COMPAQ
Performance Brief

Contents

ProLiant 5500 ServerBench Performance Summary

Abstract: On January 5, 1999 Compaq announced availability of the 450MHz Pentium II Xeon processor on the ProLiant 5500. The ProLiant 5500 is the standard for performance and value in the enterprise for large departmental and enterprise customers requiring an affordable, high performance general purpose server. The performance of the ProLiant 5500 with 450MHz Pentium II Xeon is demonstrated by the industry-standard ServerBenchâ 4.01 benchmarks.

ProLiant 5500 with 450MHz Pentium II Xeon Delivers Faster Performance

The ProLiant 5500 server offers 450MHz Pentium II processors linked by a 100MHz GTL Bus to provide up to 50% faster access to memory. The Compaq Netelligent 10/100 TX embedded UTP controller provides high performance network throughput with autosensing capability and full duplex Ethernet support.

When comparing the peaks, the new 450MHz Pentium II Xeon-based ProLiant 5500 improves upon the previous generation of 400MHz/512KB Pentium II Xeon-based ProLiant 5500 by:

- 9% with four 450/512KB processors

- 24% with four 450/1MB processors

- 42% with four 450/2MB processors

On average over 1-28 clients, the new 450MHz Pentium II Xeon-based ProLiant 5500 improves upon the previous generation of 400MHz/512KB Pentium II Xeon-based ProLiant 5500 by:

- 9% with four 450/512KB processors

- 22% with four 450/1MB processors

- 32% with four 450MHz/2MB processors
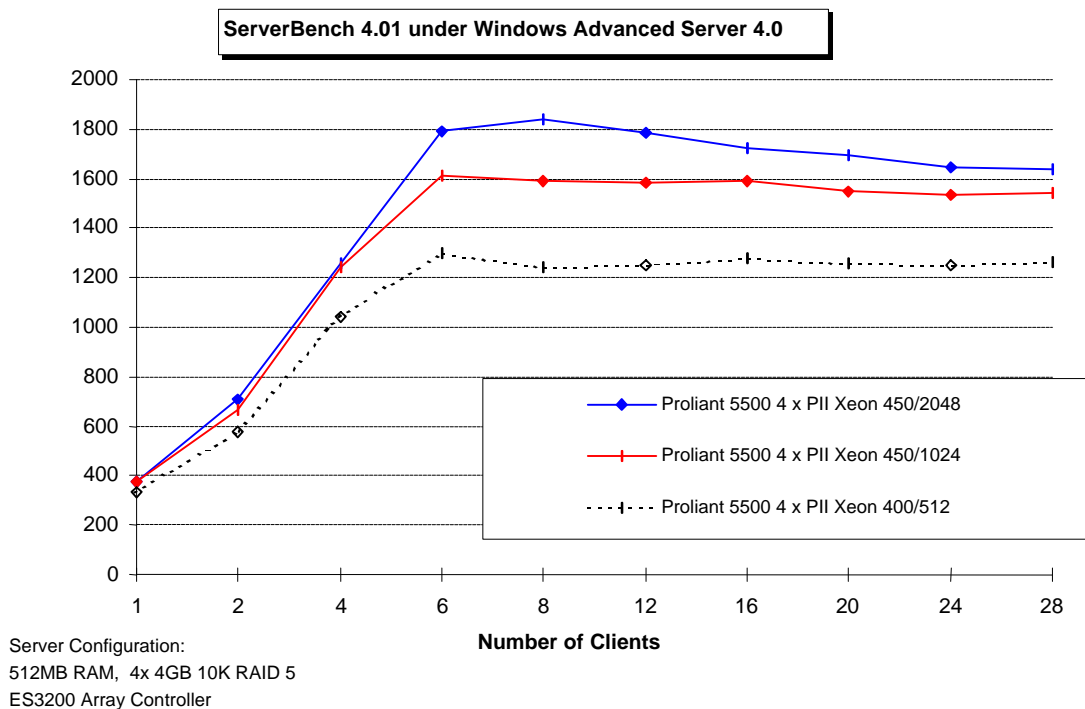
ServerBench 4.01 Benchmark

Overview

ServerBench® 4.01 measures the performance of application servers in a client/server environment by running tests that produce different types of load on the server. The ServerBench test environment includes the server being tested, its PC clients, and a PC designated as the controller (test suites are executed and monitored from the controller).

ServerBench 4.01 is an important industry-standard benchmark used by several computer vendors to simulate application server performance. Ziff-Davis Benchmark Operation (ZDBop), a division of the Ziff-Davis Publishing Company, develops and supports the publicly available, core benchmark programs that all ZD publications use, including NetBench and ServerBench.

