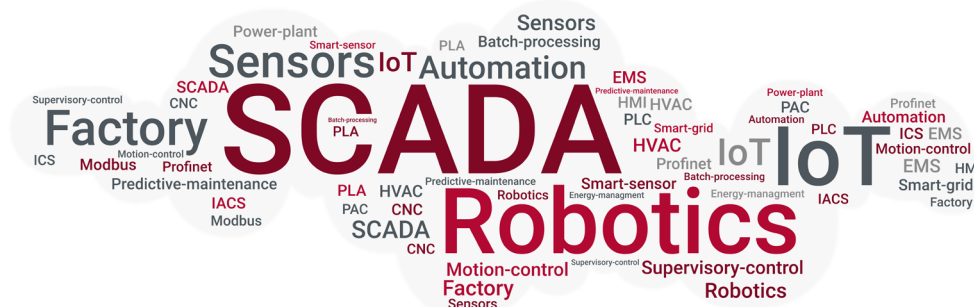


QAMISRA 



Tool Certification kits for each are available free of charge.

QA Systems software verification tools are used accross industrial domains.



G4S Alarm Generation Subsystem, Case Study

"The productivity gains of 30-40% stayed with us, especially when we were able to take advantage of reusing old tests... It became very apparent that units and tasks which had received the full Cantata treatment were much easier to integrate than those which, for various reasons, had not. We gained considerable confidence in the reliability of each other's software by knowing it had been properly tested. Speaking conservatively, this product [Cantata] has probably paid for itself twice over already... More and earlier testing is what I would do! As an activity there is no doubt it pays for itself if done properly."

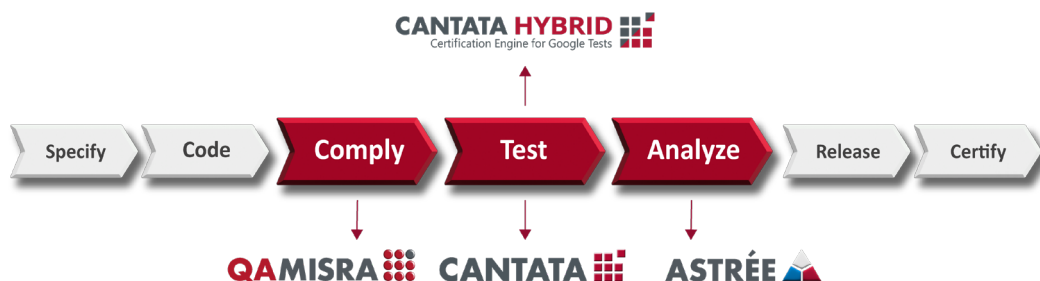
Special Projects Manager, G4S



Standard Compliant Verification

**Industrial
Automation**
Customers include:

QA Systems static analysis & software testing tools support standard compliant verification in linear flow as below:



QA Systems tools can be used for standard compliant verification to the generic industrial automation software safety standard IEC 61508 and to coding standards: MISRA (for safety), CERT and CWE (for security).

IEC 61508

The IEC 16508:2010 Functional Safety of Electrical / Electronic / Programmable Electronic Safety-related systems, is the generic 'grandfather standard' widely used where sector-specific standards are not defined. It classifies risk-based Safety Integrity Levels from SIL 1 up to SIL 4. The verification techniques defined within the standard are highly reliant on automation tools qualified or certified as suitable for use (QA Systems tools are).

IEC 61508 Part 3 section 7.4.4 recommends that software tools are certified (QA Systems tools are certified as class T2 off-line support tools suitable for use up to SIL 4).

Cantata (for unit and integration testing) addresses IEC 61508 Part 3 Software Requirements sections 6 and 7 plus Annexes A & B.

QA-MISRA (for coding standards compliant static analysis) addresses section 7 and Table A.4 where application of coding standards is explicitly recommended for SIL 1 and highly recommended for SIL 2 to SIL 4.

The Cantata IEC 61508 Standard briefing and QA-MISRA Safety Manual detail how these QA Systems tools can satisfy the verification requirements of this standard.

ABB

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BITRON

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EGICON
Reliable engineering

flex

**FORSEE
POWER**

HAMILTON

HITACHI
Inspire the Next

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NORD
DRIVESYSTEMS

PILZ
THE SPIRIT OF SAFETY

SIEMENS

SSSTC



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