

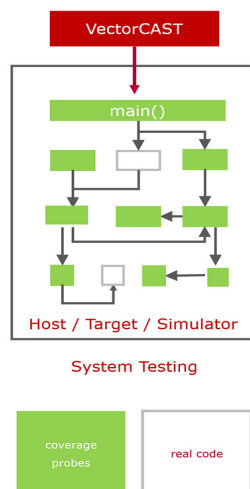
Complete Test Automation

VectorCAST/QA provides an integrated work flow for white-box system testing. VectorCAST/QA enables teams to implement consistent and repeatable processes for managing test activities and reporting key quality metrics such as code coverage. Test automation simplifies test execution allowing anyone on the test team to run a system test. It is compatible with all test execution frameworks. Application internals can be monitored and faults injected using Probe Points, and Change-Based Testing reduces total test time by only running tests that are impacted by code changes.

- > An integrated workflow for white-box system testing
- > Compatible with all test execution frameworks
- > Code coverage measures testing completeness
- > Probe Points allow monitoring of application internals
- > Change-Based Testing (CBT) reduces total test time
- > Covered By Analysis (CBA) supports manual coverage reporting and analysis
- > Requirements Gateway allows Test to Requirement linking

- > Zero impact on existing test workflow
- > Simplify test execution and collaboration
- > Testing completeness
- > White-box testing
- > Faster testing

One of the greatest challenges faced by software groups is reducing time to market for new functionality. Most groups have a backlog of new features that are waiting for release. The bottleneck is often the time that it takes to run a full suite of system tests on a candidate release; often days or weeks. Long test times mean that tests are run late in the release cycle after weeks of changes have been integrated, and often identify blocking defects which cause release delays and unhappy customers. VectorCAST/QA allows team members to collaborate on test activities, shorten test times, and provide up to date metrics on release readiness.



Zero Impact on Existing Test Workflow

VectorCAST/QA integrates with your build system and existing test infrastructure to silently collect key metrics such as code complexity, frequency of code changes, test case status, and code coverage data.

VectorCAST/QA works with your existing workflow and tools. As your normal system testing activities take place, a data repository is constructed that becomes an oracle to answer questions such as: "what tests do I need to run for this set of code changes?"

Simplify Test Execution and Collaboration

VectorCAST/QA allows users to easily run all flavors of test without needing to learn new tools or processes. Connectors for each flavor of test are configured once and then leveraged by the entire team.

Testing Completeness

VectorCAST/QA automates the capture and maintenance of code coverage data during testing, which allows users to quickly identify untested portions of the application and determine resources needed to improve testing thoroughness.

White-box Testing

Whitebox tests can access application data to verify expected data values or to initialize test data. It extends the test coverage by using fault injection to test error paths or to add test cases that are difficult to setup at the application level.

Faster Testing

Using the data gathered from the build system and from monitoring system test activities, VectorCAST/QA identifies correlations between tests and code. As the code changes, it automatically computes the minimum set of tests required to provide complete testing of the change.

Parallel Testing

VectorCAST/QA integrates easily with Continuous Integration (CI) Servers such as Jenkins to allow tests to be distributed across a farm of physical or virtual test machines.

Quality Visualization

A web-based dashboard view of software code quality and testing completeness metrics makes it easy to understand the current state of quality and testing completeness for a software project. This critical intelligence allows all stakeholders to make decisions about release readiness and process improvement.

More information: www.vector.com/vectorcast