



# ORANGEBEARD

The Software Quality Intelligence Platform

**Mastering** the world's  
software quality.





**Release faster.  
More reliably.  
In full confidence.  
Always audit ready.**



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# The challenges of software development



## Time to market of releases

Software testing requires a lot of time, for each release again

A lot of testing needs to be done just before releasing new software versions

Software testing should be carried out more often to accelerate development



## Compliance and security

Historical insight is lacking as to what was tested when and with what result

Difficulties to comply with regulations like DORA, NIS2 and SOC2

Each audit again requires a lot of ad hoc work and capacity



## Integral and complete testing

Software development often takes place in decentralized teams and a variety of tools

There is no clear integrated insight into software quality and test results

Software testing requires large investments in scarce people to secure quality

# Organisations and software quality.



**Time to market of releases**

Software testing requires a lot of time, for each release again.  
Documentation requires a lot of effort.



**Increasing compliance obligations**

Difficulties to comply with regulations like DORA, NIS2 and SOC2, because historical insight is lacking as to what was tested when and with what result



**Lack of integral insight in software quality**

There is no clear integrated insight into software quality and test results



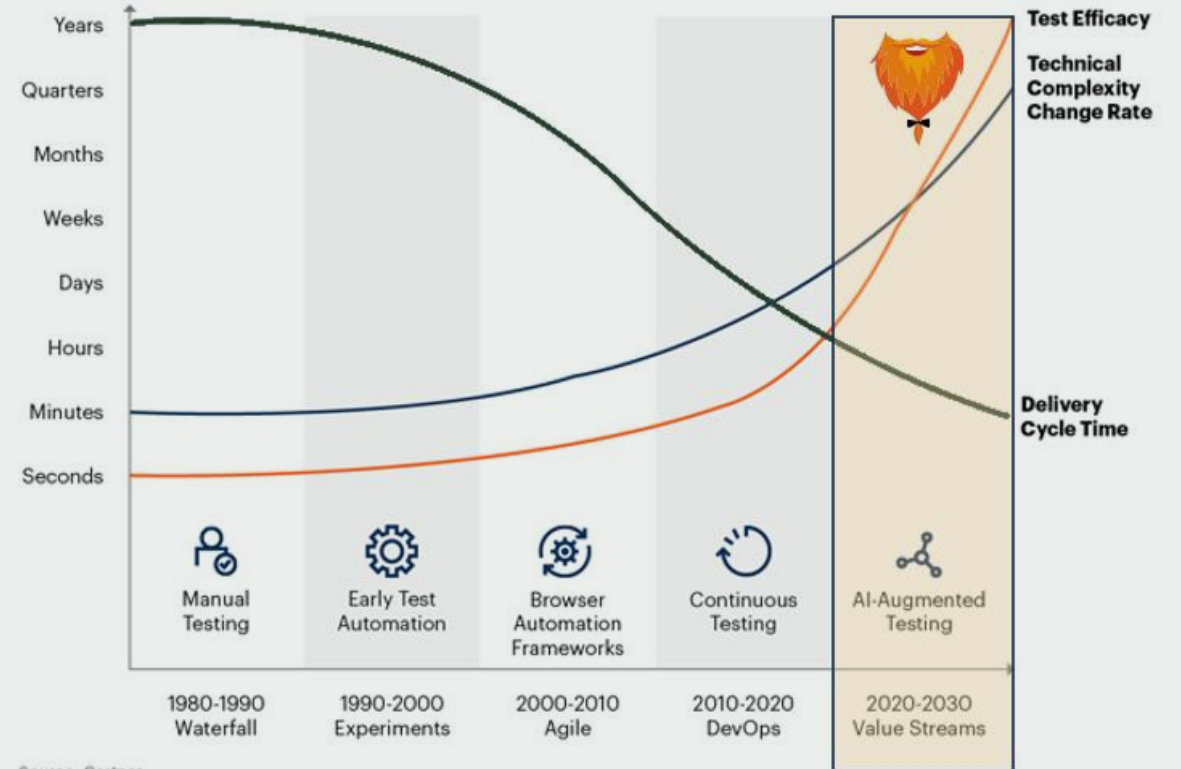
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# Evolution of Software Testing.

While we automate more testing activities, testing has remained a bottleneck on the path to faster delivery...

