PARASOFT
Automated Software Testing

# Parasoft Jtest

**INTEGRATED JAVA DEVELOPMENT TESTING FOR THE ENTERPRISE**

## TRY IT

https://software.parasoft.com/jtest

## FIND DEFECTS EARLIER AND EMBRACE QUALITY AT SPEED

- Accelerate agile development with a comprehensive and continuous automated testing strategy that provides a constant safety net for the development process.
- Increase the team's confidence in code quality and comply with coding standards.
- Efficiently test every line of code and potential execution paths to expose and eliminate defects that impact security, quality, and reliability of your software.
- Gain immediate feedback and shift-left the identification of problems relating to non-functional business requirements such as performance and security.

## Accelerate the delivery of reliable and secure Java applications, and release with confidence.

Parasoft Jtest accelerates Java software development by providing a set of tools for keeping your software reliable, secure, and maintainable, to maximize quality and minimize business risks

Parasoft Jtest's integrated Java development testing solution enables developers to quickly analyze their code for critical defects and security vulnerabilities, and efficiently perform unit/integration testing with powerful auto-generation and instant feedback about the quality of the code and impact of code changes.

Jtest helps organizations reduce risk, cut costs, increase productivity, and achieve industry compliance goals by automating this critical set of software testing needs. Comprehensive and configurable reporting enables developers and managers to understand and prioritize errors detected in the codebase, including automatically identifying which tests need to be run based on changes to the build. Part of the powerful Parasoft testing suite, Jtest's integration with Parasoft SOAtest enables end-to-end functional and load testing for today's complex distributed applications and transactions.

### AUTOMATE CODE ANALYSIS AND SECURITY COMPLIANCE

Shift-left the prevention of security and quality defects with deep code analysis providing 1000+ built-in static analysis rules for Java, including OWASP, CWE-SANS, PCI DSS, and other security standards, enabling early-stage detection of defects.

### REDUCE UNIT TESTING TIME AND EFFORT BY HALF

Automate test creation with easy one-click actions for creating and maintaining meaningful JUnit tests.

### ACHIEVE CODE COVERAGE TARGETS

Quickly generate test suites that cover a broad range of the code base via smart bulk creation. Or, leverage your existing JUnit test suite and expand it to cover more use cases with test case cloning and automatic mutation.

### AVOID THE RISKS FROM CHANGE

Release sooner and with confidence by receiving immediate feedback about code changes within the IDE and CI process so you can evaluate and eliminate risk.

> "Parasoft Jtest takes testing to a whole new level, well beyond any other testing solution. With high rates of code change, we can't avoid problems from occurring, but we can now identify and address them as soon as they occur, which is when it's fastest, easiest, and cheapest to fix them."

International Organization for Standardization ISO 9001

## STATIC ANALYSIS & STATIC APPLICATION SECURITY TESTING

Parasoft Jtest quickly goes beyond open-source to fully audit your code, finding issues ranging from API misuse to security flaws, helping ensure that the code adheres to industry standards.

### ELIMINATE DEFECTS

Quickly find and fix code defects with complete path analysis for accurate violation detection.

### CUSTOMIZE

Create custom pattern-based rules specific to your development environment and practices.

### MEASURE AND MANAGE

With centralized reporting, the team can prioritize errors detected in the codebase, including automatically identifying which tests need to be run based on changes to the build.

### INTEGRATE WITH WORKFLOWS

Seamlessly integrate with existing continuous integration infrastructure, leveraging team-based configurations and workflows.

## UNIT AND INTEGRATION TESTING

Parasoft Jtest enables developers to validate their code, from bugs to design flaws, helping to ensure that each part of the software performs as designed and with continuous quality.

### GENERATE MEANINGFUL JUNIT TESTS

Use Parasoft Jtest to bring automation to the process of unit testing. Jtest helps users easily create, assess, and enhance JUnit tests, with real-time context aware assistance, leaving developers free to focus on the business logic portion of the test.

### MAINTAIN TEST SUITES

Resolve test failures and instabilities in the test suite quickly with smart recommendations and assertion updates.

### ACHIEVE CODE COVERAGE TARGETS

Cover untested areas of code with quick fix and bulk actions to increase code coverage and jump start your test suite.

## IMMEDIATE FEEDBACK TO ADDRESS CODE CHANGES

Parasoft Jtest helps development teams efficiently test code changes, providing immediate feedback about the impact of their code changes, giving the team confidence in their change and making the team more agile.

### IN THE IDE

Real-time insights that automatically correlates test execution data with test coverage data to identify unit/integration tests that are affected by local source code changes and allows the user to run only the affected unit tests, rather than having to run the entire suite of tests.

### IN THE CI PROCESS

Turnaround the team's changes quickly with faster verification of the changes and an increase in development productivity.

## COVERAGE ANALYSIS AND TEST TRACEABILITY

Parasoft Jtest helps teams to get broader visibility into what they are testing, how well they are testing it, and how to customize test plans based on priorities.

### TRACEABILITY OF TEST TO CODE

Get comprehensive coverage analysis of how well you're testing the codebase, with granular coverage analysis from an individual test to the underlying code that it is testing and exercising.

### TRACEABILITY OF TEST TO REQUIREMENT

Quickly make objective and informed business decisions related to your release by associating tests with requirements and user stories from your original system of record (e.g. Jira), allowing you to easily verify which capabilities have been tested and understand the impact of test failures across documented user stories and reported defects.

### SUPPORTED OPERATING SYSTEMS

Windows
Linux
Mac

### SUPPORTED IDES

IntelliJ IDEA
Eclipse
NetBeans

### SUPPORTED BUILD SYSTEMS

Ant
Maven
Gradle

### SUPPORTED CI SERVERS

Jenkins
Team City
Bamboo
+ others

### SUPPORTED SOURCE CONTROL SYSTEMS

Git
Microsoft Team Foundation Server
Perforce SCM
Subversion (SVN)
+ others

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