A CESAM-BASED SOLUTION FOR MBSE

28th June 2022

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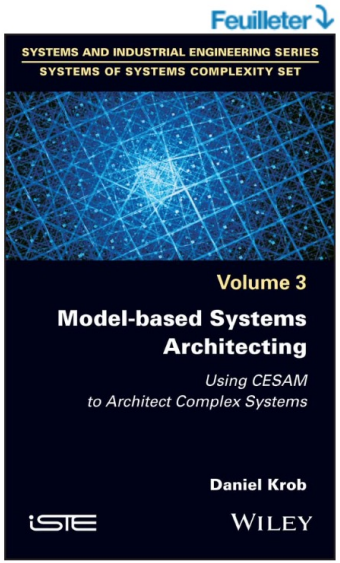
About CESAM framework



Model-based Systems Architecting: Using CESAM to Architect Complex Systems (English Edition) Format Kindle

Édition en Anglais | de Daniel Krob (Auteur) | Format : Format Kindle

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Format Kindle	Relié
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Model-based Systems Architecting is a key tool for designing complex industrial systems. It is dedicated to the working systems architects, engineers and modelers, in order to help them master the complex integrated systems that they are dealing with in their day-to-day professional lives.

It presents the CESAMES Systems Architecting Method (CESAM), a systems architecting and modeling framework which has been developed since 2003 in close interaction with many leading industrial

En lire plus

Nombre de pages de l'édition…	Langue	Éditeur	Date de publication
256 pages	Anglais	Wiley-ISTE	14 juin 2022

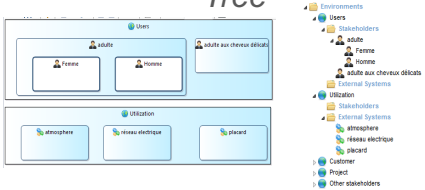
2010 : **CESAM** is selected

2010 2013 2022

How did system architects work ?

2010 2013 2022

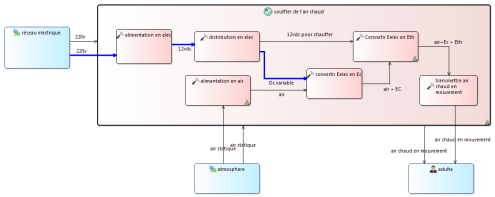
Tree



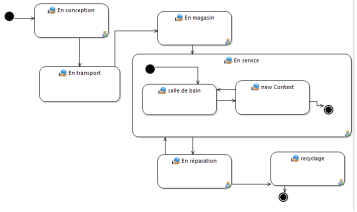
Matrix / Table

Name	Description	Requirement ID	KDD	SDF	Derived
Referential	Referential				
demande d'air chaud	demande d'air chaud	req_0010	false	false	false
ressource électrique	ressource électrique	req_0020	false	false	false
mettre l'air froid en mouvement	mettre l'air froid en mouvement	req_0030	false	false	false
consignes de pilotage du flux d'air chaud	consignes de pilotage du flux d'air chaud	req_0040	false	false	false
consigne de pilotage souffler de l'air froid	consigne de pilotage souffler de l'air froid	req_0050	false	false	false
New Functional Requirement	New Functional Requirement	req_0060	false	false	false
New Non Functional Requirement	New Non Functional Requirement	req_0070	false	false	false
New Non Functional Requirement	New Non Functional Requirement	req_0080	false	false	false

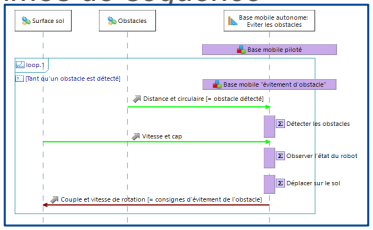
Block Diagram

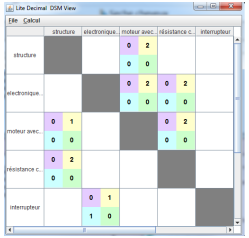


State Machine



Diagrammes de séquence





Design Structure Matrix (DSM)