**Gartner:** Combine the power of AI/ML and automation technologies to achieve faster, scalable, high-quality product development.

The Evolution of Testing



Source: Gartner  
744939\_C



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# The Solution



## Provide one place for all test output

Regain control of your testing process  
Clear reports for audits



## Auto analyze defects using AI

Faster feedback, less context switches, improve efficiency  
50% reduced defect analysis time



## Connect every tool and standardize output

Lower dependencies on tool or technology specific knowledge



## Learn from previous test runs to optimize the future

Optimize testing to significantly speed up your pipelines  
80% pipeline time saved



## Improved team performance

Shared insight in quality through userfriendly dashboard



# ORANGEBEARD

# The Solution.

Orangebeard provides an **AI driven platform** for software quality management.



## Continuous Testing Insight

All test results integrated in one place with auto analyzing and classification of defects.

Easy to understand summary and explanation of test results.



## Continuous Compliance

Collects all test data and history in the background, saving time during audits.

Traceability including historical changes and test results. Shows audit trail in realtime and 24/7.



## Continuous Improvement

Learn from previous test runs to optimize the development pipeline.

Insight into 'blank spots' in test coverage and optimize test runs.



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# The AI Assistant

The screenshot shows a web browser window with a chat interface overlaid on a test results page. The chat window, titled "Chat with Sami", contains the following text:

Hi there!

Hi! Please summarize this test result and provide analysis on why it might have failed.

**Test Result Summary:**

- Test Name: Add Two ToDos And Check Wrong Number Of Items
- Test ID: 3266486
- Test Run ID: 41317
- Status: FAILED
- Start Time: 2024-12-03T14:59:03.945Z
- End Time: 2024-12-03T14:59:05.977Z

**Analysis of Failure:**

The test failed in the step "Then Open ToDos should show 1 items left". The assertion `Get.Text (span.todo-count, ==, ${text})` failed because the actual text obtained from the `span.todo-count` element was "2 items left", while the expected text was "1 items left". This indicates that the application did not correctly update the number of remaining ToDos after adding two new items.

A screenshot (`fail-screenshot-1.png`) is attached to the test result, which visually confirms the application shows "2 items left" instead of the expected "1 items left". Reviewing this screenshot would provide further visual confirmation of the application's state at the time of failure.

**Potential Causes:**

- Incorrect ToDo counter update:** The application's logic for updating the ToDo counter might have a bug. It might be incrementing the counter incorrectly or not updating it at all after adding new ToDos.
- UI Synchronization issue:** There might be a synchronization issue between the UI and the application's internal state. The test might be checking the counter before the UI has fully updated to reflect the addition of the new ToDos.
- Race Condition:** A race condition could exist where the counter update and the test's assertion are happening concurrently, leading to inconsistent results.
- Underlying Data Issue:** The data storage mechanism for ToDos might be faulty, leading to incorrect counting.

**Further Investigation:**

To pinpoint the exact cause, further investigation is needed:

- Review the application's code:** Examine the code responsible for adding ToDos and updating the counter to identify any logical errors.
- Debug the application:** Use debugging tools to step through the application's execution during the test to observe the state of the ToDo counter at different points.
- Analyze the application's logs:** Check the application's logs for any errors or warnings that might provide clues about the failure.
- Examine the test code:** Ensure the test correctly interacts with the application and waits for the UI to update before making assertions. Consider adding explicit waits to ensure synchronization.

The attached screenshot and the detailed logs provide valuable information for debugging and identifying the root cause of the failure. The `analysisResult` is set to "TO\_INVESTIGATE", indicating that manual investigation is required to determine the exact cause and classify the defect.

Enter your message...

The background page shows a test run for "robot-framework-tests#2" with a "Failed" status. The test description is "Checks if ToDos can be added and ToDo count increases". The test steps are listed in a log, with the failing step being "Then Open ToDos should show 1 items left". The log shows the test setup, the addition of two ToDos, and the failure of the assertion. A screenshot of the application state is attached to the log.

Monitor, analyze, extend and discuss your testing process by the AI assistant.



