



Qt Quality Assurance

Analyze.  
Automate.  
Accelerate.  
*Assure Quality.*

# Future-proof Your Product Development

No matter your development approach, we have comprehensive quality management tools for your entire software lifecycle. Future-proof your product development by covering all the phases of the product development process with our solutions. Simplify across design, development, quality assurance and go-to-market to ensure continuous improvement and maintainability of your software. Our complete quality assurance offering enables you to automate your testing, accelerate your software lifecycle, and most importantly, ensure quality. Combine those three elements and you save time, cost, and enable growth.



Squish



Coco



Test Center



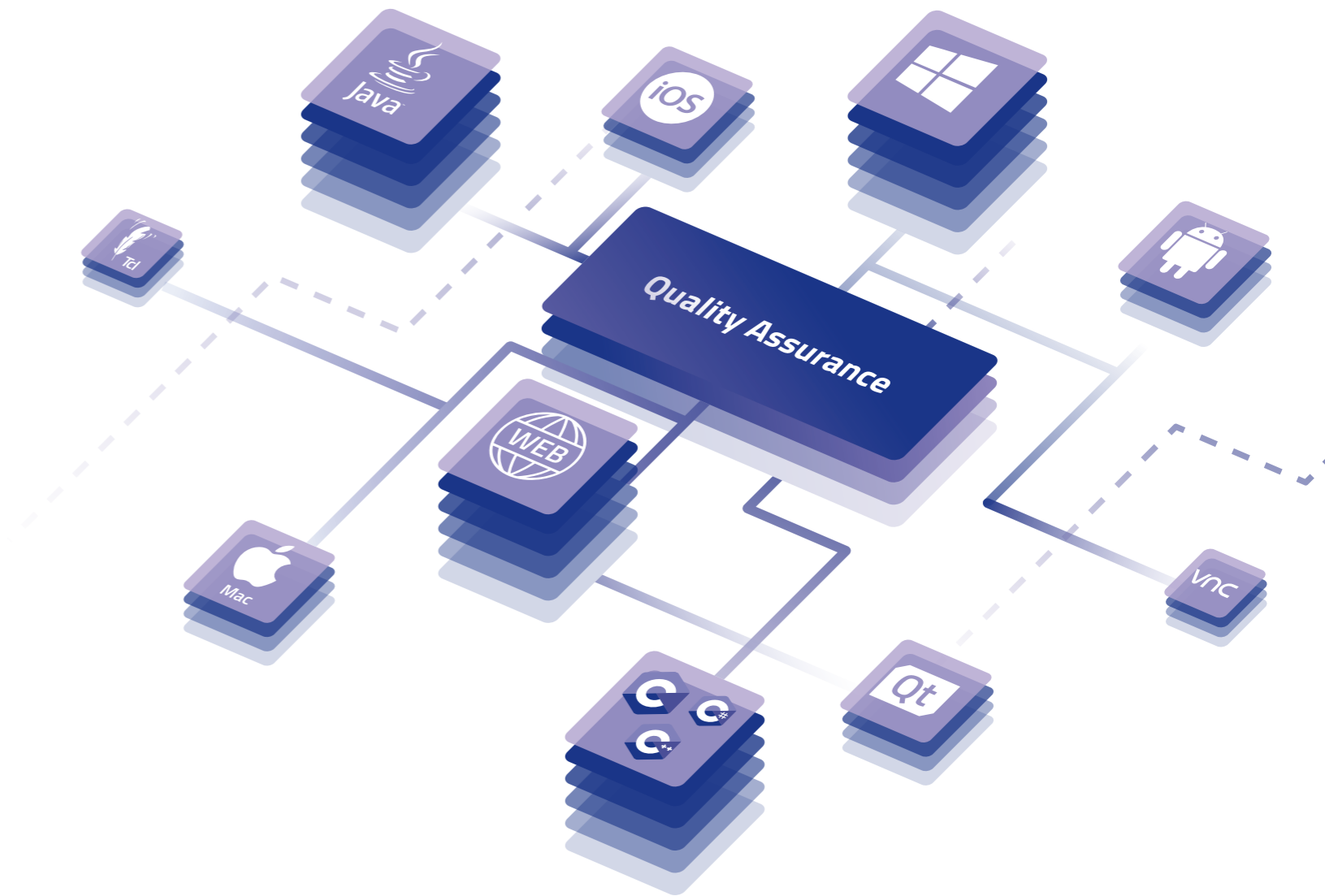
Axivion Architecture  
verification



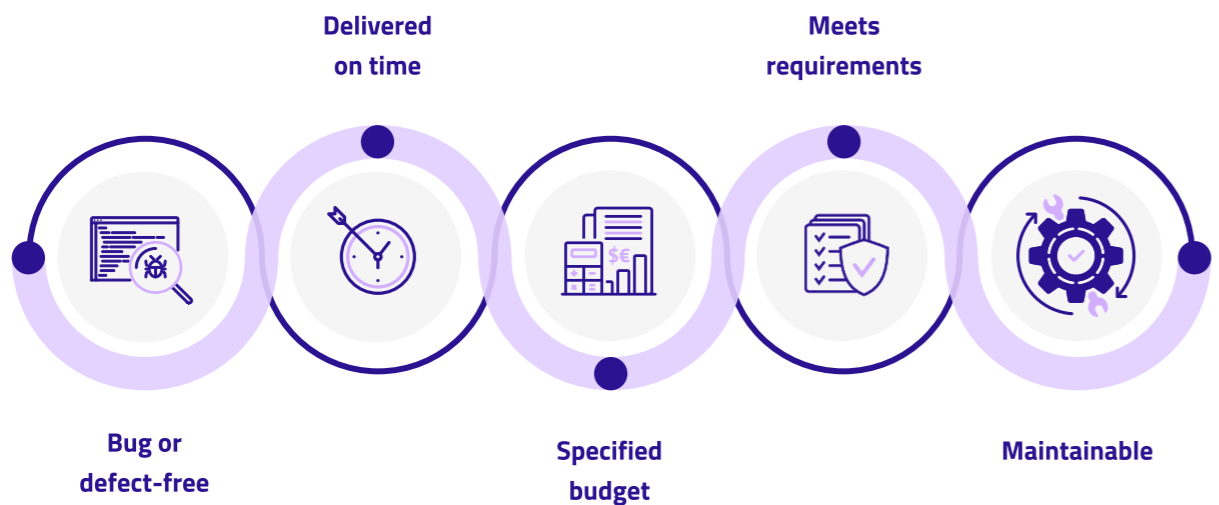
Axivion Static Code  
Analysis

## Your benefits

- + Automatated quality assurance
- + Holistic and comprehensive analysis
- + Follows industry-leading security standards
- + Saves time and money
- + Fully customisable
- + Integrates into existing development environments
- + Scalable tools, which adapt to changing requirements
- + Professional support for a hassle-free roll-out

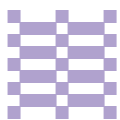


# Elevate Your Quality Assurance



## Coco

Make sure your code is covered. Coco is a cross-platform and cross-compiler code coverage analysis tool for C, C++, SystemC, C#, Tcl and QML code - from the froglogic acquisition. Merging multiple execution reports to provide advanced analysis and more outstanding features gives you insight at every level of testing. Assess and optimise code performance with Coco's built-in Function Profiler.



## Squish

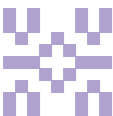
Seamlessly automate multi-technology applications or applications with more than one toolkit. Interact with UI controls of each type natively and automatically focus your efforts on application quality. Squish is ideal for agile-oriented teams. It fully supports Behaviour-Driven Development (BDD), an agile testing method which brings together technical and business project stakeholders to bring high-quality products to market. Schedule routine or custom-triggered test executions, identify regressions before builds get to QA and get that fast feedback on commits the team is looking for.



## Test Center

Manage your results. Test Center is a centralised test result management platform connecting your test automation with your entire development process - from the froglogic acquisition. View test suite statistics, visualise trends and analyze historical data of your test executions with built-in, automatic statistical reporting of your imported data. Achieve traceability by optimising tests and ensuring all requirements are fully realised through synchronising your results with your tools. Implement automatic result uploads from your Jenkins server for instant analysis of your pipeline projects. Test Center was built from the beginning to be a central, lightweight web database – access it from any device, at anytime.

