AsterStudy: a SALOME success story

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salome_meca?
salome_meca: a platform for sharing know-how...

- Leverages the existing SALOME platform
- Relies on powerful existing solvers
- Brings everything together in dedicated skill modules
... and transferring it to the engineer with quality assurance procedures
salome_meca: a platform built with end-users

- Need of a user friendly global study environment in mechanics
- With easy access to all SALOME services

Gathering users’ feedbacks (2014-2015)

Define specifications (late 2015)
First question: how do we make users happy?
Going from…
…to:

- Input settings
- Launch and management of computations
- Interaction with SALOME

Preprocessing → AsterStudy → Postprocessing
Second question: how do we achieve it?
Creating a whole new GUI for **code_aster**: AsterStudy

- Collaborative work with EDF SALOME team to build the data model and enable interaction with SALOME services

- Internal development for core engine of the module

- External development for GUI part
AsterStudy is born… thanks to SALOME…
... and used daily since September 2017
Third question: what’s next?
More features with more SALOME interactions:

Key features:
- unified interface,
- automatic input/output management,
- strong interaction between mesh and data settings,
- easy checkpoint restart.

2017

2018

Major features to come

2019

- Uncertainty propagation
- Parameters calibration
- Interactive computations management
- Graphical tools for study control

OpenTURNS
YACS
ADA0
Mesh
Conclusion
A win-win integration

- AsterStudy made possible thanks to SALOME
- Improvements benefit to other modules currently in development
- Improves the robustness of SALOME by challenging lesser used modules

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Any questions?