OMG Platform Technology Committee
Friday, March 27, 2020
Virtual March meeting minutes
OMG document ptc/20-03-03

Attendance:

Ademola Adejokun   Lockheed Martin (P)
Jim Logan    No Magic (Dassault Systemes (*)
Koji Kamei     JARA (P)
Mike Narducci    OMG
Fernando Garcia    RTI (P)
Marlin Ballard    Georgia Institute of Technology (U)
Amy Stowers    Maximus(I)
Jeff Smith    nContext (*)
Robert Rencher    Boeing (P)
Pete Rivett    Adaptive (P)
Bill Beavin    Boeing (P)
Adam Mitz    OCI (I)
Ed Seidewitz    Model Driven Solutions (*)
Conrad Bock    NIST (G)
Mike Bennett    IOTA (*)
Char Wales    Jackrabbit Consulting (*)
Maureen Robusto    OMG
Gundars Alksnis    Riga Technical University (U)
Peter Denno    NIST (G)
Meg Duncan    OMG
Chuck Abbott     OIS (P)
Ben Calloni     Lockheed Martin (P)
Zack Hashemi    nContext(*)
Brad Kizzort    OS/COMET Product Group (D)
Jim Logan    No Magic/Dassault Systemes (*)
Matteo Vescovi    Micro Focus (P)
Manfred Koethe    88solutions (P)
John Draga    Micro Focus (P)
Andy Mattice    Lexmark (R)
Richard Beatch    Bloomberg LP (D)
Elisa Kendall    Thematix Partners (P)
Evan Wallace    NIST (G)
Uwe Kaufmann    GfSE (*)
J.D. Baker    Sparx Systems (*)
Roger Burkhart    Deere & Company (T)
Hugues Vincent    THALES (*)
Daniel Brookshier    No Magic/Dassault Systemes (*)
Claude Baudoin    cebe IT & KM (*)
Juergen Boldt    OMG
Jason McC. Smith    OMG
Diane Ehramjian    OMG

Comment: Contributing (*) and Platform (P) have voting rights in the DTC, one vote per organization
(D) Domain no voting right
(U) University no voting right
(I) Influencing no voting right
(G) Government no voting right
(T) Trial no voting right

Jason Smith, OMG’s Vice President and Technical Director, determined if the PTC was quorate. Quorum was 9; there were 18 PTC voters present. The PTC was called to order at 10:52 a.m.

First order of business was approval of the Long Beach, CA PTC minutes (ptc/19-12-01).

Char Wales (Jackrabbit Consulting) moved to approve the minutes. J.D. Baker (Sparx Systems) 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

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

Highlights from this Meeting:
- Conrad Bock: (Onto)Logical Time Modeling
- Jim Logan: DL Profile for UML
- Ed Seidewitz and Manas Bajaj: SysML v2 Submission Team Status Update
- Kyle Post, Tomas Juknevicius, and Andrius Armonas: Integrating safety and reliability analysis into MBSE: Concepts and applications
- Davide Sottara: API4KP briefing and live demo
- Passed Motions:
  - Reset “Safety and Reliability for UML profile” revised submission reset to May 2020
  - Reset API4KB revised submission date to August 17, 2020
  - Reset MVF revised submission date to August 17, 2020
  - For the SysML v2 RFP, reset initial submission deadline to August 17, 2020 and reset voting list deadline to August 31, 2020
  - For the SysML v2 API and Services RFP, reset initial submission deadline to August 17, 2020 and reset voting list deadline to August 31, 2020
  - Reset AMP (Agent Metamodel and Profile) revised submission date to 25 May 2020
Reset EMP (Event Metamodel and Profile) revised submission date to 25 May 2020
Reset IMM (Information Management Metamodel) revised submission date to 9 November 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
  - PSUM initial submission: deadlines to be extended during PTC
  - SysMLv2 Language, API, and services submission: May 2020
  - AMP & EMP revised submission: May 25th, 2020
  - Safety & Reliability for UML revised submission: May, 2020
  - API4KB revised submission: August 17th, 2020
  - MVF revised submission: August 17th, 2020
  - IMM revised submission: November 9th, 2020
  - Precise Semantics of Time for fUML initial submission: May 2021
- RFPs
  - None
- Liaisons:
  - None

