

Date	Subject	Version	
2016.11.15	ModelWriter Review #2 Location and Agenda	final	
Location	Airbus Research and Technology Campus, Toulouse, France		
Presentations	https://github.com/ModelWriter/WP5/tree/master/Reviews/2016		
	Airbus Group Innovation, Airbus R&T & Testia CAMPUS Toulouse Saint Martin du Touch 18 rue Marius TERCE		
Address	Site: AIRBUS GROUP TOULOUSE - CAMPUS ENGINEERING Building: D42 Room: EUCLIDE		
	Google Map: https://goo.gl/maps/88AnQftRHaA2		





Attendees:

Name	Function	Affiliation	Attendance
Philippe Letellier	Chairman	ITEA	Yes
Juergen Salecker	STG Reviewer	SIEMENS	Yes
Özgün Algın	STG Reviewer	TURKCELL	Yes
Erik Rodenbach	Secretary	ITEA	Yes
Vincent Morel	Mentor	AIRBUS	Yes
Ferhat Erata [FE]	Project Leader	UNIT	Yes
Dr. Anne Monceaux [AM]	Technical Contact	AIRBUS	Yes
Yvan Lussaud [YL]	Technical Contact	OBEO	Yes
Prof. Claire Gardent [SC]	Primary Contact	LORIA	Yes
Dr. Samuel Cruz Lara [SL]	Secondary Contact	LORIA	Yes
Bikash Gyawali	Technical Contact	LORIA	Yes
Anastasia Shimorina	Technical Contact	LORIA	Yes
Prof. Geylani Kardaş [GK]	Technical Contact and Consultant	KOCSISTEM	Yes
Ersan Gürdoğan [EG]	Secondary Contact Point	HISBIM	Yes
Dr. Eray Tüzün [ET]	Technical Contact	HAVELSAN	Yes
Yakup Macit [YM]	Technical Contact	HAVELSAN	No
Hasan Emre Kırmızı	Developer	UNIT	Yes
Prof. Hans Vangheluwe [HV]	Consultant	UNIT	No
Dr. Guven Kose	Turkish Consortium Coordinator	MANTIS	No
Etienne Juliot [EJ]	French Consortium Coordinator	OBEO	No
Dr. Moharram Challenger [MC]	Secondary Contact	UNIT	No
Taşkın Kızıl [TK]	Primary Contact Point	HISBIM	No
Oğuz Yavuz [OY]	Technical Contact	HISBIM	No
Tuğçe Yiğiter [TY]	Technical Contact	FORD OTOSAN	No
Alan Endersoy [AE]	Technical Contact	FORD OTOSAN	No
Dr. Emrah Kinav	Primary Contact	FORD OTOSAN	No
Mehmet Önat [MO]	Primary Contact Point	KOCSISTEM	No



Hale Gezgen [HG]	Secondary Contact Point	KOCSISTEM	No
Dr. Mariem Mahfoudh [MM]	Technical Contact	LORIA	No
Omurhan Soysal	Technical Contact	MANTIS	No
Yunus Emre Cakmaz	Developer	UNIT	No

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State of the Deliverables for each work package

Deliverables

- WP1 Industrial Use Cases and Requirements (Airbus)
- WP2 Semantic Parsing and Generation of Documents and Documents Components (Loria)
- WP3 Model to/from Knowledge Base (UNIT)
- WP4 Knowledge Base Design and Implementation (Mantis)
- WP5 Project Management (UNIT)
- WP6 ModelWriter Architecture, Integration and Evaluation (OBEO)
- WP7 Dissemination and Exploitation (OBEO)

