WEBINAR RULES

- You'll be muted during the Webinar
- Please write your questions or comments in the question section
- The Webinar will be recorded

STARTING SOON

16:00

CEST

WEB-BASED DIGITAL THREAD FOR SYSTEMS ENGINEERING

WEB-BASED DIGITAL THREAD FOR SYSTEMS ENGINEERING

01

Introduction to The REUSE Company and the speaker

02

Introducing the new Web-Based Digital Thread for Systems Engineering

03

Authoring Web edition: Seamless integration with web-based engineering tools

04

SES Engineering Studio Web edition: Digital thread analysis tools

05

Live demos

06

Q&A

01

What we DO

The REUSE Company provides a platform and a set of well-defined methods to support the implementation of an incremental and comprehensive reuse process. The approach is based on knowledge management & elicitation, quality assessment, interoperability across tool ecosystems, artificial intelligence, and smart search engines.

Luis Alonso

- **Current Position:**

  Consultant Director of The REUSE Company

- **Former position:**

  Chief Software Architect of The REUSE Company

Iker Gonzalez

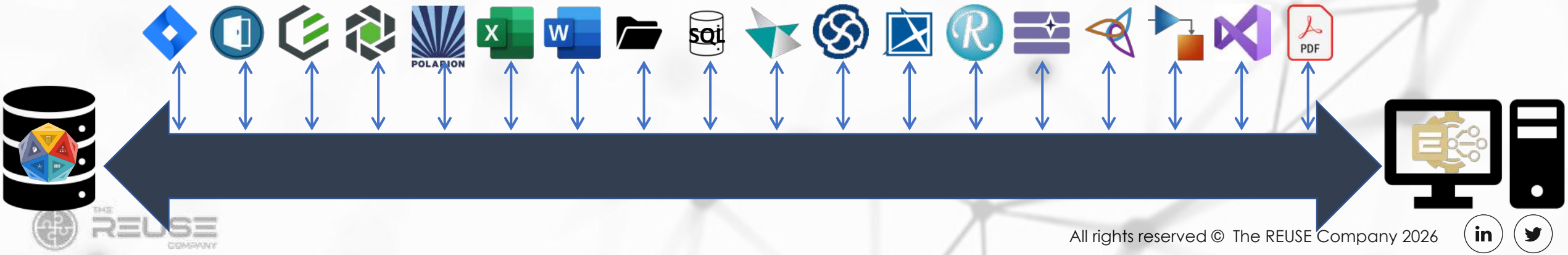
- **Current Position:**

  Consultant of The REUSE Company

INTRODUCING THE NEW WEB-BASED DIGITAL THREAD FOR SYSTEMS ENGINEERING

SES ENGINEERING Studio

- A modern tool to leverage activities developed on other tools
- Not aiming at replacing the concept of SoT
- But including connectivity to +50 tools:
  - RM, MBSE, ALM, PLM, MS Office, PDF…
- Featuring traceability and interoperability among all these tools:
  - ***Digital Thread** as a **Synchronized Source of Truth***



SES ENGINEERING Studio

- A modern tool to leverage activities developed on other tools
- …
- And implementing a series of Technical and Technical Management Processes on top of all those tools:

SES Engineering Studio Web and Desktop editions:

STRONGER TOGETHER

SES ENGINEERING STUDIO WEB AND DESKTOP EDITIONS: STRONGER TOGETHER

- SES Engineering Studio web edition (new!):
  - Authoring capabilities: semantic **writing** and **traceability assistant**
  - Including digital thread tools:
    - Global impact analysis
    - Orphan Analysis
    - Semantic search capabilities for detailed impact analysis
- SES Engineering Studio desktop edition:
  - Traceability, Authoring and Quality Management and Reporting
- **Resulting into an outstanding integration and mix of features**

AUTHORING AND TRACEABILITY GENERATION CAPABILITIES

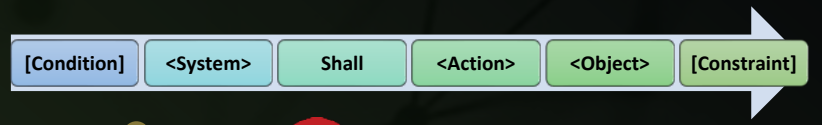
Web add-in to assist during the **authoring** and **traceability generation** process, providing customizable **quality reports** **and** **impact analysis**.

Implements the notion of CCC: **correctness** for individual requirements, and **consistency** and **completeness** among requirements and models.

Fully integrated with web requirement management tools, including a web extension

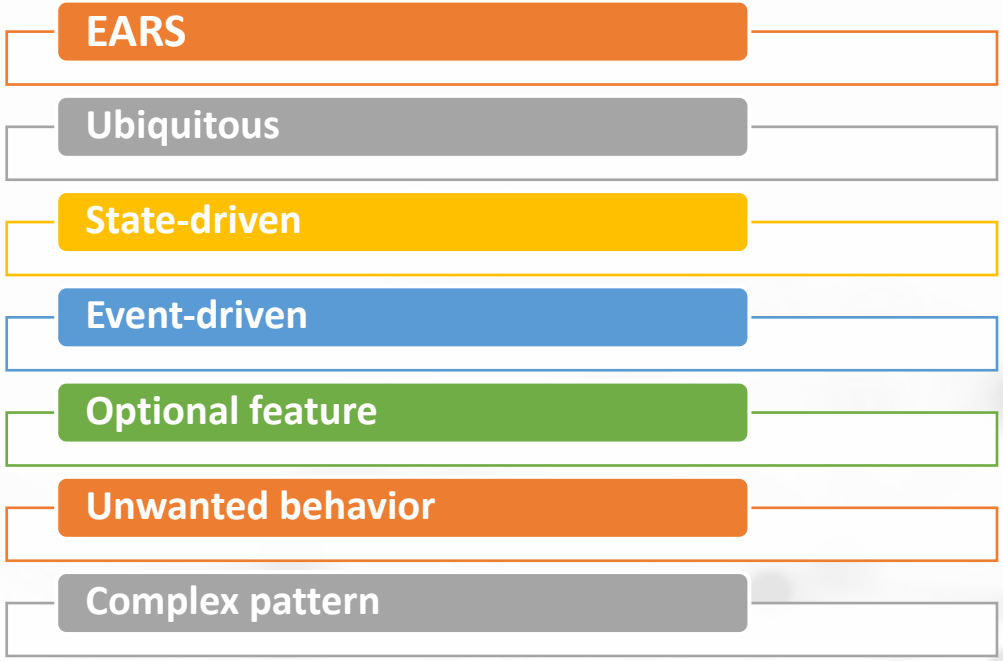
Implementing the rules in the INCOSE GtWR and many other guidelines

