

CRASH LOADCASE SETUP USING INCLUDE CONFIGURATOR TOOL

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KEYWORDS –

ANSA, Data Management, Connector definition, Include, Include configurator

ABSTRACT

The study focuses on the include preparation using ANSA and setting up of different load cases using Include configurator tool. The objective of the study was to make use of the automation capabilities of ANSA like connector definition between two different subsystems.

We did not have a defined method for braking down the subassemblies into Includes for crash simulations which made the debugging process or the model management very cumbersome. The study was done as part of method development activity to use the ANSA capabilities like using Include preparation tool, Connector and Include configurator tool. ANSA version 16.1.3 is used for the method development. Latest version of ANSA has advanced methods to do similar activities and that's the limitation with the study.

The Includes Configurator is a tool for the generation of different model variants and load cases. It has been based on the concept that a simulation model consists of several include files stored in a repository structured similarly to a file structuring. The Includes Configurator can handle combinations of different include files of the model. Each of the combinations corresponds to a different variant or load case.

In the Includes manager window the user can define the load cases and then determine which includes will participate in which of the load cases. The Includes Configurator provides useful functionality when handling includes with the aid of ANSA Data Management. The Includes Configurator provides useful functionality when handling includes with the aid of ANSA Data Management.

Future scope for the study can be using scripting to automate the workflow using ANSA Scripting capabilities. Scripts can be created for updating the configuration with latest changes to the includes or reloading the configuration from ANSA DM.