SPECweb99 Result

© Copyright 1999, Standard Performance Evaluation Corporation

Compaq Computer Corporation: ProLiant DL380
Microsoft: IIS 5.0

SPECweb99 = 1098

Test Date: Aug-2000
Tester: Mindcraft, Inc.

Hardware Avail:	Jul-2000	OS Avail:	Feb-2000	HTTP Software Avail:	Feb-2000	Sup. Software Avail:	N/A	SPEC license #:	2

Hardware

Vendor:	Compaq Computer Corporation
Model:	ProLiant DL380
Processor:	933EBMHz Pentium III
# Processors:	2 cores, 2 chips, 1 core/chip
Primary Cache:	16KBI+16KBD on chip
Secondary Cache:	256KB on chip
Other Cache:	None
Memory:	4 GB
Disk Subsystem:	1 CD-ROM, 6x9GB 10,000RPM Ultra2 SCSI
Disk Controllers:	1 IDE, 1 Integrated Smart Array Controller, Smart Array 4200
Other Hardware:	1x100Base-TX embedded Network Adapter, 1 Alteon WebSystems ACEnic PCI 1000Base-SX

Software

Operating System:	Windows 2000 Server
File System:	NTFS
Other Software:	None

HTTP Software

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

Test Sponsor

Test Date:	Aug-2000
Tested By:	Mindcraft, Inc.
SPEC License:	2

Network

# of Controllers:	1
Network Controllers:	Alteon WebSystems ACEnic PCI 1000Base-SX
# of Nets:	1
Type of Nets:	Gigabit Ethernet
Network Speed:	1,000 Mb/s
MSL (sec):	30 (Non RFC1122)
Time-Wait (sec):	60 (Non RFC1122)
MTU:	1500

Clients

# of Clients:	5
Model:	HP NetServer E60
Processor:	550 MHz Pentium III
# of Processors:	2
Memory:	128 MB
Network Controller:	Alteon WebSystems ACEnic PCI 1000Base-SX
Operating System:	Microsoft Windows 2000 Professional
Compiler:	Microsoft Visual C/C++, Version 6, SP3

Notes/Tuning Information

SUT Notes

System: Set as file server (background services), the default
Disks on Smart Array 4200 as 2 logical drives in RAID 0, 128 KB stripe, Rebuild priority low, 56MB Cache - 50% Read yand 50% write acceleration.
Logical Drive 1: 2 disks, 10,411 MB, holds C:, the OS and IIS log files
Logical Drive 2: 4 disks, 7,080 MB, holds D:, the Web server data files
Embedded 100Base-TX network adapter was disabled for the test.
IDE controller not used for the test.

Operating System Notes

Tcpip registry tuning parameters (HKLMSystemCurrentControlSetServicesTcpipParameters\
--MaxFreeTWTcbs=248000, sets maximum number of TIME_WAIT tcbs to 248,000.
--MaxHashTableSize=0x2000, sets TCB hash table size to 8,192 entries, default is 512.
--MaxUserPort=0xfffe, sets maximum open ports to 65534.
--NumTcbTablePartitions=16, sets number of independent TCB table segments, default 4.
--TcpTimedWaitDelay=60, sets TIME_WAIT parameter to 60 seconds (non-RFC 1122), default is 240.
--TcpWindowSize=65535, sets TCP send/receive window size, default 8192.
IIS registry tuning parameters (HKLMSystemCurrentControlSetServicesInetinfoParameters\
--ListenBacklog=1000, default 25.
--LogFileFlushInterval=60, forces flush every 60 seconds, default 300.
--ObjectCacheTTL=0xffff, sets IIS object cache timeout, default 10 minutes.
--MaxPoolThreads=20, maximum network request threads per processor, default 4.
--MemCacheSize=2000, maximum amount of memory IIS will use for its file cache in MB, default 50% of available memory.
--MaxCachedFileSize=950000, maximum file size kept in IIS cache in bytes, default 262,144 bytes (256KB).
Alteon NIC registry tuning parameters (HKLMSystemCurrentControlSetControlClass{4D36E972-E325-11CE-BFC1-08002BE10318} 7):

--RecvCoalMax=80, sets number of frames received before notifying host, default 20.

© Copyright 1999, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

Operating System Notes (Continued)

--RecvCoalTicks=10000, sets number of microsec before recv buffers are given to host, default 1,000.
--RxFlowControl=0 (off), default 1 (on).
--SendCoalMax=40, sets number of frames sent before notifying host, default 20.
--SendCoalTicks=10000, sets number of microsec before send buffers are returned to host, default 1,000.
--StatTicks=0, default 100000.

HTTP Software Notes

IIS: Set for more than 100,000 hits/day
IIS Home Directory: Read and write access only
cgi-bin directory: read and Scripts and Executable access, low application protection
IIS Logging: W3C Extended logging, defaults plus bytes sent; minus: user agent, server port, server IP address, username
Dynamic programs in /cgi-bin.

HTTP API Notes

Microsoft ISAPI for IIS 5.0 compiled with Visual C++, Version 6.0, SP3, code optimization=Pentium Pro
API and CGI programs are in mc05232000.zip

Network Notes

Switch: Alteon ACEswitch 180

Client Notes

on clients, set RecvCoalMax=40 (default=20)
on clients, set RecvCoalTicks=5000 (default=1000)