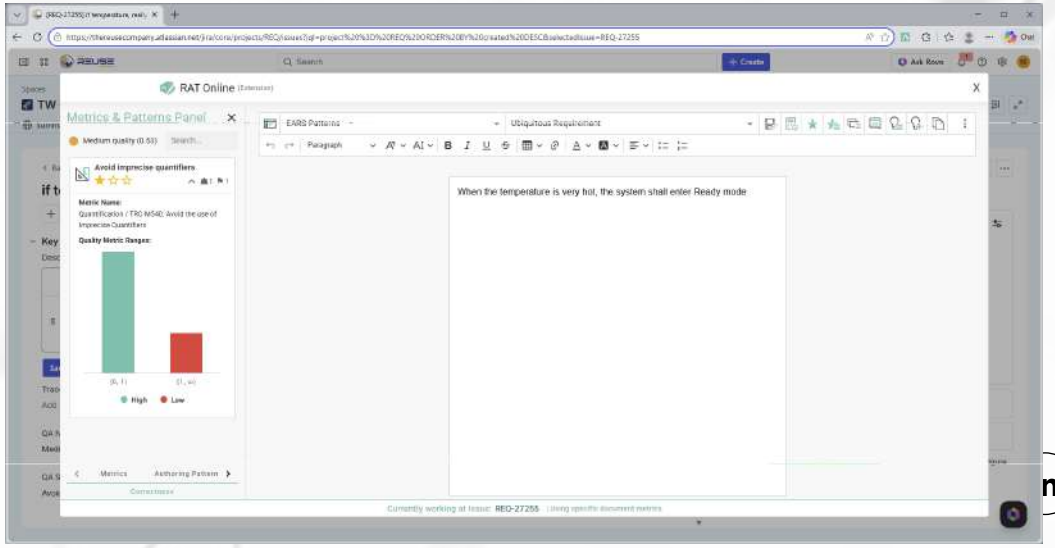
Implementing catalogues of patterns like EARS, INCOSE…



With a Semantic Writing Assistant

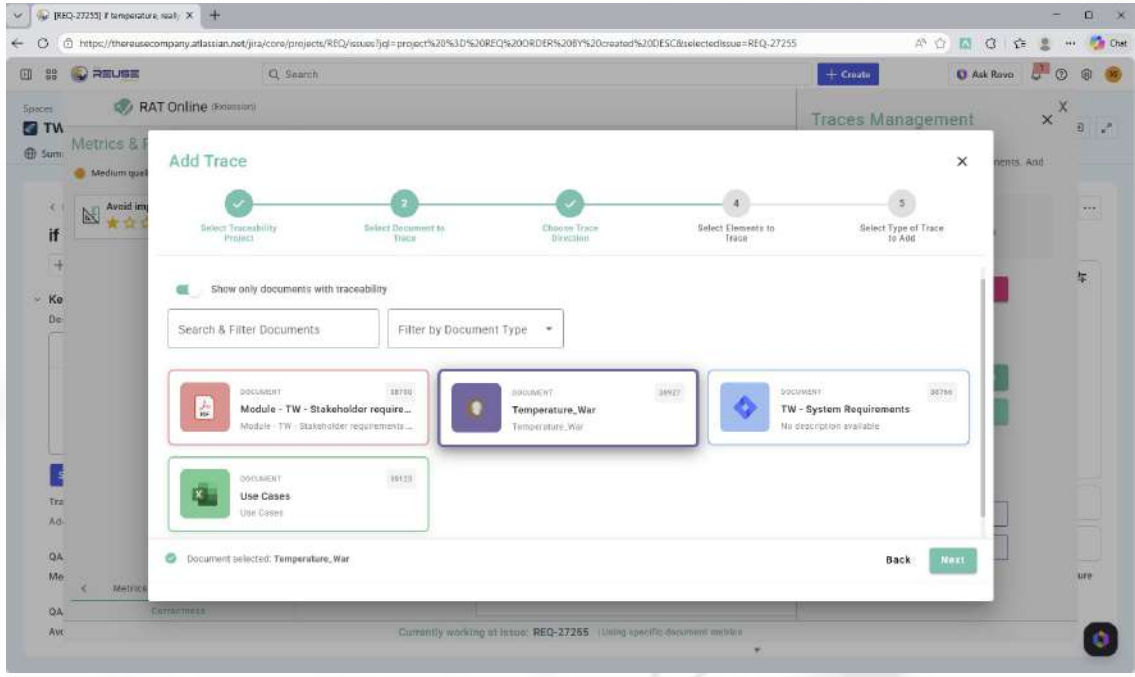
- A SMART assistant is helping authors, in real-time:
  - Follow a set of agreed patterns such as those defined by EARS, INCOSE, the MASTER …
  - Real-time checking of the agreed rules: INCOSE GtWR…
  - Search for duplicates





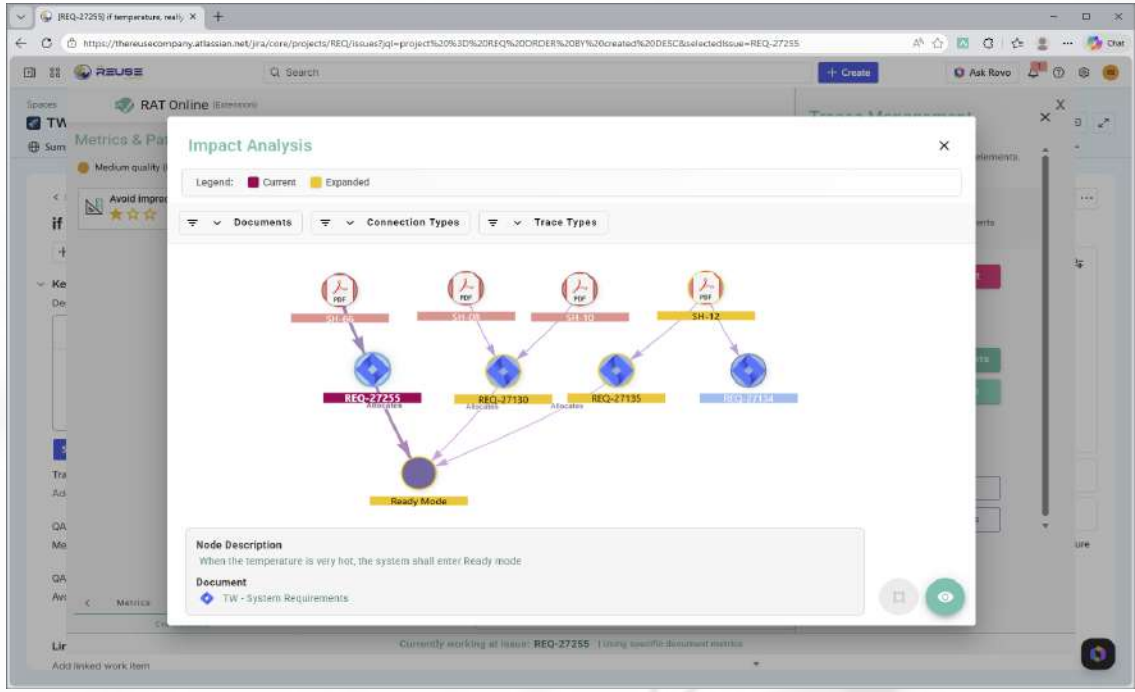
Trace while authoring

- What about connecting your requirements in your web tool with:
  - Regulation that has been parsed in a PDF file
  - External requirements in MS Word, Excel, or other formats
  - Models in an MBSE tool
  - …