Agenda Items for the Next Meeting:
- TBD

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

Highlights from this Meeting

- Full-day meeting on Wednesday
  - 30 attendees, 17 maximum at any one time
  - “AI Forum” initially planned for Thursday had already been postponed (prior to COVID-19 disruptions) to September due to lack of talk submissions
- Recapped the previous episodes for new participants
- Presented Prof. Roberto Zicari’s work at University of Frankfurt on “Z-inspection” in absentia
- Prof. Bern Blobel (University of Regensburg) presented on “AI security, privacy and ethics”
- Conducted a “demo” of the NIST RFI response analysis
- Extensive discussion of the roadmap
Documents Issued

| ai/20-03-01 | Presentation on AI Security, Privacy and Ethics |
| ai/20-03-02 | Z-Inspection [ask for permission] |
| ai/20-03-03 | Minutes of Virtual AI PTF Meeting, 24 Mar 2020 |

Future Deliverables (In-Process)
- Analysis of the 98 replies to the NIST RFI on AI Standards
  - 45 done by Claude, Bobbin and Pete Rivett – need 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 possible by September

Agenda Items for the Next Meeting
- Review the analysis of NIST RFI responses
- Select one aspect for work on an RFP
- Work session on AI taxonomy
- Work session on AI best/ethical practices
- Several hour-long joint sessions with other OMG groups
  - Discuss our relationship, offerings, and the other groups’ requirements
- Plan AI Forum for September
  - Hoping to have NIST, DoD Joint AI Center, end user(s), AI vendors, academia
  - Presentations and one or two panels
- Start a series of bi-weekly teleconferences in April

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

**Highlights from this Meeting:**
- Reviewed initial submission Space Telecommunication Interface for SDRs
- Joint meeting with BC PSIG
  - Reviewed 3 responses to Blockchain Ecosystem RFI
  - Reviewed first draft Linked Encryption Streams (LETS) RFP
  - Reviewed DIDO Reference Architecture 2.0 Discussion Paper
  - Reviewed DIDO Data Model, a component of DIDO Reference Implementation
- Extended DDS-TSN Integration to 25 May 2020 (June meeting)
• Extended response deadline Cyber Insurance RFI to 25 May 2020 (June meeting)
• Corrected process dates affected by the shift of the June meeting by one week
  o DDS C# API and REST for CORBA API: initial submission and voting list deadlines (25 May & 15 June)
  o TCP/IP PSM for DDS Interoperability and STI for SDRs: revised submission deadlines (25 May)
• IDL, SNC, IEF WGs met.
  o IDL WG: Working on IDL4 to C++ RFC and issues for for IDL4 to Java and C# FTFs.

**Deliverables from this Meeting:**
- Technology Adoption Recommendation(s)
  o None
- RFP/RFI/RFC Recommendation(s)
  o None
- TF Documents Issued
  o None

**Future Deliverables (In-Process):**
- Technology Adoptions
  o DDS-TSN: revised submission, 25 May 2020
  o IEF Policy Based Packaging Service (IEPPS): revised submission, 17 August 2020
  o TCP/IP PSM for DDS Interoperability: revised joint submission, 25 May 2020
  o REST for CORBA: initial submission 25 May 2020
  o STI for Software Defined Radios (SDRs): revised submission, 25 May 2020
- RFP/RFI/RFC Recommendations
  o IOTA Tangle RFC
  o Event Handler RFP
  o Linked Encryption Transaction Streams (LETS)
  o IDL4 to C++ Mapping RFC
- Liaisons
  o None

**Agenda Items for the Next Meeting**
- DDS-TSN RFP: review revised submission
- STI for SDRs RFP: review revised submission
- 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:
  o IOTA Tangle RFC: review draft
  o Linked Encrypted Transaction Streams (LETS) RFP: review draft
  o DIDO RA v2.0: review and publish
Fernando Garcia (Real-Time Innovations) reported on the activities of the **Data Distribution Service (DDS) Platform Special Interest Group**:

