

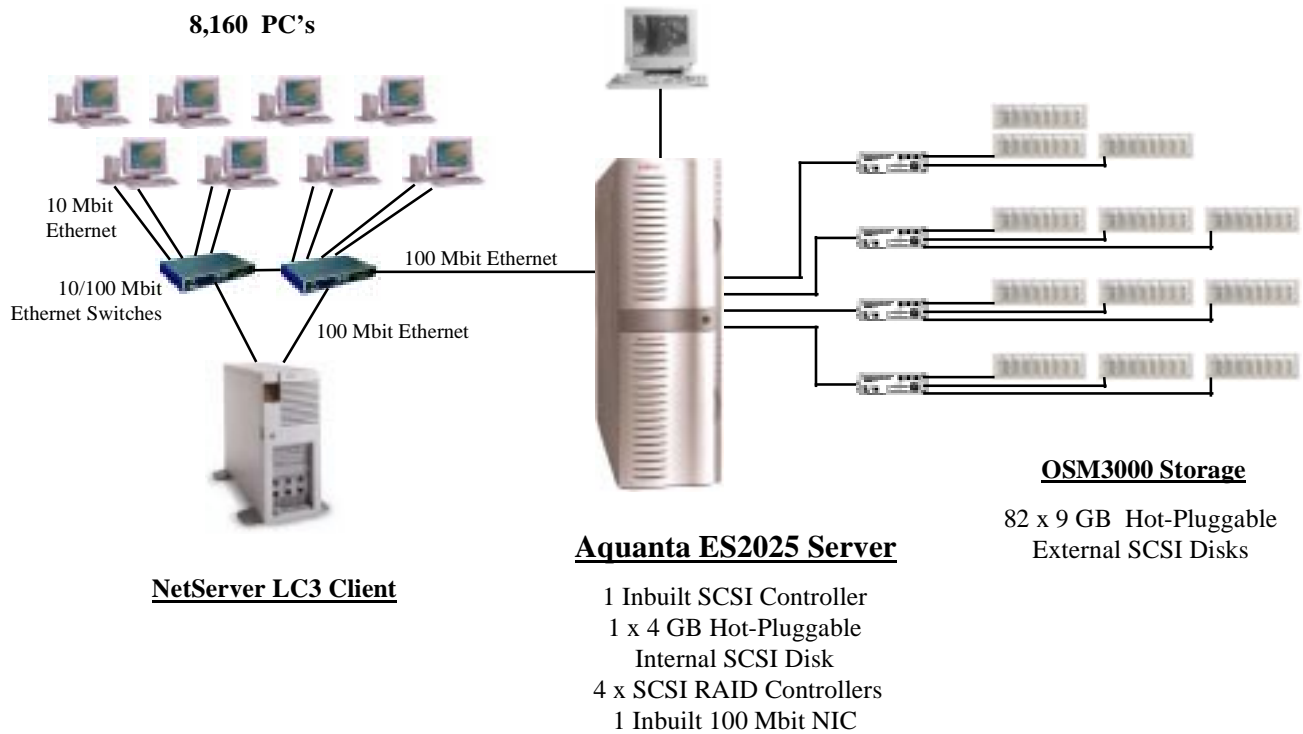


Aquanta ES2025 Server (2P 550MHz/512KB)

TPC-C Rev. 3.4

Report Date:
3-Sep-1999

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$196,642	10,265.90 tpmC	\$19.15 per tpmC	30-Sep-1999 *
Processors	Database Manager	Operating System	Other Software
2 Pentium® III Xeon 550 MHz 512KB L2 cache	Microsoft SQL Server 7.0, Enterprise Edition	Microsoft NT Server 4.0, Enterprise Edition	Microsoft IIS 3.0 Tuxedo 6.3 CFS
Number of Users			
8,160			



System Components	Server		Clients	
	Quantity	Type	Quantity	Type
Processors	2	550 MHz Pentium® III Xeon with 512KB Level 2 Cache	1	2 x 450MHz Pentium® II with 512KB Level 2 Cache
Memory	1	1024 MB	1	384 MB
Disk Controllers	4	SCSI RAID	1	Inbuilt SCSI
	1	Inbuilt SCSI		
Disk Drives	1	4.24 GB	1	3.97 GB
	82	8.54 GB		
Total Storage		704.68 GB		3.97 GB
CD-ROM / Tape	1	SCSI CD-ROM Drive	1	CD-ROM Drive

