

System Security

Do you think your SAP systems are sufficiently secure from the outside? When using sandbox systems, disabling standard users is often not considered important. However, when used to test new web applications, this combination is the perfect gateway for hackers. For example, confidential proprietary information can be stolen from the SAP system landscape and sold to competitors.

SAP system landscapes are part of a company's critical infrastructure and their complexity has risen rapidly over the last few years. This complexity harbors risks. Now, configuration errors mean many SAP systems are vulnerable to both external and internal attacks. Accordingly, Virtual Forge has established system security as one of the three core components within its Virtual Forge Security Suite. Alongside code and transport security, securing SAP systems is a particularly challenging task.

SAP solutions are now based on many different technologies that include ABAP, Java, and the new HANA database. In addition, in recent years the number of interfaces to other systems has risen exponentially. Configurations are dynamic and constantly changing.

All of these developments have led to a situation where very few SAP departments now have a comprehensive view of security relevant settings. Therefore, SAP system security is often inadequate.

To provide adequate longterm protection for SAP systems, their configurations must be monitored by means of a comprehensive vulnerability analysis. The continuous deployment of this kind of solution makes manual vulnerability checks generally unnecessary while helping you to identify vulnerabilities and potential attacks as soon as possible.



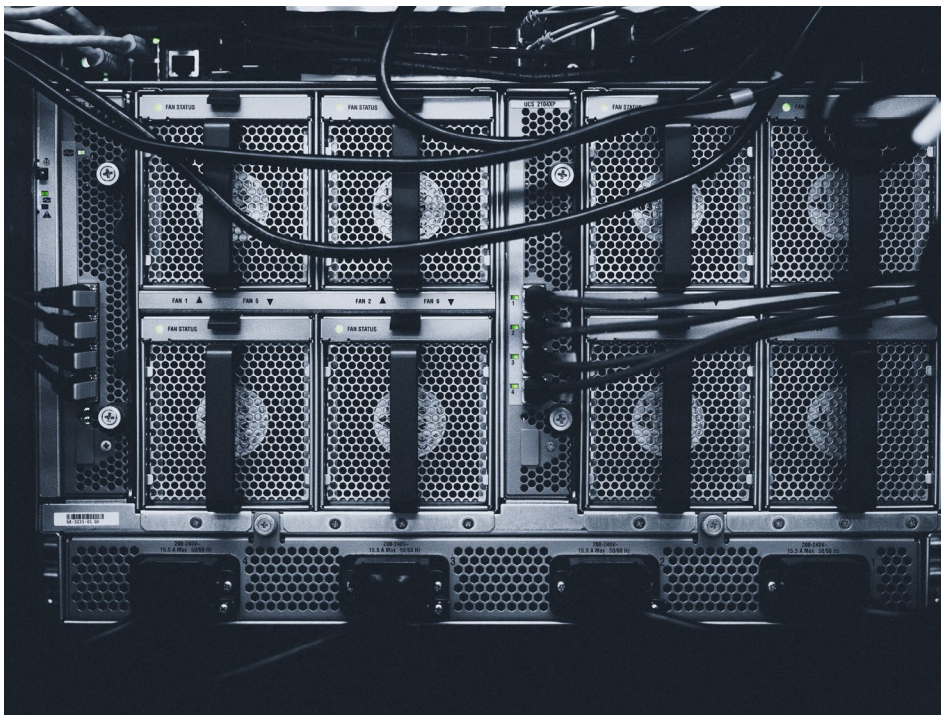
As part of the Virtual Forge Security Suite, the SystemProfiler continuously monitors the configuration of the entire SAP system landscape. The SystemProfiler addresses



key challenges that result from the increasing level of complexity and more stringent requirements now applicable for the security of SAP systems.

The various checks provided out of the box with SystemProfiler ensure that users can achieve a high level of security and quality for all SAP systems within the system landscape. The test cases supplied accordingly cover the configuration security of ABAP, Java, and HANA-based systems to provide comprehensive and platform-independent protection. This level of protection is rounded off by the option of monitoring security relevant operating system parameters. Customers who want to create their own checks have the option of programming test cases themselves and integrating these into the architecture of SystemProfiler.

