SPECweb99 Result

Dell: PowerApp.web 120
Microsoft: Internet Information Server 5.0

SPECweb99 =	1070
Test Date:	Nov-2000
Tester:	Dell

Hardware Avail:	Dec-2000	OS Avail:	Feb-2000	HTTP Software Avail:	Feb-2000	Sup. Software Avail:	--	SPEC license #:	55

Hardware

Vendor:	Dell
Model:	PowerApp.web 120
Processor:	1000MHz Pentium III Coppermine
# Processors:	2 cores, 2 chips, 1 core/chip
Primary Cache:	16KBI+16KBD on chip
Secondary Cache:	256KB ATC
Other Cache:	None
Memory:	2 GB
Disk Subsystem:	3 36GB 10KRPM drives
Disk Controllers:	PERC3/DCL RAID controller
Other Hardware:	1 Alteon ACEswitch 180

Software

Operating System:	Windows Powered Appliance Software
File System:	NTFS
Other Software:	None

HTTP Software

Vendor:	Microsoft
HTTP Software:	Internet Information Server 5.0
API:	ISAPI
Server Cache:	None
Log Mode:	W3C Extended Log File Format

Test Sponsor

Test Date:	Nov-2000
Tested By:	Dell
SPEC License:	55

Network

# of Controllers:	1
Network Controllers:	Alteon AceNIC 1000SX
# of Nets:	1
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:	5
Model:	Dell Precision 410
Processor:	450MHz Pentium II
# of Processors:	2
Memory:	128MB
Network Controller:	Alteon AceNIC 1000SX
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:
- AFD/Parameters/TransmitWorker=32, adjusts system default thread.
- Tcpip/Parameters/MaxFreeTWTcbs=248000, sets maximum number of TIME_WAIT tcbs to 248,000.
- Tcpip/Parameters/MaxHashTableSize=0x2000, sets TCB hash table size to 8,192 entries, default is 512.
- Tcpip/Parameters/MaxUserPort=0xfffe, sets maximum open ports to 65534.
- Tcpip/Parameters/NumTcbTablePartitions=16, sets number of independent TCB table segments, default 4.
- Tcpip/Parameters/TcpTimedWaitDelay=60, sets TIME_WAIT parameter to 60 seconds (non-RFC 1122), default is 240.
- Tcpip/Parameters/TcpWindowSize=65535, sets TCP send/receive window size, default 8192.
- Inetinfo/Parameters/ListenBacklog=1000, default 25.
- Inetinfo/Parameters/LogFileFlushInterval=60, forces flush every 60 seconds, default 300.
- Inetinfo/Parameters/ObjectCacheTTL=0xffff, sets IIS object cache timeout, default 10 minutes.
- Inetinfo/Parameters/MaxPoolThreads=20, maximum network request threads per processor, default 4.
- Inetinfo/Parameters/MemCacheSize=1600, maximum amount of memory IIS will use for its file cache in MB, default 50% of available memory.
- Inetinfo/Parameters/MaxCachedFileSize=620000, maximum file size kept in IIS cache in bytes, default 262,144 bytes (256KB).

Alteon NIC settings in registry:
- RecvCoalMax=80, sets number of frames received before notifying host, default 20.
- 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.

SPECweb99 Result

Notes/Tuning Information (Continued)

HTTP API Notes

Microsoft ISAPI for IIS 5.0 compiled with VC++ 6.0.

Hardware Notes

One 36GB 10KRPM disk for OS and pagefile, 2 36GB 10KRPM disks striped for web pages and logs.