2013 : Birth of **XATIS**

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CESAM-certified System Architect
Senior Expert

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Software Architect
Data Processing Software Company Expert

Jean-Marc MORAS

Senior Software Developer

Eric CLAVE

Head of XATIS project

Goals :

- **CESAM** architectural framework inside
- **Ergonomic** solution
- **Synchronization** of diagrams
- **Interoperability**

2022 : XATIS Software ID Card

2010 2013 **2022**

CESAMES

An architectural framework

eclipse

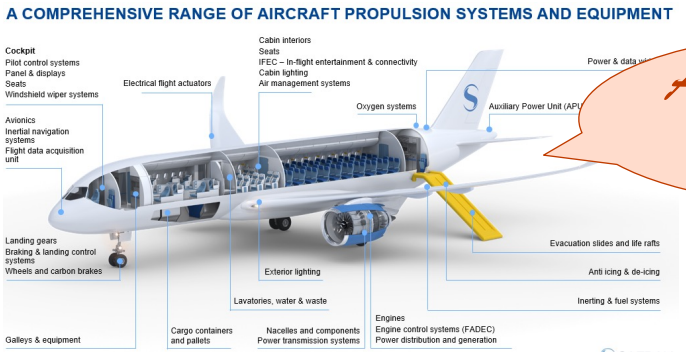
A proven technology

emf ECLIPSE MODELING FRAMEWORK

Sirius

XATIS
A SIMPLE TOOL FOR COMPLEX SYSTEMS

350 users



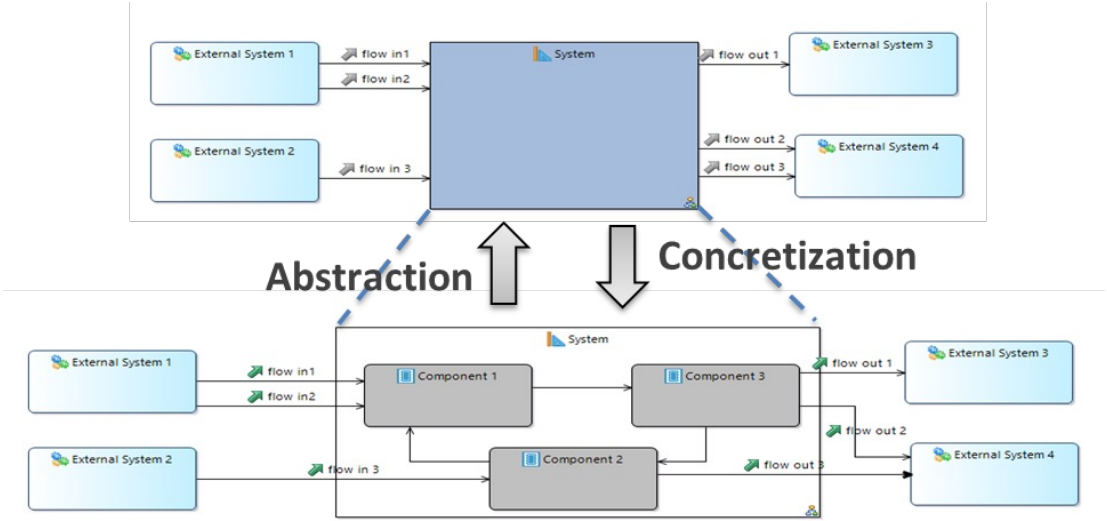
A roadmap based on projects needs

CESAMES SAFRAN

modeling objectives

2010 2013 2022

Make a system that meets the **needs** AND solve the system **integration** problem

