

# SPECweb99 Result

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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	
<b>Hardware</b>					<b>Test Sponsor</b>					
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					Test Date: Aug-2000 Tested By: Mindcraft, Inc. SPEC License: 2	<b>Network</b>				
Operating System:	Windows 2000 Server	# of Controllers: 1	Network Controllers: Alteon WebSystems ACEnic PCI 1000Base-SX							
File System:	NTFS	# of Nets: 1	Gigabit Ethernet							
Other Software:	None	Type of Nets: Network Speed: 1,000 Mb/s	MSL (sec): 30 (Non RFC1122)							
<b>Software</b>					Time-Wait (sec): 60 (Non RFC1122) MTU: 1500	<b>Clients</b>				
Vendor:	Microsoft	# of Clients: 5	HP NetServer E60							
HTTP Software:	IIS 5.0	Model: 550 MHz Pentium III								
API:	ISAPI, CGI	Processor: 2	128 MB							
Server Cache:	None	# of Processors: Alteon WebSystems ACEnic PCI 1000Base-SX								
Log Mode:	W3C Extended Log File Format	Memory: Microsoft Windows 2000 Professional	Operating System: 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 and 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 (HKLM\System\CurrentControlSet\Services\Tcpip\Parameters):

--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=0xffff, 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 (HKLM\System\CurrentControlSet\Services\Inetinfo\Parameters):

--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 (HKLM\System\CurrentControlSet\Control\Class\{4D36E972-E325-11CE-BFC1-08002BE10318}\0007):

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

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## 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)