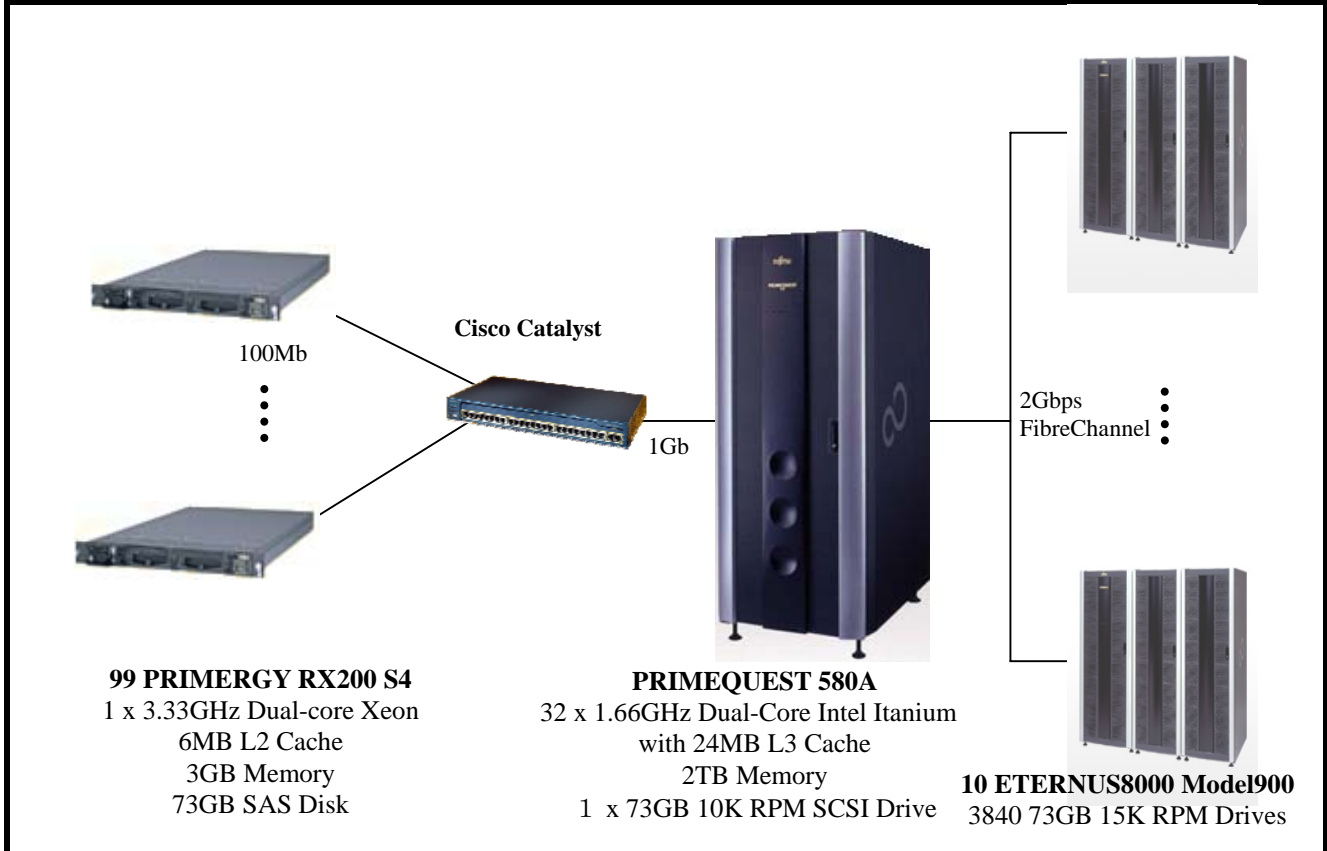
	PRIMEQUEST 580A c/s w/99 Front-Ends			TPC-C Rev 5.10 TPC pricing 1.3.0
				Report Date: December 4, 2008
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$8,950,005 USD	2,382,032 tpmC	\$3.76 USD/tpmC	December 4, 2008	
Database Server Processors/Cores/Threads	Database Manager	Operating system	Other Software	Number of users
32/64/128 Intel Itanium 1.66GHz	Oracle Database 10g Release 2 Enterprise Edition with Partitioning	Red Hat Enterprise Linux 4 AS	Tuxedo 8.1	1,936,000



