

Parasoft dotTEST



REDUCE THE RISK OF .NET DEVELOPMENT

TRY IT

https://software.parasoft.com/dottest

INCREASE PROGRAMMING EFFICIENCY:

- Identify runtime bugs without executing your software
- Automate unit and component testing for instant verification and regression testing
- Automate code analysis for compliance

Complement your existing Visual Studio tools with deep static analysis and advanced coverage.

An automated, non-invasive solution that scans the application codebase to identify issues before they become production problems, Parasoft dotTEST integrates into the Parasoft portfolio, helping you achieve compliance in safety-critical industries.

Parasoft dotTEST automates a broad range of software quality practices, including static code analysis, unit testing, code review, and coverage analysis, enabling organizations to reduce risks and boost efficiency.

Tests can be run directly from Visual Studio or as part of an automated process. To promote rapid remediation, each problem detected is prioritized based on configurable severity assignments, automatically assigned to the developer who wrote

the related code, and distributed to his or her IDE with direct links to the problematic code and a description of how to fix it.

When you send the results of dotTEST's static analysis, coverage, and test traceability into Parasoft's reporting and analytics platform (DTP), they integrate with results from Parasoft Jtest and Parasoft C/C++test, allowing you to test your entire codebase and mitigate risks.



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It snaps right into Visual Studio as though it were part of the product and it greatly reduces errors by enforcing all your favorite rules. We have stuck to the MS Guidelines and we had to do almost no work at all to have dotTEST automate our code analysis and generate the grunt work part of the unit tests so that we could focus our attention on real test-driven development.

STATIC ANALYSIS AND SECURITY TESTING

Static analysis has become a key requirement for many regulatory compliance industries such as medical (FDA / IEC 62304), industrial automation, and more. Static analysis from dotTEST goes beyond basic Visual Studio checkers to accurately expose the industry's broadest range of defects, security vulnerabilities, and compliance issues.

- Enables you to quickly find and fix code defects with complete path analysis for accurate violation detection
- Supports both Preventative (Pattern) and Detection (Flow-Based) Static Analysis techniques, along with a comprehensive set of metrics for code structure
- Helps you create custom pattern-based rules specific to your development environment and practices
- Comprehensive visibility into compliance across teams, projects and across multilanguage code-bases to provide centralized reporting with Parasoft DTP
- Ease of deployment: easy to configure, easy to automate, non-intrusive for small teams, and scalable across multiple teams
- Over 450 rules covering coding best practices and preventing security vulnerabilities such as SQL injection and XSS attacks

FRAMEWORKS

NET 4.0, 4.5, 4.6

SYSTEMS

Windows 7, 8, 10 Windows Server 2012 Visual Studio 2008-2017

SOURCE CONTROL

AccuRev ClearCase

CVS Git

Perforce

Serena Dimensions

StarTeam

Subversion (SVN)

Synergy

Team Foundation Server

Visual SourceSafe

COVERAGE ANALYSIS AND UNIT TEST TRACEABILITY

Coverage Analysis with Parasoft dotTEST



Parasoft dotTEST's high-performance code coverage engine gives you visibility into the underlying code that was tested as part of your unit, integration, and manual testing activities. With coverage reported at the granularity of each test case, results from these testing techniques can be sent to Parasoft DTP, where they are merged into a centralized view to provide visibility across all of your testing practices.

Test Traceability with Parasoft dotTEST



A key traceability requirement for safety critical compliance industries is associating tests with the requirements that are being validated. Executing your unit tests (MSTest, NUnit etc) with dotTEST and sending the results to Parasoft DTP enables you to see the test outcomes, as well as coverage and static analysis violations, combined into one centralized report that's correlated with the original system of record.



What is Parasoft DTP?

An advanced analytics and reporting platform, Parasoft DTP helps you understand the impact of changes in your codebase and provides actionable insights to the team to ensure the delivery of high-quality software.



