

Boosting Requirements Management capabilities in MS Word:

Carrying your requirements everywhere (7/10)



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THE
REUSE
COMPANY



- Short introduction to The REUSE Company and the presenter
- What is interoperability?
- Use Case #1: Moving your requirements to other tools
 - Live demo
- Use Case #2: Transforming your requirements
 - Live demo
- Q&A



01

What we DO



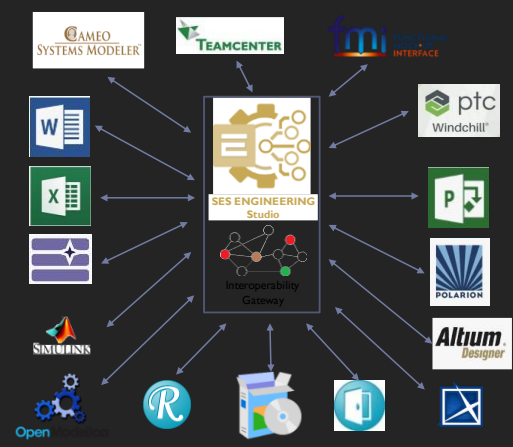
The REUSE Company is a tool vendor specialized in the application of semantic technologies and artificial intelligence to improve the digitalization of the Systems Engineering life cycle.



