

Public SSB Fact Sheet: ISO 10303-243: Application protocol: For modelling and simulation information in a collaborative systems engineering context

Projects

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Short Description/ Transmitted Information	<ul style="list-style-type: none"> • Definition of standard for web services to improve decision making for complex products
Normative document	<ul style="list-style-type: none"> • ISO 10303-243:2021 - Industrial automation systems and integration — Product data representation and exchange — Part 243: Application protocol: For modelling and simulation information in a collaborative systems engineering context (MoSSEC)¹
Version/ Release state	<ul style="list-style-type: none"> • International Standard
Release date	<ul style="list-style-type: none"> • 2021
Application Scope	<ul style="list-style-type: none"> • Combining Modelling and Simulation Data with Collaboration Data to justify change decisions and to validate the product throughout the product life-cycle
Goals	<ul style="list-style-type: none"> • Traceability of modelling and simulation technical data to the systems engineering and product/simulation lifecycle context • Efficient information sharing using web services
Promoting Bodies	<ul style="list-style-type: none"> • MoSSEC Project (Aerospace and defense industry)
Type	<ul style="list-style-type: none"> • ISO Standard
IT Standard Classification	<ul style="list-style-type: none"> • Interoperability Standard, Integration Standard
Data Format	<ul style="list-style-type: none"> • XML Schema, RESTful web-services (JSON OpenAPI)
Additional available resources	<ul style="list-style-type: none"> • MoSSEC Project page (http://www.mossec.org/welcome)
Relevant prostep ivip project groups	<ul style="list-style-type: none"> • Smart Systems Engineering²

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10303-243 wants to provide traceability to respond to business questions like:

- (Who) What organization was used for this simulation/analysis?
- What requirement version should be used for this behavior analysis assessment

¹ <https://www.iso.org/standard/72491.html>

² <https://www.prostep.org/projekte>

- This method/tool should be used for this requirement verification.
- (How) What method/tool was used for this simulation?
- What is the delta of the product definition that should be sent for this simulation?
- Where was this assumption used for a decision?
- Why was this technology used for this component?
- Prove that the right analysis result was used for this assumption.
- If there is a change to this requirement version what does it impact?
- This behavior simulation model should be used for this breakdown element (of this architecture, with these interfaces and these operational scenarios).

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- Ensure consistent product information models through the different product life cycles and technical disciplines (ref.: results of the ASD SSG “Through life cycle interoperability” WG).
- Ensure the smooth evolution and the longevity / upward compatibility of the STEP modular standards.
- Speed up the adoption of the STEP based standards, by the proper management of a set of consistent standards, sharing the same principles and common subsets (modules).
- Improved decision making for complex products, improved traceability
- Improved sharing of modelling and simulation information linked to a Systems Engineering context

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