

OMG Platform Technology Committee
Friday, December 13, 2019
Long Beach, CA
OMG document ptc/19-12-01

Jason Smith, OMG's newly appointed Vice President and Technical Director, determined if the PTC was quorate. Quorum was 7; there were 13 PTC voters present. The PTC was called to order at 09:00 a.m.

First order of business was approval of the Nashville, TN minutes (ptc/19-09-01).

J.D. Baker (Sparx Systems) moved to approve the minutes.
Char Wales (MITRE) seconded the motion.
Hugues Vincent (THALES)) proposed White Ballot.
There was no objection to White Ballot.
Motion carried.

Next order of business was **SUBGROUP REPORTS**

Zach Hashemi (MACE) reported on the activities of the *Agents Platform Special Interest Group*:

Highlights from this Meeting:

- Agent PSIG Overview – presented by Zack Hashemi
 - Mission Statement & Goals
 - Agent & Event Metamodel (AgEnt) Submission Status
- Internet of Agents (IoA) – presented by Zack Hashemi
 - Survey of techniques used in agentification of the Internet of Things (IoT)

Deliverables from this Meeting:

- None

Future Deliverables (In-Process):

- Agent & Event Metamodel (AgEnt) submission for the Agent Metamodel and Profile (AMP) RFP – revised submission due on 2/24/2020

Liaisons

- None

Agenda Items for the Next Meeting:

- Revised Agent & Event Metamodel submission – Semantic agents model for Smart Objects (SOs)
- Internet of Agents (IOA) update

Jim Logan (No Magic) reported on the activities of the *Analysis & Design Platform Task Force*

(ADTF):

Highlights from this Meeting:

- Sandy Friedenthal and Ed Seidewitz: SysMLv2 Submission Status Update
- Conrad Bock and Raphael Barbau: (Onto)Logical Requirements, Designs, and Tests—Passed

Motions:

- Reset the initial submission deadline of Precise Semantics for Uncertainty Modeling (PSUM) to February 2020.

Deliverables from this Meeting:

- Technology Adoption Recommendation(s):
 - None
 -
- RFP/RFI/RFC Recommendation(s) or Other Recommendation(s):
 - n/a
 -

Future Deliverables (In-Process):

Technology Adoptions

- API4KB revised submission: February 24th, 2020
- MVF revised submission: February 24th, 2020
- AMP & EMP revised submission: February 24th, 2020
- Safety & Reliability for UML revised submission: August 26th, 2019
- MARTE 2.0 RFI: August 26th, 2019
- IMM revised submission: February 24th, 2020
- PSUM initial submission: February 24th, 2020
- Precise Semantics of Time for fUML initial submission: May 2021
- SysMLv2 Language and API submission: May 2020

RFPs

- None

Liaisons:

- None

Agenda Items for the Next Meeting:

- (Onto)Logical Requirements, Designs, and Tests, Part 2
- SysMLv2 Submission Overview and Status?

Philip Newcomb reported on the activities of the *Architecture-Driven Modernization Task Force*:

- Bob Martin presented a slide deck on the purpose and rationale for the Software Bill of Materials specification, which is being developed by a working group of the CISQ. (posted as ADMTF/2019-12-01 and attached) with expectation the spec will be submitted as an RFC to the ADM TF in March for approval.
- The ADM TF OMG website content was reviewed and determined to be out of date and in need of update. A process was discussed for updating the OMG website and agreed upon.
- The wikipedia website content on the ADM TF was reviewed and determined to be out of date. A process for its update was discussed and agreed upon.
- The ADM TF Roadmap was reviewed and it was agreed that it is out of date and requires update. It was agreed that the Bill Ulrich will lead a session in Reston using the business architecture modeling process to define an updated ADMTF Roadmap.

Claude Baudoin (cebe IT & KM) reported on the formation meeting of the *Artificial Intelligence Platform Task Force*:

Highlights from this Meeting

- AI Meet & Greet on Monday evening—~70 attendees
- Intro (Claude), talk (Elisa), panel (Elisa, Roger Burkhart, Artem Beer)
- Met on Wednesday afternoon (first meeting since formation)
 - ~22 attendees
 - Recap of previous episodes
 - Reviewed charter, accepted proposals for a few scope clarifications
- Brainstormed “areas of standardization in AI”
- Mike Abramson presented on connection between IEF and AI
- Brainstormed a list of AI PTF activities
 - Created a rough roadmap for 2020
- Defined the broad lines of an “AI Forum” in Reston

