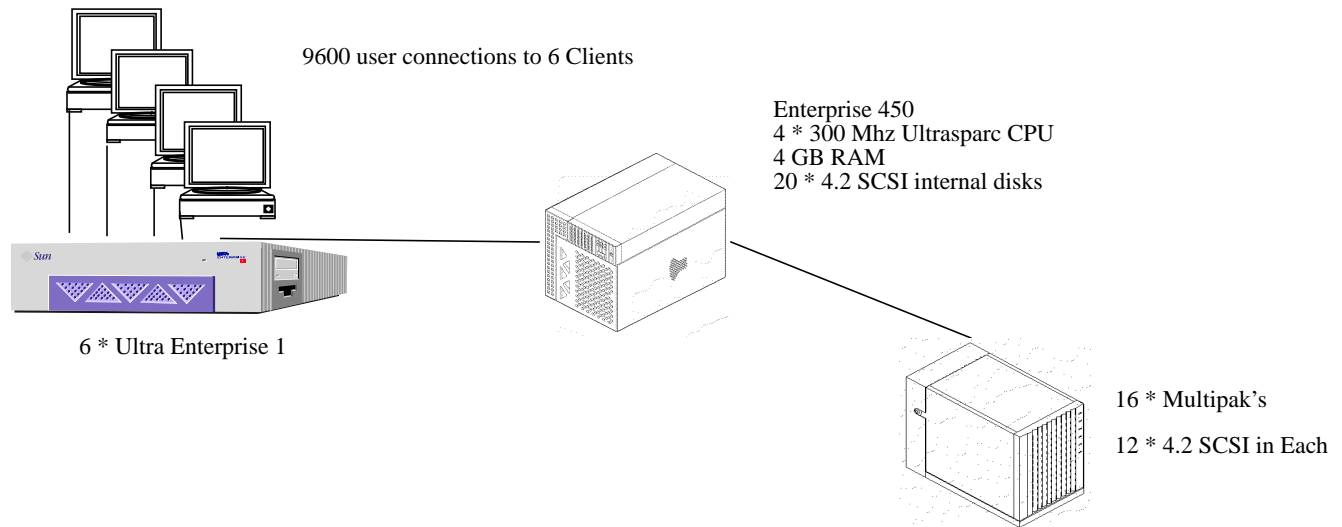


<b>Sun Microsystems</b>		<b>Ultra Enterprise 450</b>		TPC-C Rev 3.3
<b>Sybase, Inc.</b>		<b>C/S w/6 Front-Ends</b>		Report Date: 08/18/1997
Total System Cost		TPC-C Throughput	Price/Performance	Availability Date
<b>\$654,330.46</b>		<b>11559.70 tpmC</b>	<b>\$56.60 per tpmC</b>	<b>Feb 17, 1998</b>
Processors	Database Manager	Operating System	Other Software	Number of Users
<b>4 * 300 MHz UltraSPARC II</b>	<b>Sybase Adaptive Server Enterprise 11.5.0.1</b>	<b>Solaris 2.6</b>	<b>BEA Tuxedo 4.2</b>	<b>9600</b>



