

VMAP SC Technical Meeting

September 21, 2021

15:30 - 17:30 CET

Participants: Fraunhofer SCAI, Germany; Robert Bosch GmbH, Germany; Reden, Netherlands; BETA CAE, Switzerland; Karlsruhe Institute of Technology, Germany; Transvalor, France; 4a Engineering, Austria; Convergent, Canada; Simcon GmbH, Germany; Part Engineering, Germany; Key to Metals, Switzerland; inuTech, Germany

Introduction

Working Group Status/Feedback

- ANSYS Wrapper Updates
 - Ansys Wrapper plug-in installed in Bosch IT environment
 - Testing on different use cases is ongoing
 - Identification of suitable projects to sponsor the further development of plug-in
- VMAP Visualizer
 - Paraview visualizer under development
 - Part Engineering will take up this activity in the future
- CFD Extensions
 - SCAI had meeting with CGNS member (SAFRAN)
 - SAFRAN will evaluate VMAP and provide their feedback
 - Might look into common use cases / project ideas in future
- Material Data & Parameters
 - Key to Metals might provide support layer along with test/evaluations

Communication with Other Potential Partners

- LeBeDigital (Life Cycle of Concrete)
 - Presented by BAM (Bundesanstalt für Materialforschung und -prüfung)
 - Publicly funded R&D Project in the area 'Digitisation of Material Science'
 - Project Partners: Federal Institute for Materials Research and Testing (BAM), TUM & KIT
 - VMAP seems to provide most required features on FEA level – model setup/restart could be a necessary add-on
 - Translation of [FEniCS](#) data files to VMAP Format
- VMAP Analytics
 - Presented by SWERIM (The metals research institute)
 - Funded by Vinnova through the Eureka cluster program ITEA
 - Project Partners: SERIM, GEMIT Solutions, Gränges, Morgårdshammar, Prevas, Ovako, Fraunhofer SCAI
 - Project involves the development of suitable digital twins (DTs) based on physics and data science for deeper understanding of the steel manufacturing processes.

Ongoing Activities

- [VMAP Website](#) hosted by SCAI

General Organisation

- VMAP SC formation

- After the negative feedback from Tax Office in Erding the Fraunhofer legal department & tax lawyers are working on a suitable response.
- ITEA Press Release
 - VMAP received the ITEA Award of Excellence for Standardisation
 - <https://itea4.org/press-release/press-release-vmap-enhances-interoperability-in-virtual-engineering-workflows.html>
- VMAP Documentation access via Owncloud
- Planned Conferences
 - LS Dyna Conf. 5-6 October 2021
 - 2x presentations: SCAI on VMAP SC in general / DYNAmore on specific applications
 - [NAFEMS WC 2021 25-28. Oct 2021](#)
 - Multiple presentations planned

Next Meeting

- 14 December, 2021 @15:30