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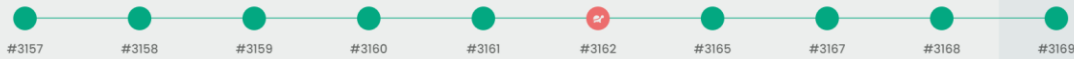


# Audit trail testing process.

Integration test #3169 > Orangebeard > IntegrationTest > 3UITests > Overview

Passed 4s November 27, 2024 13:40

Validate the overview page



## Main Overview:

Overview Time Span 1 day



Subscriptions	1 sets	Main Application	67 sets	CRM App	29 sets
0% Passed sets		85.07% Passed sets		82.76% Passed sets	
To Investigate: 1		To Investigate: 30		To Investigate: 9	
Total Number Of Defects: 1		Total Number Of Defects: 30		Total Number Of Defects: 9	
Invoice App	43 sets	Tax App	13 sets	Migrations	30 sets
83.72% Passed sets		69.23% Passed sets		73.33% Passed sets	
To Investigate: 23 Automation Issue: 7		To Investigate: 24		To Investigate: 15 Automation Issue: 1	
Total Number Of Defects: 30		Total Number Of Defects: 24		Total Number Of Defects: 16	
HRM App	91 sets	Fulfillment App	36 sets	Projects App	33 sets
76.92% Passed sets		75% Passed sets		78.79% Passed sets	
To Investigate: 49		To Investigate: 13 System Issue: 3		To Investigate: 4 Product Bug: 1 Automation Issue: 4	
Total Number Of Defects: 49		Total Number Of Defects: 20		Total Number Of Defects: 11	

## Defect History

Timestamp	User Name	Defect Type
27-11-2024 20:44:17	tomheintzberger	System issue
Description: Misinterpretation of RFC 3214 by BA		
26-11-2024 20:43:47	tomheintzberger	Product bug
Description: XML Formatting issue - does not conform to RFC 3214		
24-11-2024 20:43:20	tomheintzberger	Product bug
Description: XML Formatting issue		

## Severity

## Scans

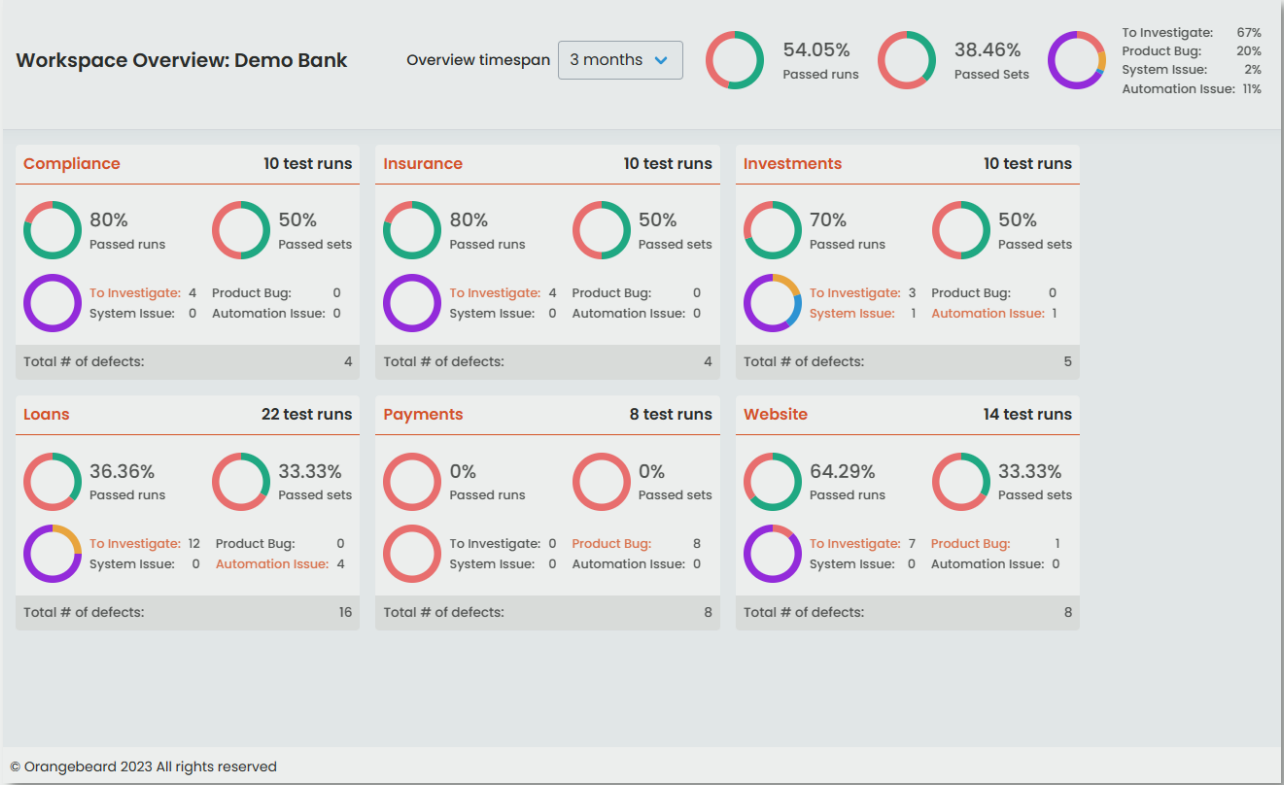
	<a href="https://vulnerable-website.com/catalog/subscr">https://vulnerable-website.com/catalog/subscr</a> The application may be vulnerable to DOM-based cross-site s key: val tag
	<b>Cross-site scripting (DOM-based)</b> The application may be vulnerable to DOM-based cross-site s key: val tag
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## Integration test #3168

