



HP ProLiant BL480c BladeSystem holds #1 performance title for Microsoft Exchange MAPI Benchmark (MMB3) over all 2P Dual-Core competitors



- The HP ProLiant BL480c server blade is the industry's only 2P server blade that offers 12 DIMMs, four hot-plug SAS or SATA drives, and three PCI-Express I/O expansion slots.

Key results at a glance:

- The ProLiant BL480c topped all other competitors in the Microsoft Exchange MAPI Benchmark (MMB3) with 13,504 users.
- The ProLiant BL480c defeated other 2P Dual-Core Xeon competitors with similarly-configured systems by up to 16%.

In January 2007, HP produced superior Microsoft Exchange MAPI Messaging Benchmark (MMB3) results of 13,504 users using Microsoft Windows Server 2003 and Microsoft Exchange Server 2003 on an HP ProLiant BL480c server blade powered by two Dual-Core Intel Xeon Model 5160 processors with 3.0GHz and 4MB L2 cache.

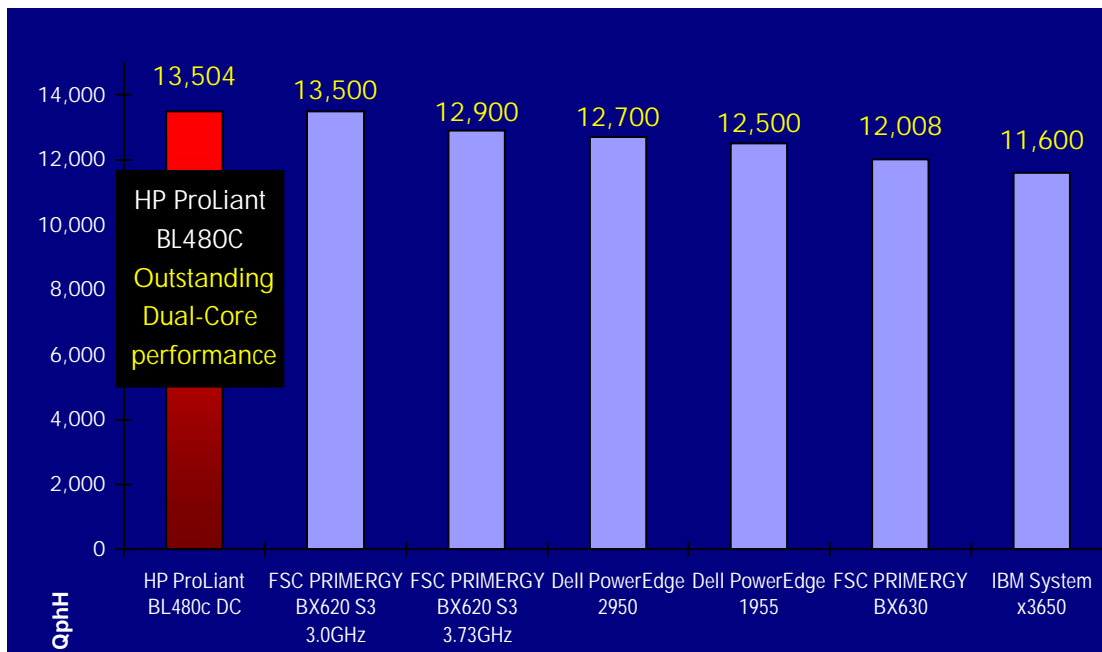


Figure 1. Comparison of performance results of the HP ProLiant BL480c Dual-Core server vs. FSC, Dell, and IBM 2P Dual-Core competitors on the MMB3 benchmark.

More information about all servers can be found at the following Web page:

<http://www.microsoft.com/exchange/>

Results as of 1-25-07.

ProLiant BL480c server configurations

HP achieved world-class Microsoft Exchange Server 2003 scalability results of 13,504 MMB3 on a ProLiant BL480c server blade equipped with:

- Two 64-bit Dual-Core Intel Xeon processors
- 336 x 36GB 15K hard drives for the Exchange files
- 4 x 72GB 10K hard disk drives for the operating systems and system logs

The ProLiant BL480c server blade also achieved the following:

- Average CPU utilization rate of 84.6% during the 13,504 MMB3 test
- Weighted 95th percentile response-time score was 256 milliseconds (ms)
- Average send-queue size for the four-hour steady-state period was 94.8 messages

The MMB3 benchmarking workload and methodology serves as the standard for Exchange Server 2003 MAPI server comparison. The MMB3 workload is characteristic of a medium corporate mail environment. Using the Microsoft LoadSim utility, the ProLiant BL480c server blade was tested at the HP Performance Center in Nashua, New Hampshire.

Interpreting the results

The ProLiant BL480c achieved greater performance versus its competitors, proving that HP ProLiant servers are designed to optimize Dual-Core technology.

The ProLiant BL480c accomplished the following superior performance deltas vs. Dual-Core 2P competitors:

- Defeated the FSC PRIMERGY BX620 S3 with 3.0GHz Intel Xeon processors.
- 4% better than the FSC PRIMERGY BX620 S3 with 3.73GHz Intel Xeon processors (with Hyper-Threading enabled).
- 6% better than the Dell PowerEdge 2900 with 3.0GHz Intel Xeon processors.
- 8% better than the Dell PowerEdge 1955 with 2.3GHz Intel Xeon processors.
- 12.4% better than the FSC PRIMERGY BX630 with 2.6GHz AMD Opteron processors.
- 16% better than the IBM System x2650 with 3.0GHz Intel Xeon processors.

Other Reasons We Win in Performance

HP StorageWorks 8000 Enterprise Virtual Array



The HP StorageWorks 4000/6000/8000 Enterprise Virtual Arrays (EVAs), used in the MMB3 benchmark, continue to offer customers in the mid-range to enterprise-sized market place leading, high performance, high capacity, and high availability "virtual" array storage solutions. Not only do these solutions reduce IT costs and complexity, they save time, space, and costs as compared to traditionally architected storage, and they are supported by a powerfully simple suite of management software making it easy for users to achieve highest level of productivity.

For more information

HP ProLiant BL480c: www.hp.com.servers/bl480c

MMB3 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.

For more details, visit <http://www.microsoft.com/exchange/evaluation/performance/default.asp>.

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