Global Payments makes data security a top priority in all aspects of its operations

New tool strengthens–and simplifies–Quality Assurance's ability to incorporate application and data security into the testing process

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Global Payments Inc.

HP customer case study: HP Software helps identify and address potential security issues early in the development cycle

Industry: Financial

Objective:

Global Payments must ensure the security of data transactions it performs on behalf of its customers.

Approach:

Incorporate HP QAInspect into existing software development QA processes to identify potential security issues early, when they are less costly to address.

IT improvements:

- Additional layer of security testing
- Early identification of vulnerabilities in software under development
- Integrated with HP Quality Center software, new security testing tool requires no additional staff or servers

Business benefits:

- Reduced risk of data security issues impacting business or customers
- Lower cost of "fixes" with less impact on application development timelines
- Rapid return on investment, with no overhead added to QA processes

It's a given that data security is a fundamental corporate priority. The question is: How best to make data security an on-the-ground reality? Is it possible to improve application and data security in the QA testing process—without adding excessive expense and effort?

At Global Payments Inc., one of the world's largest providers of electronic transactions processing services, the answer is yes. By using HP Software to integrate data security testing into their software quality assurance (QA) processes the companies QA department has been able to identify, early in the Software Development Life Cycle (SDLC), application and data security issues more easily, allowing the delivery organizations to address them earlier and more cost-effectively.

Billions of transactions annually

Every year, millions of businesses worldwide, ranging from major financial institutions to mom-and-pop corner stores, depend on Global Payments to handle billions of transactions, including credit and debit card payments, cash transfers, and financial reporting. The company also provides point-of-sale, back-office, and treasury management/EDI solutions for merchants, financial institutions and treasury managers. And, that is why Global Payments institutes multiple lines of data security processes throughout the organization.

To ensure the integrity of its customer data, Global Payments uses multiple, state-of-the-art procedures. Like other security-minded organizations, the company has long included "penetration tests" or simulated attacks on its production-ready applications performed by security specialists. This type of testing, however, has a fundamental drawback: security issues, if they exist, are discovered late in the development process—when fixing them is expensive, disruptive and often requires extensive re-coding.

The impact is significant, notes Mike Dwyer, Vice President, Quality Assurance, Global Payments. Dwyer, who has managed software Quality Assurance departments for both private and public organizations, is a strong proponent of integrating security testing into the development process.

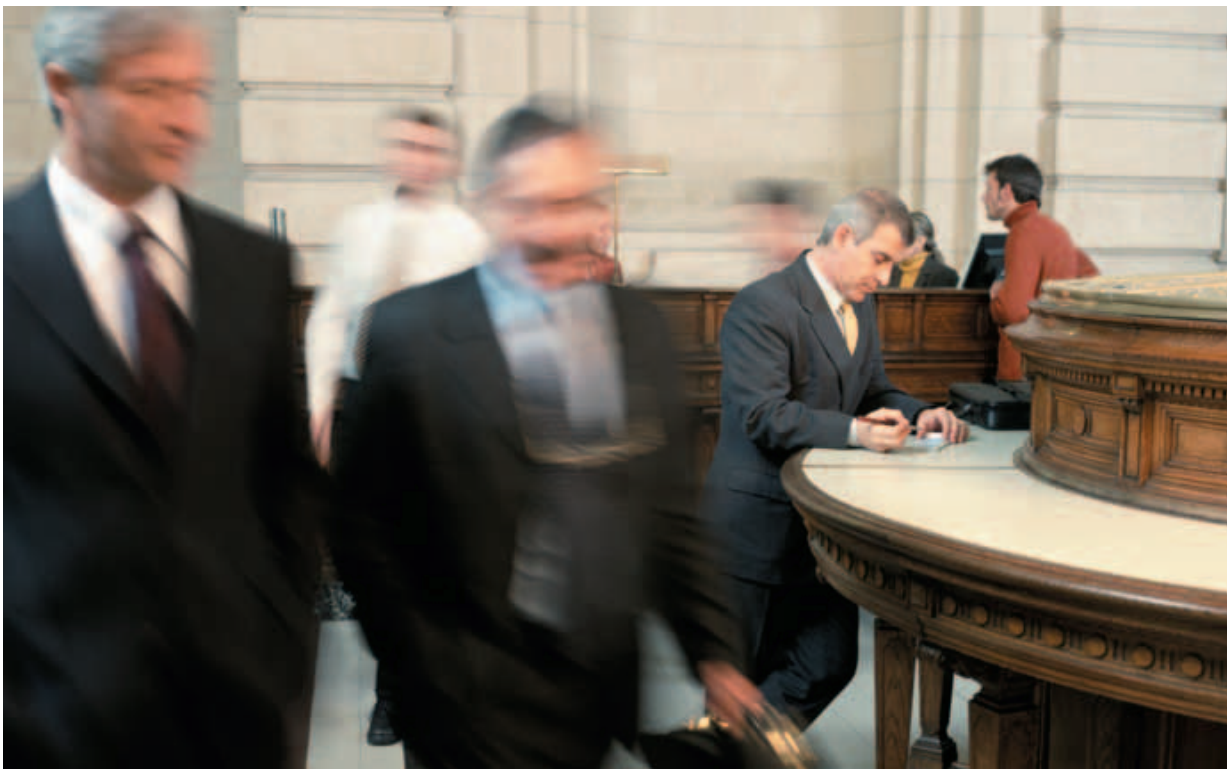
"Security issues are often deeply rooted in an application's code," Dwyer says. "Developers often have to go into the software's core components to fix security vulnerabilities." As such, the later these vulnerabilities are discovered—the more difficult and expensive they are to address—and the more likely they are to cause business-critical software release schedules to slip.