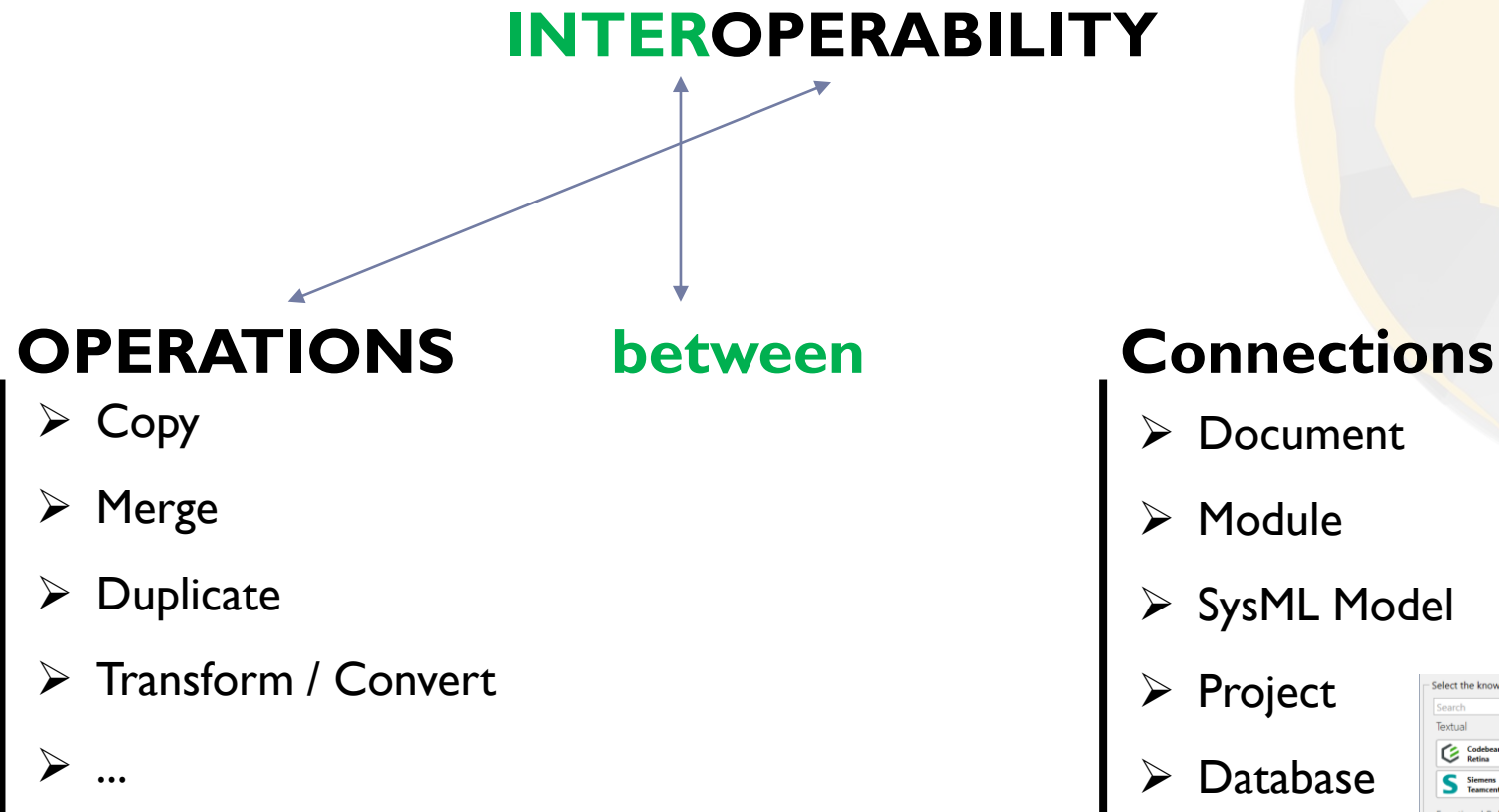


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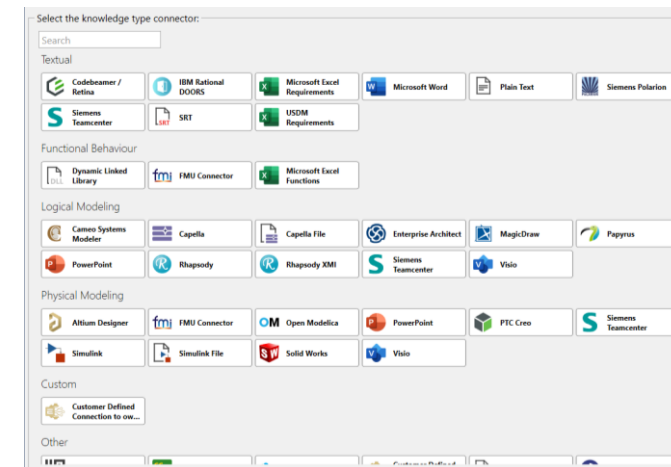
- **Current position:** Senior Key Account Manager at The REUSE Company
- Master's degree from the University of Montreal (Canada) and the IMT Atlantique School of Engineering (France).
- **INCOSE Member** (AEIS – Spanish Chapter)
 - Active member of the **Requirements Working Group**
 - Associate Systems Engineering Professional (ASEP) **Certification.**
- 7 years of experience, technical background in energy and mechanical engineering
- Speak 4 languages fluently: English, French, German and Spanish.