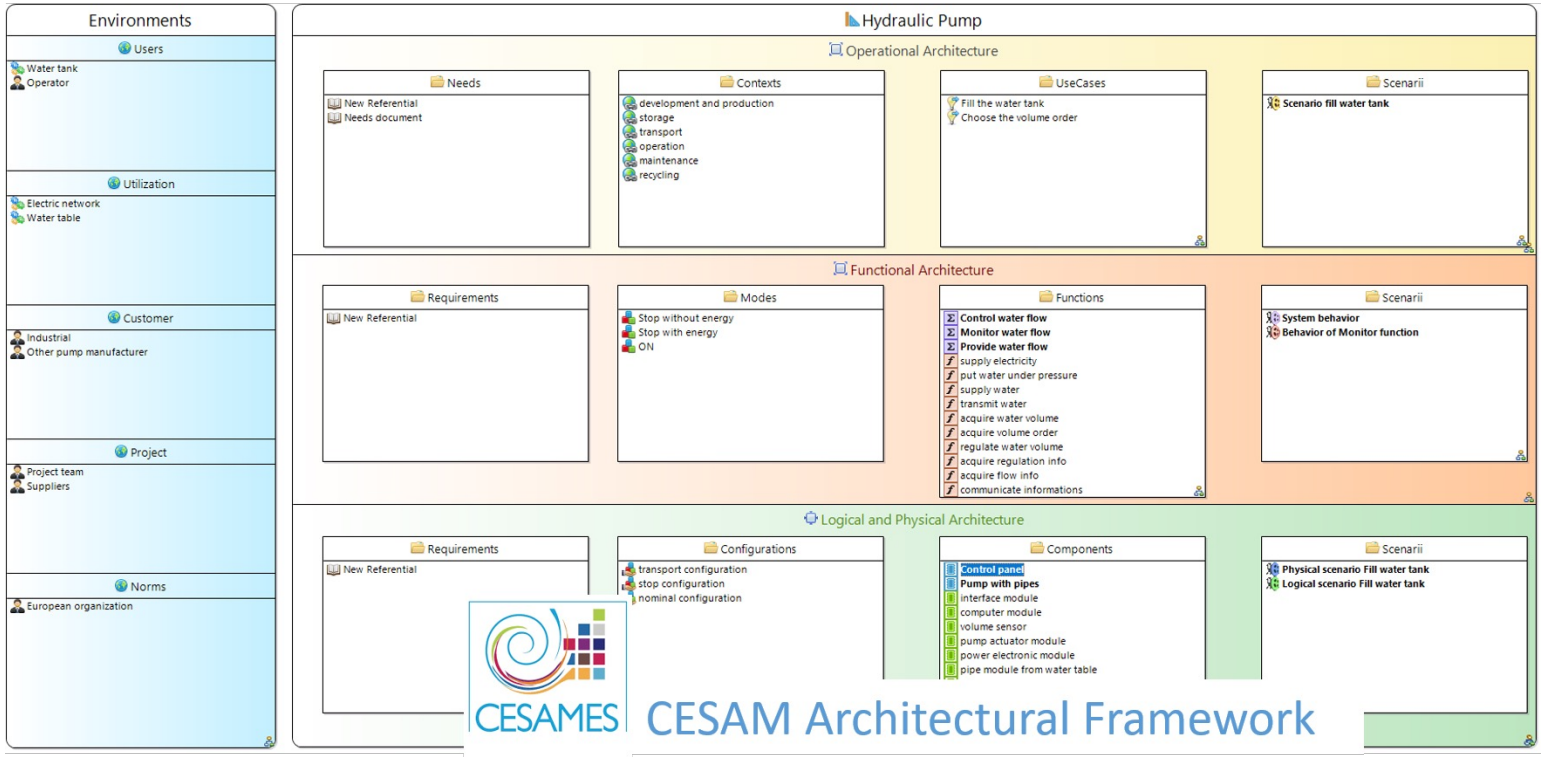


For this, **XATIS** models a system in an abstract and concrete form using the **CESAM architectural grid** of

