

Guardium®

Customer Success Story

Organization: National Library Board

Headquarters: Singapore

URL: <http://www.nlb.gov.sg>

Industries: Government, Education

Employees: More than 900

Number of Libraries: 40 (national, regional, & local)

National Library Board of Singapore



*"OUR SERVERS ARE MEANT FOR INTERNET USERS, LIBRARY USERS, AND CORPORATE USERS, IN ADDITION TO THE TRUSTED USER (FOR EXAMPLE, A SYSTEM ADMINISTRATOR) WHO MAY INADVERTENTLY OR MALICIOUSLY MANIPULATE DATA. WEB-APP FIREWALLS AND SCANNERS WATCH HTTP TRAFFIC, BUT THEY DO NOT ADDRESS DATABASE COMMUNICATIONS FROM TRADITIONAL CLIENT-SERVER APPLICATIONS OR THE SQL COMMAND LINE (FOR INSTANCE, SQL *PLUS IN ORACLE). GUARDIUM'S SQL GUARD – AN INTELLIGENT, REAL TIME DATABASE SECURITY MONITOR – WAS ABLE TO INSPECT DATA STREAMS, DETECTING AND PREVENTING INAPPROPRIATE ACTIVITY."*

~ MR. SUNG KUAN, SENIOR MANAGER, TECHNOLOGY SOLUTIONS AND GOVERNANCE AT THE NATIONAL LIBRARY BOARD

Overview

The National Library Board needed to:

- Extend data availability to internal and external users
- Securely manage and monitor contract developers with database access
- Quickly identify inadvertent or malicious data manipulation
- Maintain database integrity and performance after taking over management of database servers from a hosting vendor

Guardium provided:

- Real time monitoring, reporting, and alerting
- Capabilities for swift follow-up on access activities and exceptions
- Automated database security to minimize the NLB's workload
- Tightened security to enable safe extension of information access to all users

At the forefront of innovation

The National Library Board (NLB) was established in 1995 to transform library services in Singapore, bringing them into the information age. The NLB is recognized as being at the forefront of technology adoption, pursuing a mission of expanding learning capacity and developing a relevant and responsive library system with a rich array of information services.

"We want to ensure that our databases' integrity is maintained. Thus, we needed a tool that would enable us to monitor and manage access to our database," said Mr. Sung Kuan, Senior Manager, Technology Solutions and Governance at the NLB. "Our servers are meant for Internet users, library users, and corporate users, in addition to the trusted user (for example, a system administrator) who may inadvertently or maliciously manipulate data... If there is any suspicious traffic, the tool must be able to alert us and enable us to trace the source."

He went on to say, "The tool must allow us to expediently identify areas in our application code that access the database when there are problems associated with data integrity."

In addition, the NLB wanted to lower its workload by automating database monitoring, reporting, alerting, and auditing processes. In order to do so, the organization required the assistance of a unique and comprehensive database security and compliance solution.

Mr. Kuan researched several different options. "Some tools provide limited vulnerability assessments. However, they do not provide active real time monitoring and control."

Once Mr. Kuan was introduced to SQL Guard by MARASI International, however, he quickly recognized that this was the solution for which he had been searching. In Guardium, he found an innovative leader that offered a first-of-its-kind, flexible, non-intrusive security and auditing product – the perfect investment for an organization as technologically advanced as the NLB.

A convincing test run

"The NLB contacted MARASI International as Singapore's value added distributor of Guardium products," said Mr. Rick Ng, Sales Director at MARASI International. "MARASI works closely with Guardium to deliver a complete range of quality solutions focused on database security, so we were happy to assist the NLB."

Mr. Ng arranged a SQL Guard test with the NLB representatives. "Since the NLB representatives were already somewhat aware of SQL Guard's database security and auditing capabilities prior to the testing phase, it was easy for them to understand how to utilize the machine so that they could reap the greatest benefits," said Mr. Ng.

"After a quick implementation and configuration process," he continued, "We were able to gather SQL server client traffic and display it in a well organized manner. We could then revise their requirements and report formats, collect questions, and make adjustments as necessary to quickly and efficiently enable the NLB to get the results they needed."

At the end of the test period, the NLB concluded that SQL Guard was the solution they required to safeguard their databases.

Extending the boundaries of database security

"Web-app firewalls and scanners watch HTTP traffic, but they do not address database communications from traditional client-server applications or the SQL command line (for instance, SQL*Plus in Oracle). Guardium's SQL Guard – an intelligent, real time database security monitor – was able to inspect data streams, detecting and preventing inappropriate activity," explained Mr. Kuan. "It identified changes to privileges and metadata, and looked at content and user behavior to identify unauthorized activity."

He continued, "The database security solution manages events by aggregating and correlating information to automatically build an activity baseline. In addition, SQL Guard audits the database without a performance hit to the database itself, leveraging this information to understand all activity involving relational databases.

"SQL Guard enables us to monitor and control data usage at the core, thereby safely extending data availability to internal and external users."

Future plans

"As we enhance our IT security process and migrate some of our databases to a newer platform," said Mr. Kuan, "We will need to use a Guardium product to supplement the ones we already have."

Mr. Ng concluded, "We are excited to continue working with the NLB and to help them increase process efficiency while enhancing their database security with Guardium's unique and powerful solutions."