

Analytics & Reporting for Embedded Software Testing

DRIVING COMPLIANCE & TEST PRODUCTIVITY



Parasoft
DTP

SURPASS SIMPLE REPORTS & DASHBOARDS

Aggregated data from all your testing practices gives you a comprehensive view of the results of your testing.

- » Reduce development and testing costs by acting on insights to key metrics.
- » An interactive framework lets you navigate and analyze test results.
- » Monitor software health, progress, and ensuring compliance to industry standards.
- » Consolidate reporting across CI/CD workflows to simplify compliance and enforce policies.

MEASURE YOUR QUALITY RESULTS

See what DTP can do for you.
[Schedule a live demo.](#)

Figure 1: View key metrics and results across all your testing practices within a comprehensive dashboard.

DELIVER SAFE, SECURE, & HIGH-QUALITY SOFTWARE

Do you know the risk of your project and how it impacts your business?

Parasoft Development Testing Platform (DTP) monitors and measures the compliance quality practices, such as static analysis, unit testing, coverage analysis, runtime error detection, and much more.

Parasoft DTP collects, correlates, and analyzes data generated throughout the SDLC to produce intelligent, actionable findings so you can focus on the impact of changed code and demonstrate full compliance traceability.

With DTP's in-depth reports and dashboards, you gain confidence in your software's compliance demands, eliminating business risk associated with unsafe, insecure software, while accelerating delivery, and facilitating continuous process improvement.

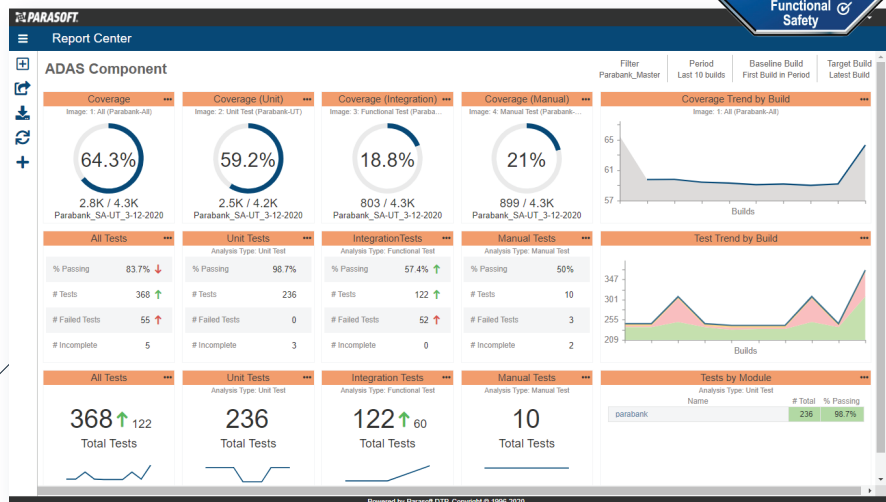
DTP provides trend charts that help in understanding the progress with compliance activities and making educated decisions about developers' assignments.

AGGREGATE, ANALYZE, & VISUALIZE

Mitigate business risks without reducing the productivity of the team with DTP's centralized quality hub. It aggregates data across your Parasoft testing practices, including static analysis, unit testing, functional testing, manual testing, code coverage, and code quality metrics from Parasoft technologies and OSS/ third-party tools, supporting over 15 development languages.

TÜV SÜD CERTIFIED

Parasoft DTP is certified by TÜV SÜD for safety-related software development according to ISO26262, IEC 62304, and IEC 61508. The certification simplifies the tool qualification process and eliminates additional testing and verification effort required to qualify uncertified tools. DTP users can take full advantage of the interactive compliance reporting and the pdf exported reports for their certification process.



COMPREHENSIVE COMPLIANCE REPORTING

Centralized aggregation of test results makes compliance with security, coding, and functional safety standards easier by automatically generating the documents needed to demonstrate compliance.

