





First annual meeting, July 7, 2015, Sindelfingen

modified version

Eclipse Working Group (EWG) open Measured Data Management

Author: Gerwin Mathwig, Sven Wittig, Andreas Benzing





Some photos of the meeting





Gerwin



Andreas





Sven





Agenda

1 Welcome and organizational matters Gerwin

2 Annual report of the steering committee Gerwin

2.1 Job split Sven

2.2 Architecture committee Andreas

Break 11.00-11.15

3 Services, Vision/Milestones 2015-2016 Gerwin

Lunch 12.30-13.30

Committee structure and elections

4 Verify Classes of the members HighQ, new ... Gerwin

5 Designation Head of electoral management Gerwin

6 Candidates for the committee-elections Sven

7 Elections Sven

Steering committee Sven

Architecture committee Sven

Quality committee Sven

8 Elect the speakers per committee SC, AC, QC

9 Plenum: result of elections speaker of SC, AC, QC

A Project structure of the WG Project manager

B Documentation of new structure WG Sven

C Communication platform EWG new speaker of SC

D Next meeting, close the meeting new speaker of SC 16.30 End





1) Welcome and organizational matters

New: Siemens (LMS) and ASAM



Interessted: Polytec

TWT

Toyota

PSA

Volvo

Continental

Ford

Bosch

..... all are welcome it will be a great day, let's start!







2) One Year open MDM – EWG Starts with founding

Founding in Ingolstadt, 11. July 2015

AUDI AG
BMW AG
Canoo GmbH
Daimler AG
Gigatronik GmbH
HighQSoft GmbH
Peak Solution GmbH
Science&Computing AG
driver member







2) Information Platform created Some links and contacts

- via open MDM Wiki Minutes, Events, MDM@WEB-Project
 - https://wiki.eclipse.org/Open-Measured-Data-Management-WG
 - https://projects.eclipse.org/proposals/mdmweb
 - Internetsite: What is open MDM (a toolbox)
 - https://openmdm.org/
 - Open Measured Data Manangement Mailinglist
 - if you want to participate contact: ralph.mueller@eclipse.org
 - open-measured-data-wg@eclipse.org
 - => if you want to join use please contact:
 - Gerwin.Mathwig@Daimler.com or Sven.Wittig@audi.de or Ulrich.Bleicher@bmw.de or any Member of the Workinggroup

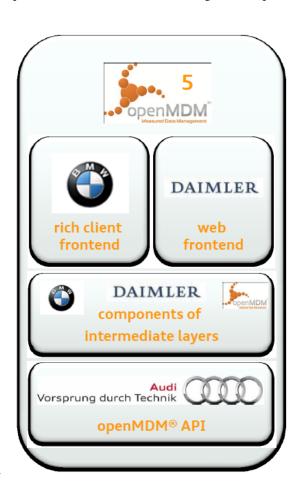




2) One Year open MDM – EWG First order "job split"

-> Sven

openMDM® initial job split



For the fast startup of "openMDM® 5" the potential three initial driver members agree the following job split as their contributions to the first development cycle of openMDM® 5:

- Audi provides a new version of the openMDM® API and the correspondig ASAM ODS application model which complies to the openMDM® 5 architecture and the recent openMDM® business object description
- BMW provides the components for a basic functional version of an openMDM® rich client frontend which comply to the openMDM® 5 architecture
- Daimler provides the components for a basic functional version of an openMDM® web frontend which comply to the openMDM® 5 architecture

The assignment of components to the corresponding work packages fpr the companies will be proposed by the openMDM® tech workgroup.

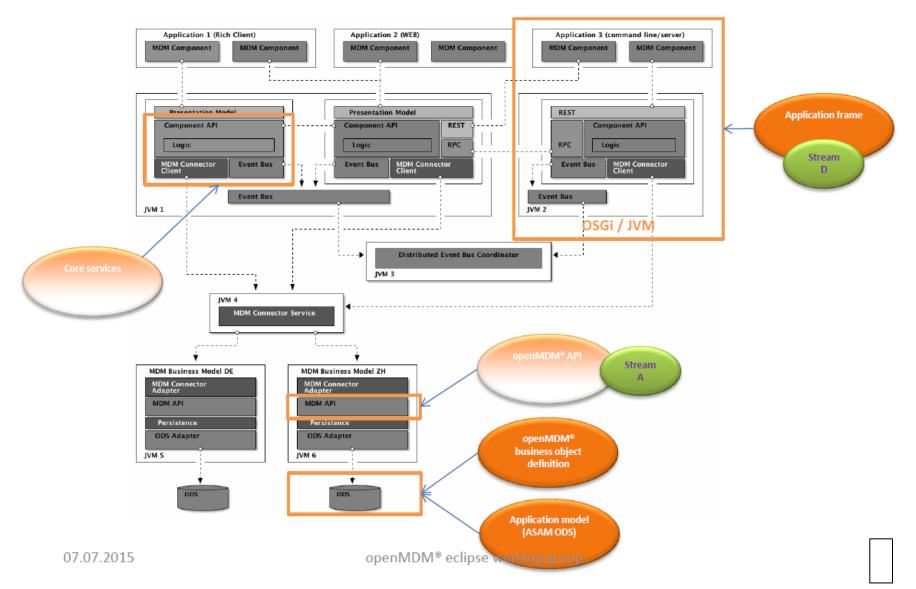
The compliance to the openMDM® 5 architecture has to be confirmed by the openMDM® tech workgroup or the corresponding gremia of the new openMDM® community. All components have to be published under the eclipse public license.

