Transport Security

Wouldn't it be nice if you earned twice as much next month? To do this, you only need to adjust your salary in the corresponding table, in a less protected system, and find a way to transfer the table entry to the production system. Is it that simple? Yes, because this vulnerability was recently discovered by us in the SAP transport system.

The transport system is used in SAP landscapes for applying updates and new developments, and for installing third-party applications. Virtual Forge has made SAP security its mission and addresses transport requests as a fundamental component in its Security Suite. The Security Suite comprises the areas of system, code, and transport security.

According to our analyses, companies transport between 3,000 and 5,000 objects on average every month. This involves the initiation of about 250 transports that contain source code-based objects, ABAP Dictionary objects and customizing. All three of these areas present specific sources of risk.

In customer-specific code, on average a critical security vulnerability is found in every 1,000 lines of code. Naturally, this should not be transported into the production system. Not because this would endanger the production system but it's because the cost of resolving these vulnerabilities rises exponentially the later this is done. In two million lines of customer-specific code, the risk of vulnerabilities entering the production system by the transport route is very high.

Roles and authorizations constitute key factors for the safe operation of the SAP system landscape. Accordingly, they are defined and maintained in complex and sophisticated models and projects. However, authorization checks can be easily deactivated or manipulated by hidden functions in transports. Identities can be changed, and authorizations can be modified. It's even possible for an entire production system to be erased entirely by transporting a single object entry.

In addition, a transport of external sources normally needs to be first imported into a system (e.g. a sandbox system) to be able to view its contents. Yet, the focus here is typically on checks targeting syntax and functionality. General security-relevant aspects are not considered – and in some circumstances can be very hard to identify manually.

The TransportProfiler and CodeProfiler solutions from the Virtual Forge Security Suite close these security gaps. Transports can be scanned in their entirety with these solutions.

Virtual Forge TransportProfiler

Protection for a system landscape needs a 'firewall' to protect against damage from transports. While internal and external regulations apply, such as the European General Data Protection Regulation (GDPR), achieving compliance with these rules in the real world is an entirely different matter.

With an architecture created with full integration and automation, Virtual Forge TransportProfiler offers protection against damaging attacks. Also, it's a revolutionary level of transparency in SAP Application Change Management, while working to improve the quality and robustness of in-house development processes.

Transports from third-party providers can be inspected before they have been imported in the SAP system. This ensures that transports are always secure before importing into your system landscape.

VIRTUALFORGE

Transports are continuously scanned and monitored as they pass from development through QA to the production system. This means that dangerous insider attacks can be identified earlier and more effectively.

To offer optimal support for current processes, the solution can be integrated into the existing SAP transport management system. On release, each transport request is scanned, and only error-free, non-critical transport requests pass on to the next system. If issues are found, the release is performed with additional checks and by applying the dual control principle.

Alongside its security aspects, Transport-Profiler offers many other benefits for SAP operations. Transports are checked for completeness and compatibility with the selected target system. Potential import errors or downgrades can be seen immediately, avoiding time-consuming corrections later.

All of this takes place automatically and fully integrated with your SAP system. Another option would be to use the Virtual Forge Security Suite as a Service, which lets you check transport requests independently from your SAP system.

Highlights:

– Prevents the manipulation of data, authorizations, and applications
– Audits the security and quality of third-party software
– Prohibits the unauthorized export of confidential data
– Integrates seamlessly with transport management
– Detects errors in transports automatically

CodeProfiler for ABAP

If transport requests contain code, a holistic auditing system must ensure that the code is thoroughly inspected. Code-Profiler for ABAP from the Virtual Forge Security Suite is the leading solution on the market for scanning ABAP code for vulnerabilities. Together, with Virtual Forge TransportProfiler, this offers you all-round protection for your SAP transport system.

Highlights:

– Automated security checks for ABAP code
– Patented data and control flow analysis
– Comprehensive reporting in the tool and as a PDF export
– Integration into the SAP development and transport processes
– Remote scan without installation in the source system

Virtual Forge SaaS

TransportProfiler and CodeProfiler can be used in a conventional on-premise setup. In addition, the Virtual Forge Security Suite as a Service offers the option of scanning transports and coding in our high-security data center-easy and quick.

Highlights:

– Checking of custom-developed ABAP code
– Validation of third-party transports and SAP add-ons
– Instant reporting of vulnerabilities with detailed criticality assessments
– Maximum encryption standards
– No installation necessary

About Virtual Forge

Virtual Forge is the leading provider of cyber security solutions for SAP. Our solutions enable companies to run their SAP applications securely.

Virtual Forge GmbH
Speyerer Straße 6
69115 Heidelberg

phone: +49 6221 868 90-0
email: contact@virtualforge.com

VIRTUALFORGE