> *"I'd recommend this for anyone who buys this tool, because most people in QA haven't been exposed to security testing. The course wasn't intended to transform my team into security experts, but to raise their awareness about security issues and teach them how to get the most out of this tool."*
> Mike Dwyer, Vice President, Quality Assurance, Global Payments

Early is better

The solution, says Dwyer, is to make security testing an integral part of the software quality assurance (QA) process and to perform security testing early in the application development cycle. "Corporations have learned to perform functional testing on an ongoing basis during software development because it enables them to identify functional issues early, when they are easier and less expensive to fix," Dwyer notes. "Integrating security testing into QA is smart for precisely the same reasons."

Global Payments uses HP QAInspect, a tool added to the HP Software portfolio with the recent HP



"QAInspect lets us integrate automated security testing into our QA processes without adding time or overhead. We help reduce the risk that security issues will only be discovered late in our development cycles—when they'll be relatively cumbersome and expensive to fix. It's a tremendous return on a very modest investment."

Mike Dwyer, Vice President, Quality Assurance, Global Payments Inc.

acquisition of security software firm SPI Dynamics. QAInspect lets QA professionals execute automated Web application security testing scripts as part of the QA process.

"It was very fast and easy to implement. It was essentially 'click and go.'"
Mike Dwyer, Vice President, Quality Assurance, Global Payments

Because QAInspect is integrated with HP Quality Center software, Global Payments didn't need to purchase additional servers to run the tool. Nor did staff need to become familiar with a new interface. As a result, says Dwyer, implementation costs were minimal and setup was streamlined. "It was very fast and easy to implement," Dwyer says. "It was essentially 'click and go.' "

Dwyer did send five of his staff members to a QAInspect training class. "I'd recommend this for anyone who buys this tool, because most people in QA haven't been exposed to security testing. The course wasn't intended to transform my team into security experts, but to raise their awareness about security issues and teach them how to get the most out of this tool."

Reports something every time

"Once QAInspect was in place, it immediately began earning its keep," says Dwyer. "It has never failed to report on potential security issues when we run it. Some of these are false positives, of course—as is always the case with security tools—but in the majority of cases, the reports it generates give us valuable information that supports the work of our development teams."

Examples of the kind of issues QAInspect can identify are SQL injection vulnerabilities, which can be exploited by hackers to trick databases into returning unauthorized information via web form queries. "There are a number of common vulnerabilities for which fixes are readily available," Dwyer says. "QAInspect identifies them early in the development cycle so that they can be fixed more cost-effectively. It's a powerful adjunct to other security processes like penetration testing, with the potential to significantly reduce the risk of unplanned development issues."

The beauty of the solution, he says, is that Global Payments QA department didn't have to hire security specialists or develop in-depth security expertise. "The software does the work," he says. "My staff will attempt to eliminate the false positives of course, but then essentially we turn the QAInspect report over to our developers, who determine what actions, if any, need to be taken."

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In addition, says Dwyer, "The time QAInspect has added to our QA processes is negligible. Other than the licensing costs, we haven't added any overhead to our QA operations."

Customer solution at a glance

Primary application
QA testing

Primary software
- HP QAInspect
- HP Quality Center Software

HP Services
- Training

Most importantly, though, QAInspect helps Global Payments protect its data and its customers. "Security breaches hurt corporations in two ways," says Dwyer. "First, there is the loss of data itself, and the fiscal consequences of that loss. But even more troubling is the damage security breaches do to a company's reputation. Global Payments' customers trust us to ensure that the data we handle on their behalf is fully protected.

"Needless to say we'll make any investment necessary to ensure their trust is merited," Dwyer concludes—which is why, he adds, Global Payments leverages a broad array of security programs and procedures. "QAInspect represents one part of our investment in security technology," he says. "For us, reducing our development costs is a bonus."

To learn more, visit www.hp.com/go/software

This customer's results depended upon its unique business and IT environment, the way it used HP products and services and other factors. These results may not be typical; your results may vary.

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