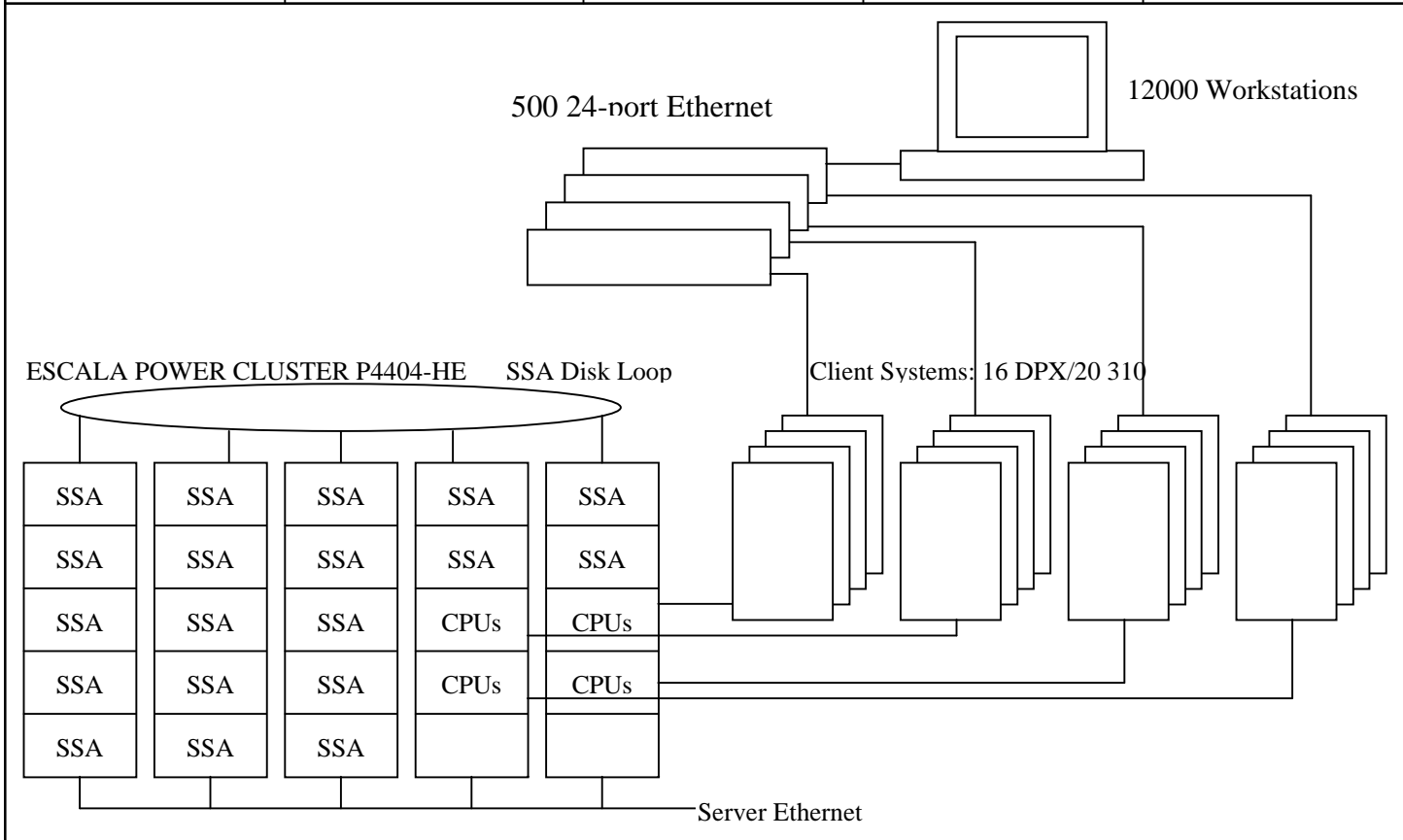


<b>BULL S.A.</b>	<b>ESCALA POWER CLUSTER P4404-HE c/s</b>		<b>TPC - C Rev.3.2</b>
			Report Date January 16, 1997
Total System	TPC - C Throughput		Price / Performance
<b>\$ 3,357,571</b>	<b>14,285.87 tpmC</b>		<b>\$235.02/ tpmC</b>
Processors	Data base Manager	Operating System	Other Software
8 Power PC 604 @ 112MHz	Oracle7 version 7.3	System AIX4.1.5	Tuxedo EPT 4.2.1
			Availability
			Now except: Oracle 7.3: June 97
			Number of users
			12 000



System Components	Server		Clients	
	Qty	Type	Qty	Type
Processors	4*8	PPC 604 @ 112 MHz	16	Power PC 601 @ 80 MHz
Cache	4	2 MB L2 per Cpu	16	512 KB L2 per Cpu
Memory (MB)	4	2048 MB	16	256 MB
Disk Controllers	16	SCSI II F/W	16	integrated SCSI adapter
Disk Drives	291	4.5 GB SSA Disks	16	1.1GB SCSI II
	4	4.5 GB SCSI Disks		
Total Storage (GB)	1229 GB		1GB each client	
Terminals	1	System Console	16	System Consoles

