

UNLOCKING CROSS-PLATFORM POTENTIAL

- A DEEP DIVE INTO SE INTEROPERABILITY -



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THE
REUSE
COMPANY



- ✦ **LIGHTNING ROUND OF THE PRESENTER & TRC**
- ✦ **THE INTEROPERABILITY HUB**
- ✦ **EXAMPLES OF INTEROPERABILITY**
- ✦ **YOUR EXPERIENCE!**

Introduction to Presenter >>



- **INCOSE ASEP**
- **MAIN CONTRIBUTOR TO THE INCOSE GUIDE TO WRITING REQUIREMENTS**
- **SALES & CONSULTING REPRESENTATIVE UNDER CSEP & ESEP**
- **FIRST AUTHOR OF THE "APPLYING THE KNOWLEDGE CENTRIC SYSTEMS ENGINEERING METHODOLOGY TO A PRACTICAL CASE"**

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.



What we do

Tools and platforms

International Standards

Handbooks

WHAT INTRIGUES US

INTEROPERABILITY HUB

- Semantic traceability.
- Agnostic NLP-powered data exchange between organizations & tools.

ENHANCED TECHNICAL MANAGEMENT

- Traceability.
- Quality assessment.
- V&V.
- ...

SMART REQUIREMENTS ENGINEERING

- NLP-based requirement elicitation.
- MS Word Add-in with all the RM features.

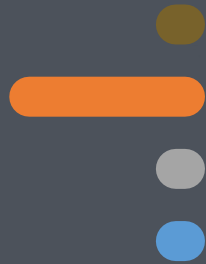
LIFE CYCLE MANAGEMENT

- Definition and instantiation of life cycle templates.
- Gateways based on KPIs from the Tec. Management Processes.





02



TOOLS AND PLATFORMS

All these capabilities are seamlessly integrated into a **wide variety of tools and platforms**:

- IBM, Siemens, PTC, Dassault, Capella, MagicDraw/Cameo, Simulink...
- And other Requirements, MBSE, ALM and PLM tools, including MS Office





03



IEEE 15288

IEEE 29148

IEEE 12207

IEEE 29110

INTERNATIONAL STANDARDS

Aligned with international standards:
ISO/IEEE 15288, 29148, 12207, 29110

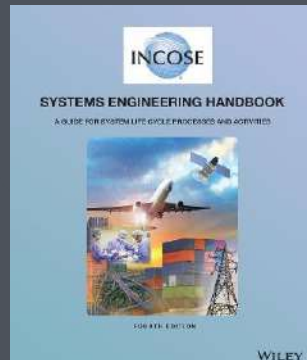




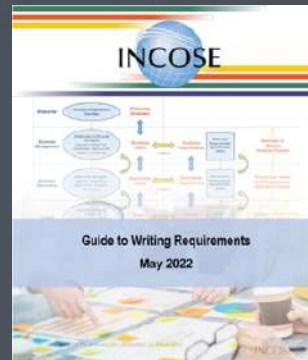
04



HANDBOOKS AND GUIDELINES



INCOSE Handbook



INCOSE GfWR



NASA



ECSS

WHO IS USING OUR TECHNOLOGY?

Aerospace and defense



AIRBUS
GROUP
INNOVATIONS

SAFRAN
AIRCRAFT ENGINES

AIRBUS
DEFENCE & SPACE

esa
European Space Agency

THALES



aes

AIRBUS

THALES
Communications & Security
S.A.S.

