



**IBM @server xSeries 440
with xSeries 330
using Microsoft SQL Server 2000**

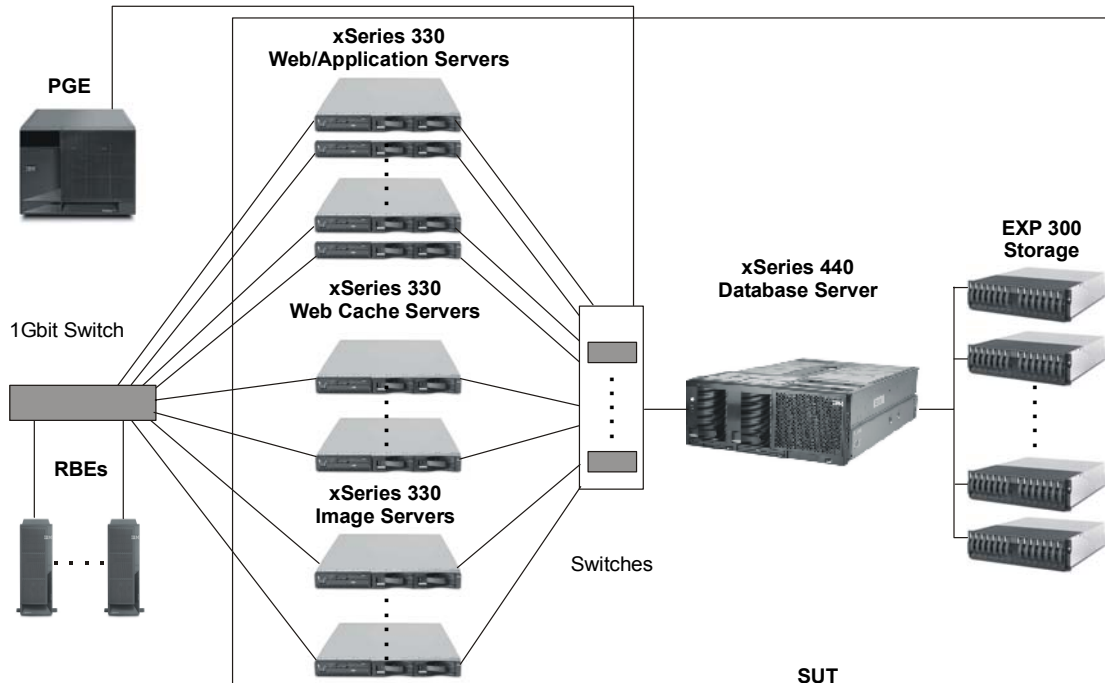
TPC-W Version 1.8

Report Date: 9/12/2002

Amended: 12/9/2002

Price Performance \$32.62 / WIPS@10,000	Performance 21,139.7 WIPS @10,000	Available: December 31, 2002
Total Cost \$689,477	WIPSo@10,000 2,394.6	WIPSp@10,000 18,434.3
Scale 10,000 Items	Number of Users 164,000	Number of Systems 63
Web Server Microsoft Corporation Internet Information Server 5.0	Application Server Microsoft ISAPI	Image Server Microsoft Corporation Internet Information Server 5.0
Database Manager Microsoft SQL Server 2000 Enterprise Edition	Load Balancer Microsoft DNS	Web Cache Microsoft ISA SE Volera Exceleator 2.1

Other Software: Microsoft Windows 2000 Indexing Services



Function	System	# of Systems	Operating System	Processors	Memory
Web Server	xSeries 330	26	Windows 2000 Server	2 Pentium III 1.26GHz/512KB	768MB
Web Server / Other Software	xSeries 330	1	Windows 2000 Server	2 Pentium III 1.26GHz/512KB	768MB
Image Server	xSeries 330	20	Windows 2000 Server	2 Pentium III 1.26GHz/512KB	512MB
Image Server / Load Balancer	xSeries 330	1	Windows 2000 Server	2 Pentium III 1.26GHz/512KB	512MB
Database Server	xSeries 440	1	Microsoft .NET EE	8 Xeon MP 1.6GHz/1MB	8GB
Web Cache	xSeries 330	9	Windows 2000 Server Microsoft ISA SE	2 Pentium III 1.26GHz/512KB	512MB
Web Cache	xSeries 330	3	Windows 2000 Server Microsoft ISA SE	2 Pentium III 1.26GHz/512KB	768MB
Web Cache	xSeries 330	2	Volera Exceleator 2.1	1 Pentium III 1.26GHz/512KB	2GB



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\$32.62 per WIPS@10,000	21,139.7 WIPS@10,000	Dec. 31, 2002