Contributions of other open MDM $^{\rm @}$ IWG members will be integrated.





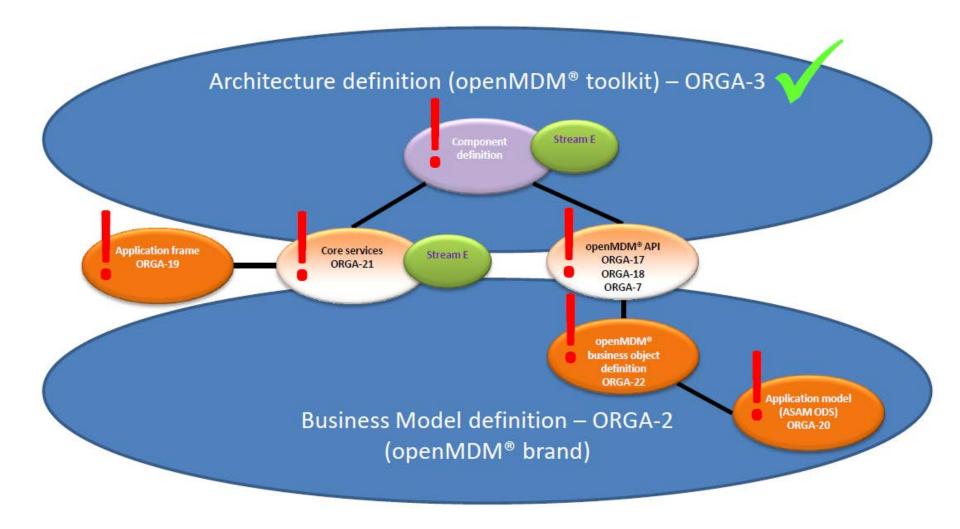
2.1 New architecture







2.1 Business layer overview







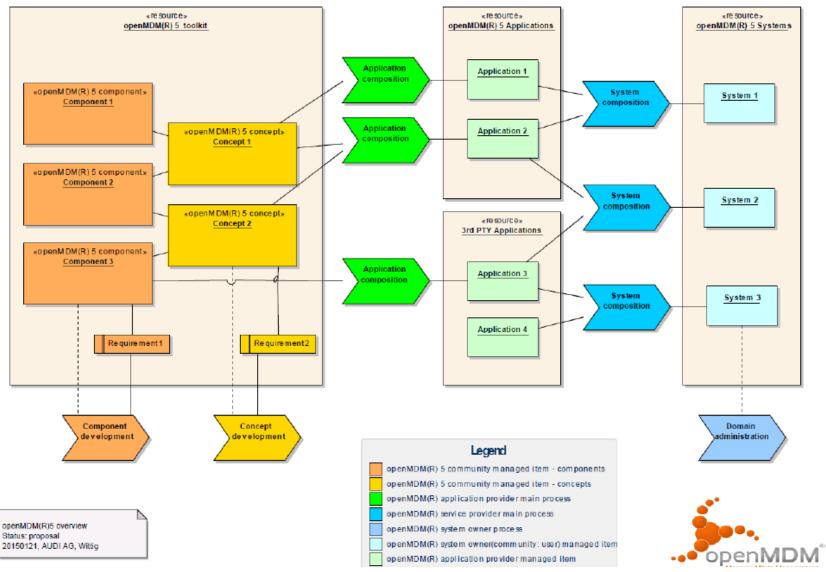
2.1 Initial job split – status 201507







2.1 Toolkit overview



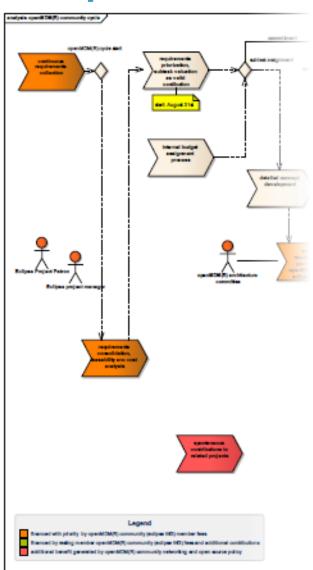




- The openMDM® eclipse working group never does act as an commercial entity. All commercial interactions (ordering, payments etc.) exclusively are carried out by the respective organizational units of the member companies under their full responsibility
- work within openMDM® eclipse working group comittees is honorary
- work within openMDM® eclipse working group services is compensated by openMDM® eclipse working group membership fees



