# OMG Platform Technology Committee Friday, 9 December, 2016 Coronado, CA, USA OMG document ptc/16-12-15

Andrew Watson determined if the PTC is quorate. Quorum was 5; there were 10 PTC voters present. The PTC was called to order at 8:56 a.m.

First order of business was approval of the Chicago, IL minutes (ptc/16-09-02).

Char Wales (MITRE) moved to approve the minutes. Sumeet Malhotra (TCS) seconded the motion.

J.D. Baker (Sparx Systems) proposed White Ballot.

There was no objection to White Ballot.

Motion carried.

Next order of business was **SUBGROUP REPORTS**.

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

With the departure of Virginie as co-chair of the MARS PTF a co-chair election was held athis meeting and Justin Scaduto of General Dynamics was elected new MARS PTF co-chair.

A PTC vote was held to thank Ms. Virginie Watine of THALES for years of excellent service and participation as MARS PTF co-chair since 2003.

#### **Highlights from this Meeting:**

- DDS XML Consolidation RFC: Reviewed second draft, reorganized per buildingblocks
- XML to JSON for DDS: Delayed until DDS XML Consolidation done
- TCP/IP PSM for DDS Interoperability: Recast as a RFP
- IDL4 to Language Mappings: New approach starting with a prototype for Java 8
- IEF Reference Architecture: Reviewed major elements of Revised Submission
- Data Residency: Position paper in preparation to consolidate all the responses of the RFI and lay out next steps
- SBC/SDR: Explored creating a WG to expand the scope beyond military radios (in Space, Manufacturing, Healthcare...)

#### **Deliverables from this Meeting:**

#### **Technology Adoption Recommendation(s)**

• N/A

#### RFP/RFI/RFC Recommendation(s)

• N/A

#### **Future Deliverables (In-Process):**

# **Technology Adoptions**

- DDS- XRCE (eXtremely Resource Constrained Environments)
- DDS to OPC UA (Open Platform Communication Unified Architecture) Gateway DDS XML Consolidation RFC
- IEF (Information Exchange Framework) Reference Architecture; revised submission date extended to February 20<sup>th</sup> 2017, 4 wk deadline for Reston
- UML Profile for ROSETTA (Relational Oriented Systems Engineering Technology Tradeoff Analysis) RFC

## **RFP/RFI** Recommended

- TCP/IP PSM for DDS Interoperability RFP
- IDL to Java 8 Mapping RFP/RFC?

#### Liaisons

• None

#### **Agenda Items for the Next Meeting:**

- DDS XML Consolidation RFC: Recommend issuance
- DDS-XRCE: Review Revised Submission
- DDS to OPC/UA Gateway: Review Revised Submission
- IEF Reference Architecture: Review Revised Submission and recommend adoption?
- IDL to Language Mappings Best Practices Discussion Paper: Review early draft
- IDL to Java 8 Mapping RFP/RFC: Review draft
- UML Profile for ROSETTA RFC: Review draft
- Data Residency Discussion Paper: Approve for publication?
- WGs to meet: IDL, SBC/SDR, HPEC?
- IEF Info Day (half day or full day)

Virginie Watine (THALES) reported on the activities of the *Data Distribution Service Platform Special Interest* Group:

## **Highlights from this Meting:**

- Presentation by Duke Energy on OpenFMB and their use of DDS
- Presentation by Kongsberg on the TerraLens product family and use of Kongsberg's DDS implementation as the foundation connectivity framework

#### **Deliverables from this Meeting:**

Presentations: dds/2016-12-02 and dds/2016-12-03

#### **Future Deliverables (In-Process):**

• TBD

#### Liaisons

None

## **Agenda Items for the Next Meeting:**

- New co-chair election
- DDS Security Interoperability demo

Bill Curtis reported on *Architecture-Driven Modernization Platform Task Force* (ADMTF) activities on behalf of the regular chairs:

## **Highlights from this Meeting:**

• Request 4 RTFs

## **Deliverables from this Meeting:**

None

#### **Future Deliverables (In-Process):**

• Automated Source Code Technical Debt Measure

#### Liaisons

ISO JTC1 SC6 WG6

#### **Agenda Items for the Next Meeting:**

• Approve revised RFC for Automated Source Code Technical Debt Measure

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

## **Highlights from this Meeting:**

- Unanimously voted to adopt Precise Semantics for State Machines submission after Ed Seidewitz/ JeremieTatibouet presentation
- SysML Profile for Safety and Reliability presentation for RFP draft background, Geoff Biggs
- SysMLV2.0 RFP draft presentations, Sandy Friedenthal and Jonathan Patrick
- SIMF RFP Revised Submission draft review and presentation, Cory Casanave and Jim Logan
- Change the IMM RFP Revised Submission and deadline to 8/14/17, Pete Rivett
- Change the API4KB RFP Submission deadlines to 5/8/17, Elisa Kendall
- Extend the initial submission date for AMP/EMP to 2/20/17, Manfred Koethe
- New revised submission date for the 5/8/2017 meeting is set for UTP2

## **Deliverables from this Meeting:**

## **Technology Adoption Recommendation(s)**

• PSSM, with errata (ad/2016 11-01 through ad/2016-11-08, ad/2016-12-03)

#### RFP/RFI/RFC Recommendation(s)

N/A

## **Future Deliverables (In-Process):**

## **Technology Adoptions**

- SMIF submission: May 8th, 2017
- UML Testing Profile submission: May 8th, 2017
- Agent Metamodeland Profile / Event Metamodeland Profile submission: Feb 20th, 2017
- API4KB submission: May 8th, 2017
- IMM submission: August 14th, 2017

#### **RFP/RFI Recommendation(s)**

- SysMLProfile for Safety and Reliability RFP: date?
- SysMLv2.0 RFP scope and objectives: June 2016

#### Liaisons

None

# **Agenda Items for the Next Meeting:**

- AMP/EMP initial submission
- Review SIMF submission
- Sandy Friedenthal, SysML v2.0 presentation

Bobbin Teegarden (No Magic) reported on Agent Platform Special Interest Group activities:

## **Highlights from this Meeting:**

- Discussion of the upcoming combined AMP-EMP submission
- The two topics are highly intertwined, therefore it makes sense to respond to both RFPs with one combined submission.
- Due to time constraints we asked for a new submission date of 20-February-2017

•

# Plans for next Meeting:

- Accommodate the combined EMP-EMP initial submission (through ADTF)
- Presentations on "Agent Technology at Work"

J.D. Baker (Sparx Systems) reported on the activities of the *Ontology Platform Special Interest Group*:

## **Highlights from this Meeting:**

- Joint session on Data Residency with MARS (Claude Baudoin, Cebe ITKM, mars/16-12-07)
- Agenda (Nick Stavros, Jackrabbit Consulting; Evan Wallace, NIST)
   ontology/2016-12-01
- Status Update on API4KP (Davide Sottara, Arizona State University / Mayo Cinic) ontology/2016-12-02
- OMG Specification Catalog (Mariano Benitez, OMG, and Elisa Kendall, Thematix) ontology/2016-12-03
- An Operational PoC for Interest Rate Swaps Analysis, Presentation and Demo (David Saul, State Street) ontology/2016-12-04
- Update on the SMIF (formerly SIMF) Submission (Cory Casanave, Model Driven Solutions) ad/2012-01-06

## **Deliverables from this Meeting:**

none

#### **Future Deliverables (In-Process):**

- API for Knowledge Bases initial submission (March 2017)
- ODM 1.2 RTF Report (March 2017)
- LCC 1.0 FTF Report (March 2017)
- Space RFP for an ontology for Satellite Operations (June or September 2017)
- Initial submission to the MVF RFP (March or June 2017)

#### Liaisons

none

#### **Agenda Items for the Next Meeting:**

- Discussion of an RFP for Provenance (joint with BMI, Gov...)
- Update on changes to Solitaire / OMG Web Site using Specification Metadata
- Potential revisions of Specification Metadata to reflect Solitaire / Specification Catalog Requirements