Alternatively, the supplied test cases can be modified to suit the customer's needs. SystemProfiler simplifies the tasks required to achieve this by providing an over-view of the configuration status of each individual system within the company. At the same time, it offers a high level of automation for executing the checks themselves and correcting potential vulnerabilities. Flexibility is ensured by the option of creating separate security policies for individual systems. The architecture of SystemProfiler is designed so that the entire system landscape can be monitored from a single, centralized system. This monitoring is performed in the background, with SystemProfiler notifying



users proactively in the event of any irregularities. SIEM solutions, or other security products, can be integrated by using the standardized open interface.

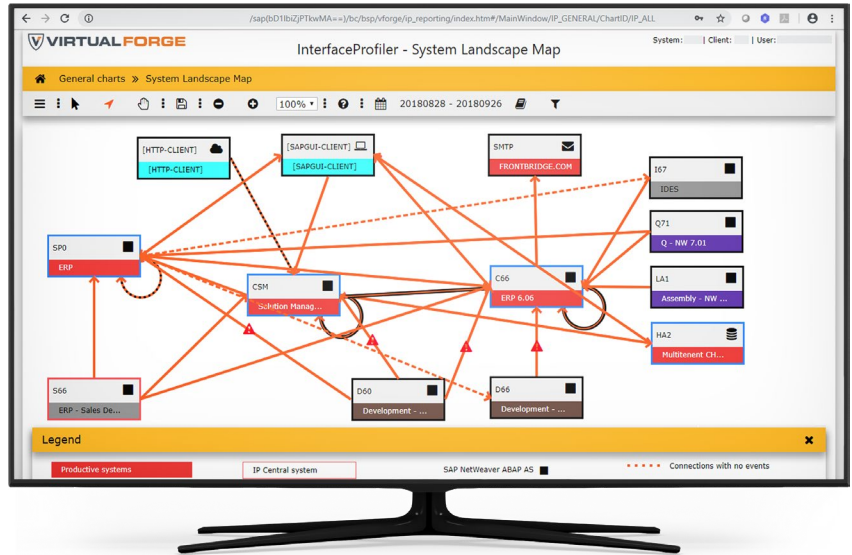
Highlights:

- Centralized architecture for continuous validation (monitoring)
- Transparent results for audits
- Comprehensive checks out of the box, extensibility to custom requirements possible
- Flexible definition of policies for the complete system landscape
- Full integration with SIEM systems
- From OS to SAP application



The complexity of business processes is reflected by the interdependencies within the system landscape. The sheer number of interfaces within this kind of system landscape offers enormous potential for attackers.

As part of the Virtual Forge Security Suite, Virtual Forge Interface-Profiler automates the analysis of the wide-ranging risks presented by interfaces in system landscapes while offering proactive and automated pro-



tection against the potential misuse of interfaces. This ensures the effective prevention of data leaks.

InterfaceProfiler helps companies to keep track of interface security within an increasingly complex system landscape. Starting from a centralized SAP system, InterfaceProfiler analyzes all the communication networks within the entire system landscape. While doing so, InterfaceProfiler audits interfaces that many users would not even recognize like the unauthorized download of lists via the SAP GUI or direct access to the database. Also, communi-

cation with external systems naturally form parts of this analysis work.

InterfaceProfiler offers the option of creating a model or ruleset to generate the target system landscape and compare it using the actual collected information. The potential risks for the company are minimized, and the economic losses are avoided when the costs of the interface analysis are significantly reduced. Also, transparency is achieved concerning the risks resulting from the interfaces.

InterfaceProfiler formats findings into a clearly structured graphical report while generating data-rich logs of all vulnerabilities detected. InterfaceProfiler produces a visual representation of the entire system landscape. The communication events can be automatically classified depending on the type of data that has been involved. Based on this classification, events can be marked or tagged with labels. This approach allows searching to be quick over large amounts of data to focus on certain types of data-flows.

Highlights:

- Comprehensive overview of all SAP interfaces
- Full transparency regarding data streams
- Automatic classification of data-flows
- Proactive approach with extensive content



About Virtual Forge

Virtual Forge is the leading provider of cyber security solutions for SAP. Our solutions enable our customers to run their SAP applications securely. Using our flagship solution, the Virtual Forge Security Suite, customers will improve their security and compliance by automating the tedious tasks involved in securing their SAP system landscape.

The comprehensive coverage of security relevant topics included in our Security Suite will provide SAP customers with full transparency on their SAP systems and applications, protecting their SAP systems and applications against unauthorized access from, e.g. cyber attacks, espionage and system downtime

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