Documents Issued

- None so far
 - Will submit Mike Abramson’s slides unless published by another group
 - Will publish revised charter if we can approve it at this meeting
 - Will publish notes from the meeting

Future Deliverables (In-Process)

- Analysis of the 98 replies to the NIST RFI on AI Standards
- Started by Claude and Pete Rivett
 - asked for more contributors
- Leading to a discussion paper

- AI Vocabulary
 - Extends the classification presented in the Board paper
 - Discussion paper, or adoption of an existing one (see Wikipedia)
- First RFP possibly September

Agenda Items for the Next Meeting

- PTF Meeting proper – ½ day
 - Review the analysis of NIST RFI responses
 - Design complementary RFI if needed
 - Select one aspect for work on an RFP (toward a draft in June)
- Several joint sessions with other OMG groups through the week-1 hr each
 - Discuss our relationship, offerings, and the other groups' requirements
- AI Forum
 - full day
 - Hoping to have NIST, DoD Joint AI Center, end user(s), AI vendors, academia
 - Presentations and one or two panels

Charter Revision

- Current charter is ai/19-09-05, scope of AI is listed as:
 - Modeling of AI artifacts
 - Machine learning, deep learning, and neural networks
 - Image and sound recognition
 - Virtual and augmented reality
 - Autonomous systems and agents
 - Knowledge representations
 - Natural language processing (NLP)
 - Security, privacy, social and other ethical aspects of AI
- Proposed Changes
 - Bullet 3: "Image understanding, speech recognition, and computer vision"
 - Add a bullet on robotic systems
 - Bullet 4: Add "and autonomic"

Mike Bennett (EDM Council) reported on the activities of the *Blockchain Platform Special Interest Group*:

Highlights from this Meeting:

- with MARS PTF
 - DLT Ecosystems interoperability – RFI review and status update
 - Tangle (IOTA node) RFC: updated draft Specification review / conformance
 - LETS RFP outline (IOTA MAM)
 - Review of IOTA EEE (pub/sub) and identified applicable OMG Specifications from CORBE, DDS and elsewhere; determined that a new, context-specific RFP may be applicable

- DIDO Reference architecture updates
- Main BC-PSIG session
 - IOTA explanation and updates (Coordicide etc.)
 - I3 Data Marketplace – IoT / Mobility using Tangle DLT
- Demo Table
 - I3 Data Marketplace physical demonstrations

Deliverables from this Meeting:

No new formal deliverables

Future Deliverables (In-Process):

- Blockchain Ecosystem Interoperability – RFP(s) – Jun/Sept 2020
- Tangle RFC (IOTA specific)
- Linked Encrypted Transaction Streams (LETS) RFP (IOTA MAM potential response)
- “Event Handler” (provisional title) (IOTA EEE potential response)

Liaisons

- MARS PTF and Finance DTF

Agenda Items for the Next Meeting:

- Tangle Specification RFC review (IOTA) (at MARS)
- Linked Encrypted Transaction Streams (LETS) RFP review (at MARS)
- “Event Handler” (provisional title) RFP review (at MARS)
- DLT Interoperability RFI: review of responses
- DLT Interoperability RFP(s) initial discussion and drafting
- Potential new RFP: Assurance Model for Crypto Assets
- DIDO RA v2
- DIDO TE updates
- Potential ‘big picture’ RFP on graph-based DIDOs

Discussion amongst the plenary participants ensued regarding “Event Handler”, as there is a current Event RFP. It was suggested to coordinate between the two before starting a new process. It was also pointed out that the term “event” may not mean the same in different areas.

Gerardo Pardo (Real-Time Innovations) reported on the activities of the *Data Distribution Service (DDS) Platform Special Interest Group*:

Highlights from this meeting

- Presentation by Vincent Hugues (THALES) on the use of DDS by the NATO Generic Vehicle Architecture (NGVA) standard (see dds/2019-12-01)
 - Discussion on how the DDS Foundation & SIG could help NVGA
 - Hugues will try to schedule a “joint” workshop with NGVA in Q2 2020 to provide training on recent specs: IDL4, DDS-XTYPES, DDS-XML, and DDS-

XRCE

- Discussion on providing visibility on DDS datamodels, including:
 - Existing standards: OARIS, ALMAS, C2INAV, TEX, OpenFMB, NGVA,
 - Others to be gathered from the community
- Discussion on improving vendor interoperability
 - Decision to publish interoperability scoreboards based on the GIT-repository tests.

