

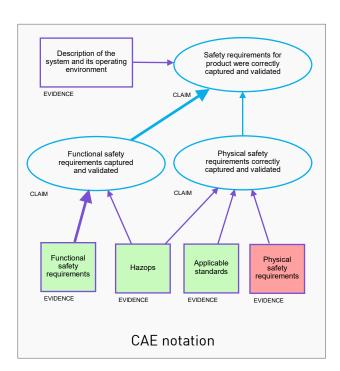


ASCE

The Assurance and Safety Case Environment

Assurance and safety cases are structured arguments supported by evidence that are crucial to delivering today's dependable systems. They communicate the risk management strategy that has been adopted in the design, operation and management of dependable systems and enable providers of such systems to meet their regulatory obligations.

The act of creating a safety case helps stakeholders establish a shared understanding of issues that contribute to safety. Once complete, a safety case provides a reviewable artefact documenting how safety is achieved in the system. The safety case is also useful as an artefact that a reviewer or regulator can use to understand and make judgments about the system.



G3 G4 Functional safety requirements captured and validated Physical safety requirements correctly captured and validated GOAL Sn4 Sn1 Sn2 Sn3 Physical safety requirements Function Applicable Hazops SOLUTION SOLUTION SOLUTION GSN notation

Description of the

system and its operating environment

CONTEXT

G2

Safety requirements for product were

correctly captured and validated

Adelard's ASCE software is the most widely adopted commercial tool for the development, maintenance and communication of assurance and safety cases.

A key component of the assurance case is a structured argument, backed by supporting evidence. ASCE supports industry standard formats for structured arguments including Claims, Arguments, Evidence (CAE) and the Goal Structuring Notation (GSN).

What our customers say about ASCE

- "A versatile, comprehensive, easy to use software package which can be used for the simplest to the most complex safety case."
- -Compliance Manager, MOD
- "Facilitates creation of assurance reports for operators, investors and regulatory bodies."
- -Reliability and Software Engineer, Energy Industry

Why use ASCE?

Visualisation of the structured argument

 The ability to visualise, and thereby understand, the whole of the assurance argument using colour coding and filters, quickly highlight areas of compliance and conversely, those areas that require further investigation to minimise risk.

Productivity gains

- With multiple documents in support of the assurance case the potential to overlook changes is high. ASCE simplifies the document management challenge by identifying changes in the underlying evidential documents allowing for the impact of those changes to be assessed.
- ASCE with its one touch reporting into Microsoft Word or HTML, takes away the effort of manually creating custom reports and greatly reduces the time it takes to get information to assessors for review.

Content editing and management

 Each node in the structured argument can have its own supporting content, including formatted text, images and links to evidence. This enables the visual argument to be more succinct whilst providing the detailed content when needed.

Licensing

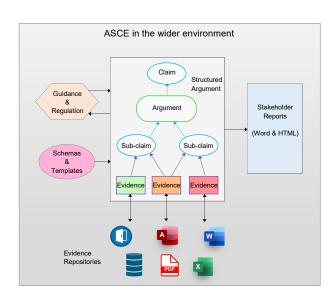
Two licensing models are available, node-locked and floating. A node-locked licence is designed for use by a single user on a designated computer. A floating licence can be accessed by a pool of users from any suitable computer. Customers can select a licensing combination that best meets their business needs.

Consulting and training

Consulting and training packages are available to ensure that you get the maximum from your investment in ASCE. We can advise on any aspect of the assurance case design helping to reduce both the time and risk in delivering the assurance case.

Support and maintenance

Assistance when you need it through dedicated communication channels and access to a knowledge database. In addition, you will receive software updates and new releases at no additional cost.



DOORS Integration

For organisations that use IBM Rational DOORS for requirements management, this integration permits ASCE to seamlessly reference evidence held within a DOORS database.

Modular GSN

A modular approach to assurance case design means that large and complex cases can be organised into separate interrelated modules. Designing in this modular way lends itself well to distributing subsections of the assurance case across divisional and contractual boundaries.

ASCE Viewer

A read-only version of ASCE is available to reviewers and stakeholders who need to view the assurance case but are not required to make edits.

About Adelard

Adelard, part of NCC Group, provides independent and technically sound advice on how to engineer and assure high integrity computer-based systems.

We are an influential consultancy and product practice working in nuclear energy, medical, defence, finance, housing, air traffic control, rail and critical infrastructure protection.

Our areas of expertise include independent safety assessment; goal and outcome-based approaches to assurance; security-informed safety and dependability.

We have defined and developed best practice in a range of critical applications and have several important strategic relationships with industry, government and regulators.