- » MISRA C:2012, AUTOSAR C++14, CERT, CWA Top 25, OWASP Top 10
- » Unit testing, structural code coverage, static analysis, requirements traceability
- » ISO 26262, DO-178B/C, IEC 62304, IEC 61508, EN 50128

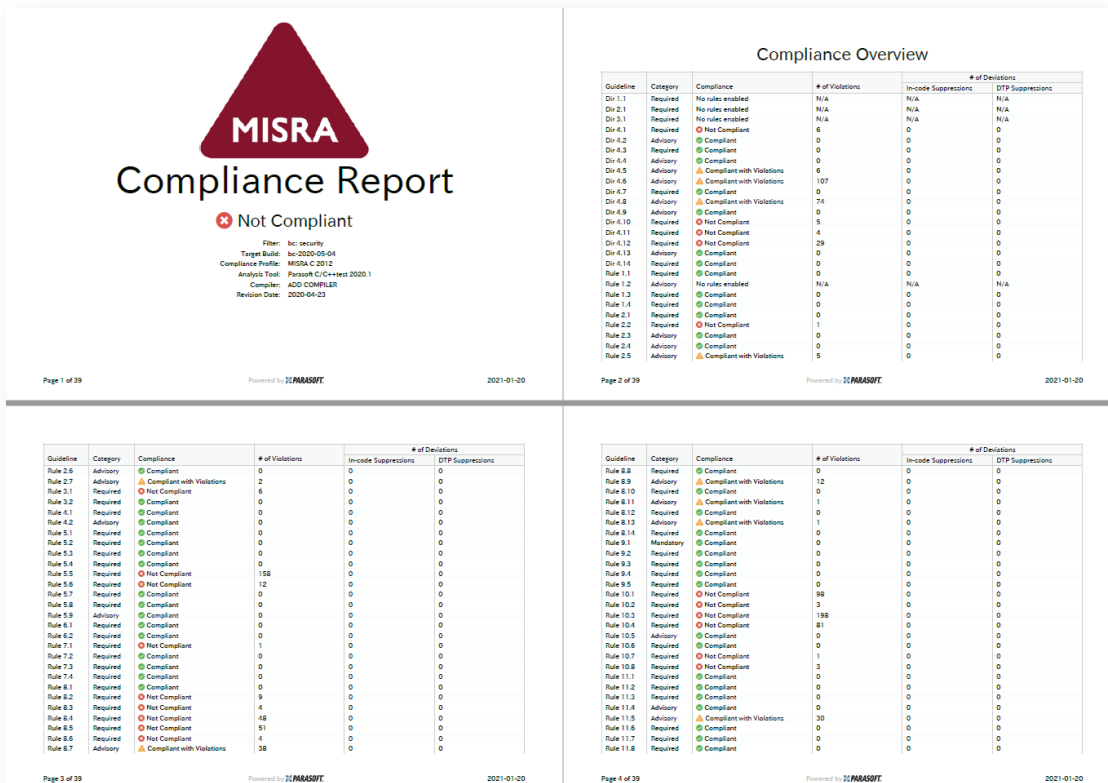


Figure 2: Example summary report of the state of compliance for each MISRA guideline, as well as any associated deviations or re-categorizations.

