



Product Overview

Parasoft Static Application Security Testing (SAST) for .Net - C/C++ - Java Platform

Parasoft® dotTEST™ /Jtest (for Java) / C/C++test is an integrated Development Testing solution for automating a broad range of testing best practices proven to improve development team productivity and software quality. dotTEST / Java Test / C/C++ Test also seamlessly integrates with Parasoft SOAtest as an option, which enables end-to-end functional and load testing for complex distributed applications and transactions.

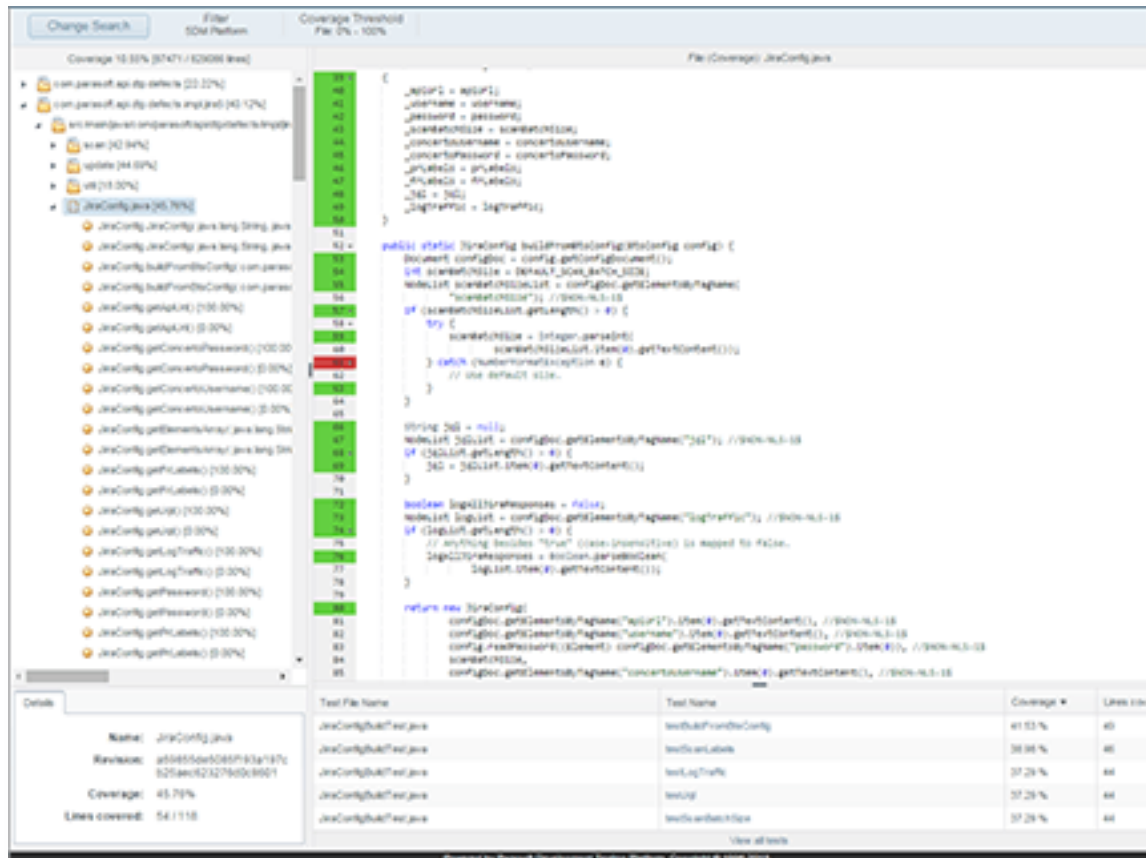
Capabilities Overview



STATIC ANALYSIS

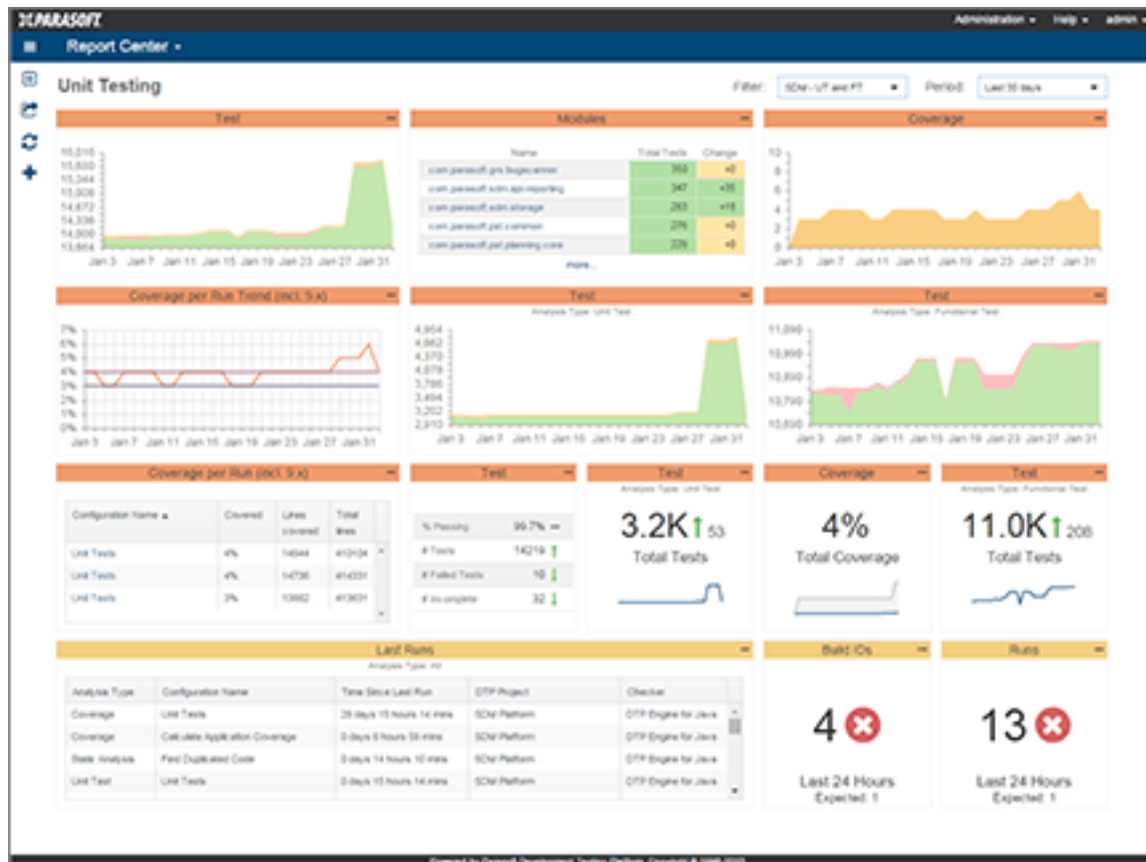
- Broad support for languages and standards: Security | C/C++ | Java | .NET | FDA | Safety-critical

- Static analysis tool industry leader since 1994
- Simple out-of-the-box integration into your SDLC
- Prevent and expose defects via multiple analysis techniques
- Find and fix issues rapidly, with minimal disruption
- Integrated with Parasoft's suite of development testing capabilities, including unit testing, code coverage analysis, and code review



CODE COVERAGE ANALYSIS

- Track coverage during unit test execution and the data merge with coverage captured during functional and manual testing in Parasoft Development Testing Platform to measure true test coverage.
- Integrate with coverage data with static analysis violations, unit testing results, and other testing practices in Parasoft Development Testing Platform for a complete view of the risk associated with your application
- Achieve test traceability to understand the impact of change, focus testing activities based on risk, and meet compliance objectives.



UNIT TESTING

- Unit testing industry leader since 1997
- Rapidly build a high-coverage test suite
- Easily extend and customize generated tests
- Expose functional problems and crash-causing defects
- Remove barriers to creating/maintaining robust test suites
- Integrated with static analysis, code review — more

