OMG Platform Technology Committee Friday, October 1st, 2021 Virtual September meeting minutes OMG document ptc/21-09-01

Attendance:

Name Company

Jason McC. Smith OMG Terrance Milligan **OMG** Harriet Costa OMG/IIC Denise Wahl OMG Juergen Boldt **OMG** Diane Ehramiian OMG Steve MacLaird OMG Chris Corso OMG Meg Duncan **OMG**

Manfred Koethe 88 solutions (P) Koji Kamei JARA (D) Matthew Howlett Rolls-Royce (I)

Rajan Kapadia US Department of Navy (G)

Bob Martin MITRE (*)

Roger Burkhart Thematix Partners, LLC (P)
Luis Rodriguez Amergint Technologies (I)
Ian Stavros Jackrabbit Consulting (*)

Takashi Yoshimi Shibaura Institute of Technology (U)

Louis Eyermann US Department of Navy (G)
Curran Meek US Department of Navy (G)

William Beavin Boeing (P)

Charles Dickerson Loughborough University (U)

Simon Mettrick BAE Systems (D)

Ryan Nochuchi The Aerospace Corporation (I)

Bobbin Teegarden OntoAge (*)

Heather Crondahl Open Civic Foundation (*)

Jim Logan Dassault Systemes (P)
Daniel Brookshier Dassault Systemes (P)

Adam Kolodny Elbit Systems of America (I)

Conrad Bock NIST (G)
Zack Hashemi nContext (*)

Mike Bennett EDM Council (D)/IOTA Foundation (*)

Richard Beatch
J.D. Baker
Sparx Systems (*)
Matteo Vescovi
Micro Focus (P)
John Draga
Micro Focus (P)
Uwe Kaufmann
GfSE, e.V. (*)
John Glaubitz
VERTEX, Inc. (R)

Adam Mitz Object Computing, Inc. – OCI (I)

Ben Calloni Objective Interface Systems/KDM Analytics (P)

Claude Baudoin cebe IT & KM
Andy Mattice Lexmark (R)
Sarah Douglass MITRE (*)

Char Wales Jackrabbit Consulting (*)
Elisa Kendall Thematix Partners, LLC (P)

Sanford Friedenthal INCOSE (*)

Comment: Contributing (*) and Platform (P) have voting rights in the PTC, 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
- (NM) non-member, no voting rights

(R) Retail, no voting rights

Dr. Jason Smith, OMG's Vice President and Technical Director, determined if the PTC was quorate. Quorum was 9; there were 9 plus eligible PTC voters present. The PTC was called to order at 10:35 a.m. EDT

First order of business was approval of the June 2021 PTC virtual meeting minutes (ptc/2021-06-05).

Char Wales (Jackrabbit Consulting) moved to approve the minutes.

Manfred Koethe (88solutions) seconded the motion.

Daniel Brookshier (Dassault Systemes) proposed White Ballot.

There was no objection to White Ballot.

Motion carried.

Next order of business was SUBGROUP REPORTS

Jim Logan (Dassault Systemes) reported on the activities of the *Analysis & Design Platform Task Force (ADTF)*:

Highlights from this Meeting:

- Sandy Friedenthal, Ed Seidewitz, Manas Bajaj: SysML V2 Update Presentation
- Sandy Friedenthal, Ed Seidewitz, Manas Bajaj: Establish SysML V2 submission eval group
- Conrad Bock: SST/SysML2 Semantic(and Other) Debt Presentation
- Chas Galey: UML3 Draft RFP
- Tao Yue: PSUM Precise Semantics for Uncertainty Modeling (PSUM) Status Update

Passed Motions:

- Add revised submission date for SysMLv2 RFP to November 8th, 2021
- Add revised submission date for SysMLv2 API and Services RFP to November 8th, 2021
- Move the revised submission of PSUM from February 21, 2022, to December 7, 2022
- Move the revised submission date for Multiple Vocabulary Facility (MVF) from August 30, 2021 to November 8, 2021

Deliverables from this Meeting:

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

Future Deliverables (In-Process):

Technology Adoptions

- SysML V2 and SysML V2 API and Services revised submission: November 8th, 2021
- MVF RFP revised submission: November 8, 2021
- AMP & EMP revised submissions: November 8th, 2021
- PSUM revised submission: December 7, 2022

RFPs: None

Agenda Items for the Next Meeting:

- Updates on AMP/EMP, IMM and PSUM, Precise Semantics of Time RFP, MVF submissions
- Updates on SysML V2
- SysML V2 semantic debt

J.D. Baker invited members to join the SysML V2 evaluation group to be established. The mailing list to be created is going to be named sysml_eval@omg.org.