Interpreting the Results

The Compaq ProLiant 5500 with 450MHz Pentium II Xeon processors delivers improved performance over the Compaq ProLiant 5500 with 400MHz Pentium II Xeon processors for environments with up to 28 clients.[1] This configuration demonstrates the extra value that larger L2 cache can play in improving server performance.

ServerBench 4.01 under Windows Advanced Server 4.0

Proliant 5500 4 x PII Xeon 450/2048
Proliant 5500 4 x PII Xeon 450/1024
Proliant 5500 4 x PII Xeon 400/512

Number of Clients

Server Configuration:
512MB RAM, 4x 4GB 10K RAID 5
ES3200 Array Controller

---

[1] Number of ServerBench clients is not necessarily equal to number of "users."
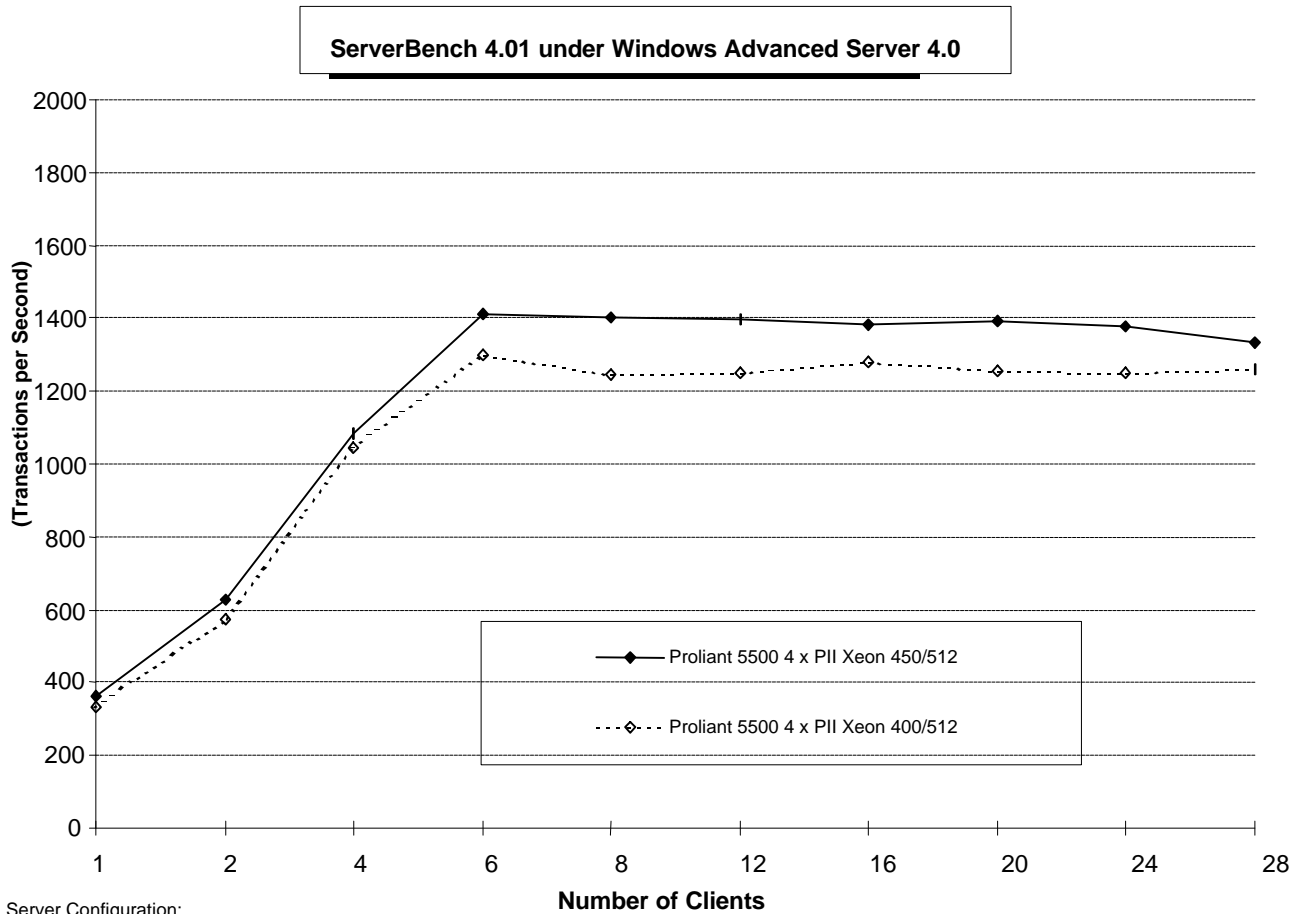
Interpreting the Results

The Compaq ProLiant 5500 with 450MHz Pentium II Xeon processors delivers improved performance over the Compaq ProLiant 5500 with 400MHz Pentium II Xeon processors for environments with up to 28 clients.[2] This configuration demonstrates the extra value that upgrading your processor can play in improving server performance.