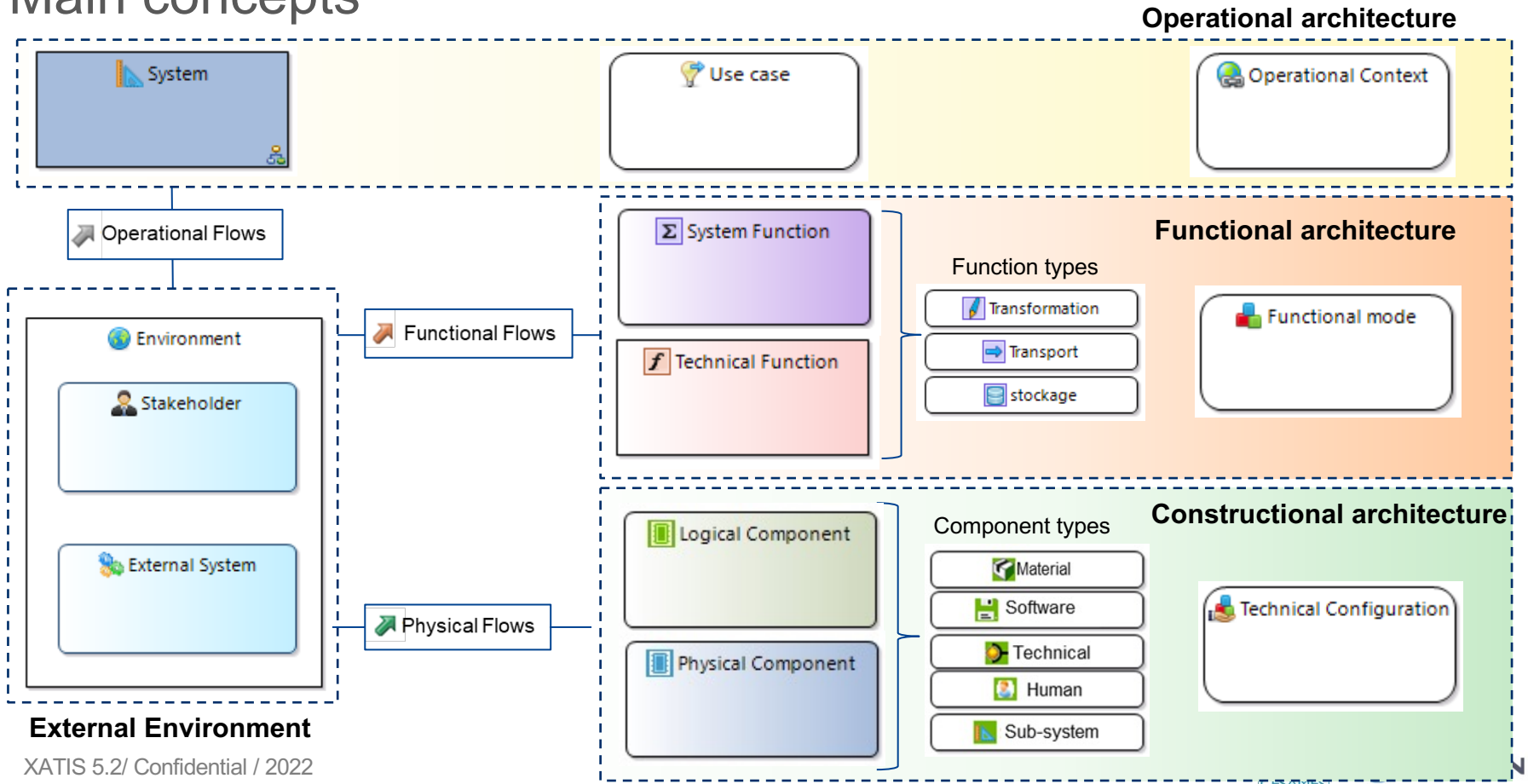
Source Krob, Element de systémique – architecture des systèmes

CESAM architectural grid

2010 2013 2022



Main concepts



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