System Component	Qty	Server:	Qty	Each of 99 Clients:
Processors/Cores/Threads	32/64/128	1.66GHz Dual-Core Intel Itanium 9150M	1/2/2	3.33GHz Intel Dual-core Xeon
Cache Memory		24MB L3 Cache		6MB 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	40	4G bps FibreChannel (used at 2Gbps)	1	Serial Attached SCSI (SAS)
Disk Drives	1 3840	73GB 10K rpm 73GB 15K rpm	1	73 GB 15K rpm
Total Storage		280,393 GB		7,227 GB



**PRIMEQUEST 580A c/s
w/99 Front-Ends**

TPC-C Rev 5.10
TPC Pricing 1.3.0
Report Date: December 4, 2008

Description	Part Number	Third Party Brand Pricing	Unit Price	Qty	Extended Price	3Year Maint. Price
Server Hardware						
PRIMEQUEST 580A Base Unit	MC5COP311U		1	150,000.00	150,000.00	456,768.00
System Board	MC-97SB21		1	18,000.00	18,000.00	
CPU Module(Dual core Itanium 9150M/1.66GHz/24MB L3/6	MC-01HA11		1	32,560.00	32,560.00	
32GB Memory Module (4x8GB DDR2-400)	MC-02A611		1	77,440.00	77,440.00	
I/O Unit	MC-97UX11		1	15,000.00	15,000.00	
BMC Module	MC-97BM11		1	1,720.00	1,720.00	
Disk Drive Unit (3.5inch, 73GB, 10,000rpm, Ultra320)	MC-03D321		1	680.00	680.00	
Gigabit Switch Board (w/ 8 external 1000Base-T ports)	MC-87GE11		1	11,850.00	11,850.00	
Additional Power Supply	MC-57PS21U		1	7,600.00	7,600.00	
External I/O Cabinet	MC-87RK11U		1	20,850.00	20,850.00	
PCI-Box	MC-07PB21U		1	20,700.00	20,700.00	
PCI Unit	MC-07PU31		1	4,250.00	4,250.00	
PCI Cassette	MC-07PC11		1	370.00	370.00	
PCI Unit Cable (5m)	MC-07CA11		1	890.00	890.00	
FibreChannel Card (4Gbps, PCI-X, dual port)	MC-08FC41		1	4,270.00	4,270.00	
FibreChannel Cable (15m, LC-LC)	CBL-MLLB15		1	330.00	330.00	
17" Flat Panel Display	96-343680-000		1	520.00	520.00	
USB Keyboard W/Trackball	MC-07KB51		1	600.00	600.00	
Server Hardware Subtotals					6,694,330.00	456,768.00
Storage						
ETERNUS8000 Model900 Base Unit w/ 2 Controllers, 4 Drive Enclosures	E890S20AU		1	180,000.00	180,000.00	1,237,908.00
Additional Expansion Rack	E800CR1U		1	12,000.00	12,000.00	
Additional Controllers (2 sets)	E800CJ01U		1	40,000.00	40,000.00	
Cache Memory (2GBx4)	E800CM41U		1	14,000.00	14,000.00	
FibreChannel Host Interfaces (4Gbps, dual port, 2 sets)	E800CH14U		1	12,800.00	12,800.00	
Drive Enclosures for Base Unit (4 sets)	E800CE11U		1	39,400.00	39,400.00	
Drive Enclosures for Expansion Rack (4 sets)	E800CE21U		1	31,000.00	31,000.00	
Disk Drive Unit (73GB, 15,000rpm)	E800CA3U		1	650.00	650.00	
Storage Subtotals					7,754,400.00	1,237,908.00
Server Software						
Red Hat Enterprise Linux 4 AS (for Intel Itanium)	PMK0348US		1	7,497.00	7,497.00	5,130.00
Oracle Database 10g Enterprise Edition, Unlimited Users, Per Processor, 3 years			2	23,750.00	47,500.00	
Partitioning, Unlimited Users, Per Processor, 3 years			2	5,750.00	11,500.00	
Oracle Database Server Support Package for 3 years			2	2,300.00	4,600.00	6,900.00
Server Software Subtotals					951,497.00	12,030.00
Client Hardware						
PRIMERGY RX200 S4	S26361-K1167-V101		1	1,174.84	1,174.84	93,555.00
Xeon DP X5260 3.33 GHz 6MB 1333MHz	S26361-F3881-E333		1	1,422.00	1,422.00	
1GB Base Memory (2 x 512MB PC2-5300F)	S26361-F3263-E521		1	109.36	109.36	
2GB Memory Module (2 x 1024MB PC-5300F)	S26361-F3263-E522		1	149.42	149.42	
Drive Bay (2 x 3.5" HDD slots)	S26361-F3317-E400		1	45.00	45.00	
Hard Disk Drive (3.5inch, 73GB, 15,000rpm Hot Plug, SAS ;	S26361-F3204-E573		1	227.00	227.00	
RAID 0/1 SAS based on LSI MegaRAID 4Port	S26361-F3257-E4		1	127.00	127.00	
Internal CD-RW / DVD Unit	S26361-F3268-E1		1	68.40	68.40	
USB FDD	S26361-F2382-L20		1	42.34	42.34	
PRIMECENTER Rack 19inch Rack (24U)	S26361-K826-V102		1	2,011.01	2,011.01	
Dummy panel, plastics, 2U + assembly	S26361-F2735-E131		1	16.00	16.00	
RackMountKit 1-2U servers	S26361-F2735-E110		1	67.00	67.00	
Cable Powercord (USA) 1.8m, grey	T26139-Y1742-E10		1	11.00	11.00	
LCDRC23 17" TFT	S26361-K1023-V200		1	1,716.00	1,716.00	
KVM Switch (8ports, 1U)	S26361-F2293-E801		1	708.00	708.00	
Console Switch adapter KVM S2 PS/2-VGA	S26361-F2293-L201		1	110.00	110.00	
KVM Cable (1.8m)	S26361-F2293-L20		1	10.80	10.80	
Client Hardware Subtotals					378,145.57	93,555.00



