



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

TPC-W Version 1.8

Report Date: 6/21/2002

Price Performance
\$32.04 / WIPS@10,000

Performance
14,356.2 WIPS @10,000

Available
June 21, 2002

Total Cost
\$459,914

WIPSo@10,000
1,510.6

WIPSp@10,000
13,012.1

Scale
10,000 Items

Number of Users
103,000

Number of Systems
43

Web Server
Microsoft Corporation
Internet Information Server 5.0

Application Server
Microsoft ISAPI

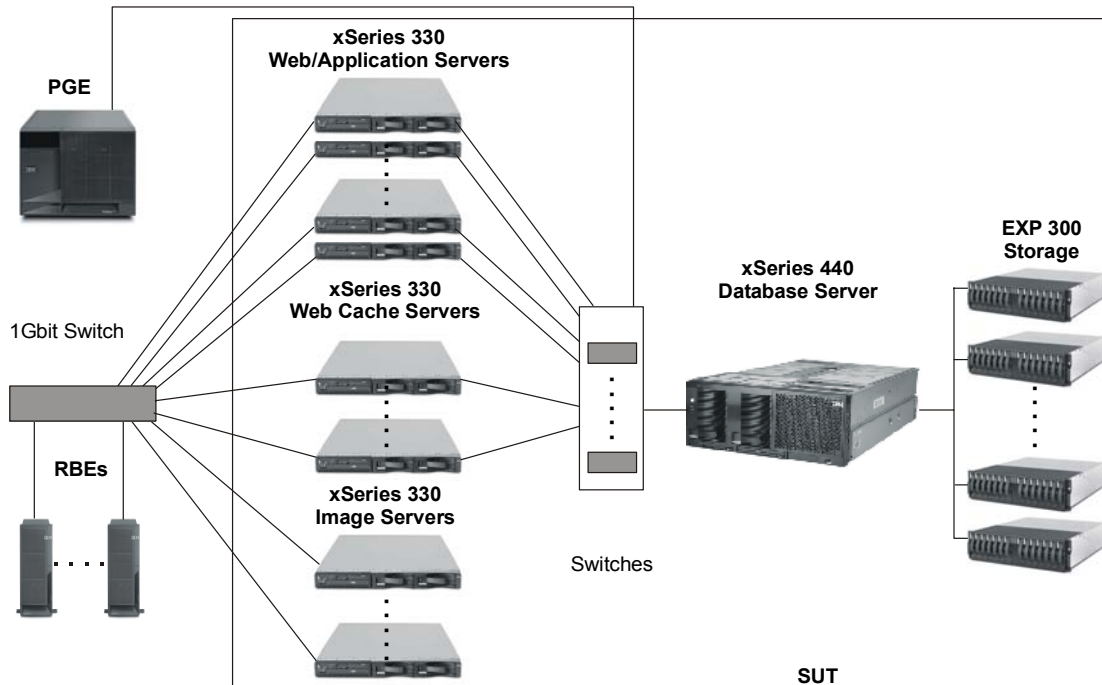
Image Server
Microsoft Corporation
Internet Information Server 5.0

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	18	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	12	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	Windows 2000 Advanced Server	4 Xeon Processor MP 1.6GHz/1MB	4GB
Web Cache	xSeries 330	8	Microsoft ISA SE	2 Pentium III 1.26GHz/512KB	512MB
Web Cache	xSeries 330	2	Volera Exceleator 2.1	1 Pentium III 1.26GHz/512KB	2GB



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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	8674-33X	IBM	1	\$1,729	42	\$72,618	\$18,900
1.26GHz Pentium III Processor	25P2836	IBM	1	999	40	39,960	0
256MB 133MHz ECC SDRAM RDIMM	10K0020	IBM	1	245	59	14,455	0
512MB 133MHz ECC SDRAM RDIMM	10K0022	IBM	1	499	8	3,992	0
18.2GB 15K Ultra160 SCSI Drive	06P5767	IBM	1	439	63	27,657	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	149	1	149	90
Intel PRO/1000 XT Adapter	22P6501	Intel	1	89	23	2,047	0
NetBAY42 Rack Standard Expansion Cabinet	9306421	IBM	1	1,439	1	1,439	300
Software							
Microsoft Windows 2000 Server	C11-00821	Microsoft	2	738	39	28,782	incl. below
Microsoft ISA Server SE	E84-00042	Microsoft	2	1,295	14	18,130	incl. below
Volera Excelerator 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						\$249,316	\$46,284
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							
1.6GHz/1MB Xeon MP Processor	32P8707	IBM	1	6,599	2	13,198	0
512MB PC1600 ECC SDRAM RDIMM	33L3324	IBM	1	499	4	1,996	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	89	39,071	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	149	1	149	90
EXP300 Storage Expansion Enclosure	35311RU	IBM	1	3,179	7	22,253	1,400
NetBAY42 Rack Standard Expansion Cabinet	9306421	IBM	1	1,439	1	1,439	300
Software							
Microsoft SQL Server 2000 Enterprise Edition	228-00968	Microsoft	2	16,541	4	66,164	
Microsoft Windows 2000 Advanced Server	C10-00475	Microsoft	2	2,399	1	2,399	
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						\$181,383	\$11,030
Connectivity							
Cisco Catalyst-XL EE w/49% Disc. (+10%)	WS-C3524-XL-EN	Cisco	4	2,995	4	6,110	
Cisco 24x7x4 Onsite Service w/32% Disc.	CON-OSP-WS-C3523	Cisco	4				\$4,341
Subtotal						\$6,110	\$4,341
Total						\$436,809	\$61,655
Large volume discount of 14% on IBM hardware; prices will vary if purchased separately.						(\$38,550)	
3rd Party Brand:							
1:IBM, 2: Microsoft, 3: Volera, 4: Cisco Systems						3-Year Cost of Ownership	
						\$459,914	
3rd Party Pricing:							
						WIPS@10,000	
						14,356.2	
1: IBM, 2: Microsoft, 3: Volera, 4: Cisco Systems						\$ / WIPS@10,000	
						\$32.04	

Independently Audited by:

Francois Raab InfoSizing, Inc.



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Numerical Quantities Summary

WIPS Interaction Summary

Interaction	Mix	Count	90% Response
Home	16.01	4,136,867	0.10
Shopping Cart	0.12	2,998,438	0.10
Customer Registration	0.03	774,472	0.10
Buy Request	0.03	670,714	0.40
Buy Confirm	0.01	308,882	2.40
Order Inquiry	0.00	194,389	0.20
Order Display	0.00	171,045	0.30
Search Request	0.20	5,166,678	0.10
Search Results	0.17	4,391,116	0.30
New Products	0.05	1,293,451	0.30
Best Sellers	0.05	1,291,678	0.40
Product Detail	0.17	4,395,102	0.10
Admin. Request	0.00	25,505	0.10
Admin. Confirm	0.00	22,927	0.90

Measurement Intervals Summary

	Shopping	Browsing	Ordering
Ramp-up Time (min.)	41 Min 9 Sec	21 Min 31 Sec	37 Min 45 Sec
Length of Measurement Interval (min.):	30 Min	30 Min	30 Min
Average Think Time (sec.)	7.04 Sec	7.8 Sec	7.04 Sec
Average User Session Duration (min.):	14.95 Min	14.93 Min	15.05 Min
Number of Users	103,000	103,000	11,000