ACP-OpDesign: Optimal Design Gateway : Reveal the path to optimized products

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ACP OpDesign, is an intuitive and process guided optimization desktop environment, developed by BETA CAE Systems, based on ETA's Accelerated Concept to Product process. With its optimization oriented and highly specialized user interface, based on the process depicted   as a diagram in the tool, it offers to the user the capability to take advantage of an efficient, direct interaction to:
- ANSA's powerful morphing and parametrization functionality,
- custom designed META Post-processor tools,
- Topology and parametric optimization Software,
- FEA solvers

Featuring a list of tools designed and developed in the context of actual optimization projects, ACP OpDesign is truly the gateway to product optimal design.
The following demo takes you on a step-by-step guide through the various phases of the process and presents the capabilities of the software (ACP-OpDesign, ANSA and META) by means of examples.

Starting from a product design space, we shall apply the loads under consideration for a topology optimization analysis. The results of this analysis will be interpreted and transformed into a low fidelity model, which will be then validated against the same loads.

Taking this model as a basis, we will parametrize it regarding its geometry (3D shape, position, cross section), its material and its thickness, and a parametric optimization will take place. The results of this analysis will be post-processed and evaluated.