Plans for Reston

- Workshop on “recent DDS standards and concepts”:
 - IDL4, DDS-XTYPES, DDS-XML, DDS-XRCE, Qos Profiles, Type Compatibility

Char Wales (MITRE) reported on *Middleware and Related Services Platform Task Force* (MARS PTF) activities:

Highlights from this Meeting:

- DL4 to C# Language Mapping: reviewed, recommended for adoption
- DDS C# API RFP: reviewed, recommended for issuance
- Cyber Insurance RFI: reviewed, recommended for issuance
- Cloud Working Group Discussion Paper Roadmap: reviewed status
- IEPPS: reviewed revised submission, extended to September 2020 meeting
- IEF Ecosystem of Interop Discussion Paper & Roadmap: presented and discussed
- TCP/IP PSM for DDS Interop: reviewed progress, extended to Boston
- DDS-TSN: reviewed progress, extended to Reston
- Joint meetings with BC PSIG
 - BC Ecosystem Interop RFI: discussed strategies to elicit more responses
 - Linked Encryption Transaction Streams (LETS) RFP: presentation on evolving RFP
 - “Event Handler” RFP: presentation on potential RFP
 - IOTA Tangle RFC: presented update
 - DIDO Reference Architecture 2.0 Discussion Paper: reviewed next version
 - DIDO Test Environment (TE): Presentation and demo
- IDL, SNC, CORBA, IEF WGs met.
- IDL WG: Working on IDL4 to C++ RFC (and other mapping efforts).
- CORBA WG: discussed CORBA and IDL related issue vis a vis FACE specs

Deliverables from this Meeting:

- Technology Adoption Recommendation(s)
 - IDL4 to C# Language Mapping
 -
- RFP/RFI/RFC Recommendation(s)
 - Cyber Insurance RFI

- DDS C# API RFP
- TF Documents Issued
 - None
 -

Future Deliverables (In-Process):

- Technology Adoptions
 - DDS-TSN: revised submission, 24 Feb 2020
 - IEF Policy Based Packaging Service (IEPPS): revised submission, 17 August 2020
 - TCP/IP PSM for DDS Interoperability: revised joint submission, 18 May 2020
 - REST for CORBA: initial submission 18 May 2020
 - STI for Software Defined Radios (SDRs): initial submission, 24 Feb 2020
- RFP/RFI/RFC Recommendations
 - IOTA Tangle RFC
 - "Event Handler" RFP
 - Linked Encryption Transaction Streams (LETS)
 - IDL4 to C++ Mapping RFC

Liaisons:

- None

Agenda Items for the Next Meeting

- DDS-TSN RFP: review revised submission
- STI for SDRs RFP: review initial submissions
- Cyber Insurance RFI: review responses
- IDL to C++ RFC: review draft
- IEF Ecosystem of Interoperability Discussion Paper: review draft
- Practical Guide to Data Governance in the Cloud Discussion Paper: review draft

Joint with BC PSIG:

- IOTA Tangle RFC: review and issue?
- Event Handler RFP: review draft
- Linked Encrypted Transaction Streams (LETS) RFP: review draft
- Blockchain Ecosystem Interoperability RFI: review responses
- DIDO RA v2.0: review and publish
- DIDO Test Environment: presentation and demo
- DIDO Reference Implementation: introduction and demo

Continue collaboration with BC PSIG, Data Governance, FACE Consortium

WGs to meet:

- IDL, IEF, SNC, CORBA

Nick Stavros (Jackrabbit Consulting) reported on the activities of the ***Ontology Platform Special Interest Group***:

Highlights from this Meeting:

- Presentation on Architecture centered, ontologies driven modeling of business systems, and related development process (Bernd Blobel) –ontology/2019-12-01
- Presentation and discussion of the Ontology Roadmap (Elisa Kendall, Thematrix Partners LLC) --ontology/2019-12-02
- Publishing Global Legal Entity Identifier Foundation (GLEIF) Data (Pete Rivett, Adaptive) – ontology/2019-12-03
- Enterprise Knowledge Graph Foundation (Dennis Wisnosky, Enterprise Knowledge Graph Foundation)

Deliverables from this Meeting:

- None

Future Deliverables (In-Process):