HENSOLDT



arianeGROUP

Energy



**FUSION
FOR
ENERGY**



edf



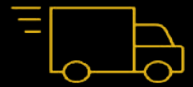
REPSOL

Healthcare



STORZ
KARL STORZ — ENDOSKOPE

Automotive



RENAULT



TOYOTA

FCA

FIAT CHRYSLER AUTOMOBILES

Other industries



SIEMENS



Agua



orange™

ELRA
European Land Agency Association

rtve



**tirant
lo blanch**
GRUPO EDITORIAL

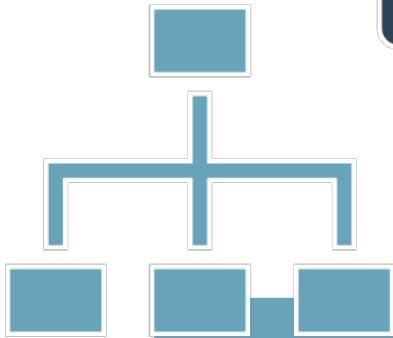


**THE
INTEROPERABILITY
HUB**



TEXTUAL REQUIREMENTS

Are the HEART of the current system engineering practices



CONCEPTUAL MODELS

Helps FORMALIZE and consolidate customer and system requirements

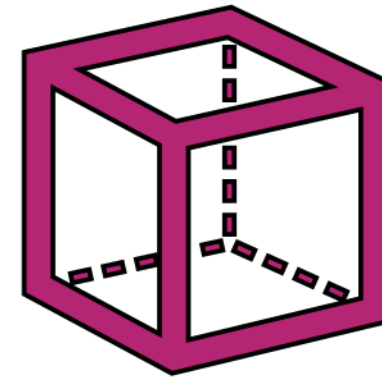
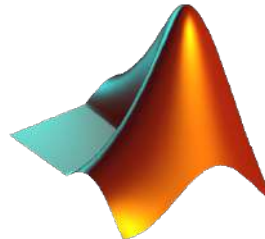
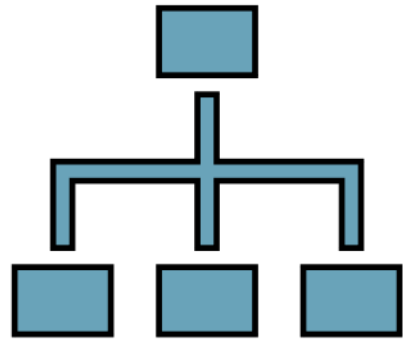


PHYSICAL MODELS

Helps validate FEASIBILITY, elicit/justify NEW REQUIREMENTS for the system/subsystems



fmi AUTHORITY SOURCES OF TRUTH



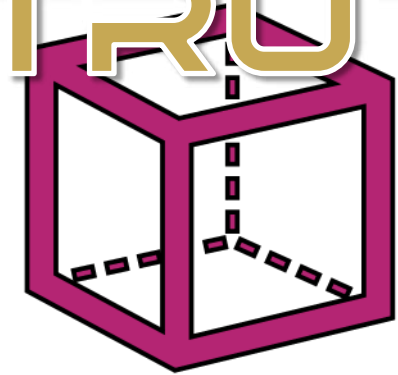
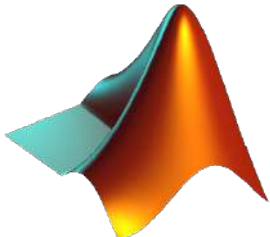
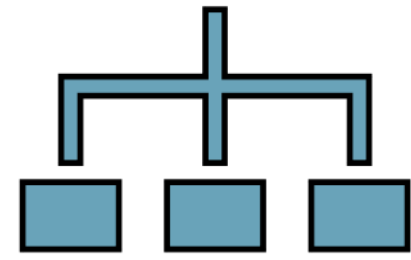
ALTUM DESIGNER



