

ERGOGROUP CHOOSES SUN BETTER PERFORMANCE, LESS COST

Key Features

- Fastest Sun configuration outperformed fastest non-Sun configuration by nearly three times
- Processed over 300 messages per second in benchmark, satisfying customer's performance demands with margin to spare
- Minimized overall system costs
- Capitalized on excess system capacity in seeking further business
- Can provide services based on a consistently stable hardware/software combination
- Gained experience and built infrastructure to attract future business

ErgoGroup AS, one of Norway's largest IT Services companies, recently benchmarked several platforms running Oracle Database10g. The winner by a large margin was a pair of Sun Fire™ V20z servers with two AMD Opteron™ 2.6 processors each, running the Solaris™ 10 Operating System.

The two servers were clustered in an Oracle Real Application Clusters (RAC) configuration. Since this configuration allowed ErgoGroup to take advantage of favorable Oracle pricing, the Sun solution proved best by an even wider margin from a price/performance point of view.

Demanding Application Requires a Ten-Fold Performance Boost

ErgoGroup, a subsidiary of the Norwegian postal service Norway Post, is a service provider and one of the largest information and communications technology companies in Norway. ErgoGroup's 1,400 employees provide a variety of outsourced applications and IT services for both the public and the private sector. Among the substantial computing equipment from many vendors in the group's data centers are over 120 Sun servers running Oracle, a combination that has delivered exceptional stability and reliability since ErgoGroup began using them in the early 1990s.

Recently, ErgoGroup had an opportunity to win a substantial contract from a major customer, but it required implementing infrastructure sufficient to satisfy one of the most demanding applications the group had encountered. The customer needed to issue as many as 60,000 electronic invoices at a time using an advanced queuing application that called for far higher



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levels of Oracle database performance than any system the group had ever hosted. ErgoGroup ran tests using the fastest systems in place at the time, which delivered just ten percent of the performance the new application demanded. As if it were not challenging enough just to meet the customer’s performance requirements, ErgoGroup also had to keep costs in check to prevent eager competitors from winning the business away from them. To gain this important customer’s business and keep them satisfied, while still making a profit, it was imperative that ErgoGroup identify the right hardware/software solution.

“Oracle recommended that we test various server candidates using Oracle Database 10g, and that we consider running more than one server in a Real Application Clusters (RAC) configuration,” said Oyvind Tonnesen, Senior Database Administrator. “We readily agreed since we wanted experience with Oracle Database 10g RAC anyway so we could provide better service to our customers in general. The 10g version of the database offers many advantages that we wanted experience with, especially in terms of manageability and understandability, and RAC adds even more advantages by allowing clusters of processors to team up for extra performance.”

Sun x64 Servers Win Benchmark Hands Down

Even though Sun had proven to be such an excellent host for Oracle over the years, ErgoGroup wanted to evaluate other vendor equipment as well to maximize the chances of finding the right solution. Therefore they set up an unbiased test to measure and compare the performance of several platforms—not just Sun but also three current platforms from other vendors plus one older-generation platform. The test was based on external Java™ technology clients that send, receive, and move messages in Oracle’s advanced queuing system.

Earlier tests had shown that of all current Sun servers in the price class of interest, Sun Fire™ V20z servers equipped with AMD Opteron processors and the Solaris 10 Operating System delivered the best performance. So this was the Sun system that the group employed in the benchmark. To obtain a full picture, they measured servers incorporating both 2.2 GHz and 2.6 GHz AMD Opteron processors, and they also measured two-processor servers versus two-server clusters where each server had two processors—a total of four Sun Fire V20z server configurations. The single servers ran Oracle Database 10g and the clusters ran Oracle Database 10g RAC.

The benchmark showed that each of the four Sun Fire V20z server configurations outperformed all of the other platforms by wide margins, and that the two-server cluster equipped with 2.6 GHz Opteron processors delivered the best performance of all. (See chart for details.)

The Sun Fire V20z server cluster was an even bigger winner when cost was factored in, as Tonnesen explained: “The [AMD] Opteron-based Sun Fire x64 servers represented a very large financial gain for us, since to achieve the same performance in the other configurations in a redundant environment we would have had to increase the number of CPUs beyond the Oracle Database 10g Standard Edition’s limit of four. That would have meant purchasing the Enterprise Edition, which is approximately three times more expensive.”

ErgoGroup proceeded to implement the Sun Fire V20z server cluster that had performed so well and brought it into production for their customer in spring of 2005. “The system has been completely stable ever since, and our customer is very pleased with the performance and availability we’re delivering to them,” reported Tonnesen. “In fact, we have excess capacity and so now we’re actively searching for additional customers—and making the most of the performance we can deliver as a competitive advantage.”

Sun Continues to be the Ideal Platform for Oracle

ErgoGroup expects Sun Fire V20z servers running Oracle Database 10g RAC to continue to meet customer performance and stability demands in the future. “We are very satisfied with Sun as a platform for these types of Oracle applications,” said Tonnesen. “It’s more than just the excellent performance and reliability—it’s also the support they provide in conjunction with each other’s products. We’ve found, for example, that on OracleMetaLink, Oracle’s premier Web support service, any issues that are likely to arise with Sun platforms are well documented. Sun and Oracle collaborate very closely at all levels, just as they have for many years.”

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“The combination of AMD Opteron-based Sun servers and Oracle Database 10g RAC allowed us to cost-effectively satisfy one of the toughest applications we’ve encountered with plenty of margin to spare,” said Tonnesen in conclusion. “This combination allowed us to satisfy the needs of an important customer.”

Learn More

For more information, please see
sun.com/servers
sun.com/oracle and sun.com/solaris

Sun Fire V20z Server Configuration

Platform	Messages/second
1-CPU older generation platform	16
1-CPU other platform 1	44
2-CPU other platform 2	72
4-CPU other platform 3	104
Sun Fire V20z with 2 x 2.2 GHz processors	162
2 clustered Sun Fire V20z servers with 2 x 2.2 GHz processors	269
Sun Fire V20z with 2 x 2.6 GHz processors	170
2 clustered Sun Fire V20z servers with 2 x 2.6 GHz processors	302