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

#### **Highlights from this Meeting:**

- Vote to Extend submission date of the Operational Threat Risk Model
- Supported Cybersecurity Workshop (December 6, 2016)
- Supported IIoT Standards at Work in Energy

## **Deliverables from this Meeting:**

None

#### **Future Deliverables (In-Process):**

- Technology Adoptions
  - o OTRA Specification (June 2017)
  - o Software Fault Patterns RFC (Sep 2017)
  - o Tool Output Integration Framework (Dec 2017)
- RFP/RFI Recommended or Other Recommendations (if SC)
  - o N/A
- Liaisons
  - o N/A

# **Agenda Items for the Next Meeting:**

- Review Status of Operational Threat Analysis Model
- Review progress of Software Fault Patterns RFC
- Review progress of Tool Output Integration Framework RFC

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

Cory Casanave (Model Driven Solutions) moved to charter the Precise Semantics of UML State Machines (PSSM) 1.0 Finalization Task Force with the following dates and membership:

# **PSSM 1.0 FTF**

Contact: pssm-ftf@omg.org

TF Chairs: Mr. Ed Seidewitz Dr. Jeremie Tatibouet

IPR Mode: Non-Assert

List of Issues: PSSM

Schedule		
Event	Date Notes	
Base Document(s)		Relevant documents:  ad/16-12-12 (PSSM Inventory (Update 2))  ad/16-12-11 (PSSM Revised Submission Errata (Updated))  ad/16-11-08 (PSCS Revised Semantics Model XMI)

		ad/16-11-07 (PSCS Revised Syntax Metamodel XMI) ad/16-11-06 (fUML Revised Semantics Model XMI) ad/16-11-05 (fUML Revised Syntax Metamodel XMI) ad/16-11-04 (PSSM Test Suite Model XMI) ad/16-11-03 (PSSM Semantics Model XMI) ad/16-11-02 (PSSM Syntax Metamodel XMI) ad/16-11-01 (Precise Semantics of UML State Machines (PSSM) Revised Submission)
Voting List Deadline	December 9, 2016	
FTF Comments Due	June 5, 2017	
FTF Report Due Date	November 6, 2017	
FTF Recommendation and Report Deadline	December 15, 2017	

# **Voting List:**

Company	Date	Notes
Airbus Group		Mr. Yves Bernard
Commissariat a I Energie Atomique-CEA		Dr. Jeremie Tatibouet
LieberLieber Software		Mr. Daniel Siegl
MITRE		Ms. Laura E. Hart
ModelFoundry		Mr. Sam Mancarella
Multi Agency Collaboration Environment		Dr. Jeffrey E. Smith (awaiting approval)
No Magic, Inc.		Mr. Nerijus Jankevicius
The Software Revolution		Mr. Jason Smith
Universidad de Cantabria		Dr. Julio Medina
nMeta		Mr. Ed Seidewitz

Char Wales (MITRE) seconded the motion Bobbin Teegarden (No Magic) proposed White Ballot There was no objection to White Ballot Motion carried

J. D. Baker (Sparx Systems) moved to charter the Distributed Ontology, Modeling, and Specification Language (DOL) Finalization Task Force 2 with the following dates and membership:

# **DOL 1.0 FTF 2**

Contact: dol-ftf@omg.org

TF Chairs: Dr Fabian Neuhaus

IPR Mode: Non-Assert
List of Issues: dol-ftf

Schedule		
Event	Date Notes	
Base document(s)		Relevant documents:  ad/15-10-04 (OntoIOp/DOL revised submission - inventory file)  ad/15-10-03 (OntoIOp/DOL revised submission - OWL file)  ad/15-10-02 (OntoIOp/DOL revised submission - MOF metamodel)  ptc/16-02-37 (Distributed Ontology, Modeling, and Specification Language (DOL), v1.0 Beta 1)
Voting List Deadline	December 9, 2016	
FTF Comments Due	March 14, 2017	
FTF Report Due Date	August 28, 2017	4 weeks prior to the September 2017 TC meeting - listed date is preliminary and my change based on the TC meeting date which is not determined yet
FTF Recommendation and Report Deadline	October 6, 2017	