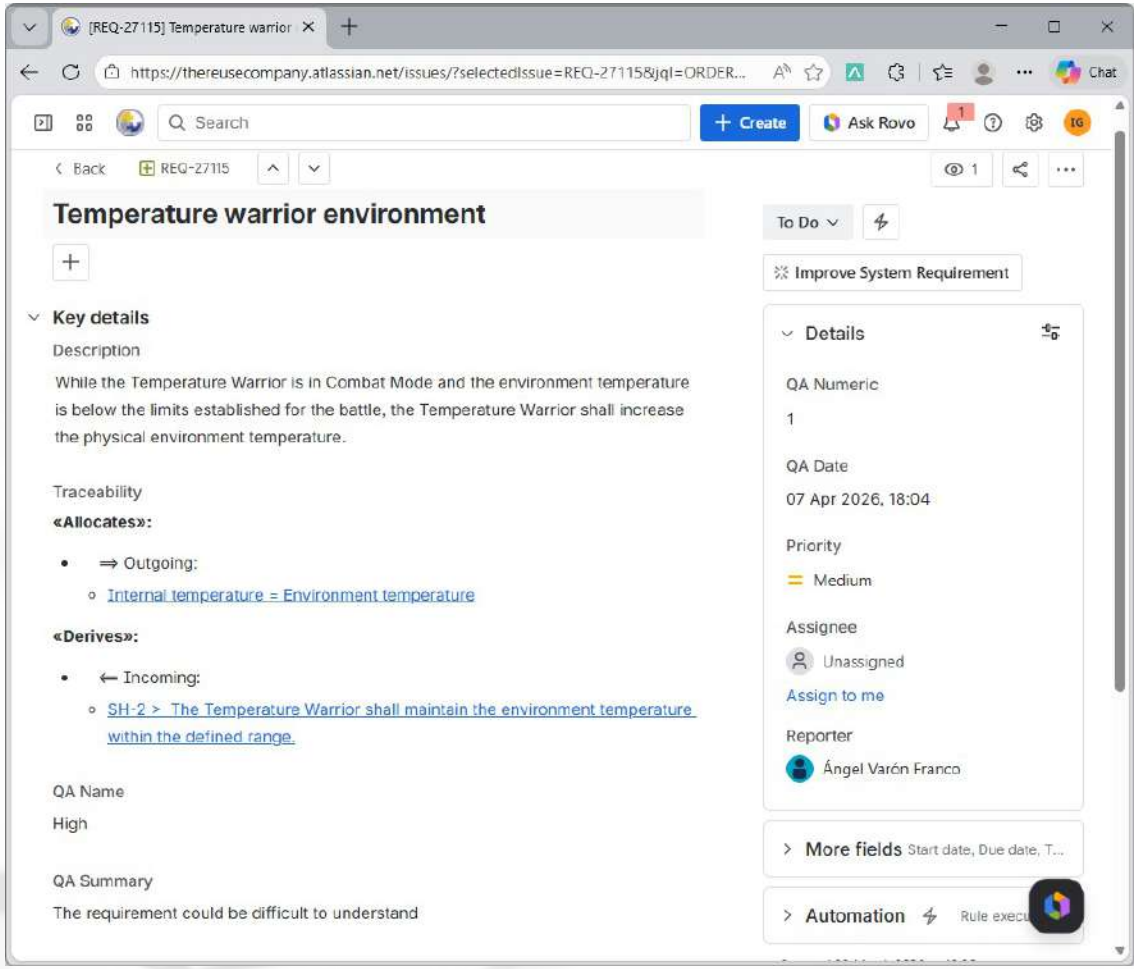
Assessing impact while authoring

- What about revising all your traces in a simple snapshot while you are still authoring your engineering elements
  - Detect missing traces
  - Identify incorrect traces
- Everything before any external review takes place



Quality/Traceability reporting on the web

- What about a reporting inside the requirement management tool (read-only copy)
- Traceability analysis:
  - Detailed list of the traces and its typology with links to the other end.
- Quality analysis report:
  - Quality Level (High, Medium, Low)
  - Quality Summary (list of defects)
  - Quality Date



SES ENGINEERING STUDIO WEB: DIGITAL THREAD TOOLS

Assess your digital thread with **SES Engineering Studio web edition** to find inconsistent or missing traceability, and perform **impact analysis** for assessing changes in your engineering workproducts

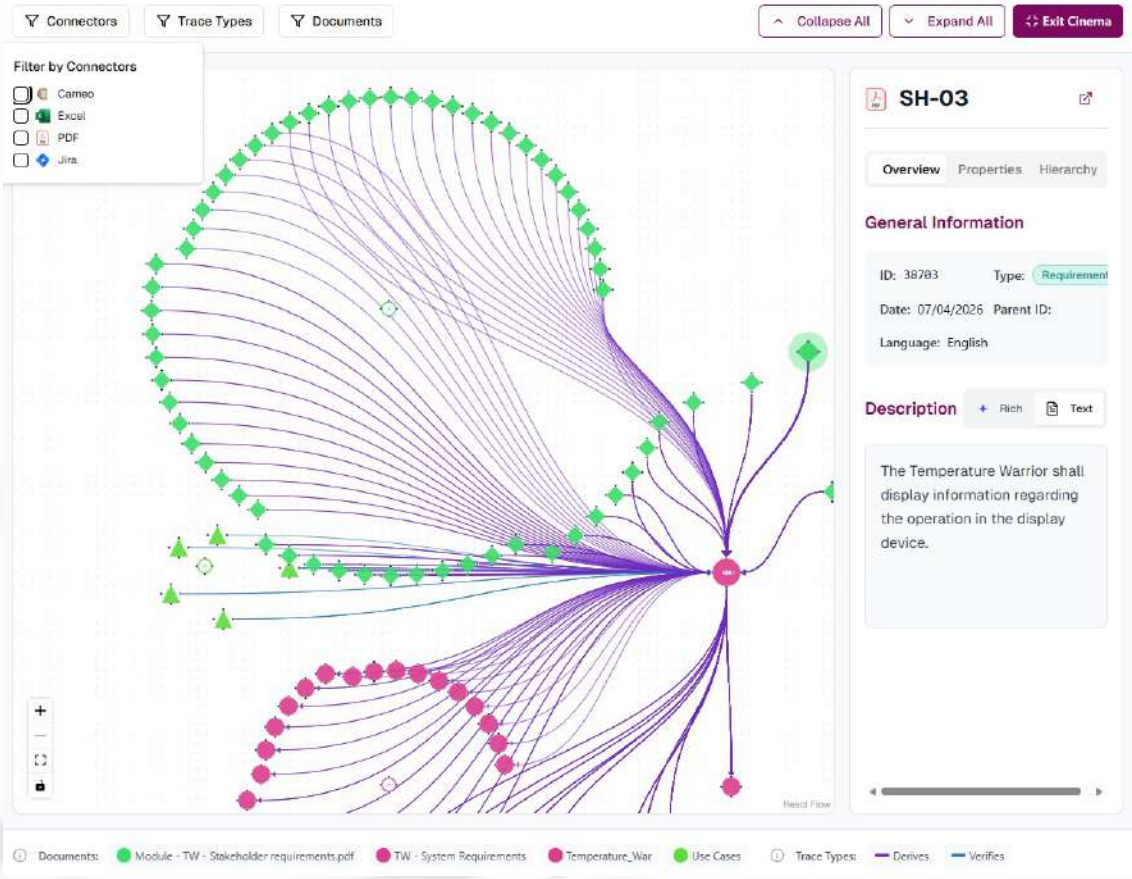
Find improvements in your digital thread by using the Global Impact Analysis tool

