



Symantec Corporation

CUSTOMER SUCCESS

Reducing Troubleshooting Time 80 percent at Symantec-with Precise i³ Software-Improves Response Time for Customers

More than 500 databases enable Symantec Managed Security Services and Symantec DeepSight Threat Management Services to provide critical security information to Symantec's most security-conscious customers. Precise i³ software allowed the teams behind these services to increase key application performance up to 15 percent, reduce troubleshooting time by 80 percent, save over \$60,000, and provide rock-solid service to Symantec customers.

When security is critical...

Many of the organizations that protect the most sensitive data, including financial, healthcare, defense, law enforcement, or other types of organizations, count on Symantec solutions—and two Symantec services in particular.

One is Symantec Managed Security Services (MSS). It's designed to allow organizations to cost-effectively outsource their security management, monitoring, and response operations to Symantec Internet security experts.

Another is Symantec DeepSight™ Threat Management Service. This service takes advantage of Symantec's unsurpassed access to thousands of Internet attack sensors worldwide and other exclusive sources to aggregate security incident information.

Subscribers can use DeepSight Threat Management Service (DTMS) to track security events globally and receive early warning of active attacks. The service also provides them with expert analysis that enables them to prioritize threats—and their IT resources—to optimize protection against a potential attack.

Enhancing service performance

Behind the scenes, these two Symantec services depend upon rapid analysis and processing of large quantities of data. They draw on hundreds of Microsoft SQL database instances.

Organization Profile

Symantec Corporation (www.symantec.com) is the world leader in providing solutions to help individuals and enterprises assure the security, availability, and integrity of their information. Headquartered in Cupertino, Calif., Symantec has more than 15,500 employees and operations in more than 40 countries.

Industry

Computer and Software

Solution

Application Performance Management

“We don't have to work out a problem's cause step-by-step because with Precise i³, it's almost always sitting there staring you in the face.”

Colin Stasiuk

Principal Security
Infrastructure
Administrator
Symantec
Corporation

The Precise application performance management solution saved \$62,400 in labor costs

In the fall of 2005, to help ensure availability and fast response time for Symantec customers, the IT team behind each service wanted to optimize database and application performance, proactively prevent bottlenecks, and minimize delays.

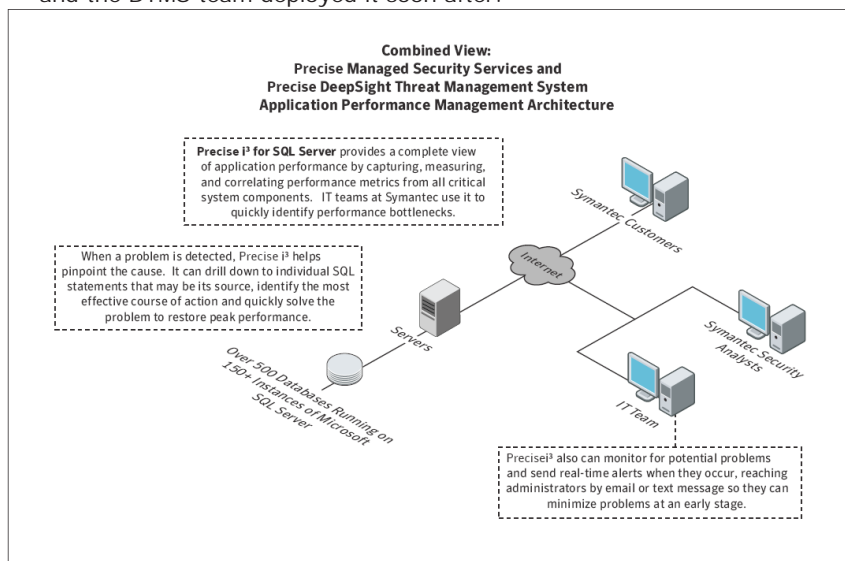
Both services faced the same basic challenge, according to Michael Mulville, a director and infrastructure administrator at Symantec. "We wondered why certain SQL calls were taking so long to respond back," he says. "Some customer reports were running for longer than they should. A few of them were crashing the databases and we had to stop and restart the database processes. When we discussed these challenges internally, we were referred to the Precise i³ software product team."

Precise i³: an eye for spotting trouble

The services teams evaluated Precise i³ for SQL Server software and discovered it provided the application performance management capabilities they were looking for.

"It lets us proactively monitor, analyze, and tune SQL Server databases," Mulville explains. "Precise i³ for SQL Server captures, measures, and correlates performance metrics from all critical system components. When problems are detected, our staff uses Precise i³ to locate and drill down to the SQL statement causing the problem. It helps us identify the most effective course of action, and restore peak performance."

The MSS team chose to deploy Precise i³ for SQL Server in late fall of 2005, and the DTMS team deployed it soon after.



Ensuring service on demand

The most important result for Symantec customers is increased reliability and performance of the databases they rely on for critical security information.

At DTMS, performance has improved by 15 percent, reducing customer

wait times for data and responses. There has also been a 15 percent reduction in database incidents (outages, slowness, and other issues) through i³'s ability to proactively spot and fix problems before they become larger ones.

"When we migrated to a new version of the DeepSight Threat Management Service," says Colin Stasiuk, a principal security infrastructure administrator at DTMS, "there were some performance problems caused by queries migrated from the old system. Procedures were blocking each other because of the way statements were written.

