Schwäbisch Hall Kreditservice AG

IBM Rational software helps modernize applications and close upcoming IT staffing gaps

Overview

The need

Schwäbisch Hall Kreditservice AG (SHKS) needed to modernize its aging applications so it would be easier to find the IT skills needed to maintain them in coming years.

The solution

Using IBM® Rational® software, developers rewrote many applications to a Java or web front end that interacted with valuable existing and new COBOL back-end systems.

The benefit

SHKS expects to more easily replace the staff members who have specialized skills, preserving competitiveness and market momentum.

Schwäbisch Hall Kreditservice AG (SHKS) is the IT service provider for Bausparkasse Schwäbisch Hall (BSH), a contractual savings for housing company founded in 1931. SHKS is a wholly owned subsidiary of BSH, which is the market leader in the German savings and mortgage market. SHKS is responsible for developing and implementing the processes, IT systems and data center operations for BSH.

Modernizing applications to close skills gap

SHKS needed to modernize its existing applications. In the past, the company used several Assembler applications plus third-party software to develop its host COBOL applications. Developers would create the code on the client, automatically FTP it to the host, and then compile it on the host using the IBM Enterprise COBOL 4.2 for z/OS® compiler. The third-party COBOL applications also contained a macro preprocessor that generated native COBOL code, which SHKS used in about 40 percent of its mainframe COBOL applications.

Finding staff with the skills to work in the third-party COBOL application and also in Assembler was becoming increasingly difficult. Plus, SHKS estimated that a significant number of existing personnel with those skills would be retiring within a few years. The company sought to modernize its mainframe applications so it could more easily find people with the IT skills necessary to maintain them.

The IBM solution helped SHKS modernize existing applications with a Java or web front end, and also migrate the remaining applications to preprocessor-based COBOL applications. Through this effort, SHKS can close the expected IT staff recruitment gap.

Solution components

Software
- IBM® Rational® ClearCase®
- IBM Rational Developer for System z®

IBM Business Partner
- IBM Premier Business Partner PKS Software GmbH

Standardizing on IBM Rational software

SHKS implemented IBM Rational Developer for System z® software to replace its third-party COBOL development environment for all applications that did not utilize the preprocessor macros. Using Eclipse for Java and the Rational software for COBOL, developers rewrote many applications to a Java or web front end that interacts with a COBOL mainframe back end.

Next, the company removed its host-based source repository, CA Technologies' CA Endevor software, and moved to a single source repository for all sources using IBM Rational ClearCase® software. To facilitate interactions between the host and the Rational ClearCase repository for Rational Developer for System z software users, SHKS developed a plugin framework using the remote access application programming interfaces (APIs) published by the Rational Developer for System z application. This framework allowed developers to check source code in and out of the Rational ClearCase repository to a host location and kick off builds directly on the host.

The current phase of the modernization effort involves removing the third-party runtime necessity in the COBOL applications by porting the sources to IBM technology and using the written preprocessor functions. To achieve this goal, SHKS used an automated migration engine from IBM Premier Business Partner PKS Software GmbH. This rules-based engine automates code conversion for frequently used COBOL code fragments as well as other language constructs. Using plugin extensions in Rational Developer for System z software, PKS adapted the Message Format Service (MFS) screen editor in the Rational Developer for System z software to accept the additional capability. This feature significantly reduced the effort involved in migrating the remaining developers to Rational Developer for System z software. The next step will be migrating the older Assembler applications to the same preprocessor-based COBOL applications.

Laying the groundwork for the future

The IBM solution helped SHKS modernize its existing applications with a Java or web front end, and also migrate the remaining applications to preprocessor-based COBOL applications. Through this effort, SHKS will be able to close the expected IT staff recruitment gap based on current staff with specialized skills who are expected to retire in the next several years. Having more modern applications also decreases maintenance efforts by eliminating older, more cumbersome software development tools. Finally, SHKS benefits by consolidating its development efforts on Rational software, which provides the same look and feel even though it encompasses multiple platforms and languages.

For more information

To learn more about IBM Rational software, please contact your IBM marketing representative or IBM Business Partner, or visit the following website: **ibm.com**/rational

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