Find missing threads in your engineering ecosystem by using the Orphan Analysis tool

Determine impact analysis of any change set, involving one or many elements with the Semantic Search and the Impact Analysis tool

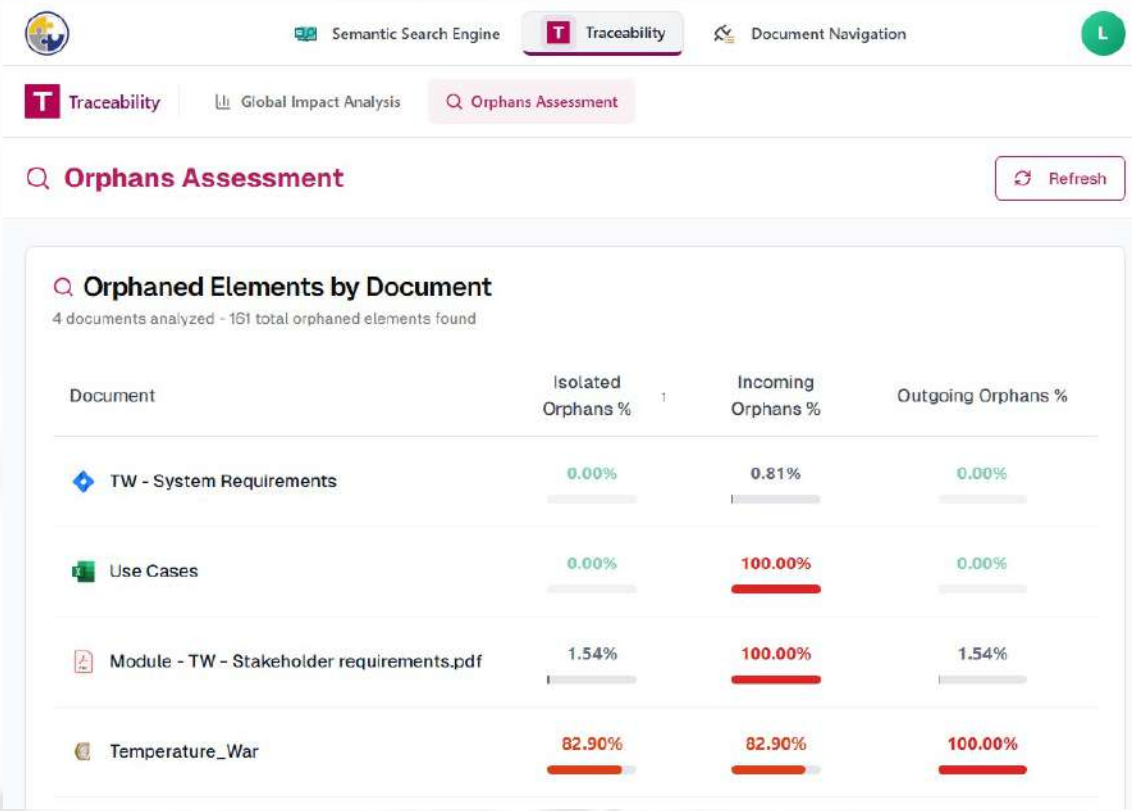
Global Impact Analysis

- Displays the traceability architecture across all documents in the repository.
- Possibility to display detailed traces among elements inside engineering documents.
- Possibilities to refine the analysis by filtering on:
  - Connector type
  - Trace type
  - Document type



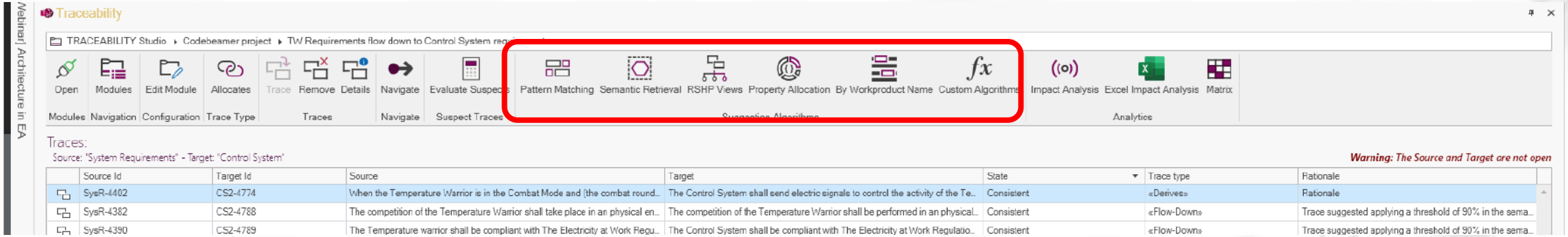
Orphan Analysis

- Looks for orphan elements in regards of traceability:
  - No incoming or outgoing traces
  - No incoming traces
  - No outgoing traces
- Show detailed list of elements in each category for each document
- Possibility to discard elements for traceability orphan analysis based on user decision.



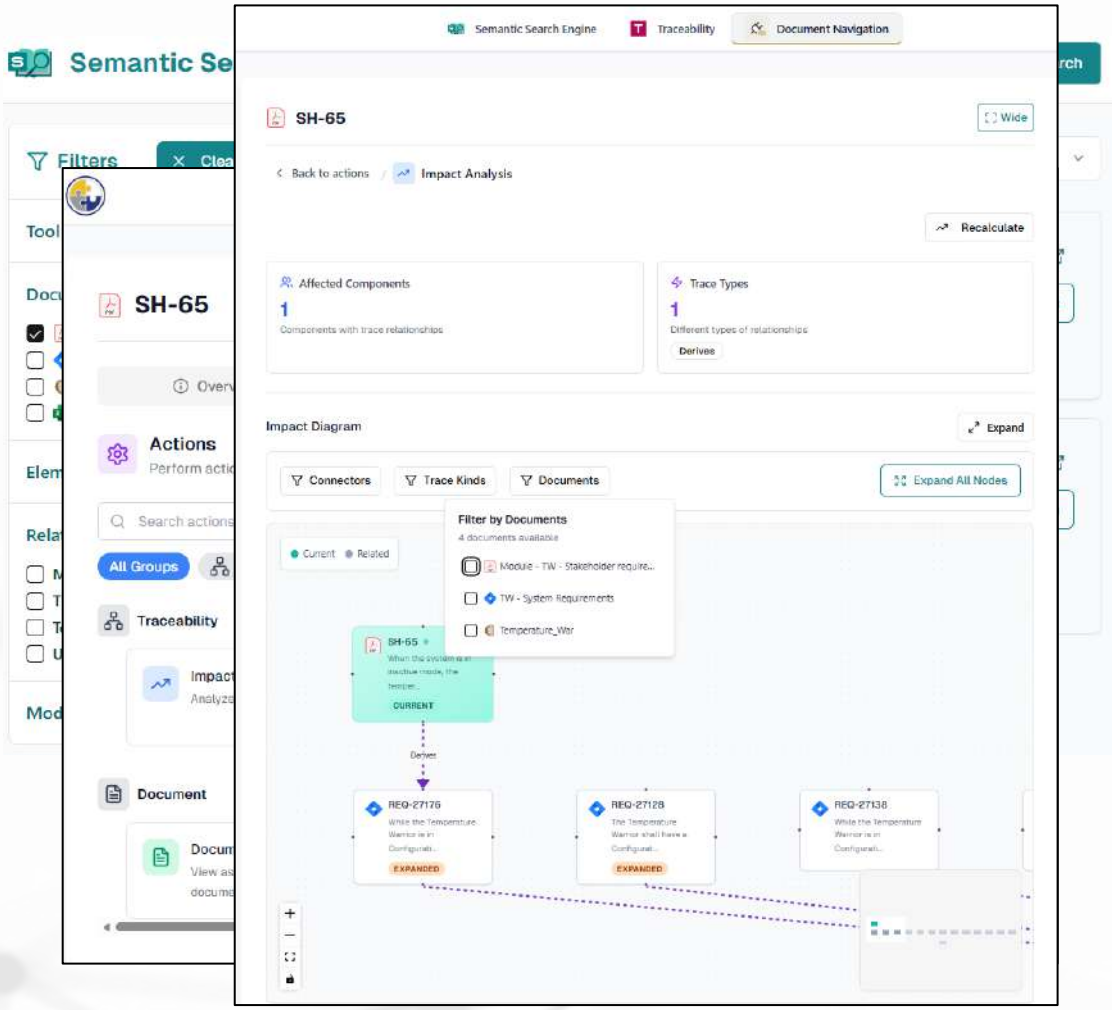
Orphan Analysis: Traceability Creation Assistant

