PARASOFT®

Parasoft dotTEST

REDUCE THE RISK IN C# AND VB.NET DEVELOPMENT

Parasoft dotTEST

INCREASE PROGRAMMING EFFICIENCY

» Ensure compliance with standards.

» Build security into your application.

» Improve productivity and code quality.

» Identify runtime bugs without executing your software.

» Perform unit and component testing.

» Automate regression testing.

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

Parasoft dotTEST automates a broad range of software quality practices, including static code analysis, unit testing, code review, and coverage analysis, including requirements traceability and the documentation required to verify compliance.

IMPLEMENT SHIFT-LEFT TESTING

Save time and money by finding and fixing defects earlier. Reduce the effort and cost of delivering high-quality software by preventing more complicated and expensive problems down the line.

ACHIEVE COMPLIANCE EFFICIENTLY

Ensure your C# or VB.NET code complies with safety and security industry standards, like CWE, OWASP, PCI DSS and UL 2900.

GET A COMPLETE VIEW OF TEST COVERAGE

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.

TRY PARASOFT DOTTEST

Learn how your team can improve code quality and compliance. Schedule a demo.

"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."

—Valued Customer

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 multi-language 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 attack.

OVERAGE 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 testingpracticescase, 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.

FRAMEWORKS
» .NET 4.7.2 or higher

SYSTEMS
» Windows 7, 8, 10
» Windows Server 2016 and 2019
» Visual Studio 2008-2019
» Visual Studio Code

SOURCE CONTROL
» AccuRev
» ClearCase
» CVS
» Git
» Perforce
» Serena Dimensions
» StarTeam
» Subversion (SVN)
» Synergy
» Team Foundation Server
» Visual SourceSafe

SUPPORTED CONFIGURATIONS
» CWE Top 25
» OWASP Top 10
» PCI DSS
» UL 2900