HEWLETT PACKARD

HP 3000 Series 922 and Series 932

Performance Brief

HP 3000 Computer Systems

The HP 3000 Series 922 systems (922LX, 922RX, and 922) are entry members of the broad family of HP 3000 business computers. The Series 932 is a performance upgrade for the Series 922. Both the Series 922 and Series 932 are optimized for On-line Transaction Processing (OLTP) environments, while also providing high performance for batch applications. This document discusses the performance of the S922 and S932 across several benchmarks and makes comparisons relative to the S925 and S935.

Performance summary

The benchmark results demonstrate that the Series 922 relative to the Series 925 provides an additional:

- 20 percent performance for on-line applications
- 15 to 20 percent decrease in batch elapsed time.

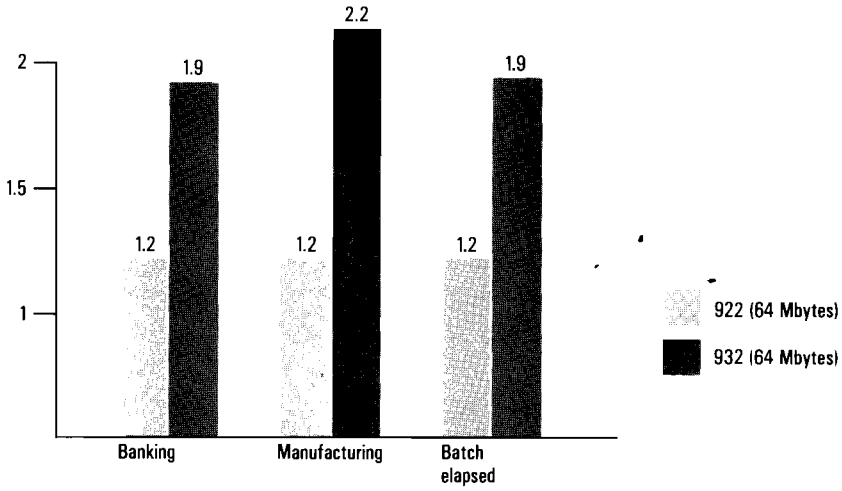
The Series 932 relative to the Series 922 provides an additional:

- 60 percent performance for on-line applications
- 60 to 65 percent decrease in batch elapsed time.

These benchmarks are based on customer environments. Actual performance increases depend on the nature of the application and user environment.

The S925, S935, S922, and S932 benchmarks described here were all run on MPE/XL release 2.0.

Figure 1. Performance relative to Series 925



On-line performance

Banking benchmark

This benchmark uses transactions that simulate deposits to and withdrawals from bank accounts. These transactions are simpler than those used in typical customer environments. This application was written in Pascal and used an HP TurboIMAGE database.

For this benchmark, the S925 maintains a consistent response time of two seconds up to 75 users, while the S935 maintains a two second response time up to 179 users. The S922 can support roughly 80 interactive users with response time comparable to the S925. The S932 can support roughly 117 interactive users with response times comparable to that of the S935.

This benchmark was also run using the HP SQL relational database (figure 2) with the following results:

- Relative to the S925, the S922 has 20 to 25 percent greater transaction throughput.
- Relative to the S922, the S932 has 55 to 60 percent greater transaction throughput and is 90 to 95 percent the performance of an S935.

Manufacturing benchmark

This benchmark is based on a third-party interactive application, which consists of several programs that closely reflect an actual manufacturing environment. The application uses block mode screen handling facilities (HP V/PLUS), several HP TurboIMAGE databases, Keyed Sequential Access Method (KSAM files), and flat files.

- Relative to a Series 925, the Series 922 has 25 to 30 percent greater throughput.
- Relative to a Series 922, the Series 932 has 75 to 80 percent greater throughput and is 90 to 95 percent the performance of a Series 935.

Figure 2. SQL Banking benchmark relative throughput

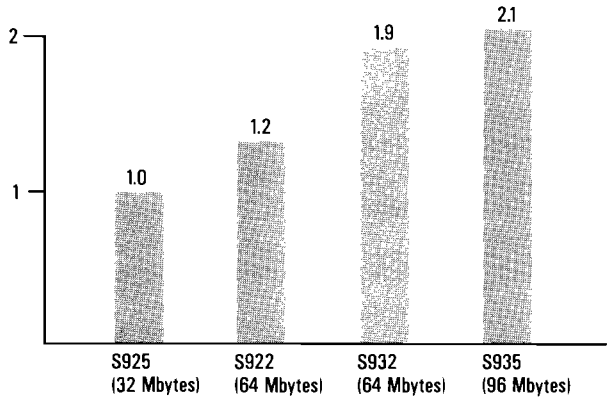
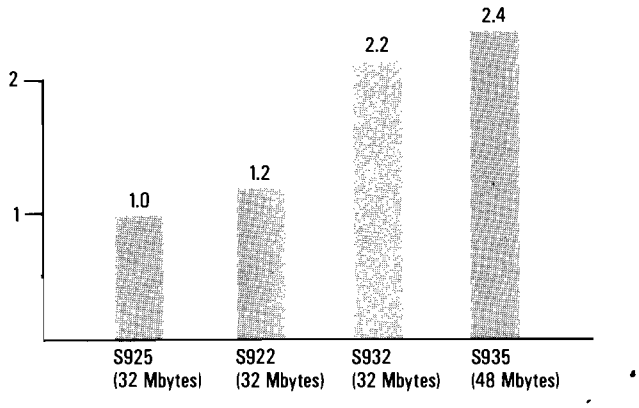


Figure 3. Manufacturing benchmark relative throughput



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Batch performance

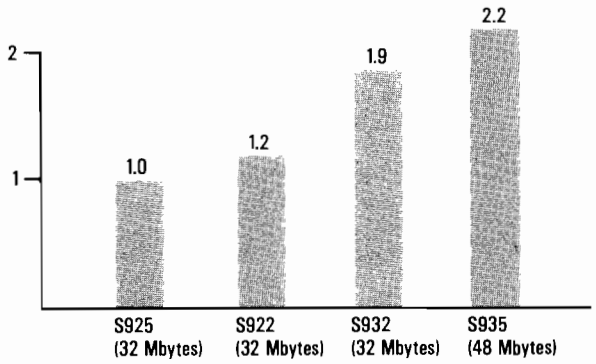
This batch performance benchmark performs Materials Requirement Planning (MRP) for a manufacturing environment. The application is written in COBOL II and uses HP TurboIMAGE databases and MPE flat files.

Figure 4 shows that, for a single batch benchmark, the Series 922 is 20 percent faster than the Series 925 in terms of CPU time utilization and is 18 percent faster in terms of elapsed time. The elapsed time improvement is lower because the single batch application waits for I/O operations. The Series 932 is 90 percent faster than the Series 922 in terms of CPU time consumed and is 65 percent faster in terms of elapsed time.

Summary

In on-line environments, the HP 3000 Series 922 provides 20 percent more OLTP performance than the Series 925, while the Series 932 provides 90 percent the OLTP performance of an S935. The Series 932 is an effective upgrade for the Series 922, offering 60 to 65 percent greater performance than the Series 922.

Figure 4. Relative MRP batch performance (elapsed time)



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