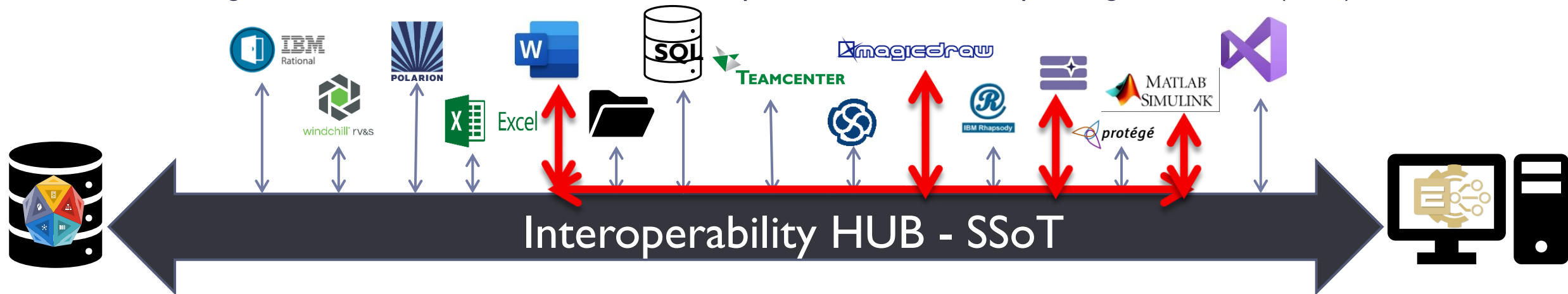
Interoperability HUB



...established and stored in the **same Project repository!**



- SES ENGINEERING Studio has implemented the notion of **Interoperability hub (SSoT – Synchronized Source of Truth)**:
 - No one-to-one connections: every source is connected to the hub
 - Source tools from many different disciplines: RMS, MBSE, PLM, ALM, MS Office, PDFs, DBMS
 - No *wipe-out* approach at all, those sources remain the **Authoritative Source of Truth (ASoT)**
 - Changes in source are notified in SES ENGINEERING Studio and give rise to the notion of **suspect links**
 - Removed elements in the source are also shown, and enable alerts in traces
 - Changes in the SES ENGINEERING Studio are persisted in the corresponding source tool (ASoT)



1

Copying/Moving Workproducts

No change of metamodel between source and target
Just moving among different tools

2

Transforming workproducts

Change of metamodel between source and target workproducts
Textual requirements to models, SysML to Capella ...

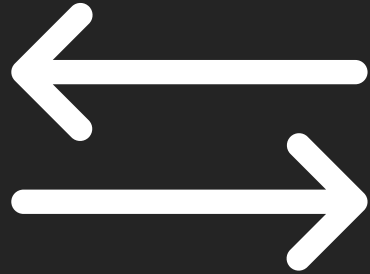
3

Binding workproducts

Changes in one workproduct triggering changes to target workproducts



NEXT EPISODE!