SYNCHRONIZED

SOLIDWORKS

SOURCE OF TRUTH M



M



ALTIUM DESIGNER



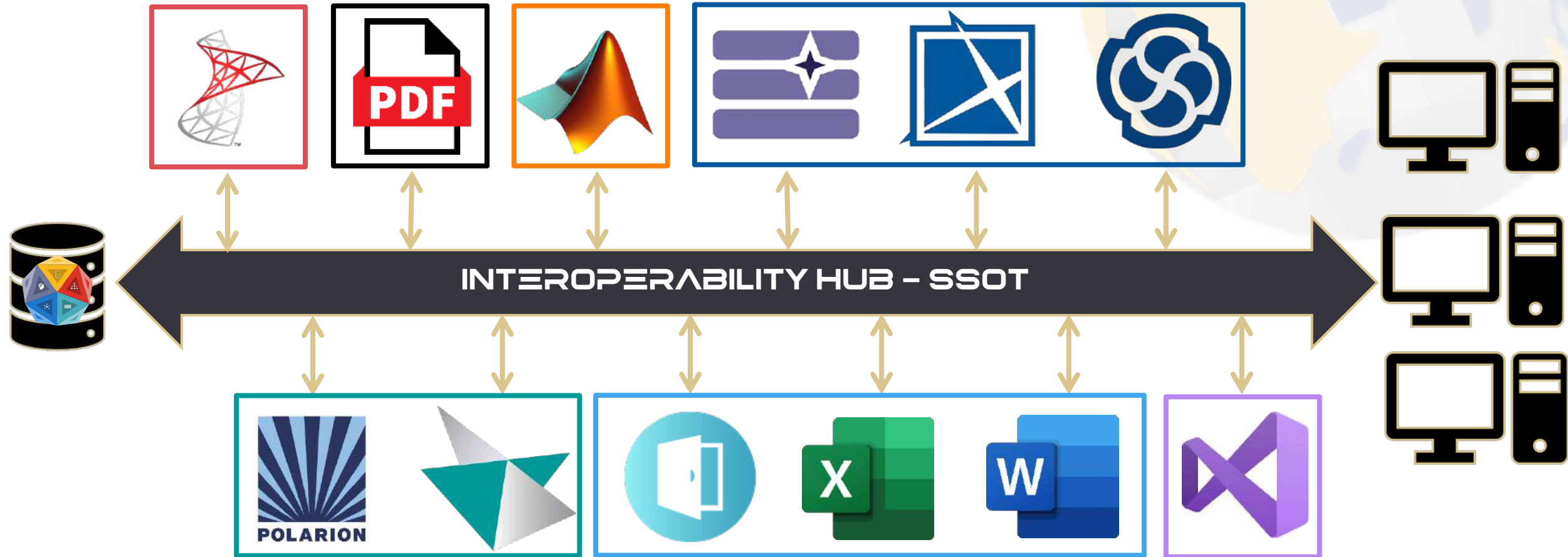
NO INDIVIDUAL ONE-TO-ONE CONNECTIONS

✿ Avoid data loss, outdated versions, unauthorized changes, disconnected life cycle, etc.



DIFFERENT PURPOSES COMBINED

✿ Each phase involves different tasks & thus, different tools to complete them.





SE TOOLS ARE DEDICATED (& NOT CHEAP)

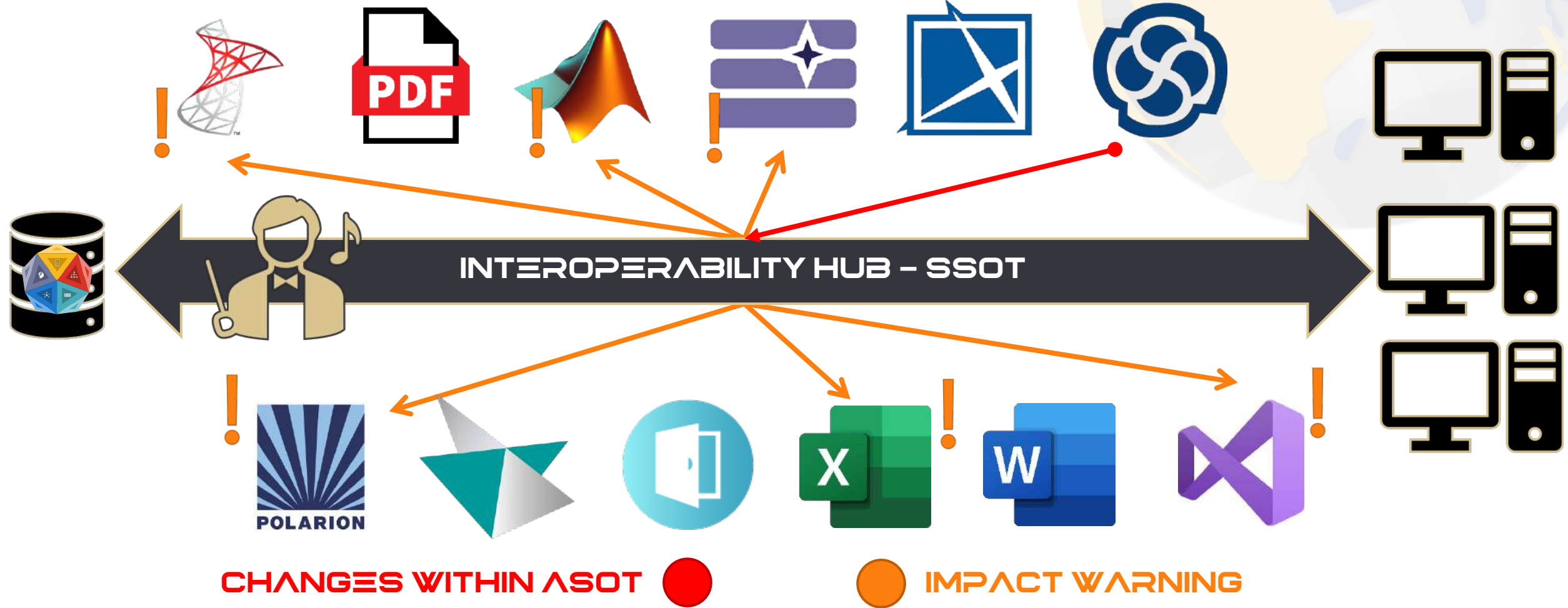
✿ No tool does everything, but they are wonderful at what they do. Need to coordinate them, not replace them.