There was the suggestion to issue an RFI regarding UML 3.

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

Highlights from this Meeting

- "Responsible AI: Emerging Open Source Frameworks for AI Fairness" (Sridhar Iyengar, IBM)
 - o Related to the responsible computing() initiative promoted by IBM
- IEEE AI Standards Council Project Authorization Request on "AI Vocabulary and Data Formats" (Chuck Easttom and Richard Tong)
 - o We're playing influencer role as it overlaps with our AI PTF scope/mission

- "Draft EU Regulation on AI Perspective of the Federation of German Industries (BDI)" (Oliver Klein, BDI)
 - o Risk classification of AI applications, leading to prohibitions and certification and labeling requirements
- Co-chairs reviewed list of potential deliverables and schedule in an additional session (which no one else attended...)

Deliverables since the last Meeting

- No RFIs, RFCs or RFPs yet
- One report and two presentations

Number	Title	Author
ai/21-09-01	Notes from the Q2 2021 AI PTF Meeting	Claude Baudoin
ai/21-09-02	Responsible Al: Emerging Open Source Frameworks for Al Fairness	Sridhar lyengar
ai/21-09-03	Draft EU Regulation on Al Perspective of the Federation of German Industries (BDI) [slides]	Oliver Klein
ai/21-09-04	Draft EU Regulation on Al Perspective of the Federation of German Industries (BDI) [video]	Oliver Klein

Future Deliverables – mostly unchanged

- AI Taxonomy or Ontology
- Analysis of NIST RFI responses
- RFI with more precise questions and more international appeal than NIST's

Very tentative:

- RFP on a Claims-Argument-Evidence model for AI (e.g., absence of bias)
- RFI on representing AI components in SysML
- RFI on the need for a standard model and language for image labeling

• Liaisons: none now, but considering the IEEE AI Standards Committee

Agenda Items for the Next Meeting

- December 8, full day if we're in person or hybrid
- Invite some prospective speakers to continue informing our roadmap
- Four (?) interim 90-minute remote working sessions in October and November

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

Highlights from this Meeting:

- IDL4 to Python Language Mapping RFP: reviewed final draft of RFP
 - o Recommended issuance
- DDS C# API Revised Submission: received status update
 - o Extended to Reston (March 2022)
- CWG Non-Fungible Tokens and Cyber Insurance DP: reviewed
 - o Recommended for publication
- DDS Service-based Discovery: continued discussion regarding need
 - o Agreed technology needed and to continue RFP preparation
- UML Profile for Rosetta (UPR): introduced proposal to evolve UPR
 - o Add logical constraints via alignment with SysML 2.0 KerML/Predicates
 - o Plan to prepare a new RFP -- to be issued from ADTF
- Open Civic Architecture Framework (OCAF): received detailed Introduction

Joint with Block Chain PSIG

- Smart Contracts RFI: reviewed next draft, targeting issuance in December 2021
- Disposable Self-sovereign Identities (SSID) RFI: reviewed latest responses
 - o Declared the RFI closed
 - Next step: prepare RFP to standardize expression of context and its communication & consumption as a DSSID; issue from MARS or some other TF?
- IOTA Protocol RFC: reported current state
 - o RFC may be ready by March or June 2022
- Linked Encrypted Transaction Streams (LETS) RFP: reviewed status of initial submission
 - o Extended initial and revised submission deadlines: December 2021 and March 2022

- Distributed Immutable Data Objects (DIDO) RA: reviewed future plans
 - o Version 4.0 being prepared, targeting release in December 2021
 - o Reworks data concepts from perspective of taxonomies, privacy, data state, etc.
- FACE Interop, IDL and IEF WGs met
 - o FACE Interoperability WG:
 - Continue to meet jointly with counterparts in FACE Consortium
 - MOU for joint OMG/FACE Interop WG still pending legal review by FACE Consortium
 - No impact on joint WG meetings; just exercise care vis-à-vis information sharing
 - Established 3 breakout WGs with co-chairs for each: DDS, CORBA, IDL4
 - o To meet frequently in between quarterly TC meeting weeks

IDL WG:

• Focused on IDL4 to C++ language mapping submission

IEF WG:

- Reviewed application of IEF to support Zero Trust Environments
- Initiated exploration of how IEF can support OCAF (OCS DSIG)

Deliverables from this Meeting:

• Technology Adoption Recommendation(s): none

RFP/RFI/RFC Recommendation(s):

• IDL4 to Python Language Mapping RFP

TF Documents Issued

• Cloud WG Non-Fungible Tokens and Cyber Insurance DP

Future Deliverables (In-Process):

