Tooled methodology for seamless collaboration

1. Need elicitation with MBSE
2. System and safety consistency
3. System Architecture to Cosimulation
4. **Digital continuity for MBSE**

MOISE
Models and Information Sharing in Extended Enterprise

Value Proposition

Accelerating and extending the scope of Systems Engineering analyses thanks to a unified vision of structural architecture, across domains and within the Extended Enterprise (EE).

Main challenges

- Take into account **heterogeneity** between EE stakeholders' data, methods & tools.
- Make each stakeholder comfortable with **the exchange of data** regarding confidentiality.

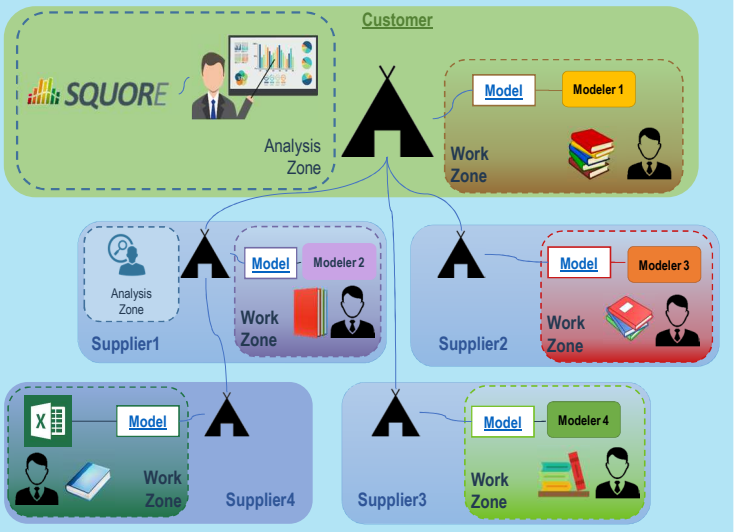
Proposed solution

MOISE has developed a **Proof Of Concept**, called **TeePee** ("TeePee is an enhanced engineering platform for the extended enterprise), that demonstrates the key concepts allowing the **digital continuity** in the **Extended Enterprise**.

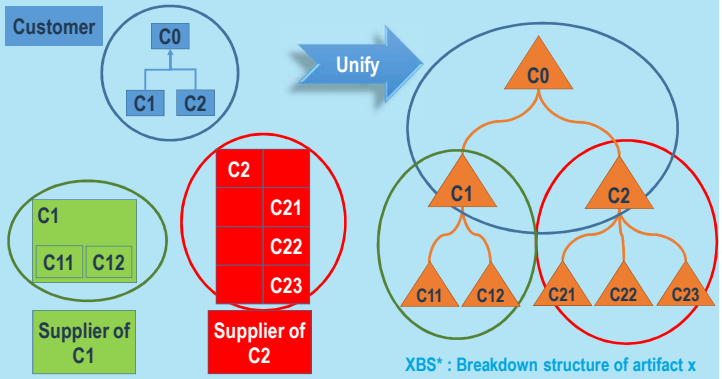
- **Viewpoints** (datamodel and glossary) formalize the information to be exchanged.
- Each company keeps **full control of the storage** of its own System Engineering data and manages its publication.
- Each company can **access** other stakeholders' data only to the extent of its **rights** on published viewpoints.
- Modular **web-based services** provided through a REST API allow the implementation of **connectors** with virtually any technology.
- **Visualization** of analyses results includes **dynamic interactions** and customizable dashboarding with dedicated tools like SQUORE.

Considered use case

Example of EE using TeePee

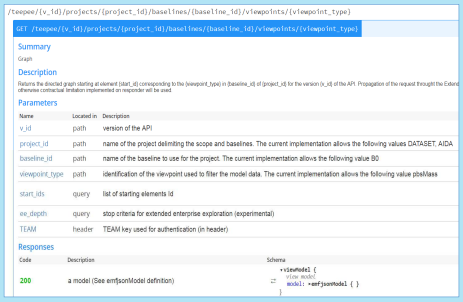


From xBS* as silos in each stakeholder's M&T to a unified xBS* within EE

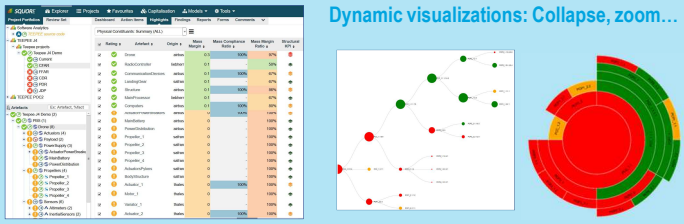


7 viewpoints focused on structural architecture

- Operational Stakeholders
- Functional Breakdown
- Functional Flows
- Constituent breakdown
- Physical interactions
- Function Allocation to Physical Constituent
- Functional Flow Allocation to Physical Interaction

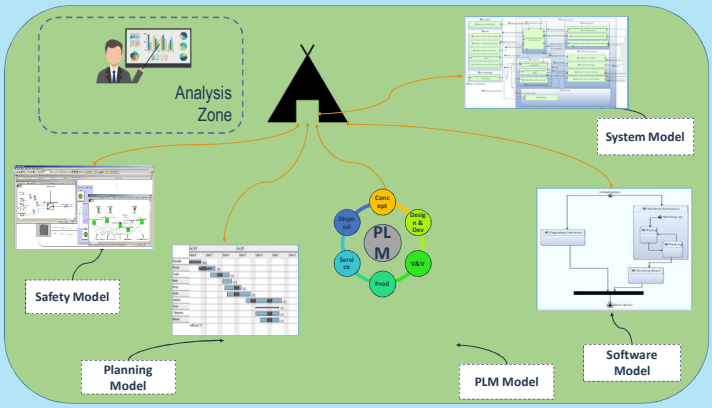


Dynamic visualizations: Collapse, zoom…



Opportunity

Within a company, same concept could be used: viewpoints and tool connectors would bring consistency between domains.



CONTACTS:
Julien BACLET
julien.baclet@irt-saintexupery.com
Guillaume VOLBRECHT
guillaume.volbrecht@irt-saintexupery.com