**Highlights from this meeting**

- Presentation by Daniel Ota and Ditmir Hazizi (Fraunhofer FKIE) on the NGVA standard and how they create the DDS data-types and Qos
  - Presentations to be posted as dds/2020-03-01 and dds/2020-03-02
  - Discussion on the next steps see dds/2020-03-03
  - “joint” workshop with NGVA in Q2 2020 still being considered as virtual meeting.
- Presentations / Discussion on improved vendor interoperability delayed to next meeting
- Workshop on “recent DDS standards and concepts” delayed to a future meeting:
  - IDL4, DDS-XTYPES, DDS-XML, DDS-XRCE, DDS-RPC, DDS-TSN, Qos Profiles, Type Compatibility
- RTF/FTF discussions for DDS-XTYPES, DDSI-RTPS, IDL to C#.

**Plans for Orlando**

- Plans in flux. Will finalize once we know whether meeting is in person or virtual

Ben Calloni (Lockheed Martin) reported on the activities of the **System Assurance Platform Task Force**:

**Highlights from this Meeting:**

- Presentation on Software Fault Patterns RFC
- Vote to Vote on SFP RFC
- Vote to Adopt SFP RFC
- Presentation by Acquired Data Solutions
  - “Maximizing Productivity through Cyber-Security Automation for Operational Technology”
- Discussion on Cybersecurity Risk Metamodel Specification to proceed with RFC (Decision at 2Q2020 TC meeting)

**Deliverables from this Meeting:**

- sysa/2020-03-01 through 04  SFP Submission Files
- sysa/2020-03-05  SysA TF Updated Agenda
Zach Hashemi (MACE) reported on the activities of the Agents Platform Special Interest Group:

**Highlights from this Meeting:**
- Agent and Event Metamodel – A New Approach - presented by Manfred Koethe
  - Discussed new approach for Agent and Event (AgEnt) Metamodel to include integration with SysML-v2 that has support for SMOF and temporal ordering
- Microservices-Based Multi-Agent Systems (MAS) - presented by Zach Hashemi
  - Presented survey of Microservices oriented Multi-Agent Systems (MAS) and discussed how Microservices principles closely matches the MAS objectives

**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 5/25/2020

  - Liaisons
    - None

**Agenda Items for the Next Meeting:**
- Revised Agent & Event Metamodel submission integrated with SysML-v2
- RFP discussion for standardization of lightweight agent platform for Internet of Agents (IoA) to support agents with limited computing and memory resources
  - It is undecided what Task Force will host this RFP

Evan Wallace (NIST) reported on the activities of the Ontology Platform Special Interest Group:

**Highlights from this Meeting:**
- Presentation on the Standard Business Report Model (SBRM), (Pete Rivett, Adaptive) – [no slides used]
- Presentation Provenance and Pedigree Metamodel and Notation (John Butler, Auxilium Technology Group) – ontology/2020-03-02
• Presentation on Industrial Ontologies Foundry (IOF), (Evan Wallace, NIST) – ontology/2020-03-03

Deliverables from this Meeting:
• None

Future Deliverables (In-Process):
• API4KP revised submission (August 2020)
• Multiple Vocabulary Facility (MVF) revised submission (August 2020)
• ODM 2.0 RFC (September 2020)
• Languages, Countries and Codes (LCC) 1.2 RTF report (September 2020)
• RFC for the Specification Metadata Ontology, UML Profile, and IDL Template (December 2020)
• DOL 1.1 RTF Report (December 2020)

Liaisons
• None

Agenda Items for the Next Meeting:
• Review guidelines and requirements for ontology specification, publication and maintenance
• Problems with reusing the W3C PROV-O Ontology – logical inconsistency

Mr. Wallace also noted that there was ongoing discussion regarding what Task Force would host the ODM 2.0 RFC or other RFs.

