# V&V Analyser

# Get certification-ready

# **SCOPE**

Critical Software's approach to providing customers with gap analysis audits adopts a rigorous and phased approach, with different activities prescribed at each stage. The objective is to enable the customer to understand the gaps that exist in the implementation of a given project according to the relevant industry certification standards.

#### **KEY ACTIVITIES**

#### Information Gathering

The information gathering phase sets out to obtain all of the relevant information about the project. This includes specific information about the project's implementation, artifacts and processes. It also includes face-to-face interviews to ensure all relevant information is captured."

#### **Gap Analysis**

A thorough gap analysis is then performed on the information collected in order to identify gaps in the project's processes. The relevant industry certification standards are used as a reference point for this analysis.

# **DELIVERABLES**

### **Audit Analysis**

Report The gap analysis results are documented in an audit report that is delivered to the customer. Contents include data from the analysis of project artifacts, processes and components, a synthesis of results and recommendations relating to the project as well as a list of open points to address.

#### **Final Presentation**

A final presentation will also synthesise the gap analysis audit, highlighting the main recommendations and the open issues identified. There will then be an opportunity to discuss the outcomes of the gap analysis.

# **RELEVANT INDUSTRIES**

Automotive	Industrial	Railway	Medical	Aerospace	Space
IEC 61508 Functional safety of electrical/electronic/programmable electronic safety-related systems			ISO 14971 ARP 4761 Medical devices - application of risk management to medical devices safety assessment	ECSS series Processes for project management, engineering and	
ISO 26262 Road vehicles - functional safety	IEC 61511 Functional safety - safety instrumented systems for the process industry sector	EN 50126 Railway opplications - the specification and demonstration of RAMS EN 50128 Railway opplications - communications, signalling and processing systems -software for railway control protection systems	ISO 62304 Medical devices software - software life cycle processes  ARP Cert cons highl or co syste  DO- Soft cons airbe and certi  DO- Desis guild airbe ai	process on civil airborne systems and equipment	product assurance in space projects and applications
				ARP 4754 Certification considerations for highly-integrated or complex aircraft systems	NASA STD 8719.13B Software safety standard - NASA
	IEC 62061 Safety of machinery - functional safety of electrical, electronic and programmable electronic control systems				technical standard
				DO-178B Software considerations in airborne systems and equipment certification	
		EN 50129 Railway applications - communications, signalling and processing systems - safety-related electronic systems for signalling			
				DO-254 Design assurance guidance for airborne electronic hardware	