- API4KP revised submission (March 2020)
- Multiple Vocabulary Facility (MVF) revised submission (March 2020)
- ODM 2.0 RFC (March 2020)
- Languages, Countries and Codes (LCC) 1.2 RTF report (March 2020)*
- RFC for the Specification Metadata Ontology, UML Profile, and IDL Template (June 2020)
- DOL 1.1 RTF Report (December 2020)
- Possible Member Submission to the W3C on RDF*, SPARQL*
- Possible RFP for extensions to the RDF/OWL W3C standards for integrity constraint and data validation support (epistemic reasoning) with mapping to SHACL, possibly default values support
- Possible RFP for rule syntax extensions to SPARQL (could be combined with OWL RFP, or part of SPARQL 1.2 at W3C)

Liaisons

- None

Agenda Items for the Next Meeting:

- see above

The next order of business was **RFP/RFC/RFI/RFR/WHITE PAPER ISSUANCES.**

J.D. Baker (Sparx Systems) moved to issue the DDS C# API RFP (OMG document number mars/2019-12-07)

Char Wales (MITRE) seconded the motion

Hugues Vincent (THALES) proposed White Ballot

There was none opposed to White Ballot
Motion carried

.D. Baker (Sparx Systems) moved to issue the Cyber Insurance RFI (OMG document number mars/2019-12-22)
Claude Baudoin (cebe IT & KM) seconded the motion
Hugues Vincent (THALES) proposed White Ballot
There was none opposed to White Ballot
Motion carried

The next order of business was initiation of the **TECHNOLOGY RECOMMENDATION** polls.

Before the PTC on 13th December 2019 were the below reports and submissions and a poll was held for each of them:

IDL4 to C# Language Mapping RFP submission	mars/19-11-01
Inventory	mars/19-11-02
MOF2 RDF Mapping 1.0 FTF report	ptc/19-11-01
Convenience document clean	ptc/19-11-02
Convenience document with change bars	ptc/19-11-03
Ancillary attachment file	ptc/19-11-04
MOF2RDF normative machine-readable files zip archive	ptc/19-11-05
MOF support .zip file	ad/18-12-06
MOF to RDF mapping support files	ad/18-12-07

Jason Smith explained that the vote on this technology recommendation will be carried out by email. However, any PTC voting representative here today whose company wishes to vote “Yes” to all the adoptions can pre-register that vote now, and OMG staff will email confirmation of that vote to the registered voter after the meeting. If any member wishes to do anything other than vote “Yes” to all, or subsequently wishes to change its mind about voting “Yes to all”, please wait for the voting form to arrive by email and use it to vote appropriately.

Those who pre-registered a vote IN FAVOUR OF RECOMMENDING ADOPTION of the above reports and submissions:

THALES, 88solutions, cebe IT & KM, GfSE e.V., Real-Time Innovations, Boeing, Micro Focus, MITRE, Model Driven Solutions, Jackrabbit Consulting, OntoAge, IOTA Foundation

The next order of business was **SUBGROUP CHARTERS/EXTENSIONS/CHANGES.**

Gerardo Pardo (Real-Time Innovations) moved to charter the **IDL4 to C# 1.0 Finalization Task Force** with the following dates and membership:

IDL4 TO C# LANGUAGE MAPPING (IDL4-CSHARP) 1.0 FTF

Contact: idl4-csharp-ftf@omg.org

TF Chairs: Mr. Fernando Garcia-Aranda

IPR Mode: Non-Assert

Public List of Issues: IDL4CSP

Members List of Issues: IDL4CSP

Schedule

Event	Date	Notes
Base document(s)		<i>Relevant documents:</i> mars/19-11-02 (IDL4 to C# Language Mapping inventory file) mars/19-11-01 (IDL4 to C# Language Mapping RFP joint revised submission)
Voting List Deadline	December 13, 2019	
Beta 1 Specification Publication	February 1, 2020	
FTF Comments due	May 1, 2020	
FTF Report Due Date	November 9, 2020	
FTF Recommendation and Report deadline	December 18, 2020	

VOTING LIST:

Company	Date	Notes
ADLINK Technology Ltd		<i>Mr. Erik Hendriks</i>
Jackrabbit Consulting		<i>Dr. Nick Stavros</i>
Kongsberg Defence & Aerospace		<i>Dr. Ornulf Staff</i>
MITRE		<i>Ms. Syltinsy Jenkins</i>
Micro Focus International Plc		<i>Mr. Matteo Vescovi</i>
Naval Surface Warfare Center		<i>Mr. Charles Fudge</i>
OCI		<i>Mr. Adam Mitz</i>

Objective Interface Systems		<i>Mr. Chuck Abbott</i>
Real-Time Innovations		<i>Mr. Fernando Garcia-Aranda</i>
Twin Oaks Computing, Inc.		<i>Mr. Clark Tucker</i>