IMPACT & VERSION MANAGEMENT

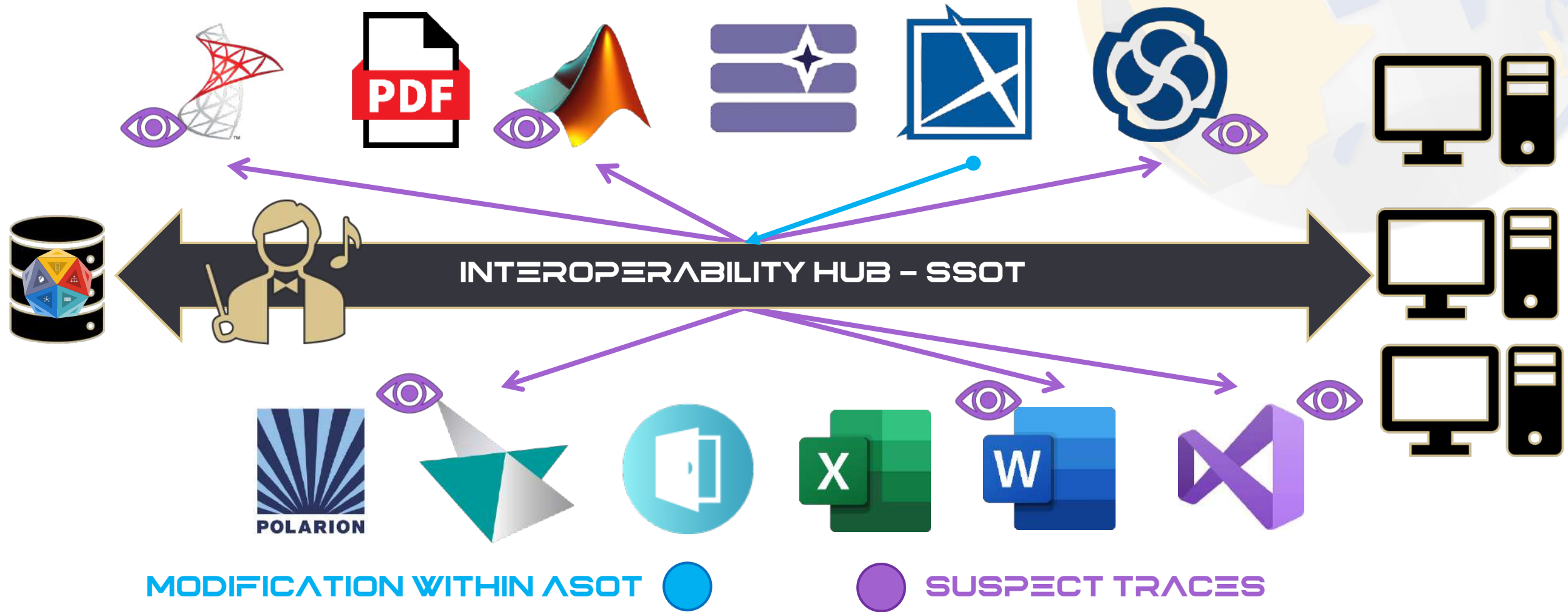
✦ Changes inside the ASoT will trigger impact warnings & generate versions tracked within the Hub, with the reverting option.