**Copying /
Moving
Workproducts**

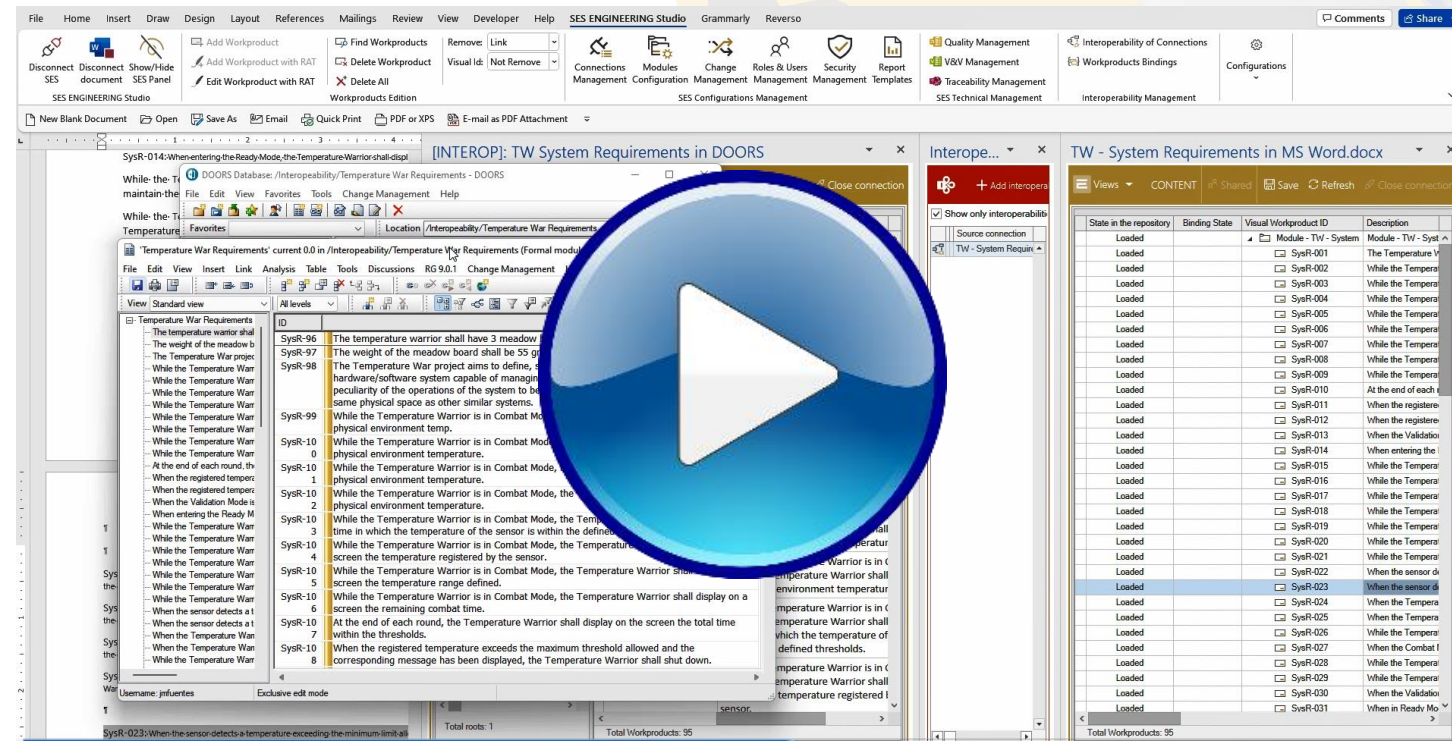


- From MS Word to a DOORS Project, with changes and roundtrip to MS Word.
- From MS Word to Capella + linking with model elements.



Steps:

1. Open the SES ENGINEERING Studio MS-Word Add-in
2. Connect to a **DOORS** module
3. Map attributes between both sources
4. Perform the copy and show results





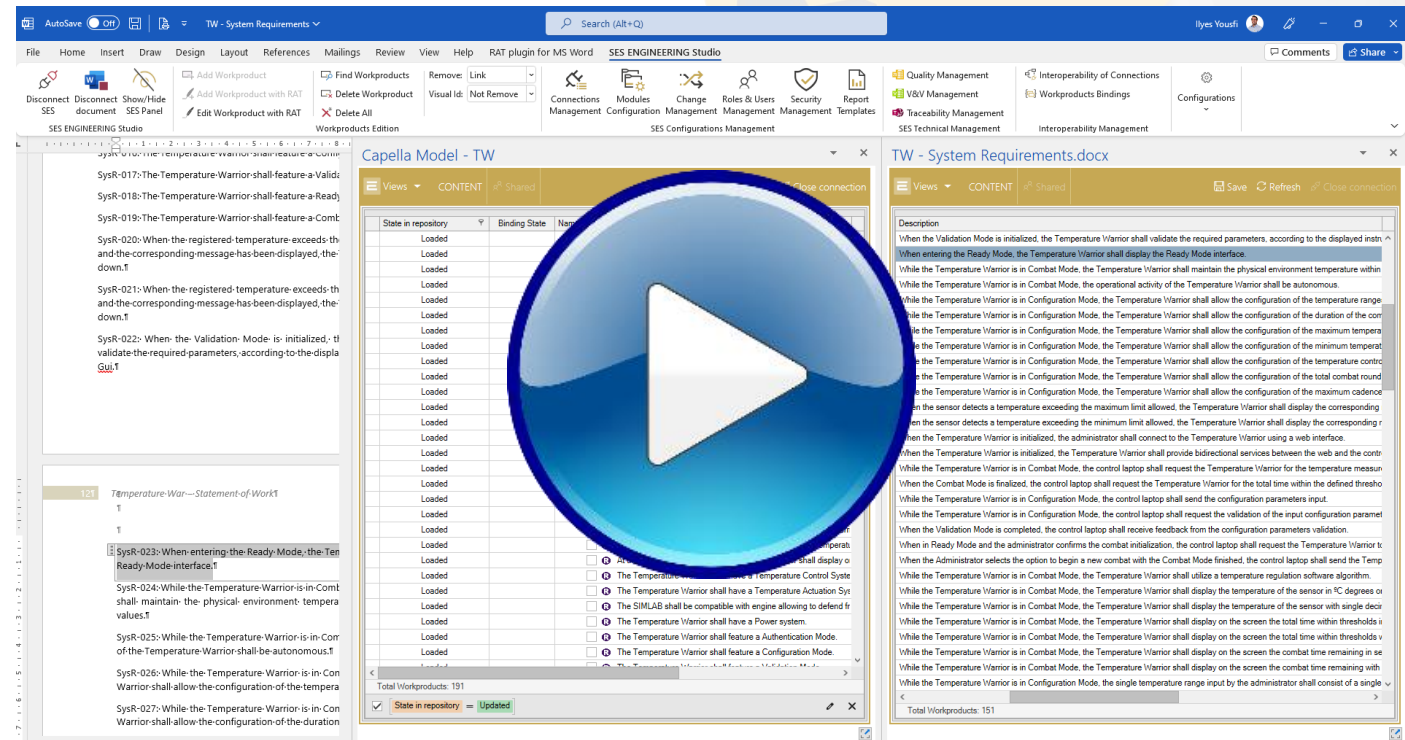
The screenshot displays the SES ENGINEERING Studio interface with the following components:

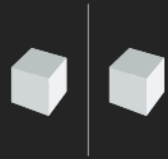
- Menu Bar:** File, Home, Insert, Draw, Design, Layout, References, Mailings, Review, View, Developer, Help, SES ENGINEERING Studio, Grammarly, Reverso.
- Toolbars:**
 - Left: Disconnect SES, Show/Hide document, SES Panel.
 - Center: Add Workproduct, Find Workproducts, Remove: Link, Add Workproduct with RAT, Delete Workproduct, Visual Id: Not Remove, Edit Workproduct with RAT, Delete All, Workproducts Edition.
 - Right: Connections Management, Modules Configuration, Change Management, Roles & Users Management, Security Management, Report Templates, Quality Management, V&V Management, Traceability Management, Interoperability of Connections, Workproducts Bindings, Configurations.
- Workspaces:**
 - Top: [INTEROP]: TW System Requirements in DOORS
 - Bottom Left: SysR-014: When entering the Ready Mode, the Temperature Warrior shall display... (SysR-96 to SysR-10)
 - Bottom Right: TW - System Requirements in MS Word.docx (Table below)

State in the repository	Binding State	Visual Workproduct ID	Description
Loaded		Module - TW - System	Module - TW - Syst
Loaded		SysR-001	The Temperature V
Loaded		SysR-002	While the Tempera
Loaded		SysR-003	While the Tempera
Loaded		SysR-004	While the Tempera
Loaded		SysR-005	While the Tempera
Loaded		SysR-006	While the Tempera
Loaded		SysR-007	While the Tempera
Loaded		SysR-008	While the Tempera
Loaded		SysR-009	While the Tempera
Loaded		SysR-010	At the end of each
Loaded		SysR-011	When the register
Loaded		SysR-012	When the register
Loaded		SysR-013	When the Validatio
Loaded		SysR-014	When entering the
Loaded		SysR-015	While the Tempera
Loaded		SysR-016	While the Tempera
Loaded		SysR-017	While the Tempera
Loaded		SysR-018	While the Tempera
Loaded		SysR-019	While the Tempera
Loaded		SysR-020	While the Tempera
Loaded		SysR-021	While the Tempera
Loaded		SysR-022	When the sensor d
Loaded		SysR-023	When the sensor d
Loaded		SysR-024	When the Tempera
Loaded		SysR-025	When the Tempera
Loaded		SysR-026	While the Tempera
Loaded		SysR-027	When the Combat I
Loaded		SysR-028	While the Tempera
Loaded		SysR-029	While the Tempera
Loaded		SysR-030	When the Validatio
Loaded		SysR-031	When in Ready Mo

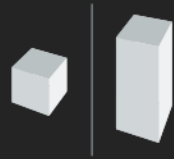
Steps:

5. Connect to a **Capella** model 
6. Copy requirements
7. Use *RAT – AUTHORIZING Tool* to automatically link the requirements to the model
8. Save the **Capella** Model

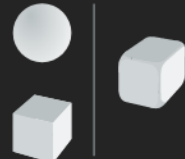




Copy



Transform



Combine

2

Transforming Workproducts



Textual requirements in Word are converted into SysML relationships

The screenshot shows a Microsoft Word document on the left and a Cameo4SysML model on the right. The Word document contains several textual requirements, such as 'The Temperature Warrior shall have a Control System.' and 'The Temperature Warrior shall have a Power system.' The Cameo4SysML model on the right shows a SysML structure with elements like 'Temperature warrior', 'Control system', and 'Power system' that correspond to the requirements in the Word document. A circular arrow icon with the text 'SYSML' is overlaid on the image, indicating the conversion process.