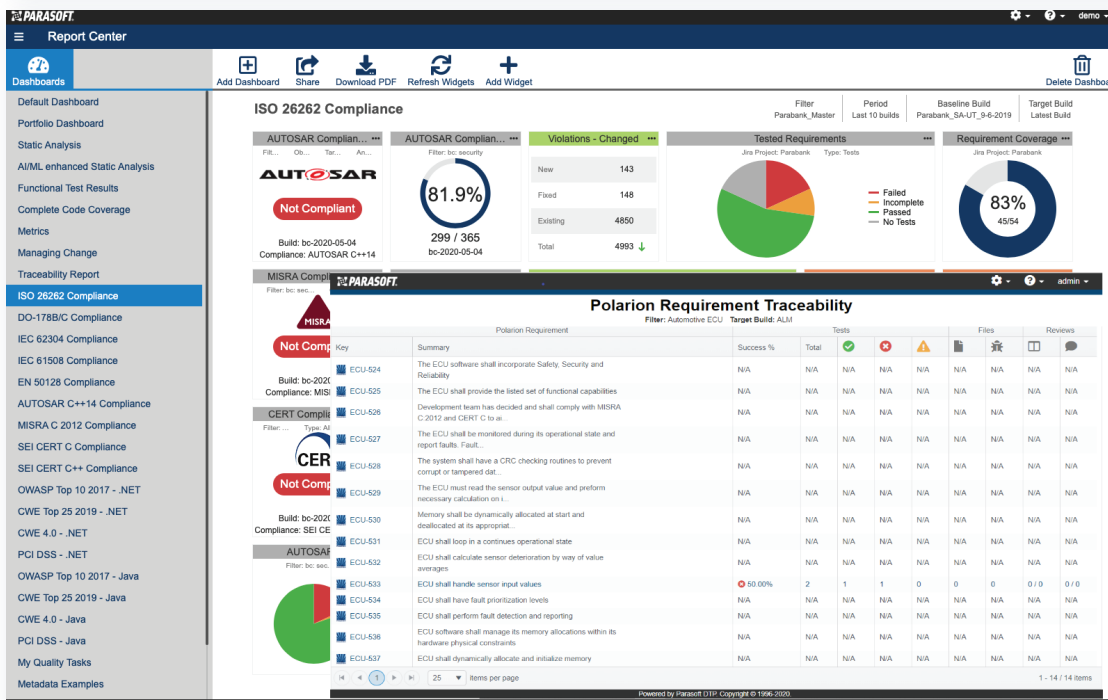


Figure 3: Traceability to tests and code ensures verification and validation of each requirement.

INTEGRATION WITH INDUSTRY ANALYSIS TOOLS & TESTING FRAMEWORKS

Leverage out-of-the-box integrations with ALM/Requirement management tools like Polarion ALM, codeBeamer, and Jama Connect plus SCMs like Git, Subversion, Mercurial, Microsoft TFS, and others.

The integrations complete the verification and validation of requirements by providing an automated bidirectional traceability to the executable test case, which includes the pass or fail result and traces down to the source code that implements the requirement. Download extensions from the Parasoft Marketplace to integrate with popular open-source tools and systems.

ALM TOOL INTEGRATIONS ENABLES A RANGE OF FUNCTIONALITY

- » Manually create bugs/issues and tasks from the violation's explorer view.
- » Manually create bugs/issues and tasks from the test explorer view.
- » Send, view, and update Parasoft test results in work items.
- » Traceability from requirements to tests, static analysis results, and code reviews.



Figure 4: Track compliance trends and results of tests throughout the software development life cycle and determine how to address coverage gaps.

REPORTS & DASHBOARDS ARE GREAT, BUT THEY'RE JUST THE START

DTP's analytics are exceptionally advanced because of how its data is aggregated and correlated. The Explorers within DTP give visibility into that data and enable powerful workflows with the development team, integrating directly in the IDE and other systems of record.

AI & MACHINE LEARNING IN SOFTWARE TESTING

Parasoft's AI solution reviews new static analysis findings in the context of both historical interactions with the code base and prior static analysis findings to predict relevance and prioritize the new findings.

AGGREGATED REPORTS & DASHBOARDS

Parasoft DTP's flexible drag-and-drop dashboard provides over 50 out-of-the-box widgets, categorized and color-coded so you can quickly assemble your own view into your quality process.

DATA EXPLORERS THAT LET YOU TAKE ACTION

Explorers provide an interactive UI for exploring your test data and understanding how changes in your codebase are changing code quality. From Explorers, you can trigger external workflows.

SDLC WORKFLOW INTEGRATIONS

DTP is at the center of integrating quality into your SDLC, by enabling workflows that are critical for ensuring the successful adoption of quality practices into your software development process.

INTELLIGENT ANALYTICS FROM THE PROCESS INTELLIGENCE ENGINE (PIE)

Advanced analytics from PIE enable you to drive process improvements, gain greater insights, and streamline the team's testing activities. You can use existing PIE "slices" that are preconfigured inside DTP, or you can create your own. Sample slices include:

TEST IMPACT ANALYSIS

Why re-test everything every sprint? Optimize your testing strategy and focus on re-executing only the tests that touch the changes.

TEST STABILITY

Did that test failure mean anything or is it always doing that? Where are the real regressions?

RISKY CODE CHANGES

What is the risk of the code that you just changed? What is the amount of existing quality debt?

KPI CALCULATIONS

How do you measure cross-team performance to ensure efficient adoption of quality practices? How do you know the amount of risk?

MODIFIED CODE COVERAGE

How do you know if you need to create new tests? Focus on achieving 100% coverage on only code that has changed.

CUSTOM ANALYTICS

Make calculations that are custom to your organization. Use slices as templates and implement anything you want.