Staring you in the face

"When a process blocks a process which blocks a process, there's no intuitive way to see this except with Precise i³. It has 'current activity' and other tabs that show which statements take the highest amount of time and processing to execute.

"We don't have to work out a problem's cause step-by-step because with Precise i³, it's almost always sitting there staring you in the face. We can focus on fixing instead of finding."

Summarizing the Results

Kelshaw summarizes his experience using Precise i³ software: "It really is a remarkable product. I strongly recommend that any company experiencing capacity and performance management problems should evaluate Precise i³. It has transformed the production environment for one of our most critical applications, delivered a 156 percent return on investment, and led to significantly more efficient product release cycles."

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80 percent faster problem solving

As a result, the DTMS team is seeing an 80 percent reduction in troubleshooting time. "SQL performance problems that use to take about a week and a half to fix now take about two days," Stasiuk says.

Another useful feature of Precise i³, the team says, is its Performance Warehouse, which retains historical data. Says Stasiuk: "When we have rollouts, Precise i³'s Performance Warehouse lets us look back and review factors like the network I/Os, wait time, and log waits. We can see if a spike or drop in performance correlates with a rollout.

Many times Precise i³ has helped us decide to roll back a new feature and tweak it before it caused an issue."

Saving \$62,400

During a recent development project, Precise i³ saved the team's database administrators enough time on troubleshooting that they could do much of the development work themselves. This saved the team \$62,400 that they would have paid for six months of work from an additional database developer.¹

The team also uses Precise i³ to monitor which jobs demand the most compute resources. "We then can schedule them outside of peak processing periods," Stasiuk says, "to keep our response times for customers short."

Reducing the need to spend \$8,000

Managed Security Services (MSS) is seeing a five-percent increase in performance due to Precise i³, and the solution has enhanced the team's ability to diagnose and fix bottlenecks and slowdowns.

"In one day, Precise i³ pinpointed the exact SQL statement that was causing the problem," Rotan remembers. "Meanwhile, the Microsoft SQL technical support expert worked for a week at about \$8,000 to unwind the SQL files dump, and ended up verifying Precise i³'s finding."²

The SQL statement was tweaked and fixed. The access violation error

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Jim Rotan II

Principal Security
Infrastructure
Administrator

Symantec
Corporation

Business Drivers

- Enhance customer satisfaction by improving application performance and response times
- Offer better customer service by proactively identifying and addressing potential performance
- Increase operational efficiency and reduce IT overhead

Technology Challenges

- Enhance ability to monitor, analyze, and tune SQL server database to optimize
- Enable capture, measurement, and correlation of performance metrics throughout system
- Enhance the ability to detect and correct the root causes of database degradation
- Enable proactive alerts about customized warning thresholds to be transmitted to IT staff
- Reduce application troubleshooting and problem resolution time

Solution

- Precise application performance management integrated with SQL databases

Precise Products

- Precise i³ for SQL Server

Technology Environment

- Applications: Proprietary security monitoring and data-analysis applications
- Database: More than 500 databases of 150+ instances of Microsoft SQL Server 2000 (SP4) Windows 2003 X64 (SP1)r
- Storage: Dell EMC CX700 and 3Par S400

ended, and a key report was available. "Traditionally we'd use native SQL tools to troubleshoot a problem," Rotan explains. "With Precise i³, the kind of troubleshooting that takes a week can now happen in a day. That means better service to Symantec security analysts, and the Symantec customers counting on those analysts. Going forward, Precise i³ can also reduce our need for outside help."

Solving problems at an early stage

MSS is about to complete a deployment of IBM NetCool network management software, and likes the fact that Precise i³ can be integrated with NetCool as a tool for monitoring database performance. When preset performance thresholds are reached, Precise i³ proactively sends alerts that are channeled through NetCool to reach DBAs and other administrators by text message or email, enabling them to minimize potential problems at an early stage.

"Precise i³ will also help us in capacity planning," Rotan says. "With it, we'll be able to monitor database growth and performance as the service grows, and determine when we need to scale up, so we can use funds with greater efficiency."

All told, MSS projects 100 percent payback in less than 12 months.

"The difference Precise i³ makes for Symantec customers," sums up Mulville, "is increased uptime and better performance—with less delay in getting results. In the security business, that's especially critical. We appreciate Precise i³."

More customer success stories can be found at: www.precise.com

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Director, Infrastructure
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BUSINESS VALUE AND TECHNICAL BENEFITS

Service Performance/Reliability

- Increased service stability through 15% reduction in database incidents at DepSight Threat Management Services (DTMS)
- 15% increase in service performance at DTMS
- 5% increase in service performance at Managed Security Services (MSS)
- Increased ability to proactively set and monitor performance thresholds and automate alerts

Operational Efficiency/Savings

- 80% reduction, from five days to one, in diagnosis and solving problems at MSS
- 80% reduction, from 10 days to 2, in diagnosing and solving problems at DTMS
- \$62,400 in costs avoided by eliminating six month of consultant time at DTMS
- Increased ability to avoid expense of out side technical support

Payback

- Projected 100% payback in less than 12 months at MSS
- Projected 100% payback in less than 10 months at DTMS