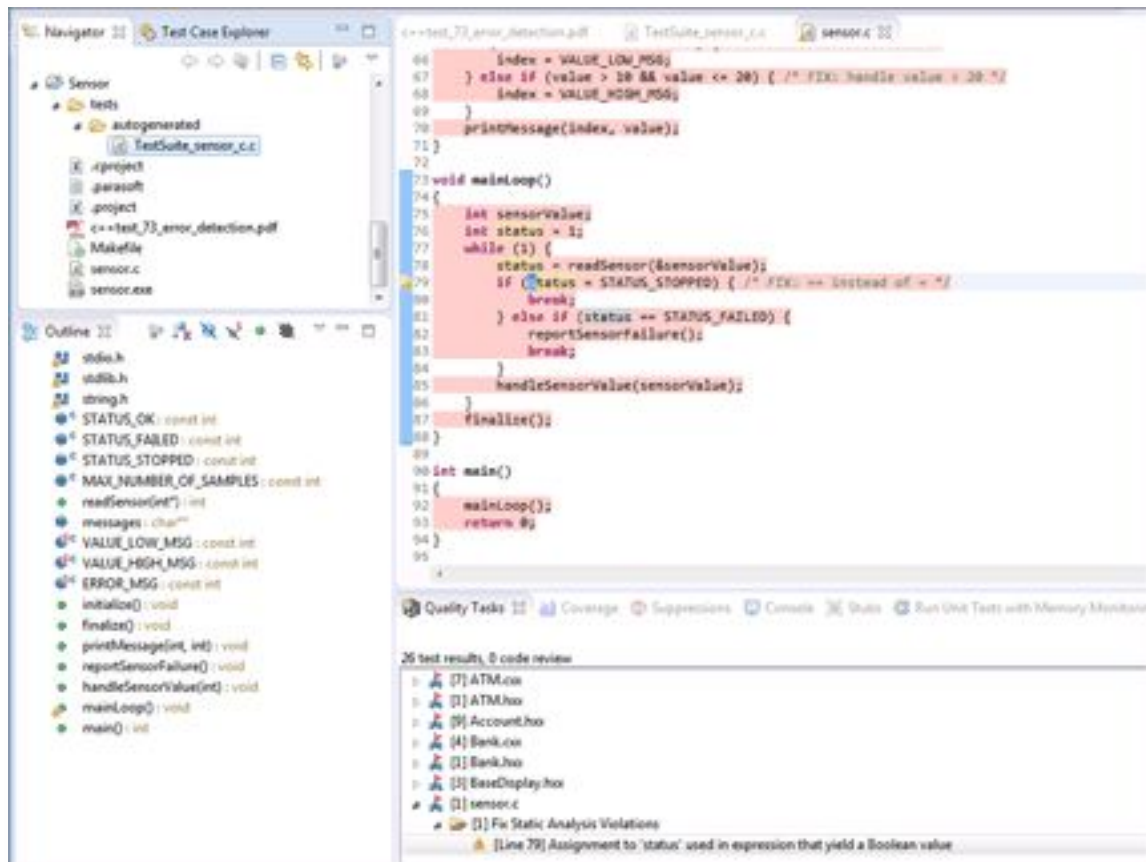
The screenshot displays the Parasoft test management interface. At the top, there's a navigation bar with 'Change Search', 'Filter', 'Module', and 'Administration' links. Below this is a table listing test files with columns for 'Test File Name', 'Test Name', 'Status', 'Assigned To', 'Priority', and 'Action'. The table contains several entries, including 'MetastatHistoryWrapperV1Test.java' and 'MultipleTestCasesActionWrapperV1Test.java'.

In the center, a code editor shows a Java snippet for a date formatting utility. The code includes a `formatDate` method that takes a `Date` object and returns a formatted string. It also includes a `ThreadLocalFormat` class that implements `ThreadLocal` and provides a `format` method.

On the right, a 'Test Results' panel shows a tree view of test results. It includes a 'Test History' tab and a 'Test Results' tab. The 'Test Results' tab displays a list of test results with columns for 'Test Name', 'Status', 'Priority', and 'Action'. The results show various test cases with their respective status (e.g., 'Pass', 'Fail') and priority (e.g., 'High', 'Medium').

TRACEABILITY

- Bidirectional requirements traceability with Parasoft
- Take control of requirements definition, management and testing
- Link requirements with code, code changes, code analysis, manual and automated tests
- Prevent unexpected changes and regression
- Satisfy industry standard requirements, such as FDA, DO-178C and ISO 26262.



RUNTIME ERROR DETECTION

- Expose critical defects as the application is exercised
- Works from unit testing through application/system testing
- Reports only defects that actually occur
- Lightweight and suitable for embedded testing
- Integrated with static analysis, unit testing, code review & more

Parasoft C/C++test Edition

C and C++ Testing, Static Analysis, Code Review

Parasoft C/C++test is an integrated Development Testing solution for automating a broad range of best practices proven to improve software development team productivity and software quality for C and C++. C/C++test facilitates:

- **Static analysis** – static code analysis, data flow static analysis, and metrics analysis
- **Peer code review** process automation—preparation, notification, and tracking
- **Unit testing** – unit test creation, execution, optimisation, and maintenance
- **Runtime error detection** – memory access errors, leaks, corruptions, and more

Parasoft Jtest Edition

Java Testing, Static Analysis, Code Review

Parasoft Jtest is an integrated Development Testing solution for automating a broad range of practices proven to improve development team productivity and software quality. It focuses on practices for validating Java code and applications, and it seamlessly integrates with Parasoft SOAtest to enable end-to-end functional and load testing of today's complex, distributed applications and transactions. Jtest facilitates:

- Static analysis — static code analysis, data flow static analysis, and metrics analysis
- Peer code review process automation—preparation, notification, and tracking
- Unit testing — JUnit and Cactus test creation, execution, optimisation, and maintenance
- Runtime error detection — race conditions, exceptions, resource & memory leaks, security attack vulnerabilities, and more

Parasoft dotTEST Edition

.NET Testing, Static Analysis, Code Review

Parasoft dotTEST is an integrated Development Testing solution for automating a broad range of best practices proven to improve software development team productivity and software quality. dotTEST facilitates:

- Static analysis—static code analysis, data flow static analysis, and metrics analysis
- Peer code review process automation—preparation, notification, and tracking
- Unit testing—unit test creation, execution, optimisation, and maintenance
- Plugin testing—sets up the actual application execution environment and launches tests from it