



System Architecture to Co-Simulation

1. Need elicitation with MBSE
2. System and safety consistency
3. System Architecture to Co-Simulation
4. Digital continuity for MBSE

MOISE
Models and Information
Sharing in Extended
Enterprise

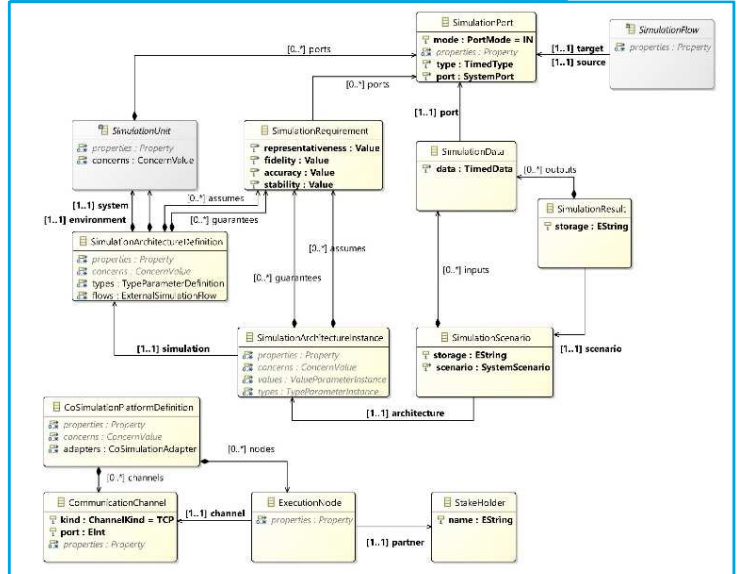
Value Proposition

Defining Co-Simulation Architecture from System Architecture description, specifying simulation models, and allowing their execution in an Extended Enterprise context while securing stakeholders' Intellectual Property.

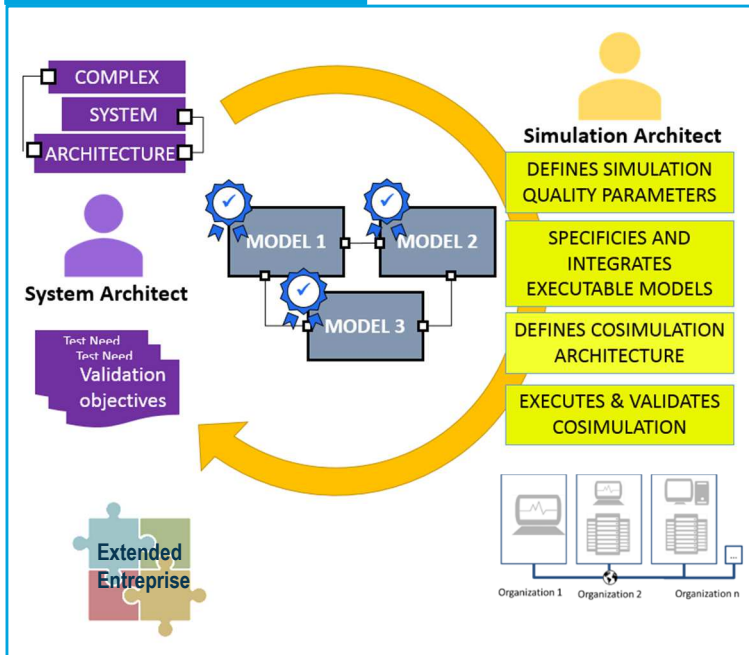
Motivations

- Facilitate the set-up of a cosimulation environment through inheritance of data from System Architecture description models, and a validated methodology relying on modeling viewpoints
- Take into account the heterogeneity between EE stakeholders' behavioral models.
- Make each stakeholder comfortable with the exchange of data regarding confidentiality

Simulation viewpoint proposal



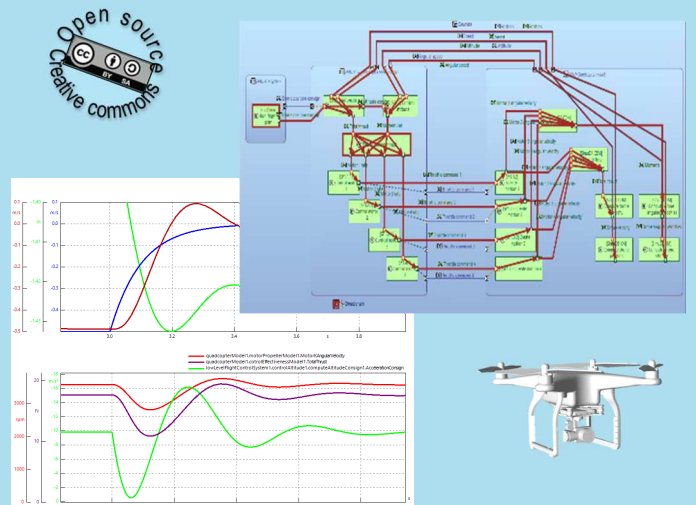
Proposed methodology



Study Case

AIDA: Drone for A/C preflight inspection. Used by MOISE for a representative co-design process.

Access AIDA models on IRT Saint-Exupéry forge:
<https://sahara.pf.irt-saintexupery.com>



Tools & Technologies

- CAPELLA (PolarSys, Eclipse)
- SimulationX, Pro-SiVIC (ESI Group)
- CosiMate (Kiastek)



CONTACTS:
Rémi TAILLARD
remi.taillard@irt-saintexupery.com
Guillaume VOLBRECHT
guillaume.volbrecht@irt-saintexupery.com