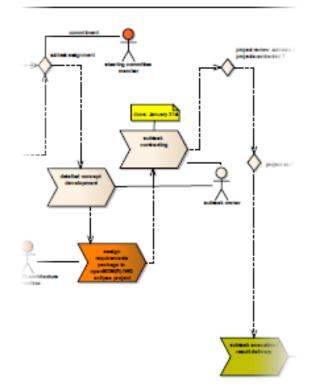




requirements collection requirements consolidation requirements packaging







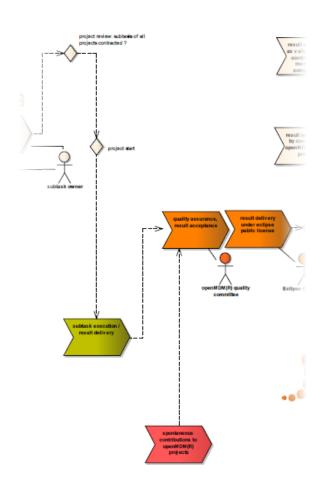
task assignment order placement







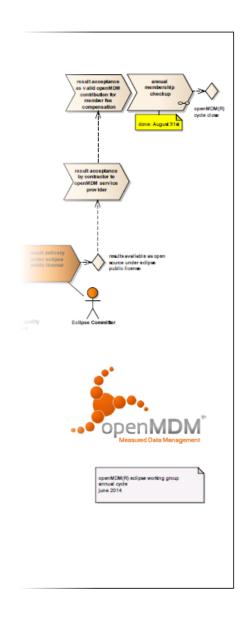
task execution continuous quality assurance continuous delivery







result acceptance membership checkup







2) One Year open MDM – EWG -> Gerwin Developing Rich and Web Client, API

- The MDM@WEB-Project was created under eclipse by Daimler and Gigatronik, supported from ICS. The WG learned, what's to do.
- BMW drives the developing of the rich client with Canoo
- Audi drives the API developing with Epos and Canoo
- First commit under eclipse envirement from canoo
- the hardest task is the creation of the API –
- First milestoneplan was generated
- New Members joined:
 Müller BBM, Piterion, iTemis, TATA, Bertrandt, ASAM, Siemens
- Workshops for interessted companys: PSA, Ford, Continental, Bosch ...





2.2) One Year open MDM – EWG All committees started there work - AC

The greatest part of this year was to find the new architecture of open MDM 5!

Experiences of the Architecture Committee speaker: Andreas Benzing ...



Thank you Andreas, for your good work!

Decisions: OSGI; HQL ...

2.2) The openMDM® Architecture

openMDM® Architecture Committee
Andreas Benzing, ICS AG





2.2) Outline

- The People
 - Technik Arbeitsgruppe (TAG)
 - Architecture Committee
- The Story
- Current Status
- Conclusion







2.2) openMDM Technik AG (TAG)

Members of the 'old' openMDM community

A lot of experience with building and operating MDM systems

 Came together to shape the technical structure of the future openMDM







2.2) Architecture Committee

- Formal Board of the openMDM IWG
 - Comprises Driver Members and Project Leads
- Ensures the consistency of projects
 - functional
 - non-functional
 - technical
- Evaluates and defines technologies
- Establishes technical guidelines





2.2) Outline

- The People
- The Story
 - Driving Forces from openMDM® 4 Experience
 - R5 System Specification
 - Transition to Eclipse
- Current Status
- Conclusion







2.2) Driving Forces from openMDM® 4

- Compatibility with ASAM ODS
- Shield openMDM® business model from CORBA interfaces coming from ODS
- Integrate external data in openMDM® systems
- Read-only compatibility with openMDM® 4 data model
- Break compatibility with components built for openMDM® 4





2.2) R5 System Specification

- Created by the TAG starting in 2013
- Result of many years experience with MDM4
- Architecture Goals
 - Modularity
 - Assembly
 - UI Independence
 - Conformance to Specification
 - Resilience





2.2) Transition to Eclipse (2014)

- Mar: last openMDM general assembly
- Apr: Technik AG meets Eclipse
- May: last meeting Technik AG
- Jun: Proposal MDM@WEB
- Jul: Kick-Off Architecture Committee
 - Initially only 3 OEMs and MDM@WEB PL
- Aug: Architecture Documentation Workshop
- Sep: First MDM@WEB meeting
- Oct: Regular AC conference calls start
 - Müller-BBM joins the AC as Driving Member
- Dec: Architecture Goals Workshop





2.2) Transition to Eclipse (2015)

- Jan: Presentation of draft to MDM@WEB developers
- Feb: Initial commit of Eclipse repository
 - Specification Draft, Technology Evaluations, ...
- Mar-Apr: Development and regular conference calls
- May: Data Access Layer Workshop
 - Open sourcing of HQL offered for integration in openMDM
- Jun: Version 1.0.0 of core specification committed
- Jul: First presentation about current architecture spec.
- ... to be continued!





2.2) Outline

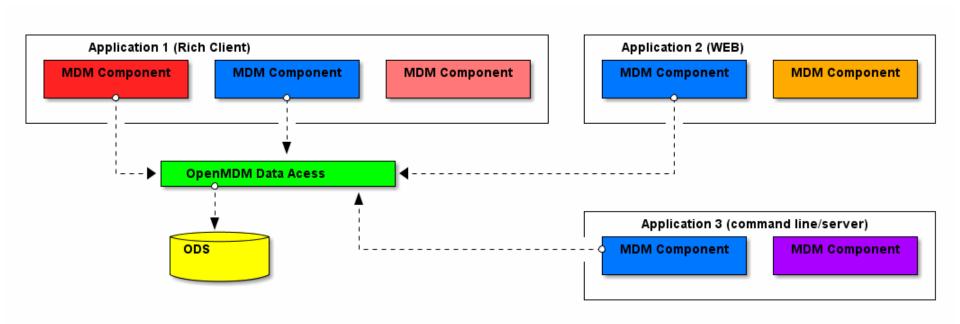
- The People
- The Story
- Current Status
 - Figures from the Architecture Specification
- Conclusion







