



#### Case Study

# Trade-Van Significantly Reduces Its Scan Time and Improves Developer Morale



#### Location

Taiwan

#### **Checkmarx Solutions**

Static Application Security Testing

#### **Partner**

Galaxy Software Service

#### **Key Takeaways**

- Reduced scan time from 2 days to 3 minutes
- improved time to deployments
- Met compliance requirements
- **Enhanced developer adoption**

#### The Need

# AppSec tool to secure its development life cycle

Trade-Van Information Services Co., Ltd was established in 1996 as a spin-off of "The Cargo Clearance Automation Planning and Promotion (CCAPP) Task Force." Much like CCAPP which was responsible for building a clearance automation and customs duty payment system to speed up customs clearance operations and reduce trading costs, Trade-Van's mission is to continue with these efforts while also researching and developing state-of-the-art technology and providing a full range of value-added network services across multiple industries.

Since Trade-Van's projects — including the clearance automation and customs duty payment system and online tax declaration system — house personally identifiable information (PII), Trade-Van applications cannot withstand a breach. With that in mind, Trade-Van immediately got to work introducing security best practices, starting with the introduction of the Capability Maturity Model Integration (CMMI) into its software development process to identify areas for process improvements and decrease

risk in software development. Trade-Van was also quick to introduce application security (AppSec) scans, a Security Operations Center (SOC) monitoring platform, and attain its ISO 27001 information security certification.

Trade-Van soon realized the importance of securing its software development life cycle (SDLC) and implemented a policy, "never launch without source code inspection." Trade-Van's internal developers were initially tasked with manual code reviews; however, due to a large number of applications and software updates, Trade-Van quickly realized that the only way to ensure a secure SDLC was to adopt a source code scanning tool.

According to Ming-Sheng Chiu, Deputy Manager of the Quality Assurance Centre of Trade-Van, the first source code scanning tool the team implemented was far too inefficient — only capable of completing full scans and taking up to 48 hours per scan. Trade-Van went back to the drawing board, connecting with its agent, Galaxy Software Services (GSS), to find a fast, accurate, easy-to-automate source code scanning tool that offers both full and incremental scans.

#### The Solution

# **Checkmarx SAST for its fast and incremental scans**

After prudent evaluations, Trade-Van selected Checkmarx Static Application Security Testing (SAST) for its source code scanning solution. "During 2011 and 2012, we actively assessed other source code scanning tools," Chiu pointed out. "It wasn't until GSS introduced Checkmarx that we knew we found the right fit."

With the execution of a proof of concept, it was confirmed that Checkmarx is not only faster but also allows for incremental scans. Moreover, Checkmarx SAST can be automated and integrated into developers existing tools and processes and it can generate reports according to international regulatory requirements such as OWASP Top 10, OWASP Mobile Top 10, SANS Top 25, PCI DSS, etc. Therefore, as soon as the Trade-Van proposed Checkmarx SAST, it immediately gained the support of senior management, and the decision was finalized.

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Ming-Sheng Chiu

Deputy Manager of the Quality Assurance Centre, Trade-Van

#### The Results

#### + Quickly adopted Checkmarx environment

Thanks to the professional services capability of the GSS team, the introduction process of Checkmarx was extremely smooth. GSS not only conducted optimal planning for the host capacity based on the current and future inspection capacity required by Trade-Van, but also arranged educational training, system installation, user consultation, and other services, allowing developers to adapt to the new environment painlessly.

#### + Significantly reduced scan time

Since launching **Checkmarx SAST**, Trade-Van is able to conduct scans at a much faster pace. Instead of taking up to 48 hours to conduct one scan, it now takes three to five minutes.





#### + Easily met compliance requirements

Trade-Van is able to meet compliance and policy requirements with ease. By setting regulatory and criticality-based flaw policies, Trade-Van receives alerts from Checkmarx when updates are required to remain compliant with specified regulations or when a flaw meets its criticality threshold. Heng-Sheng Lin, Senior Information Security Engineer of Trade-Van's Information Security Integration Service Department, noted that alerts are currently set for low-, medium-, and high-criticality flaws. When flaws are detected and accuracy confirmed, remediation guidance is suggested, and a fix is implemented. In the case of multiple flaws, high-criticality flaws are prioritized. Once the code is deemed "ready to go," it's pushed to production.

### + Less security debt and faster time to remediation

With a fast and accurate source code scanning tool in place, Trade-Van is now more confident than ever in the security of its SDLC. There's no longer a need for developers to stagger developments due to a low-efficiency scanning tool. They can scan as frequently as needed — significantly improving time to deployments.

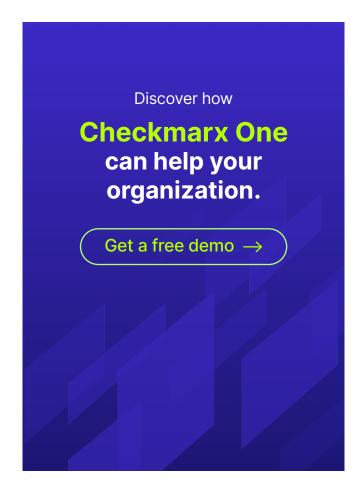
## + Substantially enhanced developer buy-in

Furthermore, with AppSec scans integrated and automated into developers' existing tools and processes, and with scan times significantly reduced, developers are seeing AppSec in a favorable light instead of as a potential bottleneck. In fact, Trade-Van developers have been actively addressing errors and working on how to avoid repeating mistakes.

#### The Future

#### Adopt more scanning tools

Trade-Van doesn't intend to stop with SAST. Its developers have been leveraging modern development practices — including the use of APIs and third-party code — and taking secure code training courses. In keeping up with the current AppSec landscape, Trave-Van recognizes the need to adopt the full suite of Checkmarx testing tools. With GSS and Checkmarx by its side, Trade-Van is confident in the security of its applications and — more importantly — the security of its clients' personal data.



### **Checkmar**

Checkmarx is the leading application security provider, offering the industry's most comprehensive cloud-native platform, Checkmarx One™. Our products and services enable enterprises to shift everywhere in order to secure every phase of development for every application while simultaneously balancing the dynamic needs of CISOs, security teams, and development teams. We are honored to serve more than 1,800 customers, including 60 percent of Fortune 100 organizations, and are committed to moving forward with an unwavering dedication to the safety and security of our customers and the applications that power our day-to-day lives.