<b>Bull S.A.</b>		<b>ESCALA POWER CLUSTER</b>		<b>TPC-C REV 3.2 EXECUTIVE SUMMARY</b>			
				<b>PAGE 2 OF 2</b>			
<b>P4404-HE</b>				<b>Report Date: January 16, 97</b>			
Description	Part Number	Third Party Brand	Pricing	Unit Price	Qty	Extended Price	5 yr. Maint.
<b>Server Hardware</b>							
ESCALA POWERCLUSTER P4404-HE SYSTEM (2*36U racks,4*(8CPU604112MHZ-1MBL2,1GB memory,disk, CDrom,floppy, async lines )	CPXG148U0000			450,00 0	1	450,000	82,000
ETHERNET INTERCONNECT BASE KIT (3 or 4 nodes)	DCKG002-0000			1,50 0	4	6,000	0
512MB MEMORY MODULE	CMMG023-0000			30,40 0	8	243,200	0
ADD'AL 19" RACK 36U ( Empty)	RCKG001-0000			5,50 0	3	16,500	4,320
SSA 4 PORT ADAPTER	MSCG021-0000			1,37 0	19	26,030	0
SSA DISK SUBSYSTEM RACK	SSAG002-0000			8,70 0	1	8,700	8,400
4.5GB SSA DISK DRIVE MODULE	MSUG068-0000			3,15 0	3	9,450	0
SSA DISK SUBSYST. RACK W/ 16*4.5GB DK	SSAG002U0000			59,10 0	18	1,063,800	151,200
ETHERNET LAN ADAPTER (LSA)	DCCG074-0000			72 0	24	17,280	0
0.6M SSA LOOP TO LOOP CABLE	CBLG164-1000			3 5	19	665	0
SYSTEM CONSOLE BQ 306 (White display kbd, conn. cable)	CSUG002-1100			62 0	1	620	48
<b>Subtotal</b>						<b>1,842,245</b>	<b>245,968</b>
<b>Server Software</b>							
ESCALA POWERCLUSTER SYSTEM SOFTWARE (Per node)	EXSG062-0000			18800	4	75,200	34,560
CONCURRENT RESOURCE MANAGER -CLASS RK LICENCE	EXSG056-PG00			4000	4	16,000	7,680
CRM FOR AIX4.1 - LIBRARY	EXSG050SPCE			6 0	1	60	0
ORACLE version 7.3, SQL*Net		ORACLE	1	404,14 3	1	404,143	404,143
<b>Subtotal</b>						<b>495,403</b>	<b>446,383</b>
<b>Client Hardware</b>							
DPX/20 310 2 USER SYSTEM (PWPC/80,16MB,DK1GB,ETH,HP/CDROM,AIX3.2 2user)	CPXG081-0000			1165 0	16	186,400	88,320
4 TO 32MB SIMM MEMORY OPTION (POWER PC)	CMOG015-0000			112 0	64	71,680	0
32MB SIMM MEMORY (POWER PC only)	CMMG021-0000			128 0	64	81,920	0
NETWORK TERMINAL ACCELERATOR - 2048 SESSION	DCCG054-0000			750 0	16	120,000	17,664
SYSTEM CONSOLE BQ 306 (White display kbd, conn. cable)	CSUG002-1100			62 0	16	9,920	768
<b>Subtotal</b>						<b>469,920</b>	<b>106,752</b>
<b>Client Software</b>							
AIX(TM) V3.2 BASE LICENCE - CLASS D - 2 USERS	EXSG004-JD0A			0	16	0	2,304
AIX(TM) V3.2 LICENCE UPG. - CLASS D - 3 TO 8 USERS	EXSG004-JD0N			139 0	16	22,240	4,608
AIX(TM) V3.2 LICENCE UPG. - CLASS D - 9 TO 16 USERS	EXSG004-JD0P			149 0	16	23,840	5,376
AIX(TM) V3.2 LICENCE UPG. - CLASS D - 17 TO 32 USERS	EXSG004-JD0Q			233 0	16	37,280	8,448
BEA TUXEDO R4.2.2		BEA	2	350 0	16	56,000	42,000
<b>Subtotal</b>						<b>139,360</b>	<b>62,736</b>
<b>User Connectivity</b>							
Ultra Slim Line Hub (24port)+10% spare	DEH1487	ITI Network	s 3	310	550	170,500	0
<b>Subtotal</b>						<b>170,500</b>	<b>0</b>
<b>Other Discounts*</b>						<b>-621,696</b>	<b>0</b>
<b>Total</b>						<b>2,495,732</b>	<b>861,389</b>

**Notes:**

\* Dollar volume discount 25% on Bull Hardware/Software  
 1=Oracle Corp,2=BEA Systems,3=Data Comm Warehouse  
 Audited by françois Raab Information Paradigm

**Five-Year Cost of Ownership: 3,357,571**  
**tpmC Rating: 14,285.87**  
**\$/ tpmC: 235.02**

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.