2.2) Applications Example

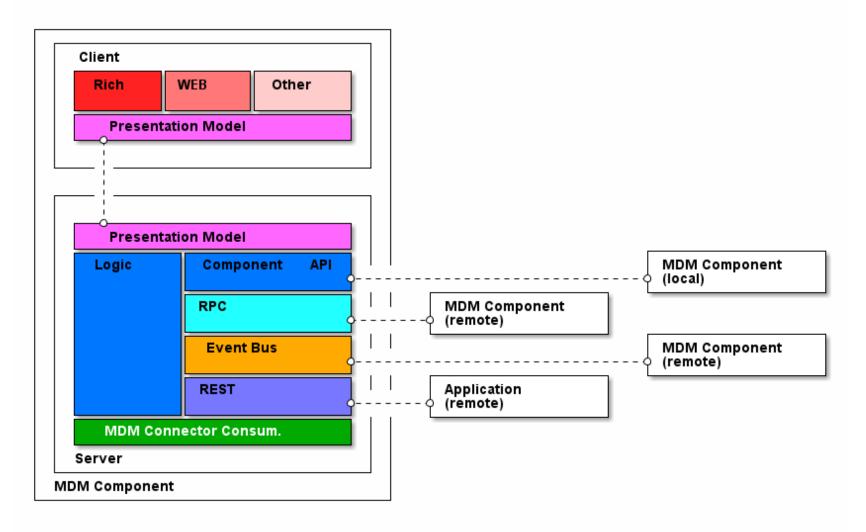








2.2) Structure of a Component

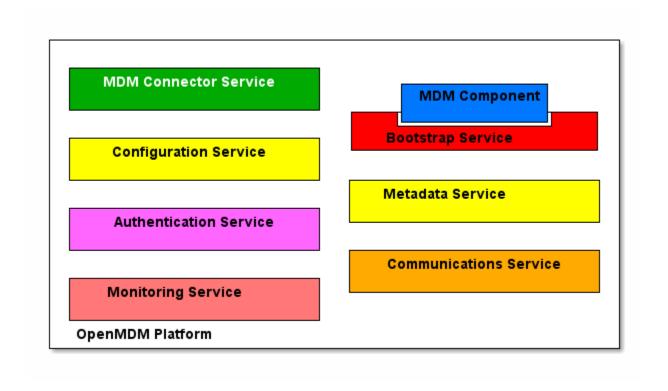








2.2) Platform Services







2.2) Summary

- Architecture Committee arrived at Eclipse
 - Thanks to the work done by the Technik AG!
 - Input of MDM4 experts still welcome
- Core architecture specification is available
 - Great effort by everyone who contributed!
 - Conforms to initial goals
 - Structure changed significantly from R5
- Benchmarking will require working software
 - Adjust if neccessary





2.2) Next Steps

- Finalize Architecture Specification
 - Data Access
 - Technologies
- Gather feedback from implementation
 - Initial component
 - Minimal bootstrap application
- Create a basis for the QC to build on
- Start validating





Thank You! Questions?









2) More activities of the EWG

- What is open MDM discriped on the open MDM ® Website
- Vision for the Workinggroup created:
 - The goal is grouth, for better coast-sharing
- Workshops for interested companys according to the vision done
 - Ford/Continental, Müller BBM, PSA, Siemens-LMS
- Serviceprozcess established:
 - Website, Issiutracking, Requirements-Management completed
 - Questions of Copyrights and open Source with lawyers
 - Product Liability clarified
 - -> no Demonstrator; because open MDM is a toolbox
- Clarification of the legal membership of German companies
 - under US law in eclipse (problems with the place of jurisdiction)
 - status = not ready









2) Open-Measured-Data-Management-EWG

The Open Measured Data Management Working Group wants to foster and support an open and innovative ecosystem providing tools and systems, qualification kits and adapters for standardized and vendor independent management of measurement data in accordance with the ASAM ODS standard.

https://wiki.eclipse.org/Open-Measured-Data-Market

"Audi" hosted community: 2006-2014

Transition to provision of Free & Open Source Software

through Eclipse Foundation: 11. 07. 2014

started with: 8 companies 15 companies today:

run first project:

1 step

2 step

second project:

3 step

4 step

5 step

MDM@WEB

prototype WEB Daimler prototype Client BMW

API Audi

Architecture Plattform 5.0

Basic Components 5.0

Transfer Components 4->5































2) Summary Our EWG works!

- Members are very active (conferences, workshops)
- High dynamic in the WG work, low responce time
- Committees are working now, thanks to Andreas and Michael
- open culture established
- Double the members since founding in one year!
- More growth with more driver member is necessary

Please advertise more driver members, so that development can be shared more.





3) Services Balance sheet for 330 days Servicecapacity Please let us transfer 120 days, to next period.