- But if you consider traceability a tedious task…:
  - Ask your traceability assistant to identify traces for you
  - Different algorithms that consider the text in your requirements, and the information in the ontology and the connected models
  - Custom methods so that you can develop other means to identify traces
  - Synchronizes the detected traces to your RMS



Semantic Search

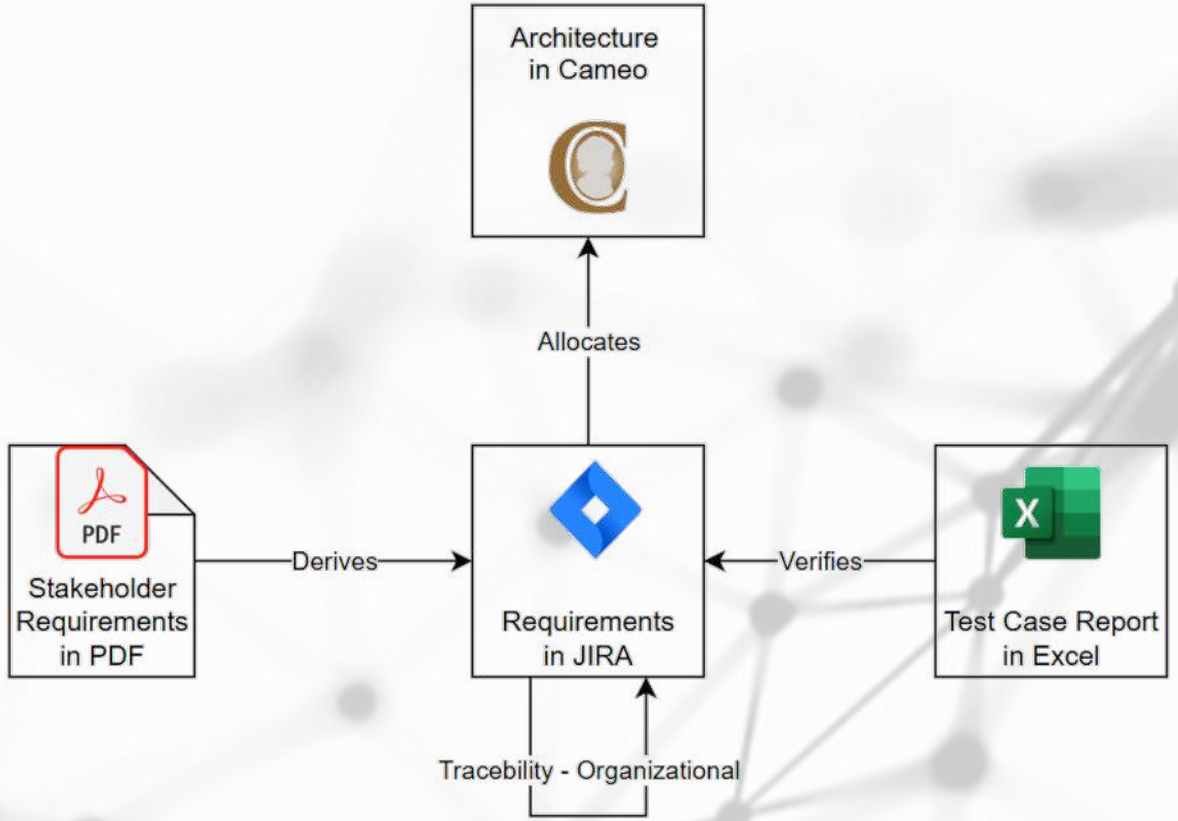
- Designed to look for engineering items based on textual search enhanced with semantic capabilities to refine the selection.
- Facetted filtering based on the container document, type of the container, type of the element, related with, etc.
- Possibility to visualize the element, its container, its properties and perform different element-oriented actions, such as impact analysis.