SUSPECT TRACES

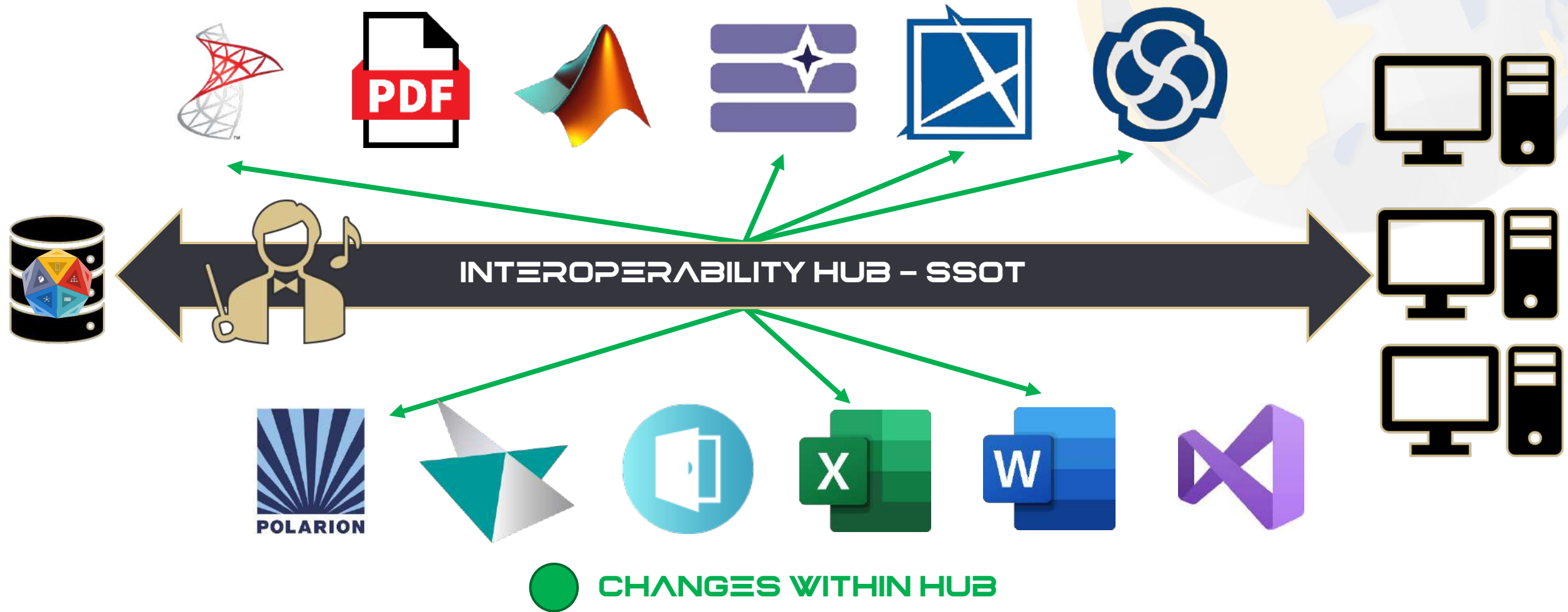
✦ Deletions & modifications inside the ASoT will trigger suspect traces within the Hub.





WORKING INSIDE THE HUB

✿ Make modifications (content, attributes, etc.) within the Hub & propagate changes back to ASoT.