ci-build StartedBy: Tom Heintzberger Revision: f080dcdcfb8bd44f2e8f87054e384ac0623cddd97 testtype: integration

Results of Code review and Security scanning included

# Valuable realtime insight & control company wide as well as in project and team



## Workspaces

Combine multiple projects into a workspace to get direct, current, valuable insights on the state of all your testing efforts across projects and products.

# Auto Test Pilot

## CI/CD Accelerator

Test what you need...  
...In the time that you have

## Subsets based on changes

What was changed?  
What risks are involved?  
What tests correlate with that?

## Optimize prioritization

Which tests are most likely to fail...  
...For this particular set of changes?  
Are there tests that always fail together?



## What was changed?

Did we change application code? A complete subsystem? Or did we change only tests? Or maybe, just the readme?

## Who changed what?

And how much experience do they have with that particular piece of code?

## What was already tested?

Did we see issues in an earlier test?  
Did any interface calls change?



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# Auto Test Pilot

Members **Test Sets** Settings Auto Analysis

Manage Test Set Names (orangebeard-atp)

Manage Test Cases

Change Test Set Display Names

Test Set Displayed Name

integrationtest-atp-nightly

Components

listenerApi

Version: 242 Updated: a year ago

orangebeardDocs

Version: 32 Updated: a year ago

reportPortalApi

Version: 95 Updated: a year ago

listenerAnalyzer

Version: 5.0.0 Updated: a year ago

orangebeardConfig

Version: 48 Updated: a year ago

serviceAnalyzer

Version: 5.0.0 Updated: a year ago

Test Cases

CleanAtpDatabase

orangebeard-atp integrationtest-atp-nightly Orangebeard IntegrationTest  
IPrepareEnvironment ICleanDatabases

Always Run

TestResult

orangebeard-atp integrationtest-atp-nightly Orangebeard IntegrationTest  
JUnitTests TestResults

AnnounceTestRunAndGenerateAdvice

orangebeard-atp integrationtest-atp-nightly Orangebeard IntegrationTest  
ZApiTests AutoTestPilot

JUnit4Listener

orangebeard-atp integrationtest-atp-nightly Orangebeard IntegrationTest  
IPrepareEnvironment JRunListenerTests

StartTestRunToBeAborted

orangebeard-atp integrationtest-atp-nightly Orangebeard IntegrationTest  
IPrepareEnvironment JRunListenerTests

Overview

orangebeard-atp integrationtest-atp-nightly Orangebeard IntegrationTest  
JUnitTests