DEMOS

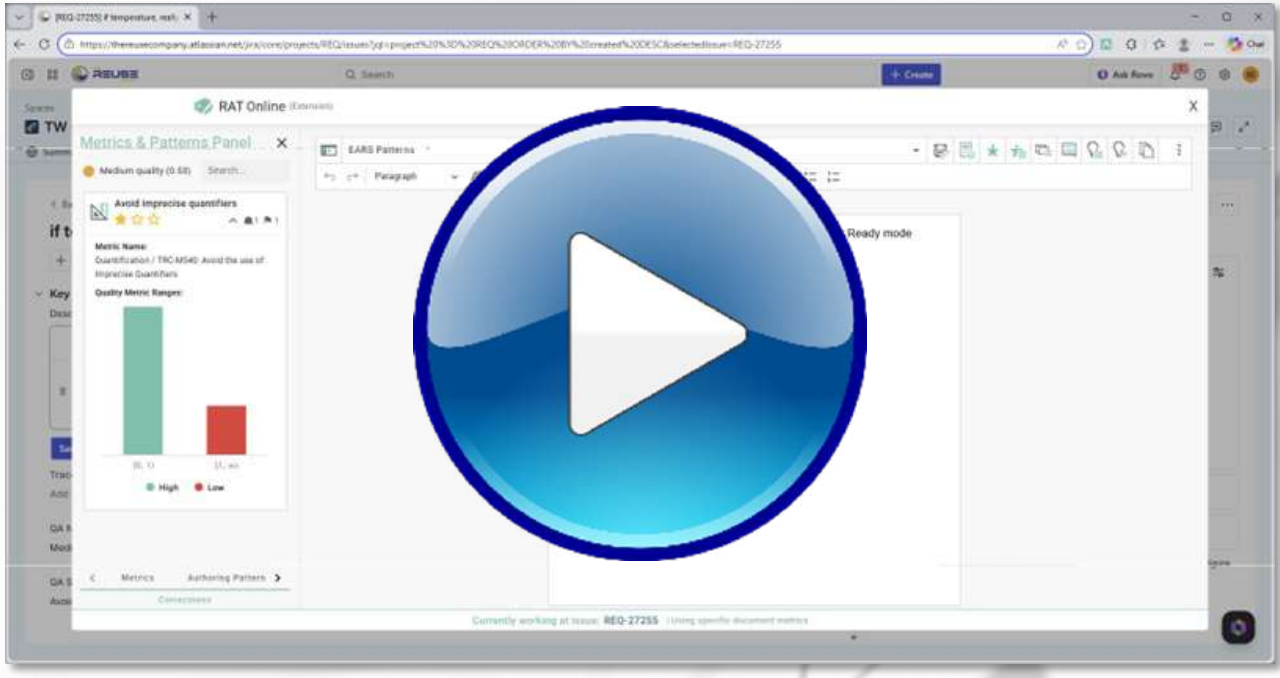
DEMO ECOSYSTEM

- Supposing being Tier 1
  - Receives **Stakeholder requirements** for the component **from the OEM in PDF.**
  - Developing **System Requirements in JIRA.**
  - Developing the **System Architecture in Cameo.**
  - Having the report of the **Test Cases in an Excel** file.
  - Tracing:
    - Stakeholder requirements to System Requirements
    - Test Case Result Report to System Requirements
    - System Requirements to Functional Requirements
    - System Requirements to Architecture



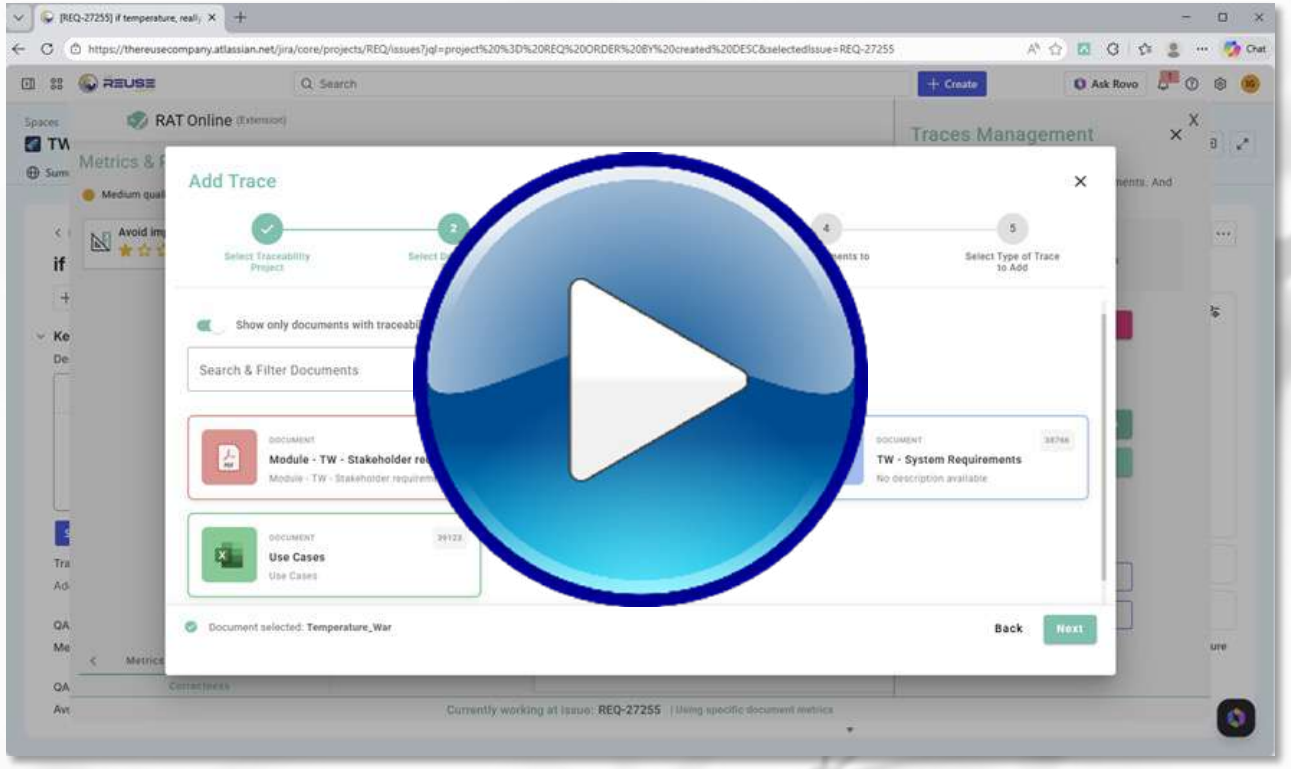
DEMO: AUTHORING CAPABILITIES

- Steps:
  1. Create issue in JIRA
  2. Author the description with RAT Web Plugin