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

Highlights from this Meeting:
• with MARS PTF
  o Blockchain Ecosystems interoperability RFI: review responses
  o LETS RFP outline (IOTA MAM)
  o Event Handler RFP status (defer to later)
  o Tangle (IOTA node) RFC: updated IOTA status and Coordicide (slides)
  o DIDO RA, reference implementation updates
• Joint session with Cloud WG
• Main BC-PSIG session
  o DIDO CLI updates and discussion
  o LETS RFP Drafting (BC-PSIG/20-03-01)
  o IOTA Tangle updates (Coordicide etc.)
  o Interoperability RFI – potential RFPs and follow-ups
• Back to MARS PTF
  o LETS RFP Draft review (MARS/20-03-19)

Deliverables from this Meeting:
Future Deliverables

- **In-Process:**
  - Tangle RFC: June, with Coordicide changes to IOTA Protocol
  - Linked Encrypted Transaction Streams (LETS) RFP: June
  - Event Handler RFP: September or later
  - DIDO CLI – potential standards elements; timings TBD
- Interoperability RFI outcomes: 2 possible RFPs; timings TBD:
  - Semantics of DLT primitives abstractions
  - Treatments of concept models for DLT business payloads
- 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)
- Potential new RFP: Assurance Model for Crypto Assets (deferred from this time)
- DIDO RA, TE and CLI updates
- Cloud WG follow-up

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

Char Wales (Jackrabbit Consulting) made the composite motion:

- To extend the PSSM 1.1 RTF revision deadline to 3 July 2020
- To extend the fUML 1.5 RTF revision deadline to 3 July 2020
- To extend the SACM 2.2 RTF revision deadline to 2 April 2021
- To extend the UML Profile for ROSETTA (UPR) 1.1 RTF revision deadline to 25 September 2020
- To extend the SysML 1.7 RTF revision deadline to 25 September 2020
- To extend the DDS-XRCE 1.1 RTF revision deadline to 25 September 2020
- To extend the DDS-OPC UA Gateway 1.1 RTF revision deadline to 25 September 2020
- To extend the RPC over DDS 1.1 RTF revision deadline to 25 September 2020
- To extend the MEF 1.0 FTF revision deadline to 3 July 2020
- To extend the Diagram Definition 1.2 RTF revision deadline to 2 April 2021
- To extend the LCC 1.2 RTF revision deadline to 25 September 2020
- To extend the ODM 1.2 RTF revision deadline to 25 September 2020

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

Hugues Vincent (THALES) proposed White Ballot

There was none opposed to White Ballot
Motion carried

Char Wales (Jackrabbit Consulting) made the composite motion:

- To add Char Wales of Jackrabbit Consulting as voter on the DDS 1.5 RTF
- To add Ronnie Gill of Boeing as voter on the SysML 1.7 RTF.
- To add Char Wales of Jackrabbit Consulting as voter on the ROSETTA 1.1 RTF
- To add Syl Jenkins of MITRE as voter on the IDL 4.3 RTF
- To add Syl Jenkins of MITRE as voter on the DDS Consolidated XML Syntax (DDS-XML) 1.1 RTF
- To add Syl Jenkins of MITRE as voter on the DDSI-RTPS 2.5 RTF

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 extend the Precise Semantics for Uncertainty Modeling RFP initial submission deadline to 9 November, 2020

and to extend the Precise Semantics for Uncertainty Modeling RFP revised submission deadline to 8 November 2021

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

Hugues Vincent (THALES) proposed White Ballot

There was none opposed to White Ballot

Motion carried

Ben Calloni (Lockheed Martin) moved to issue the Software Fault Pattern Metamodel (SFPM) RFC with the following OMG document numbers:

Submission        sysa/20-03-01
Inventory         sysa/20-03-02
EMOF file         sysa/20-02-03
MagicDraw         sysa/20-02-04
XSD               sysa/20-03-03
Clean UML file    sysa/20-03-04
EMF file          sysa/20-02-07
Cover letter      sysa/20-02-08

Manfred Koethe (88solutions) seconded the motion

Hugues Vincent (THALES) 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 12:16 A.M.