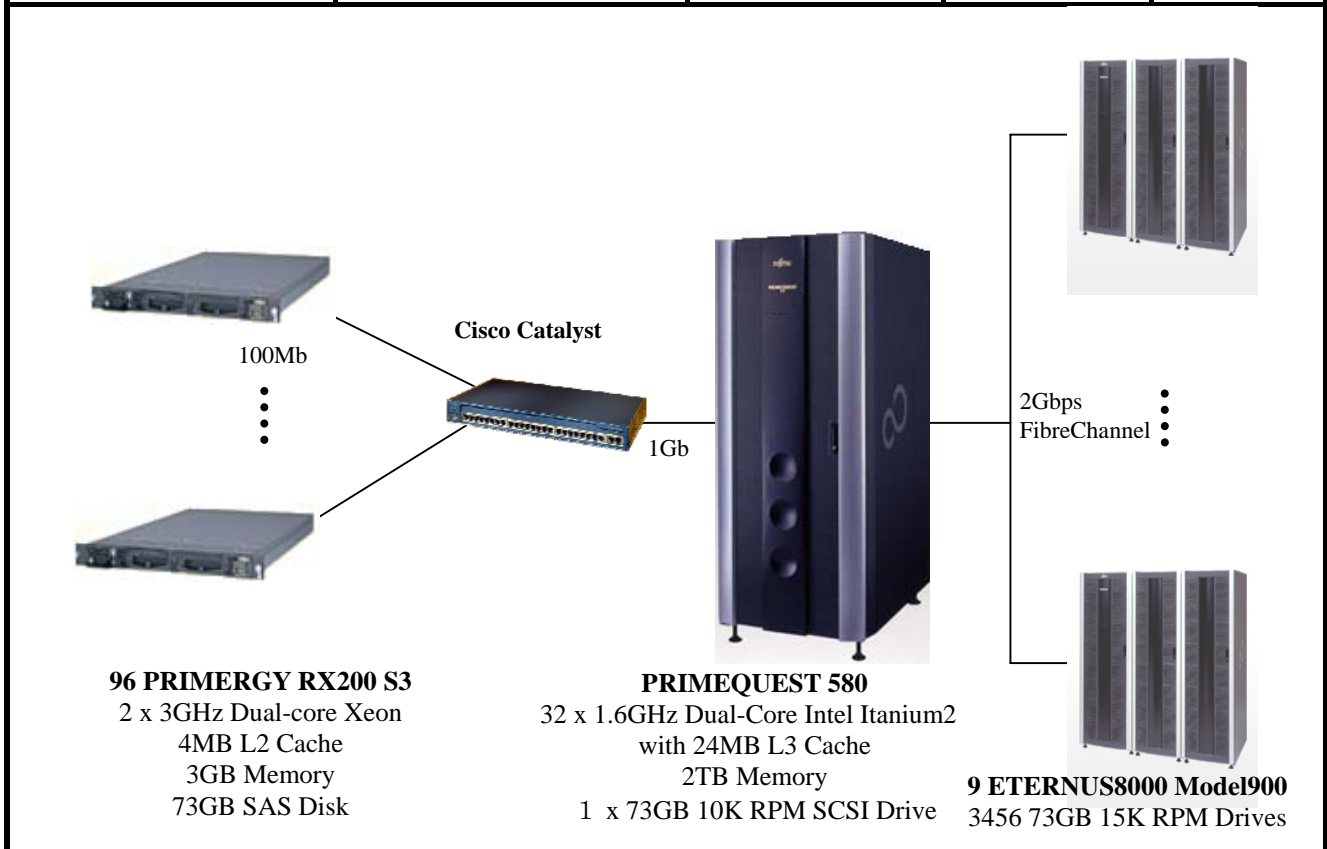
	PRIMEQUEST 580 c/s w/96 Front-Ends		TPC-C Rev 5.9	
			Report Date: October 30, 2007	
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$10,306,995 USD	2,196,268 tpmC	\$4.70USD/tpmC	April 30, 2008	
Database Server Processors/Cores/Threads	Database Manager	Operating system	Other Software	Number of users
32/64/128 Intel Itanium 2 1.6GHz	Oracle Database 10g Release 2 Enterprise Edition with Partitioning	Red Hat Enterprise Linux 4 AS	BEA Tuxedo 8.1	1,747,200