1

MOVING/COPYING 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 ...*

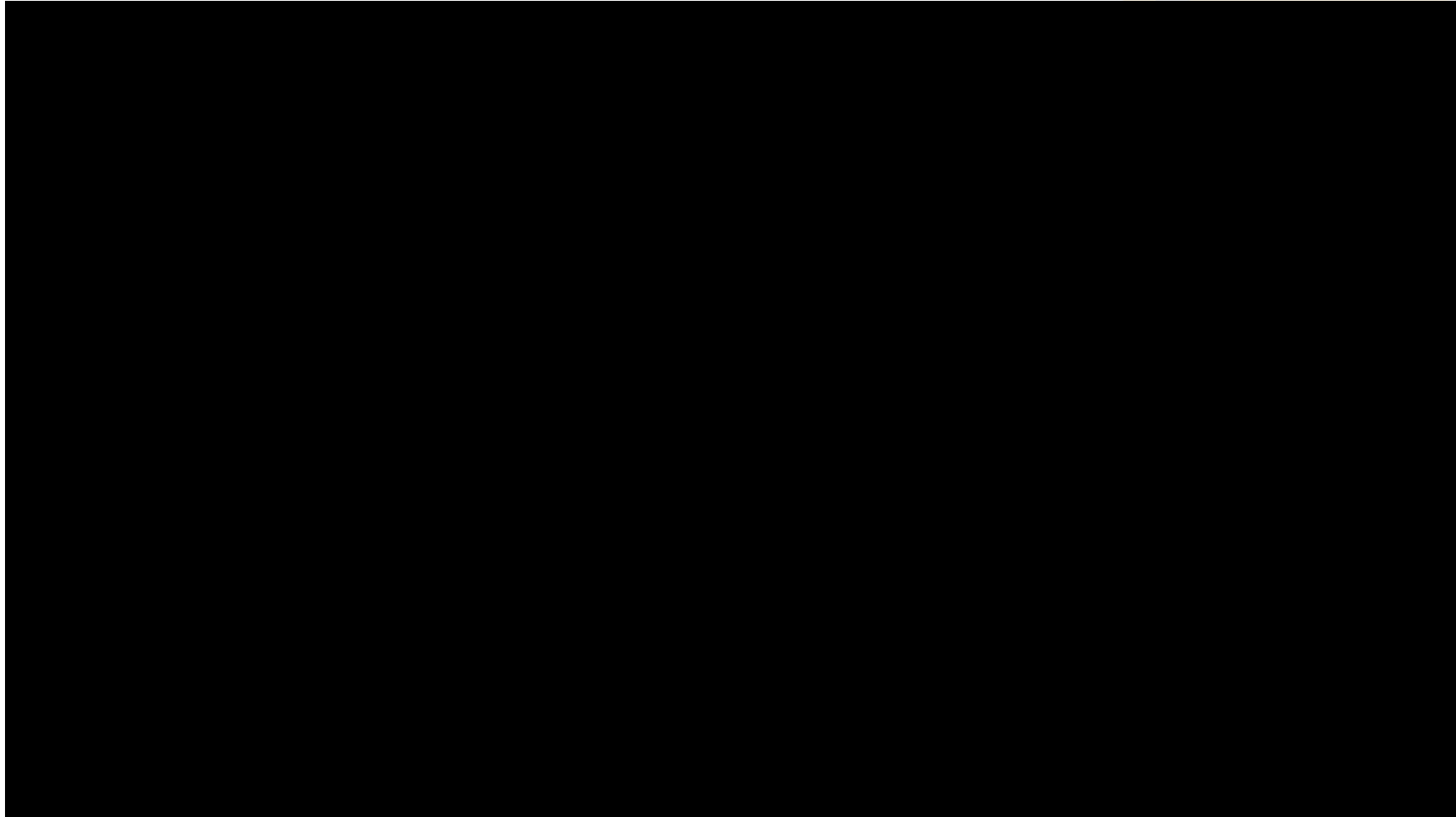
3

BINDING WORKPRODUCTS

Changes in one workproduct triggering changes to target workproducts



DEMO



