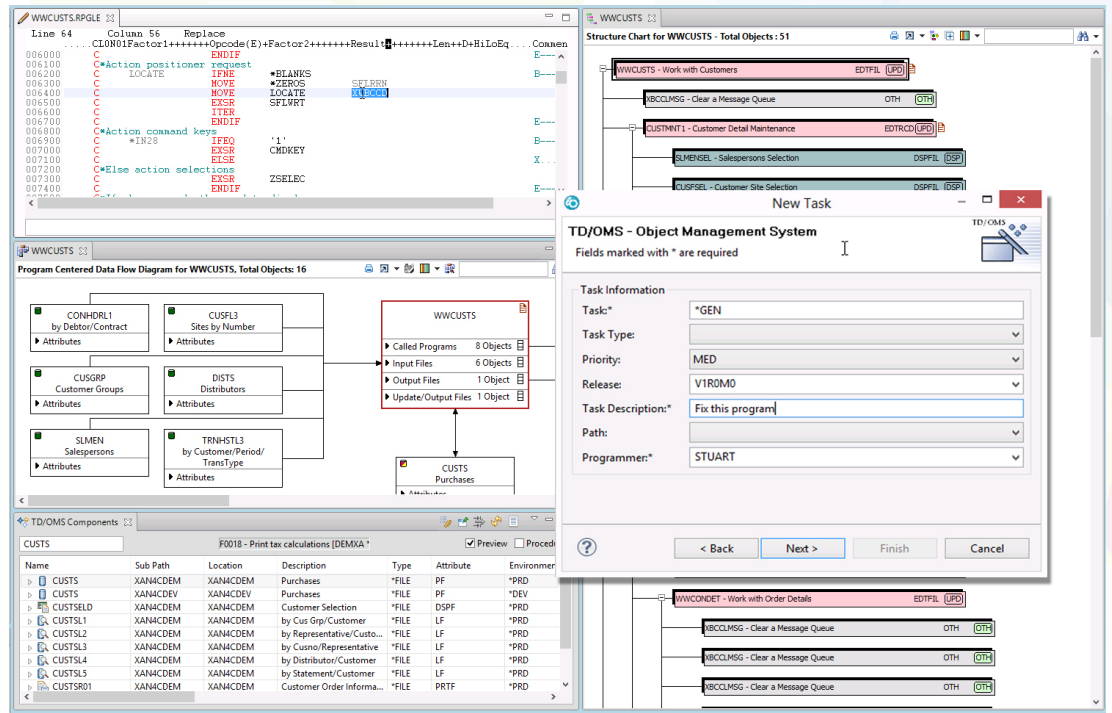


FRESCHÉ LEGACY

+  
SCM  
Unified  
Workflow

IBM i  
Products and  
Services



A Unified SCM Workflow for IBM i  
Code management, editing and analysis in a single  
managed workflow with the new X-Analysis open  
API standard

Highly integrated package completely changes the way developers work,  
boosting productivity through a unique, integrated interface.

## What the X-Analysis Open API Brings to SCM Workflow

Structure charts invoked from  
SCM task objects

SCM workflow integration

Data flow diagrams invoked from  
SCM task objects

Display of 'where-used' details  
from X-Analysis repository

Open variable and field  
'where used' impact analysis  
from SCM

Data Flow Diagrams visualized  
from SCM task objects

Creation of tasks in SCM from  
X-Analysis

And much, much more  
(details on reverse)

## The Business Need

Today's increased business dynamics are forcing more code changes with fewer resources in less time than ever. As a result, productivity and quality are no longer optional, but essential. Tools, standards and workflow must improve to meet the exacting demands of the business. Real-time integration between code analysis, editing and management would give IT executives what they need to efficiently meet business requirements: high-quality code, lower costs and shorter overall development time.

## The Solution

The core of the solution is industry-leading analysis and documentation from X-Analysis provided through Fresche's open API. Through a sophisticated interface, it combines leading SCM solutions on IBM i, like Remain Software's TD/OMS, and benefits from extensions to IBM's RDi LPEX editor. The result is an ultra-modern industry standard in development and management of IBM i applications.

