



## Automated security analysis of ABAP™ applications Security & compliance tests for ABAP™ code

### A BIG CHALLENGE

ABAP™ is one of the most powerful and widely used high-level languages for business applications. All SAP® customers run custom developed ABAP™ programs in their IT infrastructure. Some are entirely custom made. Others, as for instance ESS/MSS scenarios, are customized and exposed as web applications.

Usually, many developer teams, different departments and external consultants are involved in the development of custom ABAP™ code. The key question is: How can you measure the security quality of your custom code in complex, constantly changing IT landscapes?

### A UNIQUE SOLUTION: AUTOMATED QA FOR ABAP™

CodeProfiler is the 1st product worldwide that provides automated testing for ABAP™, BSP and Web Dynpro ABAP™ applications. Its database embodies patterns of the relevant insecure coding practices for ABAP™. CodeProfiler contains knowledge, methodology and best practices of more than nine years of intense code analysis and research in the SAP® environment. This database, combined with a unique analysis engine, allows CodeProfiler to find known insecure coding practices in ABAP™ programs with a very high reliability. CodeProfiler is also “SAP® Certified”.

### ABOUT THE INVENTORS: VIRTUAL FORGE

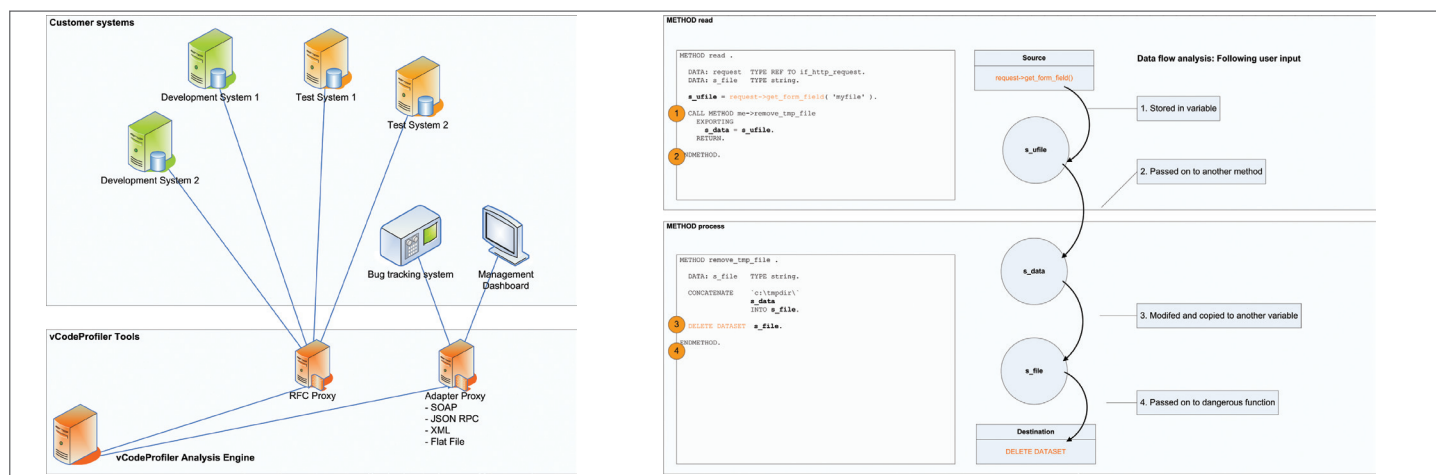
CodeProfiler was developed by Virtual Forge, the leading security experts for SAP® code reviews. Virtual Forge is the first and only company that specializes in security reviews of custom SAP® applications. SAP® itself employs CodeProfiler for internal quality assurance of its standard software.

## SAP® Certified Integration with SAP Applications

### KEY ADVANTAGES OF CODEPROFILER

Establishes a baseline security level for all ABAP™-based business applications.

- Identifies compliance violations introduced by insecure coding practices.
- Provides data flow trees for compliance tests, e.g. which code accesses a credit card number.
- Assesses the security quality of code developed by 3rd parties (consulting projects).
- Exposes backdoors potentially built into your business solutions.
- Offers detailed background information for all identified security issues.
- Allows prioritizing countermeasures by categorizing all findings.
- Accelerates the fixing process by proposing code corrections.





## Automated security analysis of ABAP™ applications

Typical scenarios: Secure ABAP™

### CONTINUAL IMPROVEMENT TO THE DEVELOPMENT PROCESS

- To determine whether the ABAP™ code in the development system is error-free, customers employ CodeProfiler early during the development stages.
- Customers use CodeProfiler in test systems to verify that their specifications have been met. It will ensure that the individual code module, in the context of the application, is secure.
- Early error detection reduces mitigation costs.
- The development organization learns and avoids future errors.
- CodeProfiler is the instrument of choice for improvement of code quality and development processes.

### SUPPLIER ACCEPTANCE CHECK

- The ABAP™ security specification should be part of the tender for outsourced development projects.
- This way, the CodeProfiler becomes part of the quality standards of the specification.
- Customers can automatically verify whether the requirements are met by the suppliers and thus gain control of the supplier process.
- Unexpected, time-consuming and change request are avoided.

### COMPLIANCE AND REVISION

- Customers employ CodeProfiler to determine which technical risks lead to regulatory requirement violations (as for example backdoors to financial transactions).
- Auditors determine which actions need to be taken by the operating department (as for example regular code analysis, to ensure compliance to external and internal guidelines).

### BENCHMARKING

- Customers employ CodeProfiler to understand and compare the quality of development projects, as well as determine the code quality of a third-party.
- This analysis permits the developments to be compared among each other, as well as against industry average.
- It fosters an effective control of corrective actions.

### VIRTUAL FORGE – THE EXPERTS FOR SECURE ABAP™

