Coverity Qualification Kit for DO-330 Compliance

The Coverity
Qualification Kit
ensures that Coverity
is configured and
operating properly within
the customer's build
environment.

Organizations working to achieve DO-330 compliance as part of the larger DO-178C standard must ensure that the tools they use to test their safety-critical aerospace software are installed, configured, and operating properly within their software development environments. The Coverity® Qualification Kit addresses this need for Coverity static analysis and helps your organization comply with these standards.

According to DO-330 ("Software Tool Qualification Considerations"), development teams must perform tool validation within their end-user build environment. This helps ensure that safety-critical defects are not missed due to installation or configuration errors.

Coverity Safety Capabilities

Coverity static analysis is certified by TUV SÜD Product Service GmbH as meeting the requirements for support tools according to IEC 61508-3. It is qualified for use in safety-related software development according to ISO 26262, IEC 61508, EN 50128, and EN 50657. And it is classified for use up to Level A in accordance with DO-178C.

The documentation pack for the Coverity distribution includes the necessary functional safety manual, which describes tool operation and failure modes including the risk of misconfiguration, and false positives and false negatives.

Coverity Qualification Kit

The Coverity Qualification Kit helps prevent errors in safety-critical software development by

- those tests to validate the tool is configured properly
- Generating a report to show proof of compliance with this requirement.

The qualification process is consistent with the recommendations of DO-330