# **Voting List:**

Company	Date	Notes
88solutions		Mr. Manfred R. Koethe
Adaptive		Mr. Pete Rivett
Fraunhofer FOKUS		Mr. Andreas Hoffmann
MITRE		Dr. Leo Obrst
Model Driven Solutions		Mr. Cory B. Casanave
NIST		Mr. Conrad Bock
No Magic, Inc.		Ms. Bobbin Teegarden
Otto von Guericke University of Magdeburg		<u>Dr Fabian Neuhaus</u>
Thematix Partners LLC		Mrs. Elisa F. Kendall

Char Wales (MITRE) seconded the motion Bobbin Teegarden (No Magic) proposed White Ballot There was no objection to White Ballot Motion carried

Bill Curtis (CAST Software) moved to charter the Automated Source Code Reliability Measure (ASCRM) 1.1 Revision Task Force with the following dates and membership:

# **Automated Source Code Reliability Measure 1.1**RTF

Contact: ascrm-rtf@omg.org

TF Chairs: Dr. Bill Curtis

IPR Mode: Non-Assert

List of Issues: ASCRM11

Schedule		
Event	Date	Notes
Base Document(s)		Relevant documents: formal/16-01-03 (Automated Source Code Reliability Measure, v1.0)
Voting List Deadline	December 9, 2016	
RTF Public Comment Deadline	October 15, 2017	
RTF Report Due Date	November 6, 2017	
RTF Revision Deadline	December 15, 2017	

# **Voting List:**

Company	Date	Notes
CAST Software		Dr. Bill Curtis
MITRE		Mr. Robert Martin
The Software Revolution		Mr. Jason Smith

Sumeet Malhotra (TCS) seconded the motion Bobbin Teegarden (No Magic) proposed White Ballot There was no objection to White Ballot Motion carried

Bill Curtis (CAST Software) moved to charter the Automated Source Code Security Measure (ASCSM) 1.1 Revision Task Force with the following dates and membership:

# **Automated Source Code Security Measure 1.1**RTF

Contact: ascsm-rtf@omg.org

TF Chairs: Dr. Bill Curtis

IPR Mode: Non-Assert

List of Issues: ASCSM11

Schedule		
Event	Date	Notes
Base Document(s)		Relevant documents: formal/16-01-04 (Automated Source Code Security Measure, v1.0)
Voting List Deadline	December 9, 2016	
RTF Public Comment Deadline	October 15, 2017	
RTF Report Due Date	November 6, 2017	
RTF Revision Deadline	December 15, 2017	

# **Voting List:**

Company	Date	Notes
CAST Software		Dr. Bill Curtis
MITRE		Mr. Robert Martin
The Software Revolution		Mr. Jason Smith

Sumeet Malhotra (TCS) seconded the motion Bobbin Teegarden (No Magic) proposed White Ballot There was no objection to White Ballot Motion carried

Bill Curtis (CAST Software) moved to charter the Automated Source Code Performance Efficiency Measure (ASCPEM) 1.1 Revision Task Force with the following dates and membership:

# **Automated Source Code Performance Efficiency Measure 1.1 RTF**

Contact: ascpem-rtf@omg.org

TF Chairs: Dr. Bill Curtis

IPR Mode: Non-Assert

List of Issues: ASCPEM11

Schedule		
Event	Date	Notes
Base Document(s)		Relevant documents: formal/16-01-02 (Automated Source Code Performance Efficiency Measure, v1.0)
Voting List Deadline	December 9, 2016	
RTF Public Comment Deadline	October 15, 2017	
RTF Report Due Date	November 6, 2017	
RTF Revision Deadline	December 15, 2017	

# **Voting List:**

Company	Date	Notes
CAST Software		Dr. Bill Curtis
MITRE		Mr. Robert Martin
The Software Revolution		Mr. Jason Smith

Sumeet Malhotra (TCS) seconded the motion Bobbin Teegarden (No Magic) proposed White Ballot There was no objection to White Ballot Motion carried

