

Financial Security Assurance

Shortening Processing Time from Days to Seconds and Speeding Application Performance with Symantec Indepth for Sybase



FSA had performance problems with applications running on Sybase, so it turned to Symantec Indepth for Sybase. Now those problems are in the past, since the company’s DBAs have deep visibility into the SQL code. Applications are performing an average of 20% better. In one case, the time to run a critical asset management report has been shortened from 47 hours to 30 seconds.

The Challenge

Financial Security Assurance Inc. (FSA) guarantees the payment of principal and interest on bonds, especially municipal bonds and asset-backed securities. To manage its business, FSA relies on a custom application suite, running on Sybase databases, which calculates the profit margin for each potential transaction.

Over 350 users worldwide access these applications. Managers use them to review transactions and decide whether they represent appropriate business for the company. When an application isn’t running at peak performance, the potential for error increases.

FSA has a number of batch processes that run overnight. When a process was running slowly or didn’t finish successfully, it was difficult to troubleshoot.

Often the problem developed gradually. For example, the run time would creep from 3 to 4.5 hours over a period of time, with no obvious explanation. The company’s experienced database administrators (DBAs) had no visibility into the root causes.

On the development side, the company wanted a more effective platform to fully test new or modified applications in a production-like environment. Sometimes performance issues would only become apparent in production. Identifying problems before production deployment became a top priority.

The Solution

Luis Morales, FSA’s managing director of MIS, was a long-time user of Veritas Storage Foundation™ and had a positive impression of Symantec software. “We virtualize all the storage on our Sun servers using Veritas Storage Foundation,” says Morales. “This allows us to optimize our storage utilization and gives us flexibility when utilizing our SAN.”

So when he worked with Jeff Garbus of Soaring Eagle Consulting in early 2006 to develop a solution that would allow his DBAs to effectively troubleshoot Sybase performance

ORGANIZATION PROFILE

Financial Security Assurance, Inc. (FSA, www.fsa.com) is the principal operating subsidiary of Financial Security Assurance Holdings Ltd. FSA provides financial guaranty insurance for asset-backed securities, municipal bonds and other structured obligations in the global markets, and has about 400 employees worldwide.

INDUSTRY

Insurance

SOLUTION

Application Performance Management, Storage Management

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Luis Morales

Director, MIS

Financial Security Assurance

Critical applications are performing 20% better on average, thanks to Symantec Indepth for Sybase

problems and failed processes, he wanted to see Symantec Indepth for Sybase in action. But he had to be certain that Indepth could handle FSA's problems.

"Jeff gave a demonstration that showed us how Symantec Indepth for Sybase would help us do a deep dive into the SQL code," Morales says. "That really sold us on the product."

"After I installed Symantec Indepth for Sybase, the DBAs were getting useful information about their applications within minutes," Garbus adds.

Satisfied with the proof of concept, FSA bought Symantec Indepth for Sybase. Garbus designed a custom training course for the DBAs with an eye toward getting them up to speed in the shortest possible time. "We focused on actual problems in their code and tailored the training to their specific needs," he says. "Instead of a week-long class, we were able to get three DBAs up and running on Indepth in just 3 one-hour sessions. That saved nearly three weeks of staff time."

Morales also turned to Symantec for security assistance: "Symantec Consulting Services worked with us on a penetration test for some of our Web apps. They were instrumental in validating our whole Web infrastructure."

The Results

One critical operation for FSA is month-end processing. "We're under a tight deadline to close our books," explains Morales. "We need that overnight process to run successfully and accurately. When the overnight run had problems, the next day we would have to do a manual workaround. That could take 20 man hours or more. We've eliminated that cost with Symantec Indepth for Sybase."

In one case, a critical batch job—scenario analysis needed by a unit managing a specialized investment portfolio—took 47 hours to complete and had to be run over the weekend. Using Symantec Indepth for Sybase, Morales' team identified some Sybase maintenance routines that were not running. They also found that the data was not indexed optimally, and corrected that problem. Morales credits Soaring Eagle with recommending a different indexing strategy. "When you can identify the long-running SQL, it's a simple matter to optimize it or reselect indexes. The trick is finding it in the first place," says Garbus.

The result was staggering: The job completed in just 30 seconds, a 99.98 percent improvement. "We run it many times a day now," says Morales. "So that team can try multiple what-if scenarios and have a high degree of confidence about portfolio performance."

Overall, Symantec Indepth for Sybase has made a significant contribution to FSA's performance. "We've improved performance an average of 20 percent for several dozen applications," says Morales. "And on the development side, our DBAs are now more proactive. They can test multiple scenarios and identify performance problems before they reach production. That feedback is very helpful to application developers as well."

SOLUTION AT A GLANCE

Key Challenges

- Support fast growth by maximizing availability
- Reduce costs
- Enhance data protection while minimizing backup window
- Streamline storage management
- Reduce troubleshooting time on database-related problems

Solution

Performance management for Sybase databases supporting key business application suite with storage virtualization for database servers

Symantec Products

- Symantec Indepth™ for Sybase
- Veritas Storage Foundation™

Symantec Global Services

- Symantec Basic Maintenance
- Symantec Consulting Services

Technology Environment

- Applications: PeopleSoft (general ledger and accounts payable), custom transaction analysis and processing
- Databases: Sybase 12.5.4
- Servers: Sun Fire E2900 servers running Solaris Operating System 8, 9, and 10
- Storage: EMC CX 700

Business Results

- 99.98% performance improvement for one key batch process (run time decreased from 47 hours to 30 seconds)
- Avoided \$2,000 workaround cost per failure of overnight batch processing
- 20% overall improvement in application performance
- Ability to run multiple scenarios to test "what-if" cases
- Saved almost three weeks of staff time with customized training delivered by Symantec partner Soaring Eagle Consulting

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CEO

Soaring Eagle Consulting