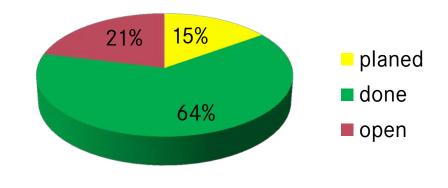


50 days
10 days

Open capacity	70 days
Müller BBM	60 days
TATA	10 days

Service-Capacity

Done capacity	210 days
Audi	60 days
BMW	60 days
Daimler	60 days
SuC	10 days
Canoo	10 days
PeakSolution	10 days



Jira will replace this Service-Excel-List





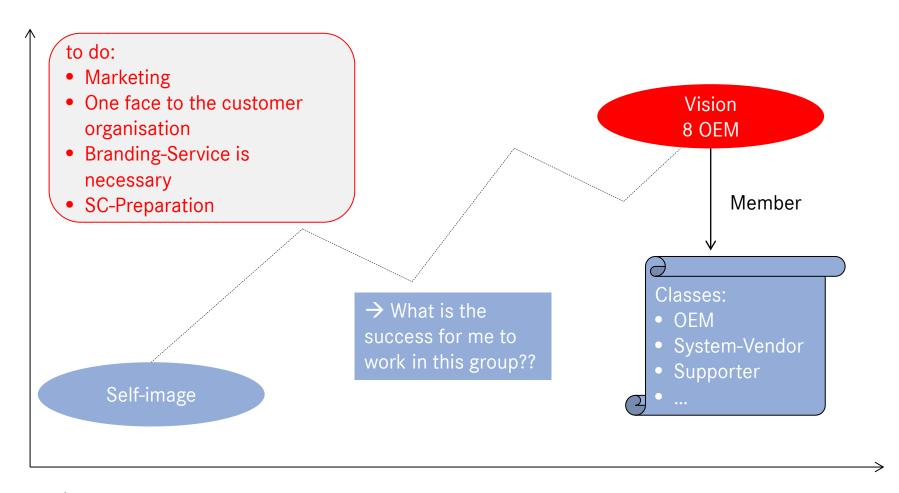
3) EWG Service Planing (Next year in Jira)

<u>_</u> ec	clipse	Compa	ny tl	nat d	lelive	ers to	comn	nunity	/			1	7	2	
	n-Measured-Data-Management-WG - Services	Summe	Audi	BMW	Daimler	Müller BBM	Gigatronik	S+C	PeakSolution	Canoo	HighQ	Bertrandt	itemis	TATA	Piterion
Cycle 01.09.	2015 until 31.8.2016	190	60	60	60						10				
Cycle 01.09	.2014 until 31.08.2015	260	60	60	60	0	10	10	10	10	10	10	10	0	10
Service-No.	Headline - Plan	330	60	60	60	60	10	10	10	10	10	10	10	10	10
S1	open MDM® 5 architecture specification is released and available (architectural concept including high level requirements from charter ar	e availa	60												
S2	open MDM® 5 quality guidelines are released and available (Q- criteria are available)				x										
S3	openMDM@WEB 1.0 client available				60										
S4	Integration environment is for Eclipse WG available												10		
S7	openMDM® 5 API specification available		X												
S8	openMDM® 5 API implementation available		60												
S9	openMDM® 5 Rich Client available			60											
S10	Architecture service is available for compliance testing														
S11	Quality service is available for quality testing														
S12	openMDM Product Management including requirements management for all openMDM® projects und support for the steering committee									15					
S13	canceled														
S14	Issue tracking system is available							10							
S15	Support Steering Committee														
S16	openMDM® API architecture compliance check														
S17	openMDM® API quality check														
S18	openMDM® rich client architecture compliance check														
S19	openMDM® rich client quality check														
S20	openMDM® web client architecture compliance check														
S21	openMDM® web client quality check														
S22	openMDM® public web site is available								10						
S23	openMDM® Architecture Review						10								
S24	Configurable webdav (read) access to openMDM® hosted data		1												
S25	Test des Peak-ODS-Servers in open MDM 5		1												
S26	Beauftragungsprozess eines Messdienstleisters mit MDM 5											10			
S27	HQL										10				
S28	Messstellen ATFX-Geometrie														10
S29	Messgrößen definieren Josef, Gerwin														





3) Vision



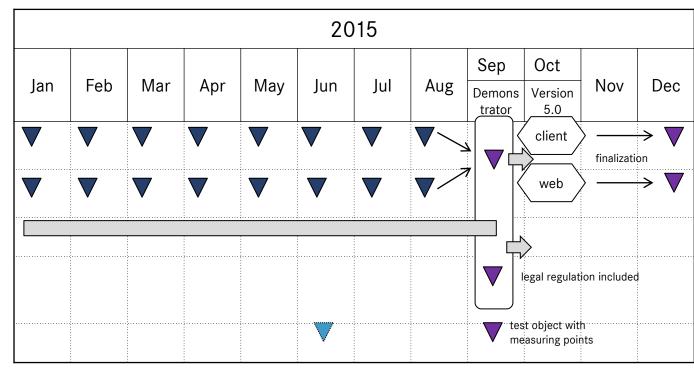
today





3) Milestones 2015 This year is to create Basic MDM 5.0 Toolbox

Milestones 2015 - Project Planning MDM@WEB



Piterion

Canoo

MDM-Client

Gigatronik

Eclipse

"Neue

MDM@WEB

Vorbeifahrt" Müller BBM

module (every fourth week)