System Component	Qty	Server:	Qty	Each of 96 Clients:
Processors/Cores/Threads	32/64/128	1.6GHz Dual-Core Intel Itanium2 9050	2/4/4	3GHz Intel Dual-core Xeon
Cache Memory		24MB L3 Cache		4MB L2 Cache
Memory	64	32GB (4 x 8GB DDR2-400)	3	1GB(2 x 512MB PC2-5300F) 2GB(2 x 1024MB PC2-5300F)
Disk Controllers	36	4G bps FibreChannel (used at 2Gbps)	1	Serial Attached SCSI (SAS)
Disk Drives	1 3456	73GB 10K rpm 73GB 15K rpm	1	73 GB 15K rpm
Total Storage		252,361 GB		7,008 GB



**PRIMEQUEST 580 c/s
w/96 Front-Ends**

TPC-C Rev 5.9
Report Date: October 30, 2007

Description	Part Number	Third Party Brand	Pricing	Unit Price	Qty	Extended Price	3Year Maint. Price
Server Hardware							
PRIMEQUEST 580 Base Unit	MC5B0P211U			168,000.00	1	168,000.00	79,368.00
System Board	MC-87SB11			18,000.00	8	144,000.00	
CPU Module(Dual core Itanium2 9050/1.6GHz/24MB L3/533MHz)	MC-01EA11			37,920.00	32	1,213,440.00	250,368.00
32GB Memory Module (4x8GB DDR2-400)	MC-02A611			77,440.00	64	4,956,160.00	
I/O Unit	MC-87UX11			15,000.00	7	105,000.00	
BMC Module	MC-87BM11			1,720.00	1	1,720.00	
Disk Drive Unit (3.5inch, 73GB, 10,000rpm, Ultra320)	MC-03D321			680.00	1	680.00	
Gigabit Switch Board (w/ 8 external 1000Base-T ports)	MC-87GE11			11,850.00	2	23,700.00	
Additional Power Supply	MC-57PS21U			7,600.00	1	7,600.00	
External I/O Cabinet	MC-87RK11U			20,850.00	1	20,850.00	
PCI-Box	MC-07PB21U			20,700.00	1	20,700.00	
PCI Unit	MC-07PU21			5,170.00	3	15,510.00	
PCI Unit Cable (5m)	MC-07CA11			890.00	3	2,670.00	
FibreChannel Card (4Gbps, PCI-X, dual port)	MC-08FC41			4,270.00	36	153,720.00	
FibreChannel Cable (15m, LC-LC)	CBL-MLLB15			330.00	72	23,760.00	
Flat Panel Display	MC-07FL41			4,830.00	1	4,830.00	
USB Keyboard	MC-07KB11			50.00	1	50.00	
USB Mouse	MC-07MU21			26.00	1	26.00	
Server Hardware Subtotals						6,862,416.00	329,736.00
Storage							
ETERNUS8000 Model900 Base Unit w/ 2 Controllers, 4 Drive Enclosures	E890S20A			200,000.00	9	1,800,000.00	1,033,452.00
Additional Expansion Rack	E800CR1			12,000.00	18	216,000.00	
Additional Controllers (2 sets)	E800CJ01			40,000.00	9	360,000.00	
Cache Memory (2GBx4)	E800CM41			25,793.00	9	232,137.00	
FibreChannel Host Interfaces (4Gbps, dual port, 2 sets)	E800CH14			12,800.00	36	460,800.00	
Drive Enclosures for Base Unit (4 sets)	E800CE11			39,400.00	9	354,600.00	
Drive Enclosures for Expansion Rack (4 sets)	E800CE21			31,000.00	54	1,674,000.00	
Disk Drive Unit (73GB, 15,000rpm)	E800CA3			746.00	3456	2,578,176.00	
Storage Subtotals						7,675,713.00	1,033,452.00
Server Software							
Red Hat Enterprise Linux 4 AS (for Intel Itanium)	MCT0738US			7,497.00	1	7,497.00	5,130.00
Oracle Database 10g Enterprise Edition, Unlimited Users, Per Processor, 3 years				20,000.00	32*	640,000.00	
Partitioning, Unlimited Users, Per Processor, 3 years				5,000.00	32*	160,000.00	
Oracle Database Server Support Package for 3 years				2,000.00	3	6,000.00	
Server Software Subtotals						807,497.00	11,130.00
Client Hardware							
PRIMERGY RX200 S3 (Xeon 5160, 2x1000Base-T)	S26361-K995-V261			3,032.00	96	291,072.00	52,800.00
CPU Module (Xeon 5160 3GHz)	S26361-F3323-E300			1,479.00	96	141,984.00	
1GB Base Memory (2 x 512MB PC2-5300F)	S26361-F3230-B521			5.00	96	480.00	
2GB Memory Module (2 x 1024MB PC-5300F)	S26361-F3230-E522			365.00	96	35,040.00	
Drive Bay (2 x 3.5" HDD slots)	S26361-F3317-E200			44.00	96	4,224.00	
Hard Disk Drive (3.5inch, 73GB, 10,000rpm, SAS 3Gbps)	S26361-F3204-E173			264.00	96	25,344.00	
Internal CD-RW/ DVD Unit	S26361-F3123-E1			68.40	96	6,566.40	
USB FDD	S26391-F264-L226			58.80	1	58.80	
19inch Rack (24U)	S26361-K826-V102			1,591.00	5	7,955.00	
LCD/KB/Pointing Device Unit (1U)	S26361-K1023-V200			1,821.60	5	9,108.00	
KVM Switch (sports, 1U)	S26361-F2293-E801			708.00	15	10,620.00	
KVM Cable (1.8m)	S26361-F2293-L20			10.80	106	1,144.80	
Client Hardware Subtotals						533,597.00	52,800.00