- Technology Adoptions
 - o DDS C# API: revised submission, Feb 21, 2022
 - o DDS-TSN: revised submission, Nov 8, 2021
 - o TCP/IP PSM for DDS Interoperability: revised submission, Feb 21, 2022

- o IDL4 to C++ Language Mapping: revised submission, Nov 8, 2021
- o Linked Encrypted Transaction Streams (LETS): initial submission, Nov 8th, 2021

RFP/RFI/RFC Recommendations to Issue

• DDS Service-based Discovery RFP: issue 2021 Q4

• Smart Contracts RFI: issue 2021 Q4

• IOTA Protocol RFC: issue 2022 Q2?

TF Documents

• Distributed Immutable Data Objects (DIDO) RA V4.0: publish 2021 Q4

• Cloud WG Discussion Paper:

Practical Guide to Cloud Data Governance: publish in 2022 Q1

Cloud Service Agreement Template: publish in 2022 Q1

Everything as a Service: A Guide to XaaS: publish in 2022 Q2

Practical Guide to Cloud Computing, version 4: 2022 Q3

Liaisons

• FACE Consortium (MOU in process)

Agenda Items for the Next Meeting:

- Review initial submission: Linked Encrypted Transaction Streams
- Review revised submission: DDS TSN Integration API
- Review revised submission: IDL4 to C++ Language Mapping
- Review latest draft RFP: DDS Service-based Discovery

Joint with BC PSIG:

- Linked Encrypted Transaction Streams RFP: review initial submission
 - Disposable Self-sovereign Identities (SSID) (exact title TBD) RFP: review latest draft (TBD)
 - Smart Contracts RFI: review for issuance
 - DIDO RA V4 DP: review for publication

Continue collaboration with BC PSIG, Cloud Working Group, FACE Consortium MARS WGs to meet: IDL, IEF, FACE Interop, SNC?

Mr. Zack Hashemi (nContext) reported on the activities of the *Agent Platform Special Interest Group*:

Highlights from this Meeting:

- Agent PSIG Introduction presented by Zack Hashemi
 - o AMP RFP overview, benefits of KerML/SysML v2 to agent-base system
- Agent and Event Metamodel An Update presented by Manfred Koethe
 - o Update on progress of the Agent & Event Metamodel (AgEnt) revised submission
 - o Added new feature: Allen's Temporal Logic to the AgEnt Planning Model
- Automated Analysis Correlation (ACC) Overview presented by Mary Armijo
 - o Presented technical overview of the ACC an intelligent multi-agent system
 - o Volunteered to contribute to the AgEnt standard by supplying two implementation Exam

Deliverables from this Meeting:

None

Future Deliverables (In-Process):

• Agent & Event Metamodel (AgEnt) revised submission for the Agent Metamodel and Profile (AMP) RFP and Event Model and Profile (EMP) RFP– scheduled for submission on Nov 8th, 2021

Liaisons

None

Agenda Items for the Next Meeting:

- Discuss the submitted approach for the Agent & Event (AgEnt) Metamodel standard
- Review the two implementation examples (PSMs) of the submitted AgEnt standard

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

Highlights from this Meeting:

with MARS PTF

- Smart Contracts RFI Draft review
- Disposable Self-sovereign Identity RFI review all responses
- IOTA Protocol RFC plans update
- LETS RFP status update
- DIDO update

Main BC-PSIG session: with Finance DTF

- Election of new Blockchain PSIG Co-chair (Ian Stavros)
- Smart Contracts RFI editing; decided to hold off to Q4 for issuance
- FIGI Update (FDTF)
- Disposable SSI responses review and discussion
- Money and Currency Semantics (presented by FDTF)

Deliverables from this Meeting:

- None
- •

Future Deliverables

- IOTA Protocol RFC
 - Smart Contracts RFI (Dec)
 - Longer Term
 - o D-SSI Potential RFPs
 - o Smart contracts RFP(s)
 - o Other RFIs, likely followed by RFPs: Oracles, Token, Exchange / Wallet ...