Bill Curtis (CAST Software) moved to charter the Automated Source Code Maintainability Measure (ASCMM) 1.1 Revision Task Force with the following dates and membership:

# **Automated Source Code Maintainability Measure 1.1 RTF**

Contact: ascmm-rtf@omg.org

TF Chairs: Dr. Bill Curtis

IPR Mode: Non-Assert

List of Issues: ASCMM11

Schedule			
Event	Date	Notes	
Base Document(s)		Relevant documents: formal/16-01-01 (Automated Source Code Maintainability Measure, v1.0)	
Voting List Deadline	December 9, 2016		
RTF Public Comment Deadline	October 15, 2017		
RTF Report Due Date	November 6, 2017		
RTF Revision Deadline	December 15, 2017		

# **Voting List:**

Company	Date	Notes
CAST Software		Dr. Bill Curtis
MITRE		Mr. Robert Martin
The Software Revolution		Mr. Jason Smith

Sumeet Malhotra (TCS) seconded the motion Bobbin Teegarden (No Magic) proposed White Ballot There was no objection to White Ballot Motion carried J. D. Baker (Sparx Systems) moved to charter System Modeling Language 1.6 Revision Task Force with the following dates and membership:

# SysML 1.6 RTF

Contact: sysml-rtf@omg.org

TF Chairs: Mr. Yves Bernard Mr. Robert Karban Dr. Tim Weilkiens

IPR Mode: RF-Limited

List of Issues: SYSML16

Schedule				
Event	Date	Notes		
Base Document(s)		Relevant documents: ptc/16-12-06 (ISO-80000.xmi) ptc/16-12-05 (QUDV.xmi) ptc/16-12-04 (SysMLDI.xmi) ptc/16-12-03 (SysML.xmi) ptc/16-12-01 (SysML, v1.5 convenience document)		
Voting List Deadline	December 9, 2016			
RTF Public Comment Deadline	March 1, 2017			
RTF Report Due Date	November 6, 2017			
RTF Revision Deadline	December 15, 2017			

# **Voting List:**

Company	Date	Notes
Airbus Group		Mr. Yves Bernard
Association of Universities for Research in Astron		Mr. Brian Selvy
Boeing		Mrs. Brittany Friedland
Commissariat a I Energie Atomique-CEA		Dr. Chokri Mraidha
Delligatti Associates, LLC		Mr. Lenny Delligatti
Georgia Institute of Technology		Dr. Russell Peak
INCOSE		Mr. Sanford A. Friedenthal
InterCAX		Dr. Manas Bajaj
International Business Machines		Dr. Graham Bleakley, Ph.D.
MITRE		Ms. Laura E. Hart
ModelAlchemy		Mr. Uwe Kaufmann
ModelFoundry		Mr. Sam Mancarella
NASA		Mr. Robert Karban

NIST	Mr. Conrad Bock
No Magic, Inc.	Mr. Nerijus Jankevicius
Office of the Secretary of Defense	Mr. Leonard F. Levine
PTC	Mr. Andreas Korff
Softeam	Dr. Alessandra Bagnato
Sparx Systems	Mr. James D. Baker
The Charles Stark Draper Laboratory	Mr. Jeff Vodov
Universidad de Cantabria	Dr. Julio Medina
oose Innovative Informatik eG	Dr. Tim Weilkiens

Sumeet Malhotra (TCS) seconded the motion Bobbin Teegarden (No Magic) proposed White Ballot There was no objection to White Ballot Motion carried

#### J.D. Baker (Sparx Systems) made the composite motion:

- To extend the Structured Metrics Metamodel 1.2 RTF report deadline to 31st March 2017
- To extend the Action Language for fUML 1.1 (ALF) RTF report deadline to 31st March
- 2017
- To extend the Ontology Definition Metamodel 1.2 RTF report deadline to 31st March 2017
- To extend the Languages, Countries and Codes 1.0 FTF report deadline to 31st March 2017
- To extend the DDS-XTYPES 1.2 RTF report deadline to 31st March 2017

