



Tool Development and Qualification

The problem

In order to increase the productivity and the quality of the software lifecycle, companies involved in the development of embedded systems are increasingly developing internal tools or using off-the-shelf tools to reduce, eliminate, or automate the objectives of the design or verification process

However, in the context of safety-critical software certification such as airborne software, ADAS systems and others, it is required to qualify these tools.

Our offering

CS Canada provides the following services to support the tool development and qualification:

- Adapt to the clients' tools to meet the standards
 - Assistance in the choice of tools
 - Assessment of the required qualification level
- Automate the production chain including the creation and/or the configuration of tools to meet needs up to qualification
- Develop and/or adapt a qualification kit
 - Creation of the Software development and verification plans
 - Specification document
 - Results report
 - Qualification report
- Qualify tools under ISO26262:2018 (part 8) and DO-178B/C (DO-330)
 - Update of documents (PSAC, SECI) and results (SAS)
 - Creation of documents related to the tool (TQP, TCI, TAS, TQR)



Benefits

By using CS Canada's services, the client inherits a controlled and reliable production line that meets their needs.

This production chain that includes qualified tools makes it possible to improve processes and accelerate production towards the certification of embedded mission-critical or safety-critical systems software.

Why CS Canada?

- Certification experience:
 - Aerospace: US (FAA), Europe (EASA) and Canada (TCCA) authorities
 - Automotive: TÜV SÜD
- Publication of articles
 - http://my.ldrasoftware.co.uk/repository/newsletters/LDRA_Newsletter_Issue_20.pdf
- Extensive experience in the use and qualification of COTS
 - Structural coverage analysis
 - Unit tests, integration tests, system requirements tests
 - Programming rules checking
- Culture of automation
- Experience in tool development and certification (tool chain of embedded system software integration testing tools)