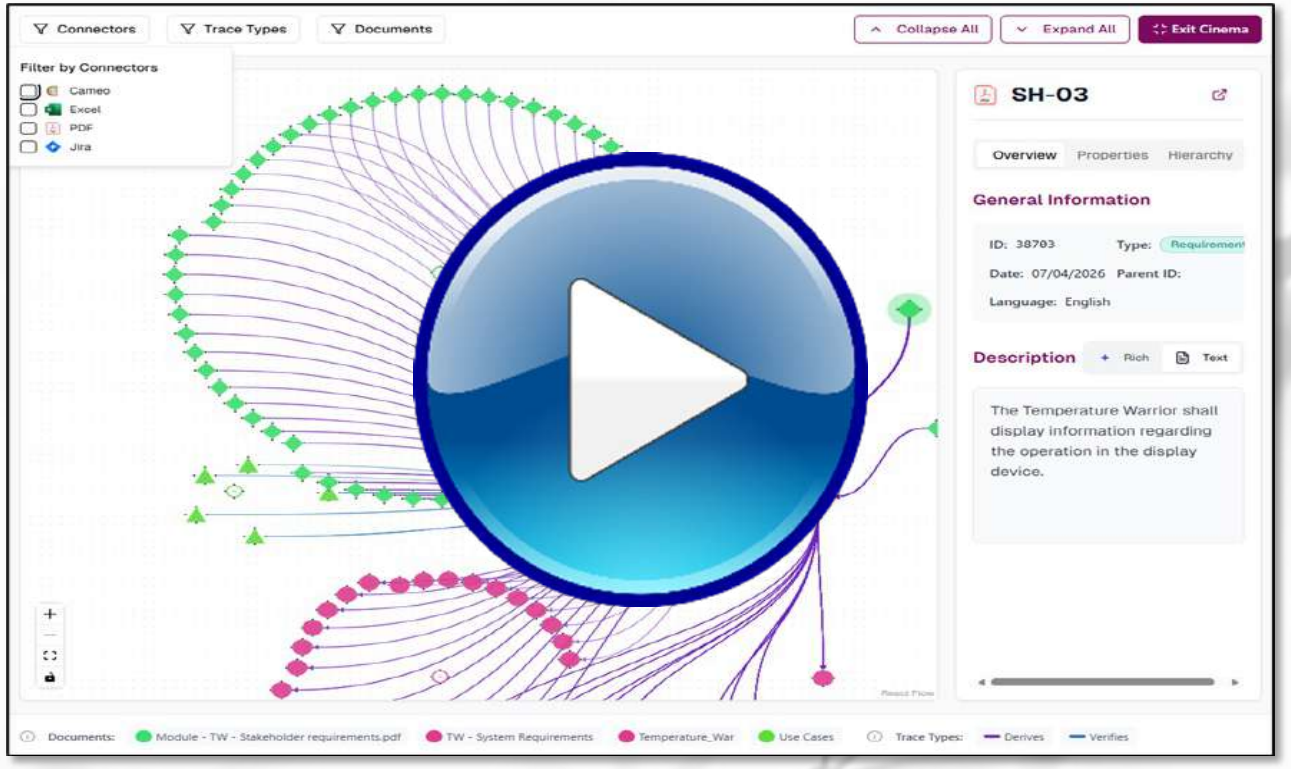
DEMO: AUTHORING TRACEABILITY

- Steps:
  1. Create trace with architecture elements
  2. Create trace with Stakeholder Requirement
  3. Create trace with Use Case elements
  4. Perform impact analysis
  5. Report in Jira Issue



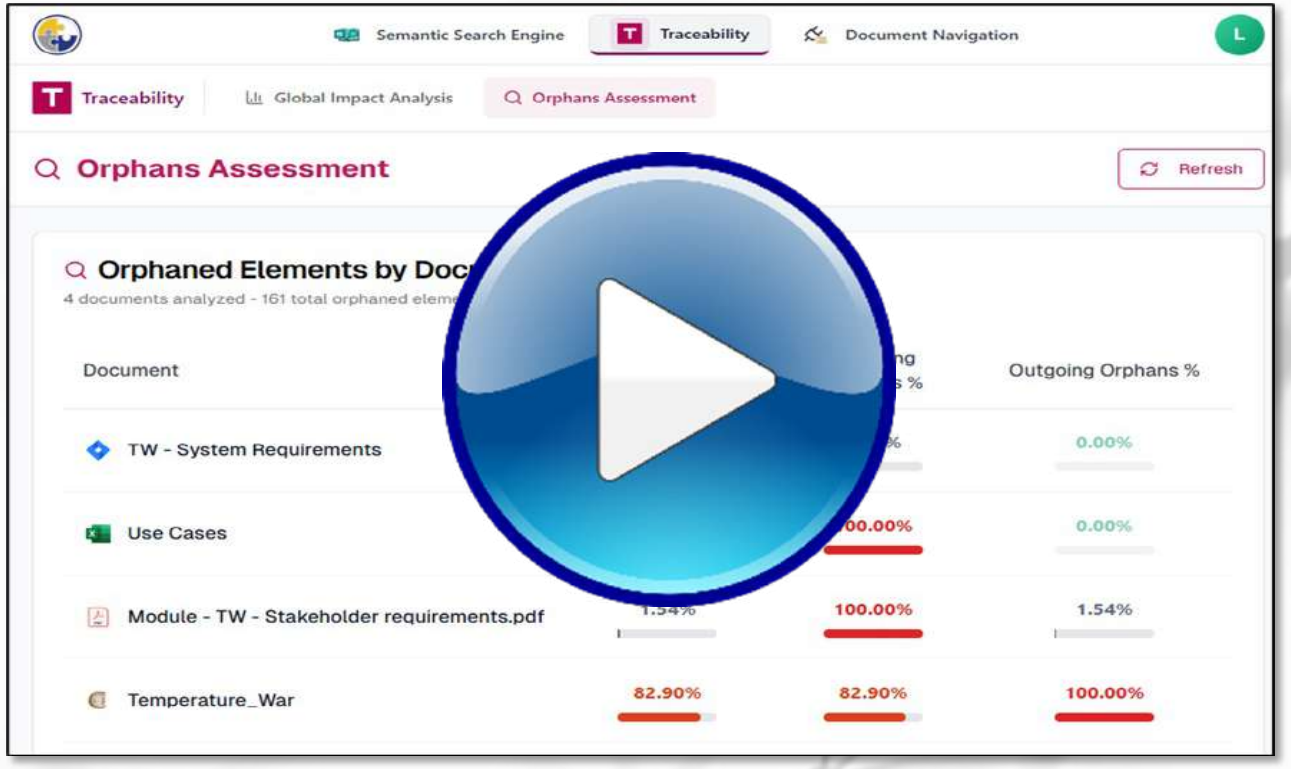
DEMO: GLOBAL IMPACT ANALYSIS

- Steps:
  1. Global Impact Analysis tool
  2. Traces architecture visualization
  3. Using filters to analyze traceability



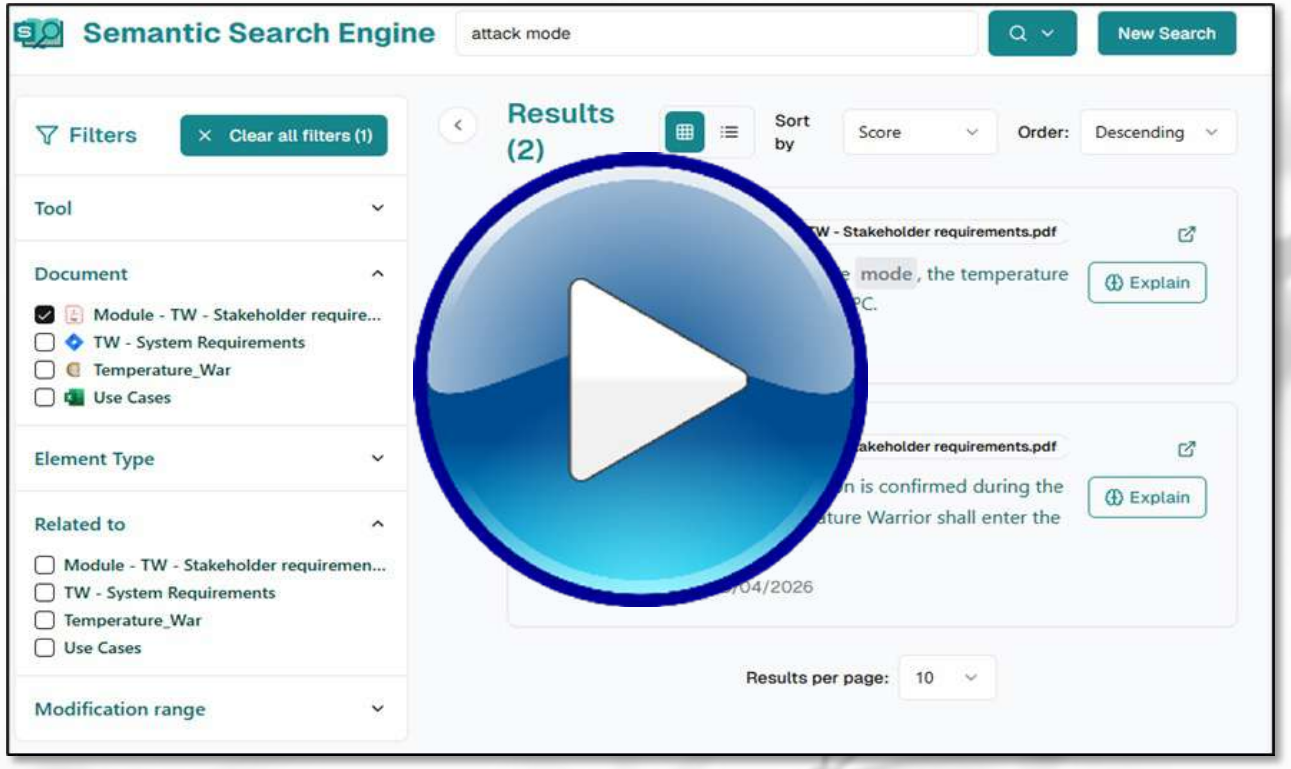
DEMO: ORPHAN ANALYSIS

- Steps:
  1. Open Orphan Analysis tool.
  2. Examine the report for the set of documents.
  3. Trace orphaned elements.
  4. Examine the details of the traceability for a given document.
  5. Change the need for a trace of a given element and assess again the document.