Word Document Content:

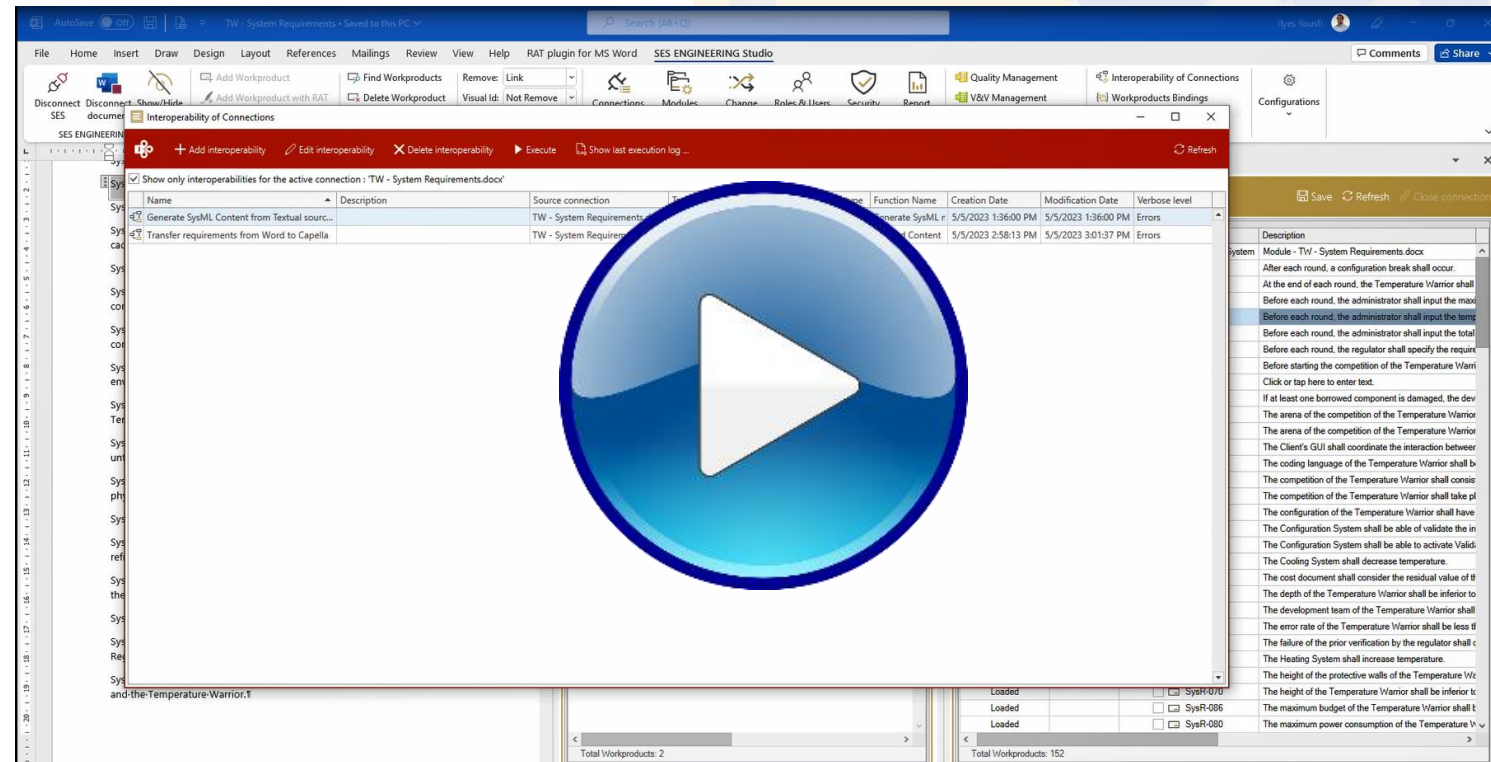
- ...shall have a Coordination System.
- ...shall have a Temperature Actuation System.
- ...compatible with engine allowing to defend from an...
- ...shall have a Power system.
- ...shall feature a Authentication Mode.
- ...shall feature a Configuration Mode.
- ...shall feature a Validation Mode.
- ...shall feature a Ready Mode.
- ...shall feature a Combat Mode.
- ...temperature exceeds the maximum threshold allowed...
- ...temperature exceeds the minimum threshold allowed...
- ...on Mode is initialized, the Temperature Warrior shall...
- ...the Ready Mode, the Temperature Warrior shall display the...
- ...Temperature Warrior is in Combat Mode, the Temperature Warri...

