VMAP User Forum 2025

18-20 February 2025
Schloss Birlinghoven, Sankt Augustin Germany

Is the simulation data organized for further analysis?

This event will address the growing importance of digitalization and process integration in manufacturing, emphasizing both virtual tasks (like design, simulation and optimization) and physical steps (such as material & part testing and monitoring, system testing). There is also an increasing emphasis on digital product passports, which require well-structured, standardized, and semantically rich data. The event will span three days:

- **Day 1**: Updates on the VMAP specifications and the ongoing adaptation of tools to the standard
- **Day 2**: Focus on VMAP, its metadata and associated ontologies, as well as solutions for semantic information management in various R&D projects.
- **Day 3**: Integration platforms and the semantic analysis and AI integration supported by VMAP.

Overall, the event aims to advance the standardization and semantic structuring necessary for successful digital integration in manufacturing.

To register for the event, visit our website or contact us at info@vmap-standard.org

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	Tuesday, 18 February 2025	
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10:00	Registration & Networking	
	VMAP SC Status	
11:00	Welcome and Introduction *A brief overview about the intention, vision & strategy of VMAP SC*	*VMAP SC Klaus Wolf*
	Introduction to VMAP Working Group Activities *The aim of WGs and he overall progress*	*VMAP SC Priyanka Gulati*
	Lunch Break	
	VMAP Extended Specifications	
	VMAP Working Group – Sensor & Monitoring Data *Latest developments on handling of sensor and measurement data*	*WG Members*
	VMAP Working Group – Full Model Definitions *Latest developments in the full model domain*	*WG Members*
	Concepts for Meta-Data-Management *How VMAP tracker files support the semantic data management*	*WG Members*
	Break	
	VMAP Ongoing Wrapper and Interface Development	
	VMAP IO Lib & Wrapper Development *Solutions for open source and commercial simulation tools Potential presentations on Wrappers for OpenFoam, Abaqus, Permas, OOFEM, Ansys Mechanical, Simcon Cadmould, DYNAmore Envyo, Transvalor Forge, MpCCI Mapper, DLR internal Codes*	*Wrapper Developers*
	VMAP Joint Wrapper Development and Distribution *Open Discussions*	*All*
17:30	Drinks & Discussion	
18:00	Reception & Dinner in Schloss Birlinghoven	

Wednesday, 19 February 2025		
09:00	Welcome	
VMAP Data Standard and Semantic Information Management		
	Digitisation in Manufacturing - Developments in EU Projects *The digitalisation and deeper integration of process flows in manufacturing is becoming increasingly important. This applies to both virtual processes (design, modelling, simulation, optimisation) and physical work steps (material characterisation, coupon and component testing, monitoring of individual manufacturing steps, system testing) and, finally, to the growing number of mandatory digital product passports.* *The increased integration of processes can only succeed if the associated structuring of data and information is further standardised and provided with semantic concepts.* *Various approaches to data and model standardisation and the associated semantic organisation are currently being investigated and developed as part of a range of R&D projects. The aim of this session is to present the needs of different industry sectors, engineering disciplines and project proposals and to discuss the possibilities of joint solutions regarding unification and standardisation.*	*Fraunhofer SCAI*
	Potential Contributions from active R&D Projects ***Pioneer** – Open Innovation Platform for Optimizing of Production*	*Project Partners*
	Break	
	Potential Contributions from active R&D Projects ***Alabama** – Adaptive Laser Beam for Additive Manufacturing* ***InShaPe** – Green Additive Manufacturing through Innovative Beam Shaping and Process Monitoring* ***Restore** – Sustainable remanufacturing solution with increased automation and recycled content in laser and plasma-based processes*	*Project Partners*
	Lunch Break	
	Potential Contributions from active R&D Projects ***GEAR-UP** – Green Engineering, Analysis, & Reskilling for Unbounded Production* ***BASE** – Battery Passport for Resilient Supply Chain and Implementation of Circular Economy* ***SmartEM** – Open reference architecture for engineering model spaces*	*Project Partners*
	Break	
	Potential Contributions from active R&D Projects *Other Upcoming Projects*	*Project Partners*

	Discussion – Joint Activities, Developments and Standardisation	*All*
17:30	Drinks & Discussion	
18:00	Reception & Dinner in Schloss Birlinghoven	

Thursday, 20 February 2025		
09:00	Welcome	
Data Management Platforms and AI		
	Presentation from partners *Digital Product Passport*	*Partners*
	Presentation from partners *Efficient Workflow Management Tools*	*Partners*
	Presentation from partners *Open Innovation Platform from Pioneer Project*	*Partners*
	Presentation from partners *Software Vendor Perspective*	*Partners*
	Break	
	Presentation from partners *OEM Partners presenting User Perspective*	*Partners*
	Presentation from partners *OEM Partners presenting User Perspective*	*Partners*
	Presentation from partners *OEM Partners presenting User Perspective*	*Partners*
	Presentation from partners *NAFEMS SPDM group Overview*	*Partners*
	Lunch Break	
	Concluding Session *The concluding session to summarize the 3-days and provide perspective on the future of VMAP SC. Some insights on how the industry might go forward with the semantics data management and its usage for the data analytics and AI activities.*	*VMAP SC*
14:30	End of all sessions	

Agenda is subject to change

VMAP SC e.V. Founding Members