Bobbin Teegarden (No Magic) seconded the motion Char Wales (MITRE) proposed White Ballot There was no objection to White Ballot Motion carried

#### Sumeet Malhotra (TCS) made the composite motion:

- To extend the QVT 1.4 RTF report deadline to 16th June 2017
- To extend the DDSI-RTPS 2.3 RTF report deadline to 16th June 2017
- To extend the Data Distribution Service 1.5 RTF report deadline to 16th June 2017
- To extend the Object Constraint Language 2.5 RTF report deadline to 16th June 2017
- To extend the DDS-PSM-Java 1.1 RTF report deadline to 16th June 2017
- To extend the MOF 2.6 RTF report deadline to 16th June 2017
- To extend the XMI 2.6 RTF report deadline to 16th June 2017

Bobbin Teegarden (No Magic) seconded the motion Char Wales (MITRE) proposed White Ballot There was no objection to White Ballot Motion carried Bobbin Teegarden (No Magic) moved to extend the Diagram Definition 1.2 RTF report deadline to 22<sup>nd</sup> September 2017

Sumeet Malhotra (TCS) seconded the motion

Char Wales (MITRE) proposed White Ballot

There was no objection to White Ballot

Motion carried

Ed Seidewitz (Model Driven Solutions) moved to add Sumeet Malhotra as TCS voter to the Essence 1.2 RTF and to add Jeremie Tatibouet as CEA voter to the fUML 1.3 RTF. Sumeet Malhotra (TCS) seconded the motion Char Wales (MITRE) proposed White Ballot

There was no objection to White Ballot

Motion carried

Mr. Watson then reviewed the proposed amendment to the Policies & Procedures allowing RTFs to extend specifications (OMG document pp/2016-12-02)

Mr. Seidewitz (Model Driven Solutions proposed an amendment to pp/2016-12-02 to remove the clause "and if the FTF report is delivered before 15 September 2020" Elisa Kendall seconded the proposed amendment.

There was discussion and an additional proposed amendment failed due to a second.

Hugues Vincent then (THALES) moved to revert back to the original document (pp/2016-12-02) Sridhar Iyengar seconded this motion/amendment

Mr. Watson clarified that a **yes vote** would revert back to the original document which includes the sunset clause, while a **no vote** would revert back to pp/2016-12-02 with the sunset clause removed.

In favour of the motion: 6

Opposed: 4 Motion passed

Andrew Watson then asked for a vote by show of hands to accept the proposed amendment (pp/2016-12-02) to the OMG Policies & Procedures as previously distributed.

In favour: 9 Opposed: 1 Motion passed

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

Before the PTC on 9th September, 2016 were the following submissions and reports:

Precise Semantics of UML State Machines (PSSM) Submission PSSM Syntax Metamodel XMI PSSM Semantics Model XMI PSSM Test Suite Model XMI fUML Revised Syntax Metamodel XMI fUML Revised Semantics Model XMI PSCS Revised Syntax Metamodel XMI PSCS Revised Semantics Model XMI PSCS Revised Semantics Model XMI Errata Inventory	ad/16-11-01 ad/16-11-02 ad/16-11-03 ad/16-11-04 ad/16-11-05 ad/16-11-06 ad/16-11-07 ad/16-11-08 ad/16-12-11 ad/16-12-12
IDL 4.1 RTF report Revised specification (clean) Revised specification (change bars)	ptc/16-11-10 ptc/16-11-11 ptc/16-11-12
SysML 1.5 RTF report Revised specification (clean) Revised specification (change bars) Attachments file (ancillary) SysML.xmi (normative) SysMLDI.xmi (informative) QUDV.xmi (informative) ISO-80000.xmi Papyrus Source models (Ancillary)	ptc/16-12-14 ptc/16-12-01 ptc/16-12-02 ptc/16-12-09 ptc/16-12-10 ptc/16-12-11 ptc/16-12-12 ptc/16-12-13 ptc/16-11-09

Andrew Watson 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 these technologies:

TCS, No Magic, Fujitsu, The Software Revolution, MITRE, CAST Software, THALES

Andrew Watson 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 10:59 A.M.