Cameo4SysML Model Content:

State in repository	Binding State	Name
New		New_Cameo_MDL
New		Model
New		Structure
New		Relations
New		Association[temperature warrior:Temperature wa
New		Association[temperature warrior:Temperature wa
New		Association[temperature warrior:Temperature wa
New		Temperature warrior
New		Control system
New		Temperature actuation system
New		Power system
New		Grounding

Demo steps:

1. Open the SES ENGINEERING Studio MS-Word Add-in
2. Connect to a Cameo Model
3. Run the transformation interoperability
4. Check the content in the engineering view (from Word)
5. Save the content in both sources (the Hub and the model)
6. Check the generated content in the model







Don't miss our series of webinars!

Boosting MS Word with Requirements Management Capabilities

1. Introduction to the MS Word Add-in of SES ENGINEERING Studio
2. Writing high-quality requirements in MS Word
3. Parsing existing MS Word documents using different techniques
4. Managing requirement attributes in MS Word
5. Managing requirement baselines and versions in MS Word
6. Managing traceability in MS Word
7. Transforming MS Word requirements
8. Propagating changes from traceability links
9. Collaboration
10. Reporting Systems Engineering artifacts through MS Word



Sign up and recordings

15 '
webinar

Episode 8. Propagating changes from traceability links.

This chapter will be focused on the application of a core technique to **preserve consistency** across the board by allowing the choice to **propagate automatically** the desired changes between elements that are traced..

Dates:

Tuesday, May 23rd, 2023, 5:00 PM CET (Madrid)/ 8:00 AM PST (Los Angeles)/ 11:00 AM EST (Detroit)

Thursday, May 25th, 2023, 9:00 AM CET (Madrid)/ 4:00 PM JST (Tokyo)/ 5:00 PM AEDT (Sydney)



> www.reusecompany.com

> Resources -> Webinars (15' and 1hr)

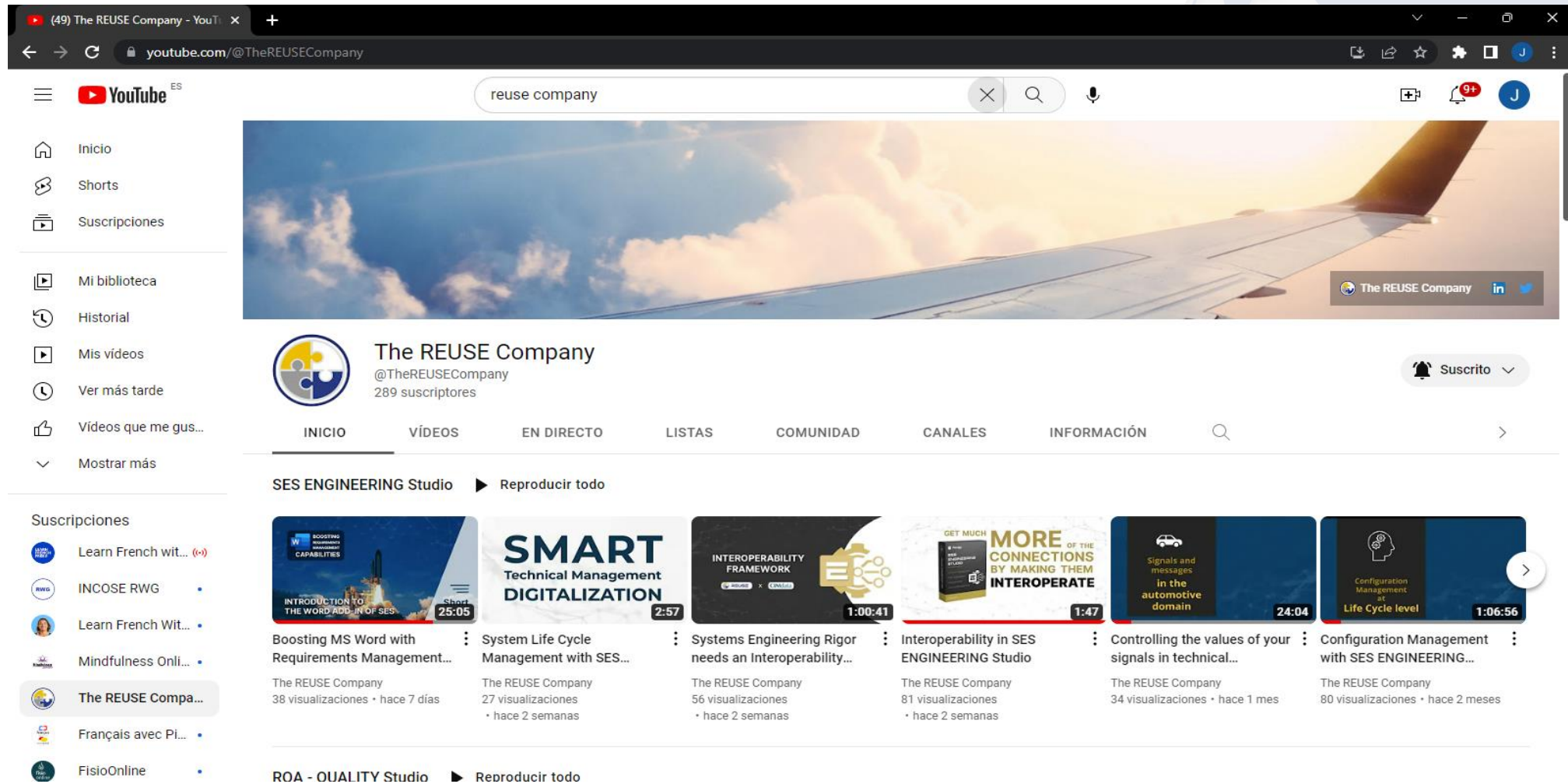
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Enabling SMART Systems Engineering