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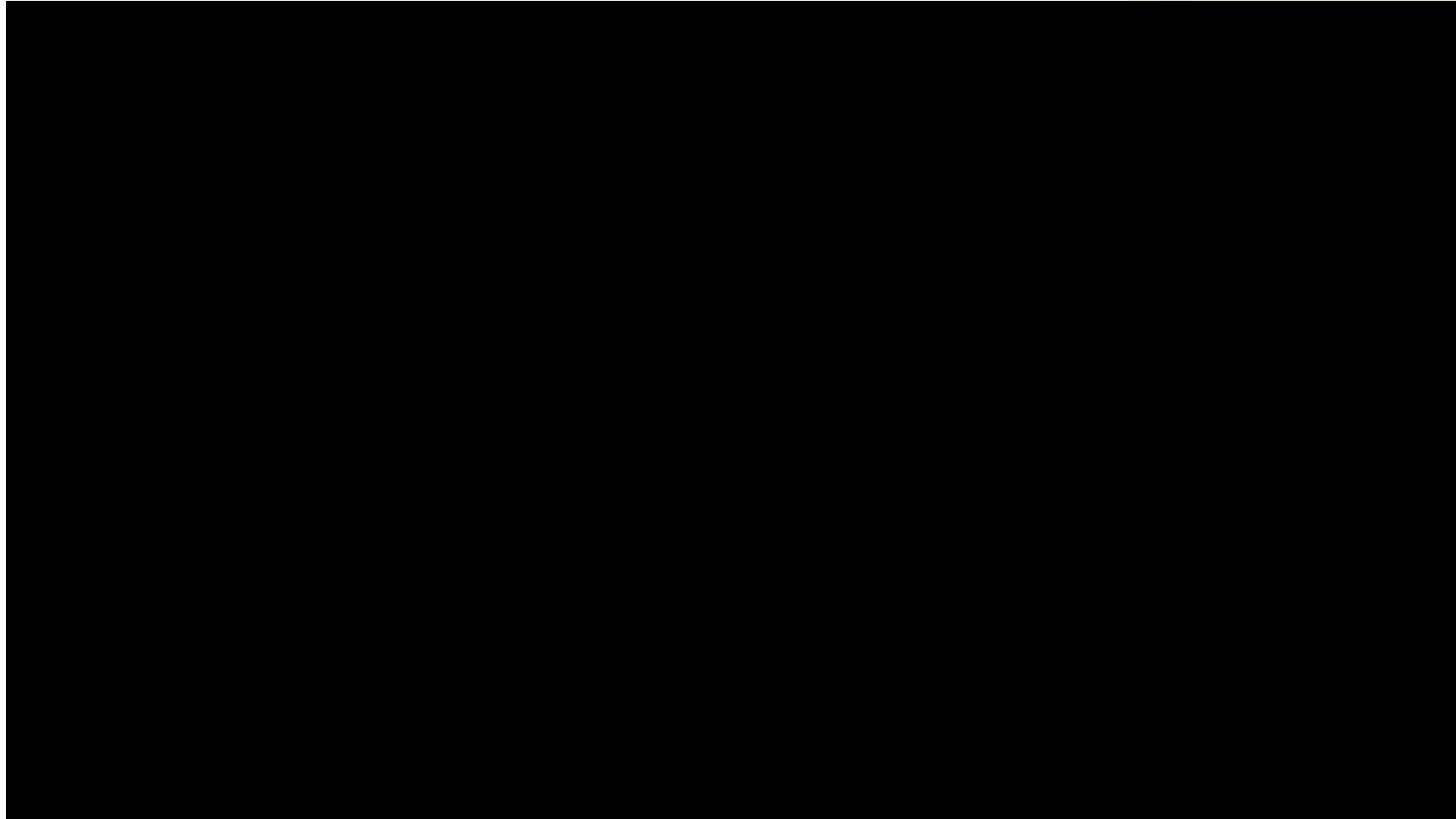
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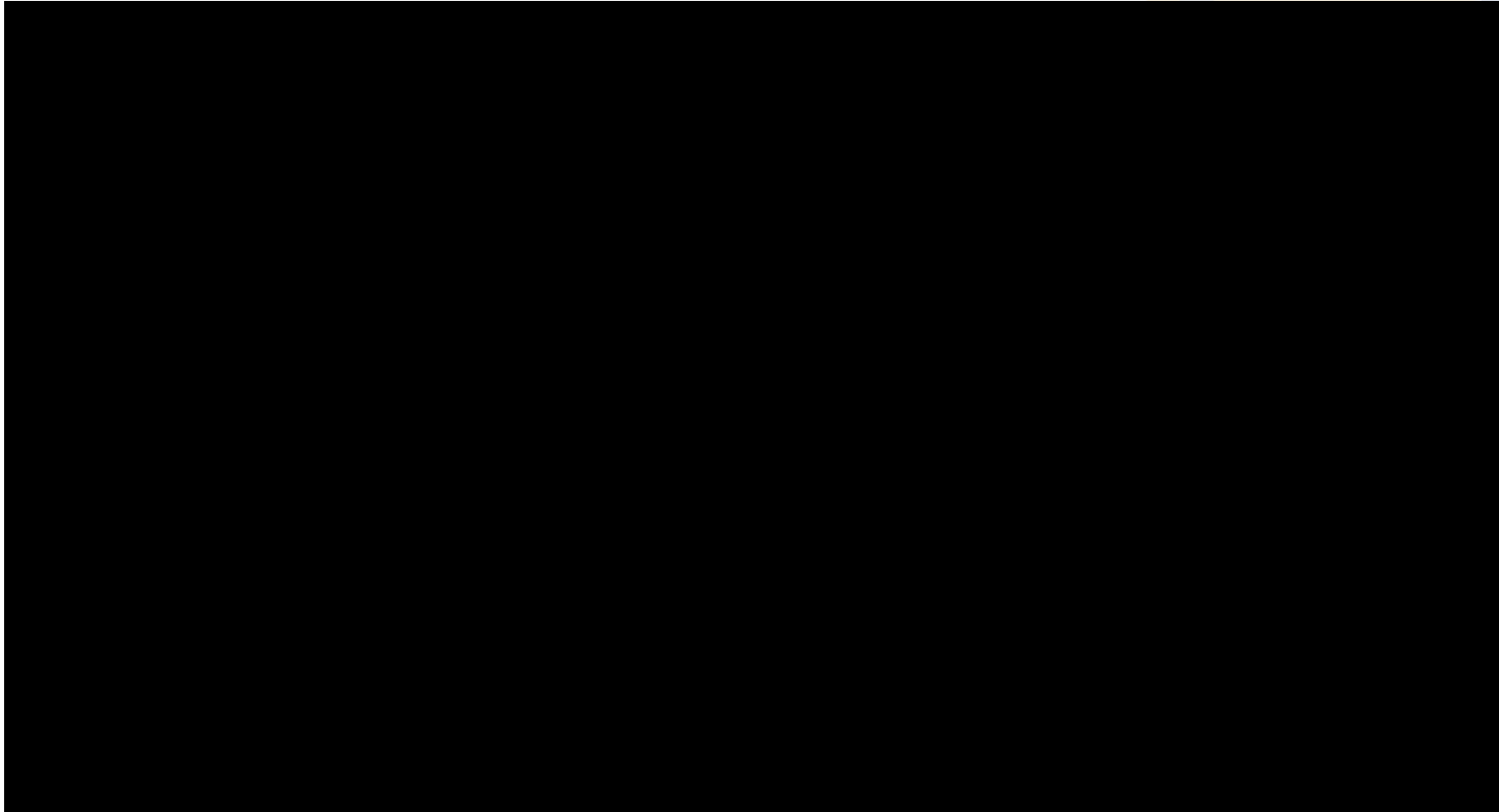
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DEMO