Agenda

Comment

- 13:00 13:05 Introduction (slides)
- 13:05 13:20 Overview of the project (WP5) [15 mins] (Ferhat Erata, UNIT) (slides)
- 13:20 13:50 Industrial Use Cases (WP1) [30 mins] (Anne Monceaux, AIRBUS)
 - 1. Airbus' "System Installation Design Principles" Use Case (Anne Monceaux, AIRBUS) (slides)
 - **2.** Ford-Otosan's "Product Lifecycle Management (PLM)" Use Case (Ferhat Erata on behalf of Tugce Yigiter, Alan Endersoy from FORD-OTOSAN) (slides)
 - **3**. Havelsan "Application Lifecycle Management (ALM)" Use Case (Dr. Eray Tuzun from HAVELSAN) (slides)
- 13:50 14:00 Exploitation, Dissemination, Standardisation (WP7) (Yvan Lussaud, OBEO) (slides)
- 14:00 14:30 Technical Achievements & Innovations (WP 2, WP3, WP4) [30 mins]
 - 1. Writer Part (WP2), (Prof. Claire Gardent, LORIA) (slides)
 - 2. Model Part (<u>WP3 Tarski</u>), (Ferhat Erata, UNIT) (<u>slides</u>)
 - 3. Core (WP4), (Prof. Geylani Kardas, KOCSISTEM on behalf of Dr. Guven Kose, MANTIS) (slides)
- 14:30 14:40 User Interfaces and Integration (WP6) [10 mins] (Yvan Lussaud, OBEO) (slides)
- 14:40 15:00 Break
- 15:00 16:00 **Demonstrations** (WP1) [60 mins] (<u>slides</u>)
 - Short Introduction (Ferhat Erata)
 - 1. Airbus Use Case [using WP2/WP4 tools]
 - 2. <u>Havelsan Use Case</u> [using WP3 (Tarski)]
 - 3. FordOtosan Use Case [using WP3 (Tarski)]
 - **4.** Hisbim's Demonstration of Microsoft Word Plugin [5 mins video]
 - 5. <u>Mantis' Demonstration</u> of Ontology Infrastructure Demo [5 mins video]
- 16:00 16:10 Conclusions (Ferhat Erata, PL) (slides)
- 16:10 16:40 Reviewers' private session
- 16:40 16:55 Feedback session
- 16:55 17:00 Final words



Details about the Agenda:

Comment

13:00 - 13:05 Introduction

13:05 - 13:20 Overview of the project (WP5) [15 minutes] (Ferhat Erata, UNIT)

General Overview of the project,

Industrialization triangle which describes each partner's position

Problem Statement of the project (esp. in terms of Airbus, FordOtosan, Havelsan)

General overview of the architecture and associated Work Packages

Overview of the rest of the activities, meetings, workshop etc.

Other managerial topics and status

13:20 - 13:40 Industrial Use Cases and Exploitation Prospects (WP1) [20 minutes] (Anne Monceaux, AIRBUS)
Overview: Status of Deliverables

<u>Industrial Use Cases</u> (Explanation of the selected use cases and their **KPIs**)

- 1. Airbus' "System Installation Design Principles" Use Case (Anne Monceaux, AIRBUS)
- 2. <u>Ford-Otosan</u>'s "FEAD (Front End Accessory and Drive) & EGR (Exhaust Gas Recirculation)" "*Product Lifecycle Management (PLM)*" Use Case (Ferhat Erata on behalf of Tugce Yigiter, Alan Endersoy from FORD-OTOSAN)
- 3. <u>Havelsan</u> "Application Lifecycle Management (ALM)" Use Case (Dr. Eray Tuzun from HAVELSAN)
- 13:40 14:25 Technical Presentations (WP 2, 3, 4) [15 minutes each]
 - 1. Model Part (<u>WP3 Tarski</u>), (Ferhat Erata, UNIT)
 - * SotA for Automated Analysis:

https://docs.google.com/document/d/1Y-Cl5Z3KKBhDOgJmf4q 8ZFUdET3vKT1iVa97T8pPD4

- * Next Step: As-designed <-> As-built architecture, automated trace creation between model & code
- 2. Writer Part (WP2), (Prof. Claire Gardent, LORIA)
- 3. Core (WP4), (Prof. Geylani Kardas, KOCSISTEM on behalf of Dr. Guven Kose, MANTIS)
 - * ModelWriter Core Model (Technical Domain: Traceability)

https://docs.google.com/drawings/d/1QZhoKNUINoyw8dTYkh62FLQmUv9PLhRPrbYjBEMGfYs/

* SotA for Traceability Management:

https://docs.google.com/document/d/1Y-Cl5Z3KKBhDOgJmf4q 8ZFUdET3vKT1iVa97T8pPD4

- * A Semantic Data Model (Semantic Domain) which is similar to Extended/Enhanced Entity-Relationship Model (EER) or <u>Alloy</u> is combined with ModelWriter Core Model for knowledge representation.
 - * Graph database backend using Neo4J will be used for performance consideration
 - * Microsoft Word plugin working on top of MW Core.

