



HP ProLiant ML310 G3 Dual-core server achieves top single processor result on Microsoft Exchange MAPI Messaging Benchmark



In January 2006, HP announced new Microsoft® Exchange MAPI Messaging Benchmark (MMB3) results using Microsoft Windows® Server 2003 and Microsoft Exchange Server 2003, on an HP ProLiant ML310 G3 server powered by a Dual Core Intel® Pentium® D Model 840 processor (3.2GHz/800 - 2 x 1 MB L2). The MMB3 benchmarking workload and methodology serves as the standard for Microsoft Exchange Server 2003 MAPI server comparison. The MMB3 workload is characteristic of a medium-sized business corporate mail environment. Using the Microsoft LoadSim utility, the ProLiant ML310 server was tested at the HP Performance Center in Nashua, New Hampshire.

HP achieved world-class Microsoft Exchange Server 2003 scalability results of 5,500 MMB3. The ProLiant ML310 G3 server was equipped with one Dual-Core Intel Pentium D Model 840 processor 3.2 GHz, 1 MB L2 per core, 163 – 72.8 GB 10K hard drives for the database files and transaction log files, and 4 – 36.4 GB 15K serial attached SCSI (SAS) hard disk drives for the Exchange files, operating systems and Active Directory files.

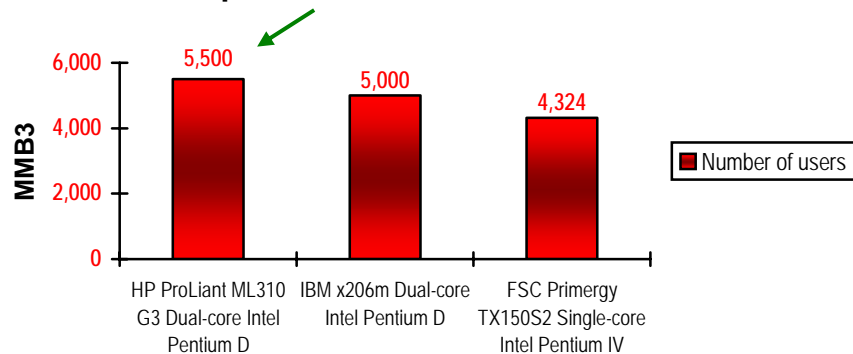
HP ProLiant ML310 G3 Advantage

The HP ProLiant ML310 G3 is an affordable, single processor tower server designed to provide the solid network foundation essential to fuel thriving small offices. Dual Core Intel Pentium D or Pentium 4 processing power combines with industry-leading management and essential data protection features for a secure, affordable platform that helps you run your business.

HP StorageWorks EVA Advantage

The HP StorageWorks 5000 Enterprise Virtual Array (EVA5000) that helped achieve this result is a high performance, high capacity, and high availability "virtual" RAID storage solution for the high-end enterprise-class marketplace that removes the time, space and cost boundaries of traditionally architected storage.

10% to 27%+ better performance with HP's uniprocessor ProLiant ML310 G3



The ProLiant ML310 G3 server achieved an average CPU utilization rate of **84.8%** during the **5,500** MMB3 test, weighted 95th percentile response-time score of **318** milliseconds (s), and average send-queue size of 46 messages for the four-hour steady-state period.

Interpreting the results

The ProLiant ML310 G3 achieved superior performance versus its single processor competitors, both Single-core and Dual-core, showing that Dual-core performance is compelling, and also that ProLiant servers are designed to optimize this latest technology in processing.

The ProLiant ML310 G3 achieved the following superior performance deltas:

- 10% vs. the IBM eServer xSeries 206m with Intel Pentium D (Dual-core) processor.
- 27% vs. the Fujitsu-Siemens PRIMERGY TX150 S2 with Intel Pentium IV (Single-core) processor.

For more information

HP ProLiant ML310: <http://www.hp.com/servers/proliantml310>

Results valid as of 2-1-06. For more details, visit <http://www.microsoft.com/exchange/evaluation/performance/default.asp>.

Test methodology

The MMB3 workload, for LoadSim 2003, is a modification of the previous MMB2 workload, and replaces the previous MMB2 standard. For Microsoft Exchange 2000 Server, the benchmarks were measured using the MAPI Messaging Benchmark 2 (MMB2). With MMB3, the workload and methodology has changed to be more reflective of production environments. It is designed to include new features from Microsoft Exchange 2003 Server and Outlook 2003.

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