

Manufacturing Technology and Industrial Systems DTF - ManTIS

OMG TC Meeting, Burlingame, CA, USA 04-08 December 2017

Preliminary Agenda (& Related Items)

[Updated 17th Nov., 2017]

Sunday, 03 Dec

== No ManTIS Business ==

Monday, 04 Dec.

== No ManTIS Business ==

Tuesday, 05 Dec.

== No ManTIS Business ==

Wednesday, 06 Dec.

OMG Information Day on "Model-Based Engineering, Automation and IoT in Smart Manufacturing"

Agenda:

<http://www.omg.org/events/ca-17/special-events/Manufacturing-Day.htm>

Thursday, 07 Dec.

09:00 – 17:00 ManTIS plenary

09:00 Introductions & agenda review

09:15 Presentations

- Report from PLM4MBSE WG (Uwe Kaufmann, ModelAlchemy)
- Update on the SysML extension for physical interaction and signal flow simulation – SysPhS aka SysPISF RFC (Conrad Bock, NIST)

10:15 Coffee Break

10:30 The Need for Data Lineage in Manufacturing (John C. Butler, Auxilium TG)

11:00 Ontology session

- The Problem with Using UML/SysML to Make an IDEAS/UAF Based Network Graph (William C. Beavin, Boeing)
- Discussion with Ontology PSIG

12:00-13:00 Lunch

13:00 – 17:00 ManTIS plenary continued

13:00 Presentations

- Status on work in ISO TC 184 SC4 Industrial Data and new SC4 subcommittee on digital manufacturing (Allison Barnard-Feeney, NIST)
- End User Testbed Opportunities from IIC (Smart Factory Task Group Chairs, IIC)
- Wrap-up from Information Day, identification of need for action, ...

14:30 Coffee Break

15:00 Presentations and roadmap discussion

- *Tentative: Update on PLM – MBSE Integration proof of concepts (Christian Muggeo, ARAS / Lucas Kirsch, CONTACT Software)*
- Roadmap and future directions discussion

~17:00 Adjourn

18:00 Manufacturing Dinner (optional), meet us at the hotel lobby

Friday, 08 Dec.

08:30 – 15:00 AB, PTC, DTC Plenaries (usually done by Noon or so)

Background for selected presentations:

1. **Auxilium:** John C. Butler & Robert Lario present about a OMG working group on Data Provenance and Pedigree (Data Lineage). “We’re working on developing a set of use cases in different domains to use as requirements to drive one or more RFPs and we’d like to get a sense of potential use cases in the manufacturing domain.”
2. **Boeing:** There are many reasons why it would be useful to define an enterprise/system/unifying model in a network graph (RDF/OWL) format. One option to accomplish this is to create a UML or SysML based model and then convert/export it in RDF/OWL format. However, the use of classes to represent properties makes the resulting model difficult to query or extend. This is a problem for the Unified Architecture Framework (UAF) which is based on an ontology (IDEAS) but implemented as a UML/SysML profile. The UAF Ontology itself needs to be defined and standardized and available in OWL/RDF format, from which UML/SysML Profiles may be derived. Otherwise "rogue" UAF implementations in owl/rdf will emerge anyway for tools like Protégé. This as simple as possible example shows that a UAF ontology defined in OWL would look very different compared to one made in UML/SysML, so OMG needs to address the situation.