DEMO: SEMANTIC SEACH AND IMPACT ANALYSIS

- Steps:
  1. Open Semantic Search tool
  2. Look for elements that might trigger change requests.
  3. Assess the details of the element
  4. Perform Impact Analysis



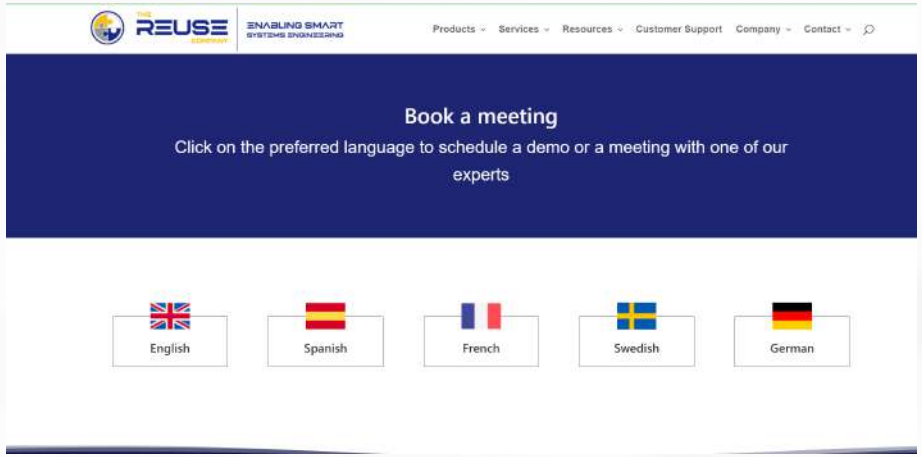
- **Requirements Engineering in the Age of GenAI – Securing Your Workflows**

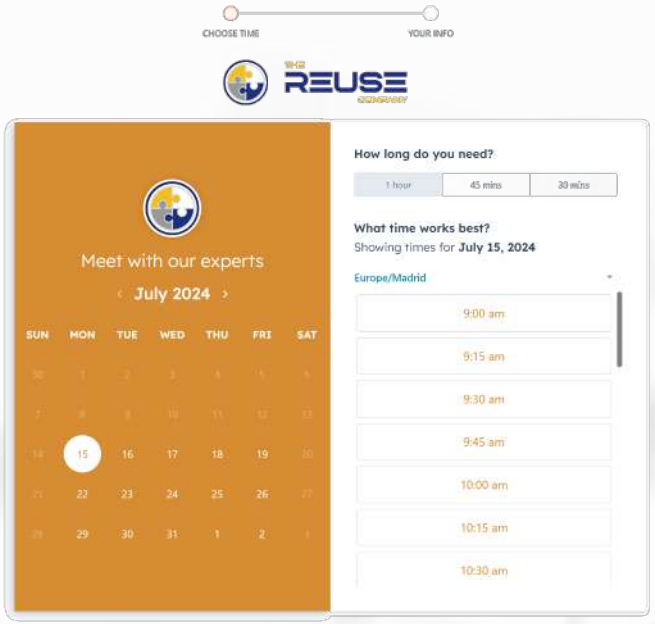
- SAVE THE DATE: May 6, 2026

Why you should join:

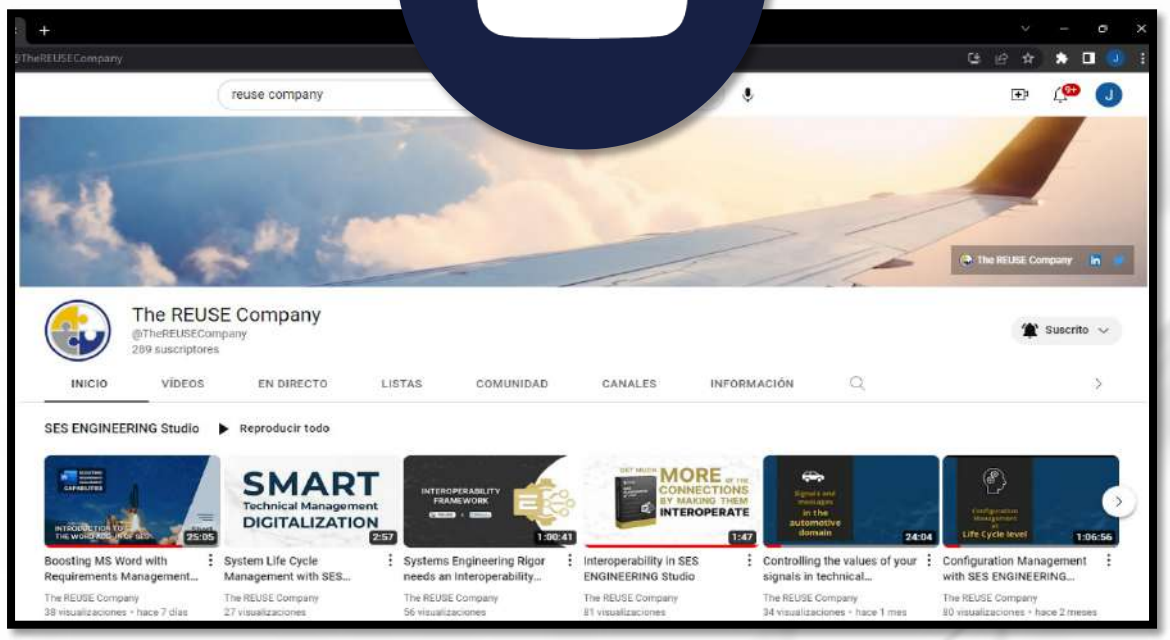
1. To check how we use deterministic semantic engines to establish a Synchronized Source of Truth (SSoT), ensuring that any requirement, whether human-written or AI-generated, meets rigorous ISO 15288 standards or guidelines such as those defined in the INCOSE Guide to Writing Requirements.
2. How to safely involve LLMs in the requirements elicitation process while using SES ENGINEERING Studio both as a writing assistant and ‘decision-enabler’ to verify the output.

- **What would this save on your current project? Connect with us for more details!**
- Book a meeting with a consultant





- ***Requirements Analysis Service :*** https://www.reusecompany.com/personalized-requirements-analysis
- **Trial license request**: contact@reusecompany.com
- Get further information…



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