Description	Part No.	Third Party		Unit Price	Qty.	Extended Price	3 yr.Maint. Price
		Brand	Price				
Web/Application/Image Server Hardware							
xSeries 330 w/1.26GHz/512KB Pentium III	8674-31X	IBM	1	\$1,729	62	\$107,198	\$46,376
1.26GHz Pentium III Processor	25P2836	IBM	1	599	60	35,940	0
256MB 133MHz ECC SDRAM RDIMM	10K0020	IBM	1	245	90	22,050	0
512MB 133MHz ECC SDRAM RDIMM	10K0022	IBM	1	499	8	3,992	0
18.2GB 15K Ultra160 SCSI Drive	06P5767	IBM	1	439	78	34,242	0
30GB EIDE ATA/100 Drive	00N8203	IBM	1	129	21	2,709	0
20/40 DDS/4 4mm SCSI Internal Tape Drive	00N7991	IBM	1	769	1	769	0
E54 15" (13.8" Viewable) Color Display	633147N	IBM	1	139	1	139	90
Intel PRO/1000 XT Adapter	22P6501	Intel	1	89	35	3,115	0
NetBAY42 Rack Standard Expansion Cabinet	9306421	IBM	1	1,439	2	2,878	600
Software							
Microsoft Windows 2000 Server	C11-00821	Microsoft	2	738	60	44,280	incl. below
Microsoft ISA Server SE	E84-00042	Microsoft	2	1,295	24	31,080	incl. below
Volera Exceleator 2.1 (for 2GB)	993-000077-001	Volera	3	17,995	2	35,990	0
3-Years of Volera Technical Support (7x24)	051-001259-001	Volera	3	8,998	3		26,994
Subtotal						\$324,382	\$74,060
Database Server Hardware							
xSeries 440 - 1.6GHz/1MB Xeon Processor MP	8687-3RX	IBM	1	\$27,099	1	\$27,099	\$3,390
W/ 2 x 1.6GHz/1MB Xeon MP Processor							
W/ 4 x 512MB PC1600 ECC SDRAM RDIMM							
xSeries SMP Expansion Module	32P8340	IBM	1	5,199	1	5,199	0
1.6GHz/1MB Xeon MP Processor	32P8707	IBM	1	6,599	6	39,594	0
512MB PC1600 ECC SDRAM RDIMM	33L3324	IBM	1	499	12	5,988	0
ServeRAID-4H Ultra160 SCSI Adapter	37L6889	IBM	1	2,099	3	6,297	0
18.2GB 15K Ultra160 SCSI Drive	06P5767	IBM	1	439	155	68,045	0
20/40 DDS/4 4mm SCSI Internal Tape Drive	00N7991	IBM	1	769	1	769	0
E54 15" (13.8" Viewable) Color Display	633147N	IBM	1	139	1	139	90
EXP300 Storage Expansion Enclosure	35311RU	IBM	1	3,179	11	34,969	2,200
NetBAY42 Rack Standard Expansion Cabinet	9306421	IBM	1	1,439	1	1,439	300
Software							
Microsoft SQL Server 2000 Enterprise Edition	810-00846	Microsoft	2	16,541	8	132,328	
Microsoft .NET Enterprise Server	N/A	Microsoft	2	2,699	1	2,699	
Visual C++ Professional 6.0	048-00317	Microsoft	2	549	1	549	
3-Year Maintenance for Microsoft Software		Microsoft	2	1,950	3		5,850
Subtotal						\$325,114	\$11,830
Connectivity							
Cisco Catalyst-XL EE w/49% Disc.	WS-C3524-XL-EN	Cisco	4	2,995	4	6,110	
Cisco 24x7x4 Onsite Service w/32% Disc.	CON-OSP-WS-C3524	Cisco	4				\$4,341
Subtotal						\$6,110	\$4,341
Total						\$655,606	\$90,231
Large volume discount of 14% on IBM hardware; prices will vary if purchased separately.						(\$56,360)	
3rd Party Brand:							
1:IBM, 2: Microsoft, 3: Volera, 4: Cisco Systems			3-Year Cost of Ownership			\$689,477	
3rd Party Pricing:							
						WIPS@10,000	
						21,139.7	
1: IBM, 2: Microsoft, 3: Volera, 4: Cisco Systems						\$/ WIPS@10,000	
						\$32.62	

Independently Audited by: Francois Raab InfoSizing, Inc.



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December 31, 2002

Numerical Quantities Summary

WIPS Interaction Summary

Interaction	Mix	Count	90% Response
Home	16.00	6,087,473	0.20
Shopping Cart	11.60	4,415,386	0.20
Customer Registration	3.00	1,141,952	0.10
Buy Request	2.60	989,725	0.30
Buy Confirm	1.20	456,194	2.40
Order Inquiry	0.75	286,490	0.20
Order Display	0.66	252,318	0.20
Search Request	20.00	7,610,045	0.10
Search Results	17.00	6,469,302	0.40
New Products	4.99	1,900,420	0.40
Best Sellers	5.00	1,902,722	0.40
Product Detail	17.00	6,468,341	0.10
Admin. Request	0.10	37,548	0.10
Admin. Confirm	0.09	33,670	0.80

Measurement Intervals Summary

	Shopping	Browsing	Ordering
Ramp-up Time (min.)	11 Min 50 Sec	22 Min 20 Sec	30 Min 43 Sec
Length of Measurement Interval (min.):	30 Min	30 Min	30 Min
Average Think Time (sec.)	7.62 Sec	7.91 Sec	7.06 Sec
Average User Session Duration (min.):	14.97 Min	14.94 Min	14.98Min
Number of Users	164,000	148,000	17,500