This Unified SCM Workflow solution provides developers with powerful impact analysis and automated code review during promotions to help maintain standards and resolve problems before they reach QA or production. Graphical analysis and documentation provide visual understanding for unfamiliar application areas with objects and code identified for projects and assigned tasks. By integrating these features into the highly configurable but easy-to-implement TD/OMS SCM solution, developers have access to all the code analysis information they need, while the workflow is automated and controlled to provide consistent quality and productivity.

Remain Software and Fresche Legacy have collaborated to extend LPEX code editing with seamless hooks into analysis and SCM task and project management from within the LPEX editor itself to give IBM i developer shops everything they need in a single unified workflow.

## The unified SCM solution provides the following:

**Bi-directional SCM workflow integration** – enables switching between code analysis and code management. Making the right decisions about development or maintenance at a detailed level improves code quality, shortens development time cycles and reduces overall TCO.

**Invoking Structure Chart Diagrams from SCM task objects** – ensures that code architecture is understood, helps developers ensure that all elements in the call stack are included in the task, and enables quicker identification and isolation of critical or faulty code elements.

**Invoking Data Flow Diagrams from SCM task objects** – enables quicker identification of faulty code elements and broader impact analysis to remove risk of knock-on errors caused by changes. Improves efficiency in development through visibility and objective quantification of problems.

**Visualising Data Model Diagrams from SCM task objects** – helps determine cause of errors through a better understanding of data architecture. The data model diagram describes the implicit foreign keys between data files (buried in RPG/SYNON/Cobol) that allow developer or QA teams to isolate the necessary data and understand how it relates to the rest of the application data.

**Display object ‘where used’ details from X-Analysis repository** – runs ‘where used’ inquiries from the powerful X-Analysis cross-reference repository before you check out objects for development or fixing to ensure complete code coverage in the SCM. Complete coverage before development starts means improved efficiency during development, better test coverage and fewer quality problems.

**Open Variable and Field ‘where used’ impact analysis from SCM** – provides up-front analysis of entire scope of change in a task or project, permitting better resource planning, improved production quality (reduces missed code changes), and improved speed. Integrating this analysis with controlled SCM tasks and projects provides accurate and up-to-date scope and scale as the project evolves.

**Creation of tasks in SCM from X-Analysis** – automatically links deep results of an X-Analysis task with development/maintenance tasks. This improves efficiency and accuracy in planning project work by effortlessly providing detailed and objective analysis across the entire application and delivering automated task creation as part of work flow rather than separately.

**Adding of objects to existing SCM tasks** – improves work flow, development quality and accuracy from better analysis.

**Real-time integration between SCM and analysis views and editors** – improves visibility and impact of efforts through real-time analysis results while working at detailed tasks in the SCM. Better understanding of changes improves code quality and confidence of developers.

**Review change history from SCM within X-Analysis** – provides the history of development/changes for a particular object when considering new development or fixes. This helps developers set a clearer context on the changes required.

**Automated code review during object promotion in SCM** – runs a series of integrated X-Analysis code review tests when an object is promoted in SCM from one environment to another. The tests examine the code for quality, known problems and coding standards. The results provide a severity response to the SCM promotion so promotion can be validated, warned or even stopped based on the results. This improves code quality, reduces testing requirements, improves production errors that slip through testing, enforces standards and helps train new developers.

**Automated documentation produced by X-Analysis** – helps improve communication and audits on history of changes managed through SCM.

## About X-Analysis

The X-Analysis Suite gives you everything you need to manage and modernize your IBM i applications. As the world’s leading solution for documentation and analysis of the IBM i, X-Analysis helps organizations modernize their IT operations by quickly allowing developers to gain a full understanding of their RPG, CA 2E (Synon) and COBOL application functions and business rules. Knowledge of these critical applications allows developers to easily update and incorporate ongoing changes to the base system.