concept version



milestone

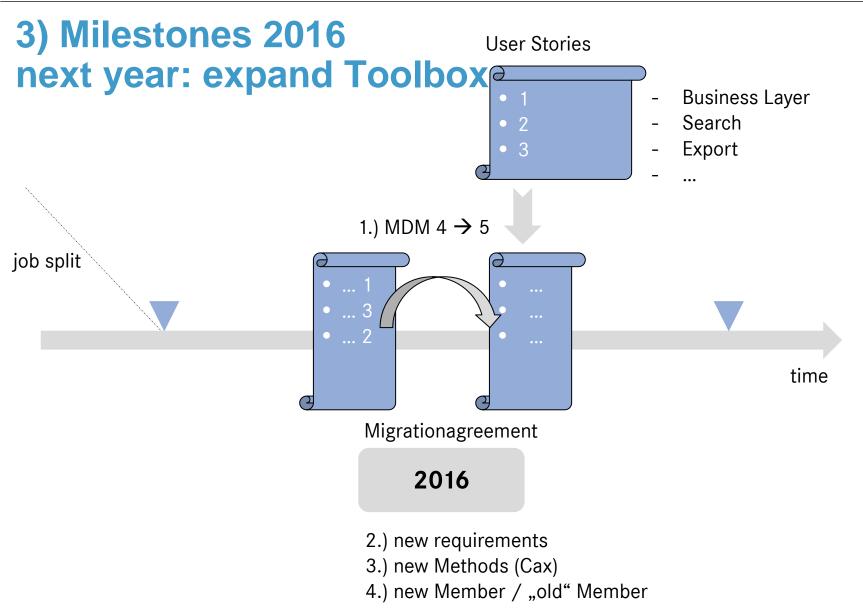
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from demonstrator to version 1.0







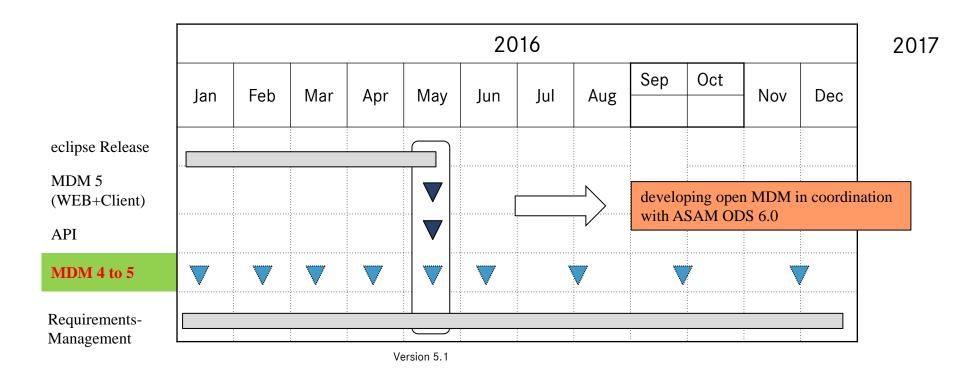






3) Milestones 2016 Start Requirement- and Release-management

a 3rd Team "MDM 4 to 5" is necessary for support of MDM 4







special prozess







leader of election: Sven Wittig









openMDM® eclipse working group

General Assembly

July 7th, 2015

DAIMLER AG, Sindelfingen, Germany





Meeting participation





Participation list



Company	Name	Signature
Halu BBH VAS	Josef Hobelsberger	
Canos	Hant Dish Walter	M.D. Welt
i temis	Lothar Wendehas	L. W)
BHW	Bleidner Ulpida	fril
BMW	Michael Schwerzball	AR
BMU	Stefan Ebelin	78/2
Auni sa	Christian locations	ail
This Resoll	Raf Wiels	Shales a
S+C Gq	Dietmar Rapl	(1)/4
Peak Solution	Dr. Levens	The state of the s
BERTRANDT	306ENRIEDER/HERRIAM	, the

July 7th, 2015

openMDM® EWG general assembly

2





Meeting participation





Participation list



Volger Krem A cheas benzing alter Gold abias Benghans	Seld Geld
alter Gold	Jaloh Galoh
	Geld
Obias Berghans	Viil
mon Markey	Rally
Sven Wittig	Sour both 9
	Sven Wittig

With Tata Motors Ltd. voting and gremia candidates were communicated in advance by Mr. Shailesh Saraph to the steering committee chairman Mr. Gerwin Mathwig

July 7th, 2015

openMDM® EWG general assembly

2

July 7th, 2015

openMDM® EWG general assembly

3





openMDM® EWG membership list





AUDI AG on behalf of Volkswagen Group of America, Inc.

Driver Member
Daimler AG

Driver Member
Driver Member
Mueller-BBM VibroAkustik Systeme GmbH

Driver Member

HighQSoft GmbH Application Vendor

Bertrandt AG

Canoo Engineering AG

Service Provider

Gigatronic GmbH

Service Provider

itemis AG

Service Provider

Service Provider

Service Provider

Service Provider

Peak Solutions GmbH

Service Provider

Piterion GmbH

Service Provider

Service Provider

Service Provider

Service Provider

Service Provider

Tata Motors Ltd. Strategic User

ASAM e.V. Guest





openMDM® EWG candidate chart





Membership Class: service provider

As the members of the membership classes have to elect among themselves the representants in the openMDM® EWG steering and quality committees, the chart below contains the respective candidates named by the members.

Company	SC	QC
Bertrandt AG	Stefan Bogenrieder	Susann Herrmann
Canoo Engineering AG	Dr. Hans- Dirk Walter	Dr. Hans- Dirk Walter
Gigatronic GmbH	Stefan Holz	Sebastian Dirsch
itemis AG	Dr. Stefan Wendehals	n/n
Peak Solutions GmbH	Dr. Hans- Jörg Kremer	Christian Weyermann
Piterion GmbH	n/n	n/n
Science + computing AG	Dr. Dietmar Rapf	n/n





openMDM® EWG candidate chart





Membership Class: application vendor

As the members of the membership classes have to elect among themselves the representants in the openMDM® EWG steering and quality committees, the chart below contains the respective candidates named by the members.

