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Performance Brief

Netfinity 7000 M10 Delivers High Throughput for Enterprise Applications

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The IBM Netfinity 7000 M10 is an advanced four-way SMP server that is ideally suited for running mission-critical enterprise applications. This line of IBM Netfinity servers is designed to deliver the high levels of throughput required by advanced database, e-business and other enterprise applications. The new models, announced worldwide in August 1999, feature the powerful Intel** Pentium III Xeon 550MHz microprocessor with up to 2MB of ECC L2 cache and 100MHz operations to memory.*

*The 550MHz system (Model 8680-3SY) was evaluated using Ziff-Davis' ServerBench** Version 4.02 benchmark. For comparison, the IBM Netfinity server performance laboratory also conducted the benchmark with the 500MHz/2MB model of the Netfinity 7000 M10.*

All results from these benchmarks are presented in this report.

ServerBench 4.02

The Netfinity 7000 M10 / 550MHz server achieved a peak level of transactions per second that was **8 percent** higher than that of the 500MHz server.

ServerBench 4.02 was used to measure the performance of the Netfinity 7000 M10 550MHz and 500MHz systems as four-way application servers running Microsoft** Windows** NT Server 4.0.

Test Environments and Results

ServerBench 4.02

Ziff-Davis' ServerBench 4.02 test suite SYS_60.TST was used to measure the performance of the IBM Netfinity 7000 M10 550MHz and 500MHz systems as four-way application servers running Windows NT Server 4.0.

ServerBench 4.02 provides an overall transactions-per-second (TPS) score showing how well the server handles client requests for a variety of operations involving the server's processors, disk and network subsystems.

Features	IBM Netfinity 7000 M10 / 550MHz	IBM Netfinity 7000 M10 / 500MHz
Processor / L2 Cache	Four 550MHz / 2MB Pentium III Xeon	Four 500MHz /2MB Pentium III Xeon
Memory	1GMB ECC SDRAM	1GB ECC SDRAM
RAID Level	RAID-5	RAID-5
Disk Drive	Nine 9.1GB 10K Wide Ultra SCSI Drives	Nine 9.1GB 10K Wide Ultra SCSI Drives
Disk Drive Adapter	One Netfinity ServeRAID-3H Ultra2 SCSI Adapter	One Netfinity ServeRAID-3H Ultra2 SCSI Adapter
Disk Driver	ISPRAIDN.SYS (6-27-99)	ISPRAIDN.SYS (12-07-98)
Network Adapter	Four Netfinity 10/100 Ethernet Adapters	Four Netfinity 10/100 Ethernet Adapters
Network Driver Version	Netfinity 10/00 Ethernet Version 3.01	Netfinity 10/00 Ethernet Version 3.01
NOS	Windows NT Server 4.0 with Service Pack 3	Windows NT Server 4.0 with Service Pack 3
System Partition Size	1GB	1GB
File System	NTFS	NTFS
Allocation Unit Size	Predefined Default	Predefined Default
Test Suite	ServerBench 4.02 SYS_60.TST	ServerBench 4.02 SYS_60.TST

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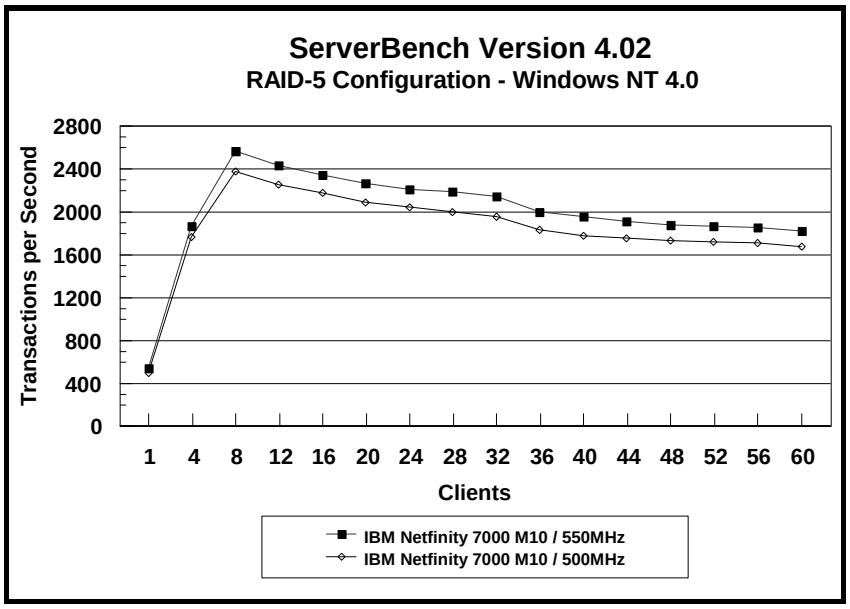

Test Disclosure Information

ServerBench 4.02

Version: ServerBench 4.02

Mixes:

- System Test Mixes
- Clients: 1, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60
- Ramp up: Default setup
- Ramp down: Default setup
- Delay: 0
- Think: 0
- Data Segment Size: 16MB
- Segment Access Ratio: 1

Network Operating System: Microsoft Windows NT Server 4.0 with Service Pack 3

- Network speed: 100Mbps
- Duplex mode: Full

Testbed Disclosure

The Netfinity 7000 M10 550MHz model is planned to be available August 31, 1999, in the USA. All other products used for these measurements are shipping versions available to the general public. All measurements were performed without independent verification by Ziff-Davis.

Network	100Mbps Ethernet
Clients	60
Switches	IBM 8275 100Mbps Ethernet
Clients per Segment	15
CPU / Memory	133MHz Pentium / 32MB
Network Adapter	IBM 100/10 PCI Ethernet Adapter (Bus 0)
Software	Windows NT Workstation 4.0
Cache	L2 = 256KB
Controller Software	Windows NT Workstation 4.0 with SP5

Published by the IBM Netfinity Server Performance Laboratory, IBM Corp.

Notes

[1] MHz denotes the internal/external clock speed of the microprocessor only, not application performance. Many factors affect application performance.

[2] When referring to hard disk capacity, GB, or gigabyte, means one thousand million bytes. Total user-accessible capacity may vary depending on operating environment.