SPECweb99 Result

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IBM: Netfinity 7600
Microsoft: IIS 5.0

SPECweb99 = 1570

Test Date: Jun-2000
Tester: IBM

Hardware Avail:	May-2000	OS Avail:	Feb-2000	HTTP Software Avail:	Feb-2000	Sup. Software Avail:	Feb-2000	SPEC license #:	11

Hardware

Vendor:	IBM
Model:	Netfinity 7600
Processor:	700 MHz Pentium III Xeon
# Processors:	4 cores, 4 chips, 1 core/chip
Primary Cache:	16KBI+16KBD on chip
Secondary Cache:	2MB
Other Cache:	none
Memory:	8GB
Disk Subsystem:	7 X 9GB (Seagate ST39103LC)
Disk Controllers:	IBM ServeRaid 3H
Other Hardware:	2 x ALTEON ACEswitch 180 GbE Switch

Software

Operating System:	Microsoft Windows 2000 Advanced Server
File System:	NTFS
Other Software:	none

HTTP Software

Vendor:	Microsoft
HTTP Software:	IIS 5.0
API:	ISAPI
Server Cache:	none
Log Mode:	W3C Extended Log File Format

Test Sponsor

Test Date:	Jun-2000
Tested By:	IBM
SPEC License:	11

Network

# of Controllers:	4
Network Controllers:	Alteon ACEnic PCI
# of Nets:	4
Type of Nets:	Gigabit Ethernet
Network Speed:	1Gb/s
MSL (sec):	30 (Non RFC1122)
Time-Wait (sec):	60 (Non RFC1122)
MTU:	1500

Clients

# of Clients:	8
Model:	Intellistation Z Pro
Processor:	450Mhz Pentium II Xeon
# of Processors:	2
Memory:	256MB
Network Controller:	Alteon ACEnic PCI
Operating System:	Windows 2000 Professional
Compiler:	Microsoft Visual C++ 6.0

Notes/Tuning Information

SUT Notes

IIS settings: Maximum Performance
IIS Home Directory: Access for Read & Write, Scripts & Executables
IIS Virtual Directory spec99 points back to web server root, low application protection

Operating System Notes

Tuning parameters:
- Tcpip/Parameters/TcpTimedWaitDelay=0x3c, sets TIME_WAIT parameter to 60 seconds (non-RFC 1122), default is 240
- Tcpip/Parameters/MaxFreeTwTcbs=400000, sets maximum number of TIME_WAIT tcbs to 400,000
- Tcpip/Parameters/MaxHashTableSize=0x10000, sets TCB hash table size to 65,536 entries, default is 512
- Tcpip/Parameters/MaxUserPort=0xfffe, sets maximum open ports to 65534
- Tcpip/Parameters/NumTcbTablePartitions=32, sets number of independent TCB table segments, default 4
- Inetinfo/Parameters/ListenBacklog=1000, default 25
- Inetinfo/Parameters/ObjectCacheTTL=0xffffff, sets IIS object cache timeout, default 10 minutes
- Inetinfo/Parameters/AcceptExTimeout=0x1, sets time for accept ex socket to wait for receive, default 120
- Inetinfo/Parameters/MemCacheSize=2000, sets the cache size for IIS, default is 50% of available memory
- Inetinfo/Parameters/MaxCachedFileSize=600000, sets the maximum file size (in bytes) that IIS will cache, default is 256KB
- Inetinfo/Parameters/MaxPoolThreads=1, sets the number of threads per processor, default 4
- Inetinfo/Parameters/PoolThreadLimit=4, sets the maximum number of threads per system, default 2*(amount of memory in MB)

Alteon NIC settings in registry
- StatTicks=0, default 100000
- RxFlowControl=0, default 1

Network adapters affinitized 1 per CPU

HTTP API Notes

IBM ISAPI v1.10 for IIS5.0 compiled with Intel Optimizing Compiler 4.0, code optimization = Pentium Pro

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Notes/Tuning Information (Continued)

Hardware Notes

1 disk for OS, 2 disk RAID 0 for logs, 4 disk RAID 0 for web pages