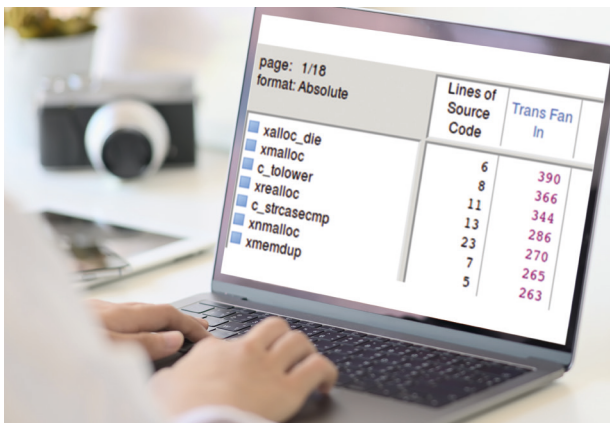# Imagix 4D

For visualization and verification of programs
Easily understand and evaluate unknown source code

Imagix 4D is a tool to understand, document and improve complex, third party or legacy source code written in **C, C++ and Java.** Imagix 4D automates the analysis of control fow and dependencies. It detects problems in data usage and task interactions. With Imagix 4D you increase productivity, improve quality, and reduce risk.
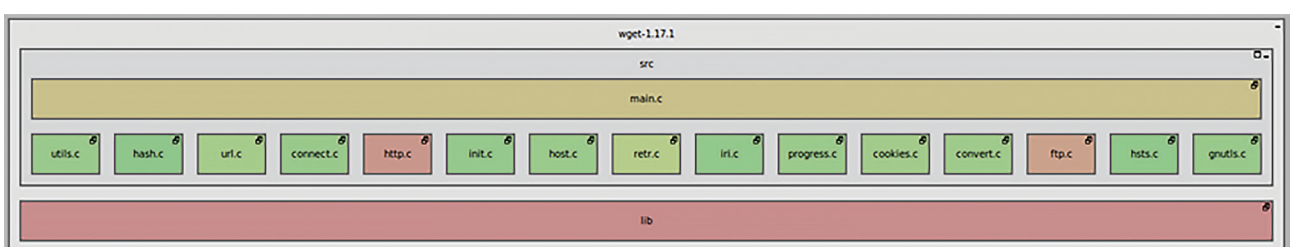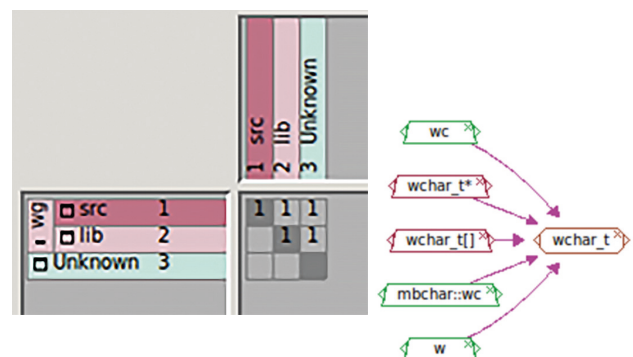
Improve quality by uncovering bugs and vulnerabilities

✓ Automated checkers find anomalies in the sourcecode

✓ Over 100 metrics (including McCabe Cyclomatic and Essential Complexity, Halstead Complexity, Maintainability Index, HIS Metrics etc.) to identify critical modules in a matter of seconds