**PRIMEQUEST 580 c/s
w/96 Front-Ends**

TPC-C Rev 5.9
Report Date: October 30, 2007

Description	Part Number	Third Party Brand	Pricing	Unit Price	Qty	Extended Price	3Year Maint. Price
Client Software							
Red Hat Enterprise Linux 4 ES (for x86)	S26361-F2346-E212	1		1,368.00	96	131,328.00	
BEA TUXEDO 8.1 CFS-R (for RHEL4 x86)		3		1,080.00	96	103,680.00	72,576.00
Client Software Subtotals						235,008.00	72,576.00
User Connectivity							
Cisco Catalyst 2950T-24 Switch		4		799.00	5	3,995.00	
Cisco SMARTnet 24x7x4 Maintenance		4			5		1,635.00
User Connectivity Subtotals						3,995.00	1,635.00
Total						16,118,226.00	1,501,329.00
Oracle Mandatory E-Business Discount		2				(161,200.00)	
Large Configuration Discount and Support Prepayment*		1				(6,742,404.90)	(408,956.40)
Total						9,214,622.00	1,092,373.00
Three-Year Cost of Ownership							\$10,306,995

Pricing Sources: 1 = Fujitsu , 2 = Oracle , 3 = BEA , 4 = Computer Online
 Audited by: Francois Raab, InfoSizing, Inc. (www.sizing.com)
 Oracle Corp. pricing contact: MariBeth Pierantoni, mary.beth.pierantoni@oracle.com,
 916-315-5081
 * 32=0.50 x 64. Explanation: For the purposes of counting the number of processors which require licensing, an Intel multicore chip with "n" cores shall be determined by multiplying "n" cores by a factor of 0.50.

Three-Year Cost of Ownership USD	\$10,306,995
tpmC	2,196,268
\$ USD / tpmC	\$4.70

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 items, please inform the TPC at pricing@tpc.org. Thank you.

**Numerical Quantities Summary for
PRIMEQUEST 580 c/s w/ 96 Front-Ends**

Oracle Database 10g Release 2 Enterprise Edition with Partitioning

MQTH, Computed Maximum Qualified Throughput

2,196,268 tpmC

Response Times (in seconds)	Average	90th %	Maximum
New-Order	0.352	0.344	38.972
Payment	0.337	0.333	38.966
Order-Status	0.344	0.341	38.946
Delivery (interactive portion)	0.103	0.104	0.325
Delivery (deferred portion)	0.243	0.242	38.849
Stock-Level	0.330	0.325	38.922
Menu	0.103	0.104	0.363

Transaction Mix, in percent of total transaction

New-Order	44.94%
Payment	43.02%
Order-Status	4.02%
Delivery(interactive)	4.01%
Stock-Level	4.01%

Emulation Delay (in seconds)

	Response Time	Menu
New-Order	0.1	0.1
Payment	0.1	0.1
Order-Status	0.1	0.1
Delivery (interactive)	0.1	0.1
Stock-Level	0.1	0.1

Keying/Think Times (in seconds)

	Keying Time			Think Time		
	Min	Avg	Max	Min	Avg	Max
New-Order	18.002	18.012	18.035	0.000	12.016	120.201
Payment	3.002	3.012	3.032	0.000	12.016	120.200
Order-Status	2.003	2.012	2.031	0.000	10.019	100.198
Delivery (interactive)	2.002	2.012	2.031	0.000	5.019	50.199
Stock-Level	2.003	2.012	2.029	0.000	5.019	50.198

Test Duration

Ramp-up time	129 Min. 0 Sec.
Measurement interval	120 minutes
Transactions during measurement interval(all types)	586,739,828

Checkpointing

Number of checkpoints	4
Checkpoint interval (seconds)	1,754