* All Components Available Now Except MS SQL Server EE 7.0, SP2

Unisys Corporation		Aquanta ES2025 Server (2P 550MHz/512KB)				TPC-C Rev 3.4 3-Sep-1999	
Description	Style	Third Party		Unit	Qty.	Extended Price	5 Years Maint.
		Brand	Pricing	Price			
Server Hardware							
SYS: Aquanta ES2025, w/ CDRom, 0 Proc, 0MB Mem	ES202151-GZN			1		\$2,726	\$2,432
PROC: 550MHz Pentium III Xeon /512 Cache & VRM	XEO3550-512			1		\$1,437	\$816
UPGRD: CPU Voltage Regulator Module	ES202151-XEU			1		\$24	
POWER: AC P/S 400W Tower	DSA400-PWR			1		\$258	\$240
MEM: 256 MB Memory Upgrade	DIM10072-256			1		\$848	\$960
CTRL: RAID 3-Ch PCI	RAD5003-P64			1		\$1,400	\$1,920
MEM: 32MB Cache & Battery BU	RAD5323-MEB			1		\$479	\$672
DISK: 4GB Drive, Ultra SCSI SCA	HDS417-W			1		\$442	\$216
MONITOR:15-inch Color	EVG2100-P			1		\$221	
KEYBD: 104 Key Spacesaver	PCK104-SKB			1		\$26	
MOUSE: 2 Button PS2	PWM1-PS2			1		\$15	
						Subtotal	\$17,752
Storage Hardware							
DISK: 9GB Drive, 10K SCSI LVD, SCA	OSD9205-W45			1		\$618	spared
DISK: 9GB Drive, 10K SCSI LVD, SCA 10% spares	OSD9205-W45			1		\$618	\$5,562
CAB: Disk, 8 SCA w/ I/F cards, 0 Disks, 3U	OSM310300-L05			1		\$2,118	\$11,520
CBL: SCSI 68-pin VHD Conn's, 5 meter	CBL134-5			1		\$142	\$1,562
CBL: SCSI 68-pin VHD Conn's, 0.5 meter	CBL134-CAT			1		\$69	\$69
ACC: Deskside Pedestal	OSM3000-DSK			1		\$26	\$312
						Subtotal	\$78,035
Server Software							
Microsoft NT Server 4.0, Enterprise Edition, incl 25 CALs		Microsoft		2		\$3,999	\$0
Microsoft SQL Server 7.0, Enterprise Edtion, unlimited user license		Microsoft		2		\$28,999	\$10,475
						Subtotal	\$32,998
Client Hardware							
SYS: NetServer LC3, w/1 450MHz Proc & CDROM, 0MB Mem	D7029-AV			1		\$1,660	\$1,635
PROC:1x450MHz Pentium II/512KB Cache UPG	D7032-AV			1		\$993	\$360
MEM: 64 MB SDRAM Memory Upgrade	D6097-AV			1		\$145	\$290
MEM: 128 MB SDRAM Memory Upgrade	D6098-AV			1		\$255	\$510
DISK: 4GB SCSI 3.5 Internal	D4910-AV			1		\$303	\$408
ETHERNET: 10/100TX Mbit/sec, PCI 32-bit	D5013-AV			1		\$68	\$136
MONITOR:15-inch Color	EVG2100-P			1		\$221	\$221
						Subtotal	\$4,113
Client Software							
Microsoft Windows NT Server 4.0, incl 5 CALs		Microsoft		2		\$809	\$0
Microsoft Visual C++ Professional 6.0		Microsoft		2		\$549	\$0
TUXEDO Core Functional Services 6.3 for NT		BEA		3		\$3,000	\$2,400
						Subtotal	\$4,358
User Connectivity							
Ethernet Switch, 8-Port 100TX TrueFast + 10% spares	NX-SW8	Netlux		4		\$229	\$916
Ethernet Hub, 8-Port 10Base-T (8+1 ports) + 10% spares	Z85094	General		5		\$27	\$30,429
						Subtotal	\$31,345
						Total	\$168,601
							\$39,616
Unisys Service Pre-Pay Discount							(\$4,193)
Western Micro discount							(\$7,382)
Notes:							
1. HW Maintenance - First 36 months that are included in Unisys warranty are upgraded to service level: Standard Performance-Gold. Last 24 months are also at service level: Standard Performance-Gold.						Five Year Cost of Ownership \$196,642 TPC-C Throughput 10,265.90 \$/tpmC \$19.15	
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 = Microsoft, 3 = BEA, 4 = Netlux, 5 = Software House Int'l							
The benchmark results and test methodology were audited by Lorna Livingtree 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. Thank You.							

NUMERICAL QUANTITIES SUMMARY
for
Unisys Aquanta ES2025 Server

MQTh, Computed Maximum Qualified Throughput: **10,265.90**
 % throughput difference, reported & reproducibility runs: 0.13%

Transaction Mix

New Order	44.82%
Payment	43.03%
Delivery	4.03%
Stock-Level	4.06%
Order-Status	4.06%

Response Times

Transaction	Average	Maximum	90th %ile
New-Order	0.32	3.91	0.40
Payment	0.18	3.82	0.21
Delivery	0.12	0.63	0.13
Stock-Level	1.32	4.56	2.46
Order Status	0.22	1.18	0.26
Menu	0.11	3.08	0.12
Delivery (Deferred)	0.50	1.63	0.70

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	18.02/120.3
Payment	3.00/0	3/12.02	3.01/120.3
Delivery	2.00/0	2/5.07	2/50.6
Stock-Level	2.00/0	2/5.08	2.01/50.6
Order-Status	2.00/0	2/10.05	2/100.71

Test Duration

Ramp up time	31 minutes
Measurement interval (M)	30 minutes
Transactions (all types) completed during measurement interval	687,149
Ramp-down time	79 minutes

Checkpointing:

Number of checkpoints	1
Checkpoint interval	30 minutes