✓ Semi-automated reviews assist in performing efficient qualitative analyses compliant to CWE or to your own requirements
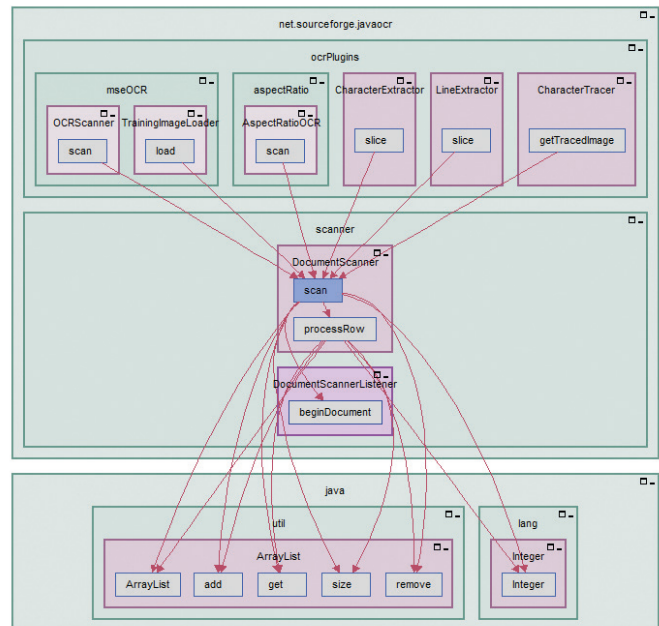
Keep control even for large projects

✓ Meaningful diagrams provide views from a global perspective up to granular characteristics of a single data type

✓ Δ-Analyses enable a detailed change tracking of revisions

✓ Checks of the existing architecture are compliant to structural requirements based on comprehensive architecture diagrams
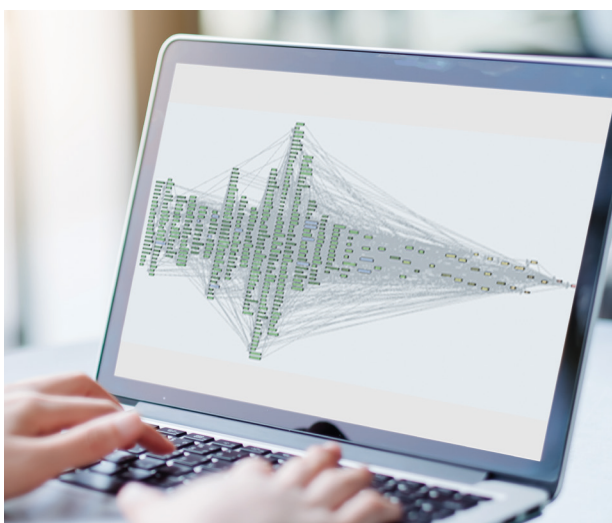
Many analyses and capabilities ✓

Imagix 4D combines a variety of useful tools and capabilities in order to assesssource code: Architecture diagrams, reports, delta analysis, profiler integration, visualization of Code Coverage measured by Testwell CTC++, function call diagrams, include hierarchy diagrams, bug finding, inheritance diagrams, control flow graphs, file call graphs, UML class diagrams, CWE compliance checks, metrics (variable, function, class, file, directory, architecture), design- and structure matrices, file editor, dependencies calculation tree, assignment calculation tree, diagram export, static source code analysis, symbol lists, grep based file search, concurrency analysis, include analysis.

Improve your software development cycle ✓
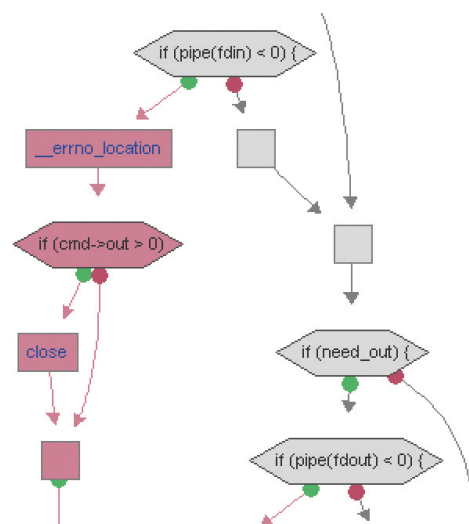
Speed up looking up information for specific symbols by effcient database queries

✓ Easily understand and evaluate unknown source code with Imagix 4D

✓ Automatically generated documents based on the present source code representing the recent state of the project

Benefit from the integration of Testwell CTC++ ✓

✓ Visualization of Code Coverage in control flow diagrams

✓ Understand the correlations between Tests and Test Coverage for a faster development of suitable test cases

✓ Function- and call-coverage reports complete the portfolio of Testwell CTC++

Improve your productivity and evaluate Imagix 4D now!