# Quality - Right From the Start



## Axivion Architecture Verification

Implementing architecture verification ensures that the structure of the system remains clear and clean. To create the structural model of your software architecture, you can either set it up manually or import it from a UML model or from any other form of graph structure. Software architecture erosion and architecture debt are made transparent and can thus be effectively combated. To check if code complies with the architecture, deviations are flagged and further architecture erosion is stopped. Already existing architecture debt can be corrected via targeted refactoring measures which you can directly monitor in the results report of the architecture verification.



## Axivion Static Code Analysis

The static code analysis checks software projects for style and coding violations. Detecting clones, dead code, division by zero and other defects in the code at an early stage reduces the time and costs involved fixing these issues at a later stage. Axivion supports a vast number of metrics and coding guidelines. Especially safety- and security-relevant aspects are covered and can therefore be easily monitored. In addition, individual coding rules and guidelines as well as configuration options can be added, ensuring high quality standards are maintained right from the start.

### software architecture

- + verification
- + recovery and archeology
- + UML® tool integration
- + AUTOSAR arxml import

### freedom from interference

- + decomposition
- + segregation
- + safety architecture compliance



### compliance

- + certified by SGS-TÜV Saar for ISO 26262, IEC 61508, IEC 62304, EN 50128, EN 50657
- + ISO 25119, DO-178B/C
- + SPICE®, ASPICE

### safety and security

- + MISRA C/C++, CERT®, AUTOSAR C++14, CWE, ISO/IEC TS 17961
- + coding guidelines
- + runtime error detection

### technical debt

- + clone detection and management
- + dead code and cycle detection
- + include profiler
- + metrics (including HIS)



### solution engineering

- + tool chain integration
- + CI/DevOps integration
- + IDE integration
- + seamless process integration
- + individual coding rules
- + coaching and training

Optimise the use of the Axivion solutions from day one for immediate results and a competitive advantage. We offer comprehensive service to leverage customer success and support you throughout the entire lifecycle.

# The Right Solution for You

Each development team is unique, so we have made sure that all our products can be adapted to meet your specific needs. Supported by our experts, you can customise the tools to ensure you don't have to make compromises and that your projects are a success.

Whether you are developing embedded software for small sensors or large machinery, aiming for improved usability or want to meet industry standards: our Quality Assurance solutions will help you achieve your goals faster, better and with fewer resources.

- Automation technology
- Automotive
- Aviation, Aerospace & Defence
- Construction
- Electronics
- Energy technology
- IT, telecommunications & software
- Measurement & control technology
- Mechanical engineering
- Medical technology
- Pharmaceutical & laboratory technology
- Railway technology
- Research institutions



# Testimonials

Apex.AI

## APEX.AI

*"We have evaluated several static analysis tools, and Axivion Suite clearly stood out in our tests. The tool performed best in terms of AUTOSAR C++ 14 coverage and convinced us through its ease of use, control flow, and data flow analysis, and report generation. Axivion Suite has already become a mainstay component in our development workflow and a valuable component of our DevOps pipeline."*



## Fresenius Medical Care

*"We are securing our ability to innovate long term. Dependency on the hardware and therefore the risk of obsolescence is reduced thanks to the improved portability."*



## Skyguide

*"What's really key for us, having to do end-to-end integration testing and not normally having access to all the source code, is a tool like Squish that can talk to an application on Linux and one on Windows...it provides exactly what we need."*



## Trumpf

*"Easing pressure on the TRUMPF development team frees up capacity and boosts the team's confidence in its own development work."*



## Weatherford

*"Tree traversal for all the controls took forever in our old utility; this is actually where I saw the biggest performance gain in using Squish. One 12-hour test with a re-write [in Squish] now runs in four hours."*



## ZF

*"We have increased efficiency in the development of ZF: manual labour has been reduced, it is easier for architects and developers to collaborate and the reusability of subcomponents has improved."*



# **Qt** Quality Assurance