### **System Components**

#### **Database Nodes:**

#### **Processors**

#### **Cache memory**

#### **Main memory**

#### **Disk controllers**

#### **Disk Drives**

#### **Total Disk Storage**

#### **Terminals**

#### **10 BaseT Hubs**

#### **100 BaseT Hubs**

### **Server System**

**1 Ultra Enterprise 450**

**4 \* 300 MHz UltraSPARC**

**32KB (D+I), 2MB external**

**4 GB**

**8 \* UltraSCSI adapters**

**212 \* 4.2 GB SCSI**

**890 GB**

**1 Console**

**None**

**1 x 8-Port Hub**

### **Front End Systems**

**6 \* UltraServer 1 Model 170**

**1 \* 167 MHz UltraSPARC each**

**32KB (D+I), 512KB external, each**

**512 MB each**

**1 \* SCSI-2 each**

**1 \* 2.1GB SCSI-2 each**

**2.1 GB each**

**1 Console each**

**1200 x 9-Port Hubs**

**Sun Microsystems  
Sybase, Inc.**

**Ultra Enterprise 450  
C/S w/6 Front-Ends**

TPC-C

Report Date: 08/18/1997

Part Number	Description	Qty	Unit Price	Extended Price	Maintenance per Mo/Yr	5 Yr. Total Maintainance
<b>Server Hardware</b>						
<i>Pricing from CAT Technology, Inc.</i>						
E450-1024	E450 Server base, 1024MB memroy	1	25,721.25	25,721.25	168.00	9,072.00
7005A	512MB memory (2x 256MB DIMMs)	6	8,700.00	52,200.00		0.00
2240A	300MHz UltraSPARC-2 CPU, 2MB Ecache	4	7,500.00	30,000.00	77.00	16,632.00
5214A	4.2GB 7200 rpm UltraSCSI disk drive	20	1,050.00	21,000.00		0.00
6600A	E450 8-bay storage expansion option	2	1,121.25	2,242.50		0.00
9682A	E450 Power Supply	1	1,121.25	1,121.25		0.00
6540A	Dual single-ended UltraSCSI adapter	8	562.50	4,500.00		0.00
X5516A	MultiPacks (12 x 4 GB drives each)	16	13,350.00	213,600.00		0.00
6286A	4mm DDS-3 tape drive	1	1,800.00	1,800.00		0.00
<b>Workgroup Server Subtotal:</b>				<b>352,185.00</b>		<b>25,704.00</b>
<b>Client Hardwaer</b>						
<i>Pricing from CAT Technology, Inc.</i>						
A11-UBA1-9S-064CE	UltraServer 1 Model 170	6	5,621.25	33,727.50	86.00	27,864.00
X1058A	Quad Ethernet Controler	6	746.25	4,477.50		
X7003A	2*64 Mb Simm for UltraServer	24	1,500.00	36,000.00		
<b>UltraServer 1 Subtotal:</b>				<b>74,205.00</b>		<b>27,864.00</b>
<b>User Connectivity</b>						
<i>Terminal Pricing from SunExpress, Hubs from NETLUX.</i>						
SX-WY35-G-G35	Wyse35 Terminal	7	295.00	2,065.00		
NX-H8TX	8-port 100Mbps Fast Ethernet Hub	3	329.00	987.00		
NX-H9	9-port (8+1) 10Mbps Ethernet Hub With 10% spares	1,320	51.00	67,320.00		
<b>Terminals &amp; Connectivity Subtotal:</b>				<b>70,372.00</b>		
<b>ALL HARDWARE SUBTOTALS:</b>				<b>496,762.00</b>		<b>53,568.00</b>
<b>Server and Client Software</b>						
<i>Sun Softwore Pricing from Sun</i>						
SOLS-C	Solaris Software on CD-ROM	1	100.00	100.00	8.00	456.00
CC-P	SPARC Compiler Single Usr. License	1	695.00	695.00	20.00	1,140.00
<b>Sun Software Subtotal:</b>				<b>795.00</b>		<b>1,596.00</b>
<i>Sybase Pricing from Sybase Inc.</i>						
	Sybase Adaptive Server 11.5	1	34,995.00	34,995.00	5,600.00	28,000.00
<b>Sybase Software Subtotal:</b>				<b>34,995.00</b>		<b>28,000.00</b>
<b>Client Software</b>						
<i>Tuxedo Pricing from BEA Systems, Inc.</i>						
	Tuxedo CFS Runtime (4.2)	6	4,200.00	25,200.00	3,780.00	18,900.00
<b>Tuxedo Software Subtotal:</b>				<b>25,200.00</b>		<b>18,900.00</b>
<b>ALL SOFTWARE SUBTOTALS:</b>				<b>60,990.00</b>		<b>48,496.00</b>
<b>Discount</b>						
	Sun 3 year Maintenance Contract Discount (Hardware)		12%			-2,954.88
	Yearly prepayment Discount		5%			-2,530.66
<b>TOTAL HARDWARE &amp; SOFTWARE COST (5YR) PRICE PER TPMC</b>						<b>654,330.46 56.60</b>

Sun hardware has 1-year warranty bundled.  
During the warranty period, maintenance is discounted 50%  
for parts that require an upgrade to their standard warranty  
Maintenance prices for Sybase and Tuxedo are yearly rates.

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.

**Note : audited by Richard Gimarc of Performance Metrics, Inc.,**