

Meeting Date/Time: 20-06.2023 / 16:00

Participants: SCAI, HTW Berlin, BMW, DLR Institutes BT and FA/SY

Agenda:

1. Concrete vs. abstract specification --> 1st implementation concepts

Current Level

Specification v1.0 for CAE Results

Write VMAP .h5 File

Write Mesh to File

VMAP IO Library

New Level for 'abstract' input decks

Some SMILE-like examples

Library of Guidelines / Modlling Interpreter / User Interface

meshes are already there

General Workflow

Combined abstract & discretised model issues

most modelling issues should be defined on abstract level

those model components which have similar concepts in (all)

codes could be also standardised on discrete level

we then need additional Guidelines which generate VMAP format instead of native code formats

2. Use Cases

We need use cases with

clearly defined needs for standardisation (on abstract and/or discrete level) and

concrete ideas of the expected benefits

Use Cases

BMW: tbd, door crash/NVH case..

DLR Oliver on turbine blades

BAM use case on concrete (Beton) modelling (Klaus will contact them)

3. Specification concept

to be done after we have analysed the use cases

4. other solutions

Novus Nexus is working on similar 'abstract model definitions' -

<https://novusnexus.com/resources>

FATXML data (metadata) from the design process through to the parts

level

https://www.beta-cae.com/events/c7pdf/10B_3_DEITERS.pdf

FATXML-Format Version V1.2_R4 (vda.de)

https://www.vda.de/de/aktuelles/publikationen/publication/fatxml-format-version-v1.2_r4

5. Next Meeting August 15, 2023

More detailed use cases

Draft workflow 'How to generate an abstract input deck?'

