

Collaborative Designer for STIMULIS (LUS)

The world's first modelling & simulation tool enabling you to write, edit, debug and test functional, real-time systems requirements the same way a programmer would develop a piece of code.

Make Embedded Systems Requirements Right The First Time

Extend Model-Based Systems Engineering with Requirements-In-the-Loop Simulation

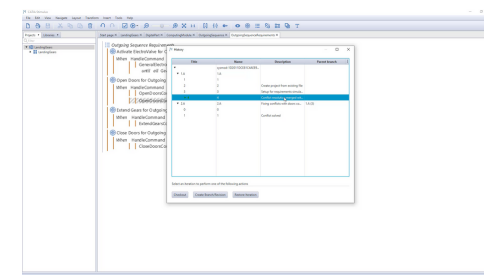
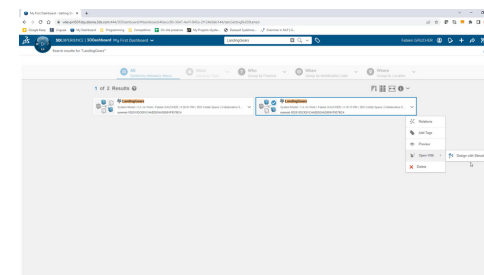
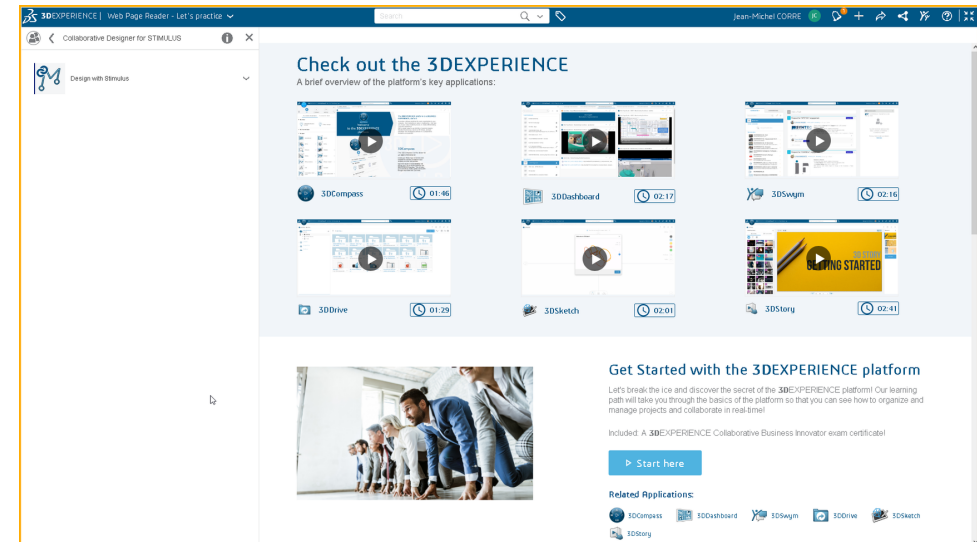
An end-to-end Requirement-based Validation Solution

At specification phase, CATIA STIMULUS enables system architects to simulate requirements and to detect ambiguous, incorrect, missing, or conflicting requirements before the design begins, thus creating the high-quality specifications needed for the validation of safety-critical embedded systems.

Development teams spend less time redefining requirements, rewriting, and re-debugging code, resulting in fewer development iterations needed to achieve quality results.

At validation phase, CATIA STIMULUS also enables test engineers to generate test vectors and test objectives automatically and to check that your embedded code complies with its specification.

Testing teams no longer write nor maintain test cases that are manually derived from the requirements. Instead, they reuse work done by system architects to build highly flexible test campaigns, allowing to adopt effective agile methods.



Benefits

- Manage full CATIA STIMULUS projects in lifecycle (similar to the current use of GIT)
- Leverage 3DEXPERIENCE features (index, traceability, configuration, change, etc)
- Interoperability (architectures, requirements & tests) with 3DEXPERIENCE and external tools
- Co-simulate with 3DEXPERIENCE and external tools
- Achieve Early Requirements Validation
- Share Clear and Observable Requirements among engineers
- Maximise functional coverage of test campaigns
- Reduce costly iterations of the development process

Highlights

- Express textual requirements in a readable formal language
- Model state machines and system architectures
- Observe possible executions of the specified system
- Generate numerous test cases automatically

APPS