- * Objectives and Technical Challenges for each WP
- * State-of-the-Art (SotA) for each WP
- * Progress beyond the SotA and Innovation in tackling the challenge(s)

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- * Expected Impact
 - * KPI improvements in each WP
 - * Cross-domain tools delivered (esp. "Tarski" of UNIT and Obeo's Open Source Tools)
- * Status of Deliverables
- * Next steps
- 14:25 14:35 User Interfaces and Integration (WP6) [10 minutes] (Yvan Lussaud, OBEO)
 - * Summarize contributions on the MW architecture
 - * Integration Remarks as a whole product and its Plan
 - * Status of Deliverables
 - * Ergonomics & KPI improvements
- 14:35 14:50 Break
- 14:50 15:00 Exploitation, Dissemination, Standardisation (WP7) (Yvan Lussaud, OBEO) Exploitation Strategy:
 - * OBEO as a tool and technology provider
 - * Expertise on document extraction
 - * Creation of M2Doc, with Professional Services, thanks to MW knowledges
 - * Consulting for customizations & integration of MW
 - * Maintenance & Support thanks to a new option for MW in Obeo Designer subscriptions
 - * New features for doc synchronization in Obeo SmartEA
 - * UNIT as a tool and technology provider
 - * Integration with Siemens Teamcenter PLM visualization, that is required for Ford-Otosan UCs
 - * using JT Open Toolkit's C++ application programming interface for 3D product information
 - * <u>ISO 14306:2012</u> Industrial automation systems and integration -- JT file format specification for 3D visualization
 - * Integration with IBM Rational DOORS or Esterel SCADE Suite, that is required for Havelsan UCs
 - * using RegIF Standard and Eclipse's Requirement Management Framework (RMF)
 - * using UML Standard
 - * Mantis provides and supports web-based services for Turkish Language
 - * Hisbim will provide cloud-based solutions integrating Office365 as Microsoft Word extensions
 - * Industrial end users' (Ford, Airbus, Havelsan) exploitation of MW are presented in WP1. Dissemination Activities:
 - * <u>MPM4CPS</u> (Multi-paradigm Modeling for Cyber-physical Systems) Cost Action, **UNIT** and **AIRBUS** are Management Committee Members representing Turkey and France in this COST action.
 - * The European Research Network on Software-intensive Systems-of-Systems (SiSoS), UNIT is a participant in the network.
 - * ITEA3-Assume project, Ford-Otosan, Havelsan, KocSistem and UNIT participates in that project
 - * A paper is submitted to ACM Applied Computing Symposium and under review.
 - * Poster presentations were made at <u>SAT/SMT/AR Summer School</u>, and <u>VTSA Summer School</u> Standardization activities:

To exchange modelwriter data, we propose a metamodel and data model on top of XMI, we

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can initiate a (in)formal (OMG style document) proposal, that defines the metamodel and API.

.MW file format specification along with the API for traceability information?

ERAs (exploitation related achievements) {top 8}

15:00 - 16:00 **Demonstrations** (WP1) [20 minutes each]

1. Airbus Use Case [using WP2/WP4 tools]

Grammar, lexicon, output of the semantic parser

Translation to DL formulae by reasoner

Update knowledge-base and check the consistency

Generate text from DL formulae

2. FordOtosan Use Case [using WP3 (Tarski)]

To demonstrate MW in PLM context

Focuses on consistency-checking and Automated Trace Creation

3. Havelsan Use Case [using WP3 (Tarski)]

To demonstrate MW in ALM context

Focuses on reasoning about trace-elements

- **4.** Hisbim's Demonstration of Microsoft Word Plugin [5 minutes video]
- **5.** Mantis' Demonstration of Ontology Infrastructure Demo [5 minutes video]
- 16:00 16:10 **Conclusions** (Ferhat Erata, PL)
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