

CAE DATA MANAGEMENT AND STANDARD PROCESS TOOLING: STORYBOARD FROM RENAULT GROUP MODEL FACTOR

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ABSTRACT

From 2014, RSA decided to concentrate all activities concerning vehicle performance validation within same division. Taking opportunity to group all levels of CAE domain (methods, modelling, analysis, tests), Model Factory was in capacity to standardize, communalize and organize its activity with optimized approach ... in the past, several SDM projects were attempted to deploy a global way to manage CAE data, without success ...

After a tool benchmark in 2016, we decided to choose BETA tool SPDRM to support our project, in relation with ANSA/META suite already exclusively used for vehicle modelling. Two years after start of this project, a big stage of deployment has been completed.

This session will resume briefly the global process which drives RSA Model Factory process, and focus on some chosen use cases developed and deployed in this context of data management backbone project, methods standardization, modular configuration, automated processes:

- SPDRM data management (global data model for all domains)
- Crash diversity and loadcases configuration: monitoring of runs/models
- Modular organization and lifecycle tracking: Dependencies between models (parent-child)
- Full NVH trimmed body assembly (connectors and A-Points modular assembly)
- Automation examples with task management