-SXR		\$2,380	1	\$2,380	\$624	
CAB: Rack Cabinet, w/ fill pnls, 36U	CAB361-SXR		\$1,310	3	\$3,930		
CAB: Link kit for 36U cabinets	LNK361-SXR		\$218	2	\$436		
CAB: Bezel kit 36U	BEZ3611-CAB		\$144	3	\$432		
CAB: Stabilizer kit 0U	WGT39581-SXR		\$103	3	\$309		
PNL: L&R side panels 36U	PAN3621-SXR		\$182	1	\$182		
<b>Subtotal</b>					<b>\$278,699</b>	<b>\$19,280</b>	
<b>Server Software</b>							
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	
<b>Subtotal</b>					<b>\$32,998</b>	<b>\$10,475</b>	
<b>Client Hardware</b>							
SYS: Aquanta DM/6 II, 0 Proc, 0MB Mem	CMT60072-ZFA		\$789	5	\$3,945	\$2,160	
PROC:1x200MHz PentiumPro/256KB Cache	PRC6200-256		\$639	5	\$3,195		
MEM: 64 MB Memory Upgrade	MTP6-64M		\$542	20	\$10,840	\$3,360	
CTRL: VGA, 64-bit with 2MB	PCV102-PCI		\$105	5	\$525		
DISK: 1.6GB IDE 3.5 Internal	HDI1600-5		\$200	5	\$1,000	\$600	
CDROM: Twelve Speed IDE	CDR1200-AI		\$108	5	\$540	\$600	
ETHERNET: 100Mbit/sec, PCI 32-bit	ETH101007-PCI		\$103	5	\$515		
ETHERNET: 10Mbit/sec, PCI 32-bit	ETH101-PCI		\$113	10	\$1,130		
MONITOR:14-inch Color	EVG142-COL		\$210	5	\$1,050		
KEYBD: 104 Key Spacesaver	PCK104-SKB		\$29	5	\$145		
MOUSE: 2 Button PS2	PWM1-PS2		\$21	5	\$105		
<b>Subtotal</b>					<b>\$22,990</b>	<b>\$6,720</b>	
<b>Client Software</b>							
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	
<b>Subtotal</b>					<b>\$20,043</b>	<b>\$11,250</b>	
<b>User Connectivity</b>							
Ethernet Hub, 8-Port 100TX TrueFast + 10% spares	NX-H8TX	Netlux	\$329	3	\$987	spared	
Ethernet Hub, 8-Port 10Base-T + 1-Port BNC + 10% spares	NX-H9+	Netlux	\$51	1375	\$70,125	spared	
<b>Subtotal</b>					<b>\$71,112</b>	<b>\$0</b>	
<b>Total</b>					<b>\$425,842</b>	<b>\$47,725</b>	
<b>Notes:</b>							
1. HW Maintenance - 1st 36 months included in Unisys product costs. The next 24 months are at the level: Standard Performance-Gold.					<b>Five Year Cost of Ownership</b> <b>\$473,567</b> <b>TPC-C Throughput</b> <b>12,026.07</b> <b>\$/tpmC</b> <b>\$39.38</b>		
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							
<b>The benchmark results and test methodology were audited by Richard Gimarc of Performance Metrics, Inc.</b>							
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:**

**12026.07**

% throughput difference, reported & reproducibility runs:

0.87%

## Transaction Mix

New Order	44.72%
Payment	43.09%
Delivery	4.08%
Stock-Level	4.03%
Order-Status	4.08%

## Response Times

Transaction	Average	Maximum	90th %ile
New-Order	0.83	23.75	1.14
Payment	0.92	23.03	1.10
Delivery	0.47	8.41	0.70
Stock-Level	2.58	25.94	4.29
Order Status	1.35	26.21	1.95
Menu	0.20	1.41	0.30
Delivery (Deferred)	0.77	14.77	0.99

## 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	18.01/12.23	19.16/120
Payment	3.00/0	3.01/12.23	4.12/120
Delivery	2.00/0	2/5.11	3.01/50
Stock-Level	2.00/0	2/5.08	3.11/50
Order-Status	2.00/0	2/10.22	3.13/100

## Test Duration

Ramp up time	35 minutes
Measurement interval (M)	30 minutes
Transactions (all types) completed during measurement interval	806706
Ramp-down time	13 minutes

## Checkpointing:

Number of checkpoints	1
Checkpoint interval	30 minutes