ServerBench 4.01 under Windows Advanced Server 4.0

Server Configuration:
512MB RAM, 4 x 4GB 10K RAID 5
ES 3200 Array Controller

---

[2] Number of ServerBench clients is not necessarily equal to number of "users."

ServerBench 4.01 Configurations Tested

	Compaq ProLiant 5500	Compaq ProLiant 5500
Number and type of processor	4 450MHz Pentium II Xeon	4 400MHz Pentium II Xeon
Size of hardware CPU cache	512KB/CPU, 1MB/CPU, 2MB/CPU	512KB/CPU
Amount of memory	512MB	512MB
Type of I/O bus	PCI/ISA	PCI/ISA
Number and type of hard disk controllers	1 Compaq ES3200	1 Compaq ES3200
Number and type of hard disks	3 or 4 x 4GB 10K rpm drives	3 or 4 x 4GB 10K rpm drives
Disk organization	RAID 5	RAID 5
Disk controller driver version	Cpqarray.sys 4.01.03.35	Cpqarray.sys 4.01.03.
Number and type of network controllers	Compaq NC3122 Fast Ethernet NIC	Compaq NC3122 Fast Ethernet NIC
Network controller driver version	N100 NT.sys V3.27.00.0001	N100 NT.sys V3.27.00.0001
NOS name and version	Windows NT Adv. Server 4.0	Windows NT Adv. Server 4.0
Any relevant modifications to default NOS parameters	Service Pak 3	Service Pak 3

TestBed Disclosure

Network type (10Base T, Token Ring, etc.)	100 Base-TX
Number and type of clients	(60) DeskPro 2000
Number and type of hubs/concentrators (full duplex, switching, etc.)	(5) Synoptic Switching Hubs 28115 (Half Duplex)
Number of clients/segment	30 @ 2 segments
Client CPU type and speed	PS/200
Client network controller broken down by percentages	Compaq Netflex - 3
Client network software name and version W95 (drivers, protocols, redirector)	Native W95 Drivers, TCP/IP Only
Size of any client network cache	N/A
Disk controller software	W95 IDE/Atapi Driver Native
Network controller software	W95 Compaq Netflex Driver Native

ServerBench Disclosure	
ServerBench version	4.01
Description of the test parameters for each mix in the test suite	Sys 60g.tst

Notice

The information in this publication is subject to change without notice and is provided "AS IS" WITHOUT WARRANTY OF ANY KIND. THE ENTIRE RISK ARISING OUT OF THE USE OF THIS INFORMATION REMAINS WITH RECIPIENT. IN NO EVENT SHALL COMPAQ BE LIABLE FOR ANY DIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION OR LOSS OF BUSINESS INFORMATION), EVEN IF COMPAQ HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

The limited warranties for Compaq products are exclusively set forth in the documentation accompanying such products. Nothing herein should be construed as constituting a further or additional warranty.

This publication does not constitute an endorsement of the product or products that were tested. The configuration or configurations tested or described may or may not be the only available solution. This test is not a determination or product quality or correctness, nor does it ensure compliance with any federal state or local requirements.

Product names mentioned herein may be trademarks and/or registered trademarks of their respective companies.

Compaq, Contura, Deskpro, Fastart, Compaq Insight Manager, LTE, PageMarq, Systempro, Systempro/LT, ProLiant, TwinTray, ROMPaq, LicensePaq, QVision, SLT, ProLinea, SmartStart, NetFlex, DirectPlus, QuickFind, RemotePaq, BackPaq, TechPaq, SpeedPaq, QuickBack, PaqFax, Presario, SilentCool, CompaqCare (design), Aero, SmartStation, MiniStation, and PaqRap, registered United States Patent and Trademark Office.

Netelligent, Armada, Cruiser, Concerto, QuickChoice, ProSignia, Systempro/XL, Net1, LTE Elite, Vocalyst, PageMate, SoftPaq, FirstPaq, SolutionPaq, EasyPoint, EZ Help, MaxLight, MultiLock, QuickBlank, QuickLock, UltraView, Innovate logo, Wonder Tools logo in black/white and color, and Compaq PC Card Solution logo are trademarks and/or service marks of Compaq Computer Corporation.

Microsoft, Windows, Windows NT, Windows NT Server and Workstation, Microsoft SQL Server for Windows NT are trademarks and/or registered trademarks of Microsoft Corporation.

NetWare and Novell are registered trademarks and intraNetWare, NDS, and Novell Directory Services are trademarks of Novell, Inc.