Liaisons

- Internal: MARS PTF and Finance DTF; WGs: CBDC; VCOI
- External: TangleEE WG (with IOTA, Eclipse Foundation and others); IEEE
- Informal: AIA Aerospace and Defense Distributed Ledger Technology Consortium

Agenda Items for the Next Meeting:

- IOTA Protocol update and plans (at MARS)
- Linked Encrypted Transaction Streams (LETS) RFP response(s) review
- Smart Contracts RFI
- Draft potential RFP: Disposable Self-sovereign ID / Context formalization

Mr. Bennett introduced the Vocabularies for Communities of Interest WG

- Concepts analysis:
 - o Finance: Money and currency concepts and definitions
 - Blockchain PSIG: Fundamentals of DLT

- Concepts v Words
 - o Semantic v Speech Communities (ISO 1087)
 - o Linked by Context
 - What is Context? formal treatment
- Standards and Tooling
 - o SKOS, MVF, SBVR, RDF, OWL etc. exist
 - o But how to use / extend for formal Context treatment
- Collaborate across TCs (TF, SIG etc.)
- Sharing and reuse both of:
 - Concept articulation
 - Terms, acronyms, references

Participate!

Would like to extend invitation to all interested TCs to build out our MVP

It was noted that the Disposable Self-Sovereign RFI was to be removed from the process page, as reviews of RFI submissions were finished.

Mr. Beatch noted that FIGI was now a U.S. and Brasilian standard, and that CryptoFIGI was going live in October.

Char Wales (Jackrabbit Consulting) reported on the activities of the *Data Distribution Service (DDS) Platform Special Interest Group:*

Highlights from this meeting

- Reviewed feedback document to the NVGA on their DDS/IDL data model
- Discussion on the trade-offs of relying on various DDS-XTYPES features for the TMS data model and how to determine vendor support for those
- Discussion on organising a Hackathon focused on DDS Interoperability, ideally to coincide with the March 2022 meeting
- Issuance (by mars) of IDL-Python RFP

Plans for next meeting

Presentations on approaches to service-based DDS discovery by various DDS vendors

Elisa Kendall (Thematix Partners) reported on the activities of the *Ontology Platform Special Interest Group*:

Highlights from this Meeting:

- Presentation: Ontology-Driven Augmented Reality, Tony Hodgson (Ethar, Inc.) ontology/2021-09-01
- Presentation and Discussion: Multiple Vocabulary Facility (MVF) Architecture and Reusable Library of Ontologies, Elisa Kendall (Thematix Partners) and Pete Rivett (agnos.ai)
- Presentation and Discussion: Ontology Visualization, Pete Rivett (agnos.ai)

Deliverables from this Meeting:

• None

Future Deliverables (In-Process):

- Multiple Vocabulary Facility (MVF) revised submission (December 2021)
- Languages, Countries, and Codes (LCC) 1.2 RTF report (December 2021)
- RFC for the Specification Metadata Ontology, UML Profile, and IDL Template (December 2021 or March 2022)
- ODM 2.0 RFC (December 2021 or March 2022)
- DOL 1.1 RTF report (December 2022)

Liaisons

None

Agenda Items for the Next Meeting:

- Report on requirements for OMG ontology specifications (with generated content in LaTeX)
- Metrics for ontology characteristics to provide for OMG ontology artifacts
- Discussion of a possible maturity index for ontology
- Presentations for deliverables in Analysis & Design

The next order of business was RFP/RFC/RFI/RFR ISSUANCES:

Char Wales (jackrabbit Consulting) moved to issue the IDL4 to Python Language Mapping RFP (OMG document number mars/2021-09-20)

Bob Martin (MITRE) seconded the motion.

Daniel Brookshier (Dassault Systemes) proposed White Ballot. There was none opposed to White Ballot. Motion passed

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

Daniel Brookshier (Dassault Systemes) made the composite motion:

- to extend the ODM 1.2 RTF revision deadline to December 17, 2021
- to extend the SysML 1.7 RTF revision deadline to December 17, 2021
- to extend the LCC 1.2 RTF revision deadline to December 17, 2021
- to extend the UPR 1.1 RTF revision deadline to December 17, 2021
- to extend the MARTE 1.3 RTF revision deadline to April 1, 2022
- to extend the DDS Consolidated XML Syntax (DDS-XML) 1.1 RTF revision deadline to April 1, 2022
- to extend the DDS-OPC UA Gateway 1.1 RTF revision deadline to April 1, 2022
- to extend the Web-enabled DDS 1.1 RTF revision deadline to July 1, 2022
- to extend the DDS 1.5 RTF revision deadline to July 1, 2022
- to extend the DDS-XRCE 1.1 RTF revision deadline to July 1, 2022
- to extend the IDL 4.3 RTF revision deadline to July 1, 2022
- to extend the Diagram Definition 1.2 RTF revision deadline to September 23, 2022
- to extend the revised submission deadline of the IMM RFP to February 21, 2022

Manfred Koethe (88solutions) seconded the motion. Bobbin Teegarden (OntoAge) proposed White Ballot. There was none opposed to White Ballot. Motion passed.

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 11:56 A.M. EDT.