DO YOU AGREE?

DID YOU FIND IT USEFUL?

OTHER ALTERNATIVES?

YOUR EXPERIENCE?



NEW VERSION OF THE INCOSE GTWR - RULES & PATTERNS

Presented by a TRC member, this INCOSE webinar will showcase & revise the **latest updates** of the **INCOSE GtWR** and how can **YOU** **easily apply them** onto your projects.



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HOW NOT TO FOCUS ON NEGATIVE REQUIREMENTS

This 15-minute webinar will explain the importance of **avoiding** the **negative voice** when writing requirements, and the **powerful application** of TRC's tools in this domain.

WE WILL BE BACK IN SEPTEMBER!



Software Tools for Digital Systems Life Cycle Management
 Inter-connecting the complete Tools Ecosystem of your organization
 Enabling digital support to all the Technical Management processes (ISO 15288) for the engineering items of your tools ecosystem
 Integrating document centric (Documentation), knowledge driven (Reuse) and model-based (MBSE) approaches in one Hub

Systems Engineering Tools and Solutions for System Life cycle Management based on Connectivity, Interoperability and Reuse

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INICIO VIDEOS EN DIRECTO LISTAS COMUNIDAD CANALES INFORMACIÓN

SES ENGINEERING Studio ▶ Reproducir todo

- Boosting MS Word with Requirements Management... 25:05
- System Life Cycle Management with SES... 2:57
- Systems Engineering Rigor needs an Interoperability... 1:00:41
- Interoperability in SES ENGINEERING STUDIO 1:47
- Controlling the values of your signals in technical... 24:04
- Configuration Management with SES ENGINEERING... 1:06:56

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