Tool Qualification Solutions BullseyeCoverage

BullseyeCoverage Tool Qualification Kit

A cost-effective solution for achieving formal tool qualification in highly regulated industries

Highlights

- Provides formal tool qualification for BullseyeCoverage
- Includes necessary artifacts for regulatory compliance
- Significantly reduces qualification costs
- Improves time to market by eliminating manual verification steps
- Increases confidence and assurance of regulatory compliance
- Provides extensible architecture
- Support available from experienced, independent verification and validation experts

Many regulatory agencies require that any software tool used to tailor the safety life-cycle must be qualified to ensure that the tool is functioning correctly for the intended purpose. One such automation tool is BullseyeCoverage.

Genuen's Tool Qualification Kit (TQK) provides a solid foundation for achieving formal qualification of BullseyeCoverage used as part of your development process in highly regulated industries such as automotive, aerospace and medical.

Understanding the Challenge of Formal Tool Qualification

Formal tool qualification enables the tool functionality to be trusted as true and correct, eliminating the need for costly, time consuming and recurring manual review of the tool outputs.

The qualification process generally involves industry specific documentation such as a safety manual, definition of operational requirements, verification of the requirements and maintaining the tool artifacts in a suitable configuration management system.

The process includes detailed analysis of the tool use cases and specific features that are relied upon to achieve compliance with the regulatory guidelines.

For complex tools, this can take hundreds and sometimes thousands of man-hours to accomplish. Additionally, the qualification package must be updated as new versions of the tools are released.

Leverage the Benefits of a COTS Solution

Out of the box, the Tool Qualification Kit provides all of the documentation that will be needed as the necessary artifacts for compliance. This documentation is essential because the overall goal is to show complete transparency for the qualification process.

The TQK includes the following artifacts:

- Safety manual
- Tool Operational Requirements
- Requirements-based Verification Procedures
- Test Trace Matrix

The kit also includes a set of automated test sequences that are run against the BullseyeCoverage components installed in the customer environment. The successful results along with the tailored artifacts listed above characterize the package that is required as evidence of compliance for the regulatory agency.

Gain Extensive Feature Coverage

Genuen engineers have determined the critical tool features that require qualification and that provide the most benefit to the end users.

The qualified feature set includes:

"C" Version
- Coverage Measurement
- Report File Generation
- Source File Coverage Metric
- Directory Level Coverage Metric
- Coverage Merging

"C++" Version
- Class MC/DC Coverage
- Class Function Coverage
- Structure Function Coverage
- Template Function Coverage
- Template Class Function Coverage

Genuen's TQK is based on an extensible architecture. Additional features can be added upon request.

Save Time and Money

By eliminating the need for manual verification, the kit provides tremendous value to companies across a widevariety of safety and mission critical industries where rigorous product development processes demand the highest levels of assurance.

With the newer functional safety standards like ISO26262 and DO-178C, there is specific information requiring the use of 'qualified tools' for verificationand validation (V&V) activities. The BullseyeCoverage TQK meets this specific need forthe BullseyeCoverage tool.

If you are using BullseyeCoverage as part of your development process in highly regulated industries,check out the TQK for BullseyeCoverage — a powerful, cost-effective alternative to manual verification.

About Genuen

We provide the test data you need across the entire development process, so that your ideas can take flight – reaching the market quickly, efficiently, and safely.