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Why do we want to store the complete model data in the VMAP file?

- All geometrical information of the model can be found at one place
- History of the material data can be easily stored
- Useful for post processing of data to validate KPIs.
- VMAP Storage can offer completely solver independent post processing analysis
- Possibility of interoperable and reusable data
- Storage of data like boundary conditions and loading over time steps will allow for development of complex workflow independent of commercial tools.
- Provides the possibility to redo simulation and a platform to store the solution information

What does a complete model entail?

- Boundary conditions
- Loading
- Contact conditions
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It is a difficult task to define the complete model, since each solver offers different modelling guidelines

Some conclusions:

- Since type of analysis largely drives the storage of model information, it would make sense to store input data in one VMAP file and output data in another VMAP file.
- This is similar to the work being done at DLR where they store the heavy data like nodes, elements and results in the VMAP File and light data like loads, boundary conditions and material information in a readable jMeS file.
- It will also be interesting to see, how the input and output files can be linked and if it will be possible to extract information from the VMAP output file and feed it to the VMAP input file for the next step.

Next Steps:

- Achieve a common understanding of what a full model means. Refer to the Slides provided by DLR (see attachment).
- Identify simple use cases which can form the basis for the development of this work
- Organizing work and discussions
- Host regular meetings to discuss and develop this further
- Depending on the development, partial or fully funded projects could be looked into to take this work further