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<p>Requirements management through AIIG Contracts</p>	<p>Connecting the Dots: Interoperability between your favourite Systems Engineering tools</p>	<p>Semantic traceability: how to keep the digital thread all along the SE lifecycle</p>	<p>The MBSE Podcast Trust us we are Systems Engineers MBSE around the world: Spain with Juan Llorens</p>
<p>Passive voice requirements: Why "passive voice" actually can become a nightmare</p>	<p>(In Spanish) Invitados al podcast 'Sistemistas': V&V ¿Qué es qué?</p>	<p>Connecting textual requirements and Capella models (Invited presenters)</p>	<p>Requirements Management: Managing data over entire life cycles</p>
<p>How to kick off your KM – KNOWLEDGE Management project</p>	<p>Taming the System Engineering Life cycle using Connectivity and Interoperability: the SES ENGINEERING Studio</p>	<p>Raise the ante: high-quality models is the only way forward after high-quality requirements</p>	<p>Digitalizing the V&V process on both sides of the V-Model</p>



The screenshot shows the YouTube channel page for 'The REUSE Company'. The channel name is 'The REUSE Company' with the handle '@TheREUSECompany' and 289 subscribers. The page features a navigation menu on the left with options like 'Inicio', 'Shorts', 'Suscripciones', 'Mi biblioteca', 'Historial', 'Mis vídeos', 'Ver más tarde', 'Vídeos que me gus...', and 'Mostrar más'. Below the channel header, there are tabs for 'INICIO', 'VÍDEOS', 'EN DIRECTO', 'LISTAS', 'COMUNIDAD', 'CANALES', and 'INFORMACIÓN'. The main content area displays a grid of video thumbnails from the 'SES ENGINEERING Studio' playlist, including titles like 'Boosting MS Word with Requirements Management...', 'System Life Cycle Management with SES...', 'Systems Engineering Rigor needs an Interoperability...', 'Interoperability in SES ENGINEERING Studio', 'Controlling the values of your signals in technical...', and 'Configuration Management with SES ENGINEERING...'. Each video thumbnail includes a title, duration, and view count.

The REUSE Company on YouTube:
<https://www.youtube.com/user/TheREUSECompany>

Thank you for your attention!



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