FRESCHE SOLUTIONS

+ Case Study

Goh Shoji

Products

X-Analysis

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GRSolutions

Japan Master Distributor
for Fresche Solutions

X-Analysis Eases Resource Shortage and Improves Productivity For Goh Shoji Through Impact Analysis and Better Application Understanding

Structural analysis of application programs and powerful impact analysis help Goh Shoji's RPG engineers become more productive despite personnel shortage.

Background

The Goh Shoji trading company sells hydraulic hoses and related parts — resins, rubber, electrical components, etc. — to major construction machinery manufacturers. Goh Shoji's core system runs RPG programs on IBM i Power Systems. The company's overseas subsidiaries operate the Movex ERP (currently "Infor M3"). For most in-house systems, only the design has been carried out by Goh Shoji, and the development process has been outsourced due to a dwindling number of RPG developers.

Challenge

Goh Shoji has just three engineers in Tokyo and one in Osaka who know RPG, so there is almost no spare capacity for development. However, exchanging data with business partners will continue to require minor development and frequent modification of the RPG programs. For example, the system is compatible with foreign currencies and when it was necessary to modify system functionality, Goh Shoji needed a way to quickly and accurately identify all impact points. As a result, Goh Shoji began considering tools that could efficiently analyze the applications.

The company also needed to eliminate the fundamental issue of the software being black-boxed. Numerous in-house and outsourced personnel had modified the system over the years and the remaining engineers were familiar with only small parts of it.

Finally, Goh Shoji wanted to eliminate the productivity loss associated with an inability to quickly visualize the application structure.

Solution

In selecting a solution, Goh Shoji compared and examined five products. X-Analysis Advisor met all criteria for application understanding, impact analysis and productivity increase. GRSolutions (GRS), a leading IBM i modernization solution expert and Fresche's master distributor in Japan, provided the licenses, including localization and introductory support.

X-Analysis Advisor gave Goh Shoji the ability to:

- Perform impact analysis when modifying file fields and source code
- Find differences in source code that had changed over time
- Analyze the complexity and quality of source code
- Check the validity of database tables.

In all cases, X-Analysis Advisor performed admirably, often exceeding Goh Shoji's expectations. An IT manager from Goh Shoji explained: "The fact that the server module works on IBM i was also an advantage, compared to other tools. Some tools work by preparing an external server, exporting the source code to the external server in text format, and then analyzing it. X-Analysis Advisor can run entirely on IBM i, so there is no need to maintain an external server. Furthermore, you can analyze not only the source code but also the compiled object. Additionally, X-Analysis Advisor can analyze objects without source code."

X-Analysis Advisor provides Goh Shoji with...

Powerful impact analysis to speed necessary code modifications

Visualization of complex IBM i applications developed over the years

Analysis of code quality and complexity to help personnel plan modifications

Result

Goh Shoji uses X-Analysis Advisor mainly to investigate the impact of source code changes and to extract target program objects that require modification. Says an IT representative at Goh Shoji:

"Since complete impact analysis is quick and accurate, the time and effort required to make changes has been significantly reduced. In terms of dependencies between program objects, you can extract not only child programs associated with a specific parent program, but conversely, parent programs associated with a specific child program.

And you can easily check the source code that needs to be modified when adding functions or changing specifications. Simply enter a keyword and search to extract a specific line of target source code. With X-Analysis Advisor, it is easy to visualize the structure of source code created by other programmers, making it much simpler to perform maintenance and repair work. This has greatly improved efficiency and team morale."

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>
> *- IT Manager, Goh Shoji*

About Fresche Solutions

Fresche is the leading provider of application modernization and management solutions that enable digital transformation for companies that rely on IBM i Systems. Through the power of automated tools and experienced professionals, Fresche delivers innovative solutions that bring clients the best, boldest ways to modernize and better manage their business and IT.