# ORANGEBEARD

# Orangebeard optimizes

## Test Analysis Time

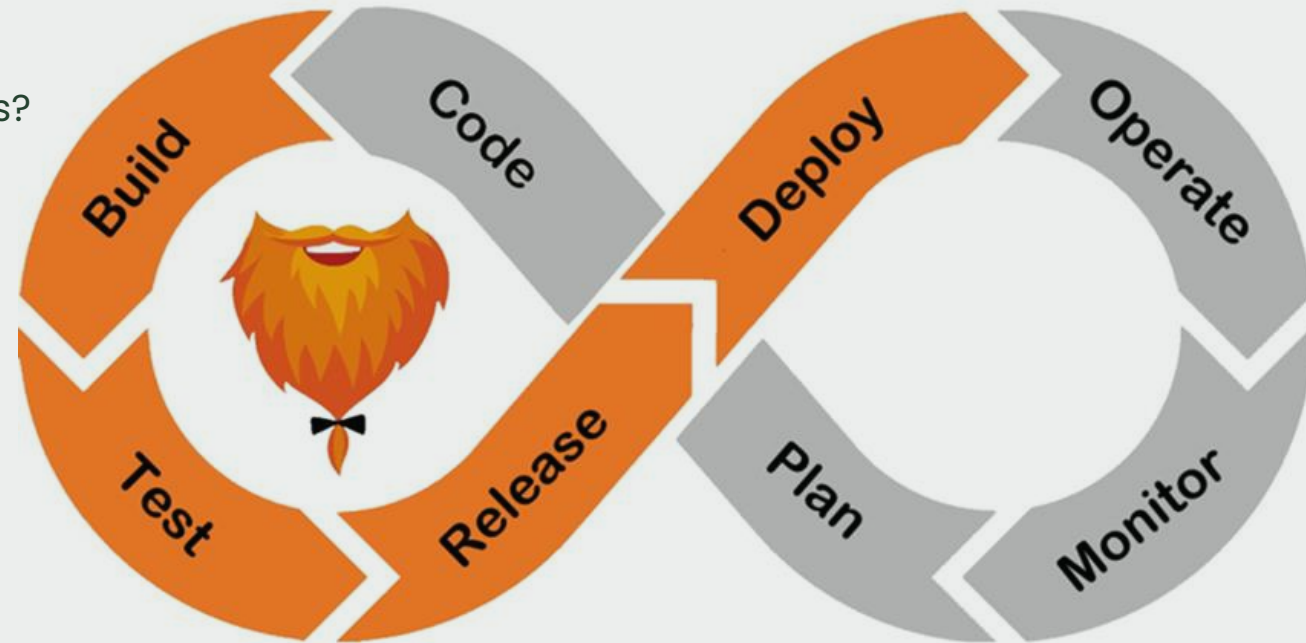
Did this occur *earlier*?  
Is this a *known* pattern?  
What was my previous analysis?

## Test Execution Time

What is the *risk*?  
What should I test *now*?  
How can I speed up *without*  
sacrificing quality?

## Test Process Insights

Why do my tests fail?  
How can I improve?  
What should I test?  
Did we test *all* we need?



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# The Numbers.

12:54pm

## Work smart and with results

Test only what is really needed

**50% faster faults findings**

## Grip and control on quality

Steer towards the best software quality and traceability

**75% faster releases**

## Proven audit ready

Comply with the latest laws and regulations in your test process

**100% audit readiness**



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# Customer testimonials.

**Happy customers**  
Case studies (including Dutch Government) show 50-75% time saved in agile teams.

**AFAS** software

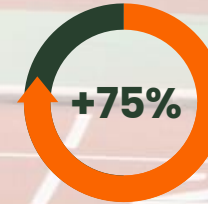


**“Orangebeard seamlessly connects to our existing tooling and provides us with clear insights and overview of our extensive automated test sets.**

**The time we used to spend on investigating and understanding why tests failed can now be spent on other things. Freeing up our testers, so they can focus more efficiently on test work that cannot be automated, further improving the quality of our software.”**



**intersolve**



**“Orangebeard Insights is highly effective in transforming low-key insights into valuable and actionable information.**

**The fact that these insights can be extracted and shared with the stakeholders and decision-makers quickly and with so little effort is incredibly valuable. The data needed to make the right decisions is available in no time. We can now achieve more in the same amount of time.”**



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# The product



## Fully operational cloud solution (SaaS)

End-to-End Solution

Realtime

Separate customer infra

All integrations are open source

You control your data



ISO27001 certified, hosted in EU (NL)

GDPR proof

Daily backups (30d retention)

Infinite history

Reproducible audit trails

Data at rest is AES encrypted

In transit SSL

OAuth2 / OpenID / SAML integration

Web Hook Support

Result data API



## Non-invasive

We correlate and integrate on multiple levels and do not require changes to the products you create.



Daily support (working hours timezone CET)

Phone & E-mail



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# ORANGEBEARD

It grows on you.



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