Visualize Software Quality and Testing Completeness

VectorCAST/Analytics provides an easy to understand web-based dashboard view of software code quality and testing completeness metrics, enabling users to identify trends in a single codebase or compare metrics between multiple codebases.

Overview of Advantages

> Real-time access to quality and testing completeness metrics
> Built-in Connectors for all VectorCAST produced data
> User-defined Connectors for third-party data
> Fully customizable dashboard based on organization’s goals

Why VectorCAST/Analytics

Software projects fall into two categories: Legacy Application maintenance and New Application development; and each present unique challenges. Legacy Applications are often under-tested and overly complex. Understanding where to start is the biggest challenge to improving quality. With new development the challenge is often release readiness: how much work has been done and how much remains to be done.

VectorCAST/Analytics helps in both cases. For Legacy Applications it identifies hot spots in code bases by comparing key quality metrics against project averages. For New Development it reports testing completeness, computing the amount of testing needed, with testing completed to date.

Using VectorCAST/Analytics

VectorCAST/Analytics provides user-configurable data connectors that allow key metrics such as: static analysis errors, code complexity, code coverage, and testing completeness to be captured from VectorCAST or third-party tools. These base metrics can be combined into calculated metrics to identify hot spots in the code, such as functions with high complexity and low coverage.

Displaying this information in a heat map view, where code coverage controls the box color and code complexity controls the box size, allows users to quickly view where they should invest testing and refactoring resources to get the best return on investment.

Big red boxes imply highly complex functions that are poorly tested.

Features

VectorCAST/Analytics provides key metrics in real time to your entire team. Both the server side, which connects to various data sources and the client side, which provides the dashboard via any web browser are highly configurable. The default configuration supports all VectorCAST tools. Simply point the VectorCAST/Analytics server at any VectorCAST project and the default dashboard displays key metrics in an easy to understand layout.
The configurable heat maps in the center of the page make it easy to find outliers such as functions with high levels of code complexity and low levels of testing.

VectorCAST project and the default dashboard display key metrics in an easy to understand layout.

The blue bar across the top captures project-wide metrics for all files in the project.

The tree view controls the granularity of the metrics displayed from the entire project view to an individual file.

The top center of the dashboard displays key metrics such as average complexity and code coverage achieved.

The Static Analysis box displays a summary of the findings from VectorCAST/Lint or any third-party static analysis tools.

**Actionable Intelligence**

Software Quality and Testing Completeness are linked. You cannot have quality without complete testing. For groups that want to improve quality, the hardest question to answer often is: “Where do we start?” VectorCAST/Analytics helps answer that question by making it easy to gather and publish key “where are we today” quality graphics.

More information: [www.vector.com/vectorcast](http://www.vector.com/vectorcast)