Company	SC	QC
HighQSoft GmbH	Dr. Ralf Nörenberg	Dr. Ralf Nörenberg





openMDM® EWG candidate chart





Membership Class: strategic user

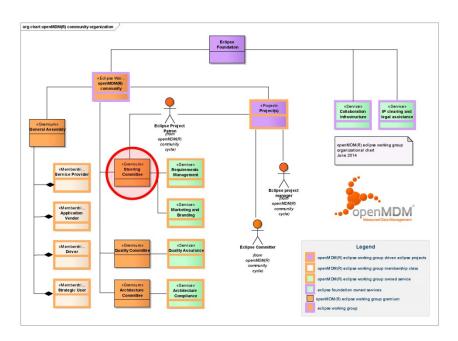
As the members of the membership classes have to elect among themselves the representants in the openMDM® EWG steering and quality committees, the chart below contains the respective candidates named by the members.

Company	SC	QC
Tata Motors Ltd.	Sailesh Saraph	Sanjay Hande





openMDM® boards



Composition

Each Driver Member of the WG has a seat in the Steering Committee.

At least one seat is allocated to each class of members different to Driver Members ...

Votes (valid at votings of the gremium, not when establishing it)

Each Driver member on the Steering Committee has three votes. Other Steering Committee members have a single vote.





The Steering Committee - Powers and Duties

The Steering Committee is required to

- · Define the strategy of the WG
- Discuss and amend the charter and the participation agreement
- Define and follow marketing and communication activities
- Popularize and defend the openMDM® brand
- Initiate and execute an annual membership checkup
- Define and execute a marketing and branding plan
- Maintain a list of the current members of the openMDM® WG
- Negotiate the annual working group participation fees towards the Eclipse Foundation with the EMO
- WP Assignment, Delivery and Accounting as defined in the section "Collaboration". Decisions on this topic have to be made with a two third majority vote.





steering committee





Company	membership class	steering committee
AUDI AG	Driver	Sven Wittig (triple vote)
BMW AG	Driver	Ulrich Bleicher (triple vote)
DAIMLER AG	Driver	Gerwin Mathwig (triple vote)
Mueller-BBM VibroAkustik Systeme GmbH	Driver	Josef Hobelsberger (triple vote)
HighQSoft GmbH	application vendor	Dr. Ralf Nörenberg (single vote)
Tata Motors Ltd.	strategic user	Sailesh Saraph (single vote)
Bertrandt AG Canoo Engineering AG Gigatronic GmbH itemis AG Peak Solutions GmbH Piterion GmbH Science + computing AG	service provider	Dr. Hans-Dirk Walter (single vote) Dr. Dietmar Rapf (single vote)

chairman: Gerwin Mathwig

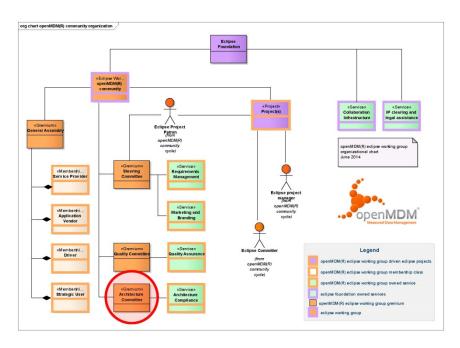
July 7th, 2015

openMDM® EWG general assembly





openMDM® boards



Composition

Each Driver Member of the WG has a seat on the Architecture Committee.

Each project lead has a seat on the Architecture Committee.

Votes (valid at votings of the gremium, not when establishing it)

Each member on the Architecture Committee has one vote.





The Architecture committee - Powers and Duties

Architecture Committee members are required to

- Ensure the functional consistency of openMDM® projects
- Ensure the non-functional consistency of openMDM® projects
- Ensure the technical consistency of openMDM® projects
- Evaluate and define technologies to be applied
- Establish technical guidelines
- Validate new project proposals and concepts
- Establish the openMDM® architecture compliance service and ensure its availability to the openMDM® projects





architecture committee





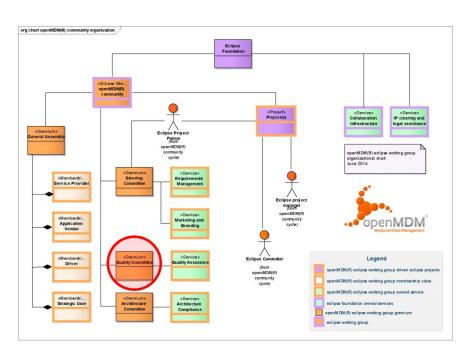
Company	membership class	architecture committee
AUDI AG	driver	Christian Rechner
BMW AG	driver	Stefan Ebeling
DAIMLER AG	driver	Andreas Benzing, ICS AG on behalf of DAIMLER AG
Mueller-BBM VibroAkustik Systeme GmbH	driver	Stefan Wartini
	Project lead MDM@WEB, MDM APPS	Gerwin Mathwig
	Project lead MDM BL	Stefan Beese (clearing of organizational issue reserved)

chairman: Andreas Benzing





openMDM® boards



Composition

Each Driver member of the WG has a seat on the Quality Committee.

