

MULTIPHYSICS SOFTWARE: COMPARING BEST-OF-CLASS APPROACH AGAINST ALL-IN STRATEGY

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ABSTRACT

Nowadays there is a strong trend for multiphysics simulations being part of the standard development process in diverse industries. As there is no unique strategy how to introduce multiphysics software and simulation processes into the product development cycle, this work compares the principal software approach of connecting different “best-of-class” software against introducing software packages that can combine different physical domains per se.

An overview over common industry solutions will be given for both strategies. Pro's and Con's will be listed for each of the two strategies. Technical details about the two strategies will not be given, but a general overview will show guidelines on the best fitting strategy for specific industrial applications. A general, yet of course not complete, list of existing tools will be presented as well. Additionally, general guidelines as a basis for a decision on what strategy path to walk will be outlined.

Finally, an outlook on the update strategy of this work will be discussed.