J.D Baker (Sparx Systems) seconded the motion
Hugues Vincent (THALES) proposed White Ballot
There was none opposed to White Ballot
Motion carried

Manfred Koethe (88solutions) moved to re-charter the **MOF to RDF 1.1 Revision Task Force** with the following dates and membership:

MOF TO RDF MAPPING 1.1 RTF

Contact: mof2rdf-rtf@omg.org
TF Chairs: Mr. Pete Rivett Mr. Manfred R. Koethe

IPR Mode: Non-Assert

Public List of Issues: MOF2RDF11
Members List of Issues: MOF2RDF11

Schedule

Event	Date	Notes
Base document(s)		<i>Relevant documents:</i> ptc/19-11-05 (MOF2RDF normative machine-readable files zip archive) ptc/19-11-04 (MOF2RDF ancillary attachment file) ptc/19-11-02 (MOF2RDF Beta 2 document clean)
Voting List Deadline	December 13, 2019	
RTF Public Comment Deadline	September 27, 2020	
RTF Report Due Date	November 9, 2020	
RTF Revision Deadline	December 18, 2020	

VOTING LIST:

Company	Date	Notes
88solutions		<i>Mr. Manfred R. Koethe</i>
Adaptive		<i>Mr. Pete Rivett</i>
Boeing		<i>Mr. William Beavin</i>

Jackrabbit Consulting		<i>Dr. Nick Stavros</i>
Model Driven Solutions		<i>Mr. Cory B. Casanave</i>
NIST		<i>Mr. Evan K. Wallace</i>
No Magic, Inc.		<i>Mr. James L. Logan III</i>
OntoAge		<i>Ms. Bobbin Teegarden</i>
Sparx Systems		<i>Mr. James D. Baker</i>
Thematrix Partners LLC		<i>Mrs. Elisa F. Kendall</i>

Char Wales (MITRE) seconded the motion
Hugues Vincent (THALES) proposed White Ballot
There was none opposed to White Ballot
Motion carried

Manfred Koethe (88solutions) made the composite motion:

- to extend the UTP 2.2 RTF report deadline to to 1 weeks after to the June 2020 meeting (June 26, 2020 or July 3, 2020)
- to extend the DDS-PSM-Cxx v1.1 RTF revision deadline to 1 weeks after to the June 2020 meeting (June 26, 2020 or July 3, 2020)
- to extend the PSSM 1.1 RTF report deadline to 3 April 2020
- to extend the Public comment deadline of the IDL to C++11 1.5 RTF to 26 June or 3 July 2020
- to extend the IDL to C++11 1.5 RTF report deadline to December 18, 2020
- to extend the IDL to C++11 1.5 RTF Report due Date to November 9, 2020
- to extend the DDSI-RTPS 2.5 RTF report deadline to 26 June or 3 July 2020
- to extend the Web-enabled DDS 1.1 RTF report deadline to 26 June or 3 July 2020
- to extend the DDS Java API 1.1 RTF report deadline to 26 June or 3 July 2020
- to extend the Interface Definition Language 4.3 RTF report deadline to 26 June or 3 July 2020
- to extend the DDS Consolidated XML Syntax (DDS-XML) 1.1 RTF report deadline to 26 June or 3 July 2020
- to extend the IDL 4.3 RTF report deadline to 26 June or 3 July 2020
- to extend the ODM 1.2 RTF report deadline to 3 April 2020
- to extend the DOL 1.1 RTF report deadline to 18 December 2020
- to name Laurent Rioux of THALES co-chair of the MARTE 1.3 RTF

Manfred Koethe (88solutions) made the composite motion:

- to add Dr. Darren Kelly as Webel IT Australia voter to the SysML 1.7 RTF
- to add Johannes Trageter as Willert voter to the fUML 1.5 RTF
- to add Johannes Trageter as Willert voter to the PSSM 1.1 RTF
- to add Johannes Trageter as Willert voter to the UML 2.6 RTF

J.D. Baker (Sparx Systems) seconded the motion

Hugues Vincent (THALES) proposed White Ballot
There was none opposed to White Ballot
Motion carried

Claude Baudoin (cebe IT & KM) moved to approve the revision to the charter of the AI PTF as outlined in OMG document ai/2019-12-01
J.D. Baker (Sparx Systems) seconded the motion
John Drage (Micro Focus) proposed White Ballot
There was none opposed to White Ballot
Motion carried

Jason Smith then asked if there was any other business coming before the PTC. There being no further business brought before the PTC, it was adjourned at 10:10 A.M.