Each project lead has a seat on the Quality Committee.

At least one seat is allocated to each class of members different to Driver members ...

Votes (valid at votings of the gremium, not when establishing it)

Each member on the quality Committee has one vote.





The Quality Committee - Powers and Duties

The Quality Committee members are required to

- Define the WG quality kit and maturity process
- Establish and maintain the openMDM® integration environment
- Establish the openMDM® quality assurance service and ensure its availability to the openMDM® projects
- Provide in-time information to the steering committee on the maturity of the components and results delivered to the community to enable it to decide on the acceptance of a deliverable as valid contribution
- Validate that the projects conform to the WG quality kit.
- Validate that the projects conform to the guidelines established by the architecture committee
- Validate that the projects apply the IP process





quality committee





Company	membership class	quality committee
AUDI AG	driver	Dr. Thomas Schmidt
BMW AG	driver	Michael Schwarzbach
DAIMLER AG	driver	Gerwin Mathwig
Mueller-BBM VibroAkustik Systeme GmbH	driver	Christian Grobauer
HighQSoft GmbH	application vendor	Dr. Ralf Nörenberg
Tata Motors Ltd.	strategic user	Sanjay Hande
Bertrandt AG Canoo Engineering AG Gigatronic GmbH itemis AG Peak Solutions GmbH Piterion GmbH Science + computing AG	service provider	Sebastian Dirsch Susann Herrmann
	Project lead MDM@WEB, MDM APPS	Gerwin Mathwig
	Project lead MDM BL	Stefan Beese (clearing of organizational issue reserved)

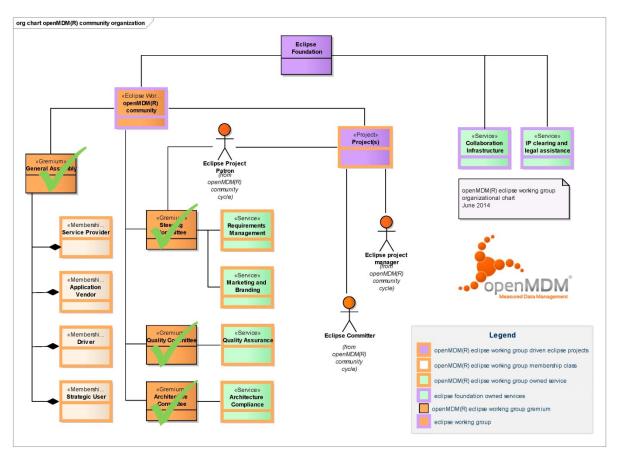
chairman: Michael Schwarzbach





openMDM® boards





July 7th, 2015

openMDM® EWG general assembly





openMDM® community cycle





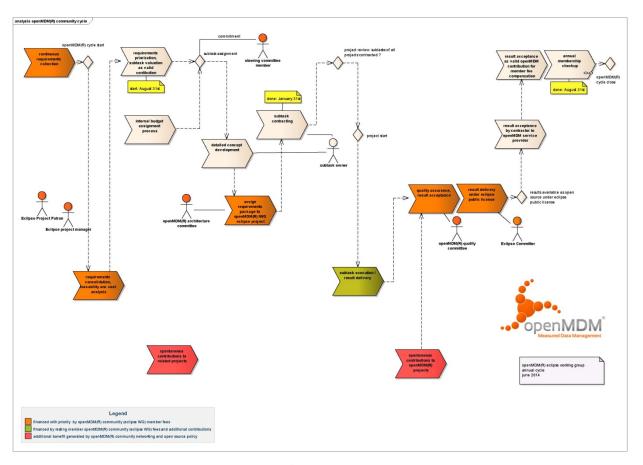
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openMDM® community cycle





July 7th, 2015

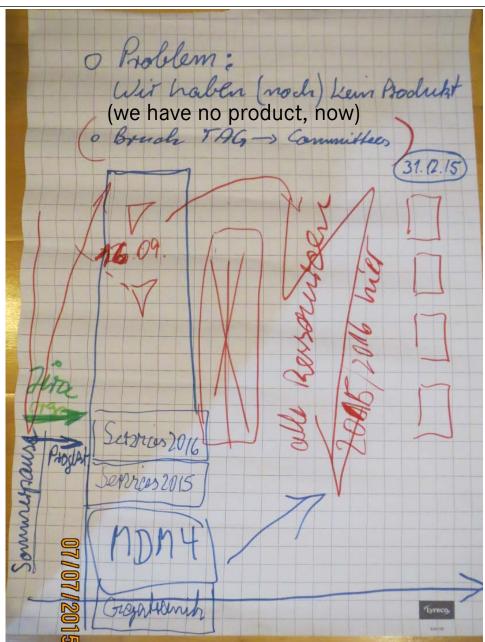
openMDM® EWG general assembly





C) Communication Platform EWG

- Job split, Services, Usecases will be tracked in Jira
- Immediately the change request will be done by Audi for API.
- Sept, 16. the next SC -> end of the year plan!
- Use the summer break for reach the milestones!
- all Resources, including the new services capacity of 2015/2016 might be used







D) End of the first year 2014/2015 from our EWG! Thank you for your work!

We start our new year, after the summer break.

SC: Sept. 16, 2015 Ingolstadt