**PRIMEQUEST 580A c/s
w/99 Front-Ends**

TPC-C Rev 5.10
TPC Pricing 1.3.0
Report Date: December 4, 2008

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)	PMK0343US	1	672.00	99	66,528.00	0.00
Tuxedo CFS-R Tier 1		2	1,800.00	99	178,200.00	
Oracle Premium Support for 3 years		2	39,204.00	3		117,612.00
Client Software Subtotals					244,728.00	117,612.00
User Connectivity						
Cisco Catalyst 2950T-24 Switch		3	839.00	5	4,195.00	
Cisco SMARTnet 24x7x4 Maintenance		4		5		1,799.85
User Connectivity Subtotals					4,195.00	1,799.85
Total					16,027,295.57	1,919,672.85
Oracle Mandatory E-Business Discount		2			-311,678.00	
Large Configuration Discount and Support Prepayment		1			-8,025,026.05	-660,260.10
Total					7,690,592.00	1,259,413.00
Three-Year Cost of Ownership						\$8,950,005

Pricing Sources: 1 = Fujitsu , 2 = Oracle , 3 = getTnew.com , 4 = TechOnWeb.com
 Audited by: Francois Raab, InfoSizing, Inc. (www.sizing.com)
 Oracle pricing contact: MaryBeth 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	\$8,950,005
tpmC	2,382,032
\$ USD / tpmC	\$3.76

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 580A c/s w/ 99 Front-Ends**

Oracle Database 10g Release 2 Enterprise Edition with Partitioning

MQTH, Computed Maximum Qualified Throughput **2,382,032 tpmC**

Response Times (in seconds)	Average	90th %	Maximum
New-Order	0.835	1.597	20.834
Payment	0.821	1.586	20.815
Order-Status	0.828	1.593	20.737
Delivery (interactive portion)	0.103	0.104	0.328
Delivery (deferred portion)	0.726	1.491	20.472
Stock-Level	0.811	1.576	20.788
Menu	0.103	0.104	0.706

Transaction Mix, in percent of total transaction

New-Order	44.94%
Payment	43.01%
Order-Status	4.02%
Delivery(interactive)	4.02%
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	12.015	120.202
Payment	3.002	3.012	3.036	0.000	12.016	120.201
Order-Status	2.003	2.012	2.030	0.000	10.013	100.193
Delivery (interactive)	2.003	2.012	2.035	0.000	5.017	50.200
Stock-Level	2.003	2.012	2.031	0.000	5.017	50.199

Test Duration

Ramp-up time	171 Min. 5 Sec.
Measurement interval	120 minutes
Transactions during measurement interval(all types)	636,339,216

Checkpointing

Number of checkpoints	4
Checkpoint interval (seconds)	1,777