

# Gamania Group tightens security to strengthen game development capability



**“HP Fortify Source Code Analyzer has greatly enhanced the quality of our programmers’ work. Previously, hundreds of security weaknesses could be found in the programming projects of our subsidiary companies. These vulnerabilities have now reduced by almost 90 percent.”**

—Huang Weiqiang, information security manager, Gamania Group

**HP customer case study**  
HP Fortify helps leading game maker combat security threats

**Industry**  
Entertainment

## Objective

Ensure the safety of gaming software and websites to protect gamers’ online privacy and interests, and to support future business development

## Approach

Test security assessment software to understand the functions and features of alternative solutions. Principal decision criteria were logic programming capability and multi-language support

## IT improvements

- Enhanced the ability to find security weaknesses. In just six months 130 programs were inspected and 4,800 high-grade security weaknesses corrected
- Increased quality of secure code from subsidiary companies; reducing the number of security vulnerabilities by almost 90 percent
- Adopted multi-language inspection reports, improving communications and accelerating application modifications

## Business benefits

- Improved the safety and quality of in-house and outsourced application development; reducing customer migration and improving business growth
- Accelerated game product time-to-market and increased product lifecycles
- Increased efficiency and reduction in the cost of legal compliance
- Ensured safe and stable operation of host systems; reducing business risks and loss



Security is vital in the computer gaming industry as external attacks can cause financial loss and damage the company’s image. To protect its host servers and game development applications, Taiwan’s online gaming market leader Gamania Digital Entertainment has a dedicated Corporate Information Security Department.

This is a vital support element as the business looks to expand globally. Gamania recently achieved an annual growth of 24 percent and now accounts for more than 35 percent of Taiwan’s online gaming market (a local market worth \$540 million (NTD15.9 billion) according to reports in 2011 from The Taiwan Market Intelligence & Consulting Institute). International expansion has also made it the largest online game provider in Hong Kong and the sixth largest in Japan, with popular titles such as Langrisser Schwarz, TiaraConcerto, Dream Drops and CoreBlaze.

## Security for growth

While this growth was good news for Gamania, it also made security management more challenging. Apart from fast and reliable host systems, superior quality and content of computer games are critical success factors for gaming companies to retain players' interests. With 130 to 140 websites to maintain, and having to manage 100 to 200 web programmers' different styles of coding, Gamania faces challenges of keeping consistent quality and secure program code. The need for an automated application security assessment tool was heightened with the company's aggressive market expansion and increase in number of projects.

Because HP WebInspect software is able to scan Ajax, SOAP, JavaScript, Flash and other next-generation Web 2.0 Internet applications, Gamania implemented it across the infrastructure to scan for security vulnerabilities. To cope with an increasing number of games being developed and to enhance the efficiency, safety and quality of the development process, the company also implemented HP Fortify solutions. After four months of evaluation and testing, Gamania decided on the HP Fortify Source Code Analyzer (SCA) static code security testing tool and the HP Fortify Software Security Center (SSC) detection tool. Installation was completed within one day and Gamania found that the products were easy to use, requiring no special education or training.

## Multi-language support

Huang Weiqiang, Gamania information security manager, says, "One of the important reasons we chose HP Fortify SCA is because it uses a very different detection method compared to its competitors that look at a single line of programming, whereas HP Fortify SCA assesses the entire application's compiled logic."

Gamania's Research and Development team is deployed across the entire Asian region including regions where developers are non-native English speakers. HP Fortify SCA supports up to 18 languages and offers superior Asian-language assistance than competing products. Offering local language support improves communication between head office and subsidiaries and speeds up throughput.

HP Fortify SCA and HP WebInspect significantly increase Gamania program development security and quality. Gamania now uses HP WebInspect to run a monthly fixed scan looking for web page security weaknesses. There is an almost 100 percent accuracy rate and the software instantly adjusts firewall settings, thereby automating security management.

Over a six month period, the Corporate Information Security Department inspected 130 development projects and corrected approximately 4,800 high-level security issues. If these flaws had not been discovered, they could have been time-bombs to serious issues.

"HP Fortify SCA greatly enhances our programming staff's work quality," notes Weiqiang. "In the initial stages of adopting SCA, tens to hundreds of security weaknesses could be found in subsidiary company programming projects. For recently developed projects sent for review, program security weaknesses numbered less than ten; a reduction in security vulnerabilities of almost 90 percent."

## Improved outsourcing

Software development outsourcing quality has increased, as has speed. The Corporate Information Security Department now conducts security checks on outsourced work, producing a precise, clear inspection report. This provides outsourcing vendors with an accurate basis for program modification. Gamania also uses the reports to learn the capabilities of each developer so future projects can be delivered to the appropriate vendors, ensuring product safety and quality.

"With the help of HP Fortify SCA source security inspections, our programming team has gradually developed good concepts and habits for version control. We've moved towards the automation of program development that also enhances efficiency," says Weiqiang.

These improvements include integrating the development process for all the codes and creating an automated build server. Automatic scanning is done overnight so programmers can readily view the inspection reports the next day. This effectively improves the program development process because HP Fortify SCA scans point out any problematic codes and suggests modifications. It also creates an effective learning tool for developers.

## Customer solution at a glance

### Software

- HP WebInspect
- HP Fortify Source Code Analyzer
- HP Fortify Software Security Center



Stringent security checks allow the company to meet regulatory requirements, including credit card transactions and data protection. Gamania uses HP Fortify's security statements and warning functions to examine programs in-house, saving the cost of external consultants and shortening the time taken to be in compliance.

In future, Gamania plans to further strengthen its Intrusion Prevention System (IPS) with a complete enterprise security platform, enabling it to develop more robust application programming and website capabilities. This will fortify its Research and Development (R&D) capabilities and enable the secure delivery of core technology to support its long-term business goals.

### For more information

To read more about HP Fortify software, go to <http://www.hpenterprisesecurity.com/products/hp-fortify-software-security-center/>

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