



# openMDM® eclipse working group

Architecture and API workshop

May 6th, 2015

AUDI AG Ingolstadt

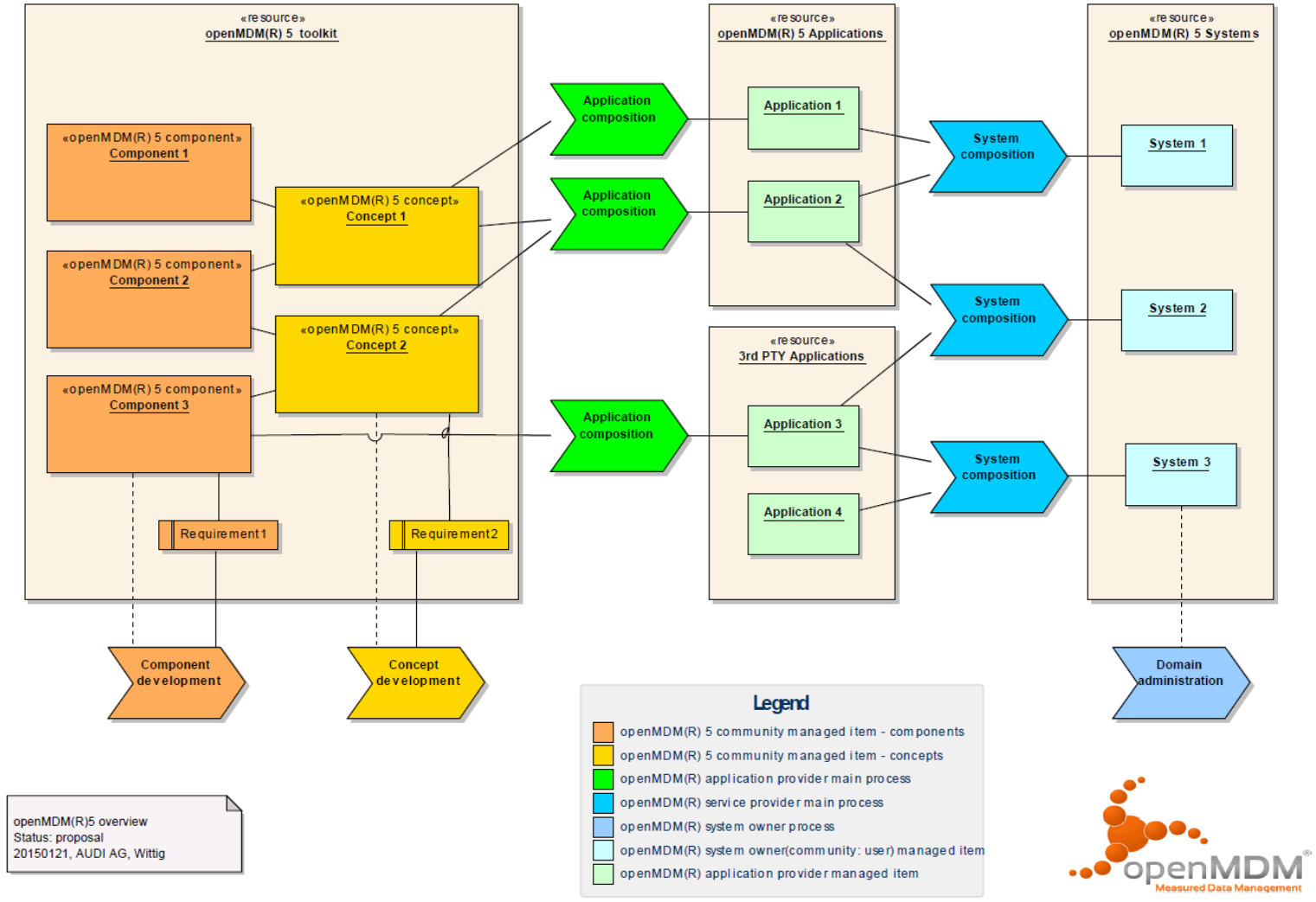
# Agenda

| | | | |
|---|---|---|---|
| 10:00 Uhr | welcome | 5 Min. | Sven Wittig (Audi) |
| | current status and goals of the meeting | 10 Min. | Sven Wittig (Audi) |
| 10:15 Uhr | contribution offer by HighQSoft | 5 Min. | Andreas Hofmann (HighQSoft) |
| | introduction to HighQSoft HQL | 30 Min. | Andreas Hofmann (HighQSoft) |
| 10:45 | current status of the API and business layer design | 30 Min. | Stefan Beese (EPOS CAT) |
| 11:15 | break | | |
| 11:30 | architecture review and positioning of the items presented | 60 Min. | Andres Almiray (Canoo) |
| | coverage of openMDM® API / BL functions by HQL | | all |
| | consequences of HQL integration to the openMDM® API / BL | | |
| | discussion | | |
| 12:30 | break / lunch | 45 min | |
| 13:15 | decision: inclusion of HighQSoft HQL to the architecture | | |
| | further actions to be taken | | |

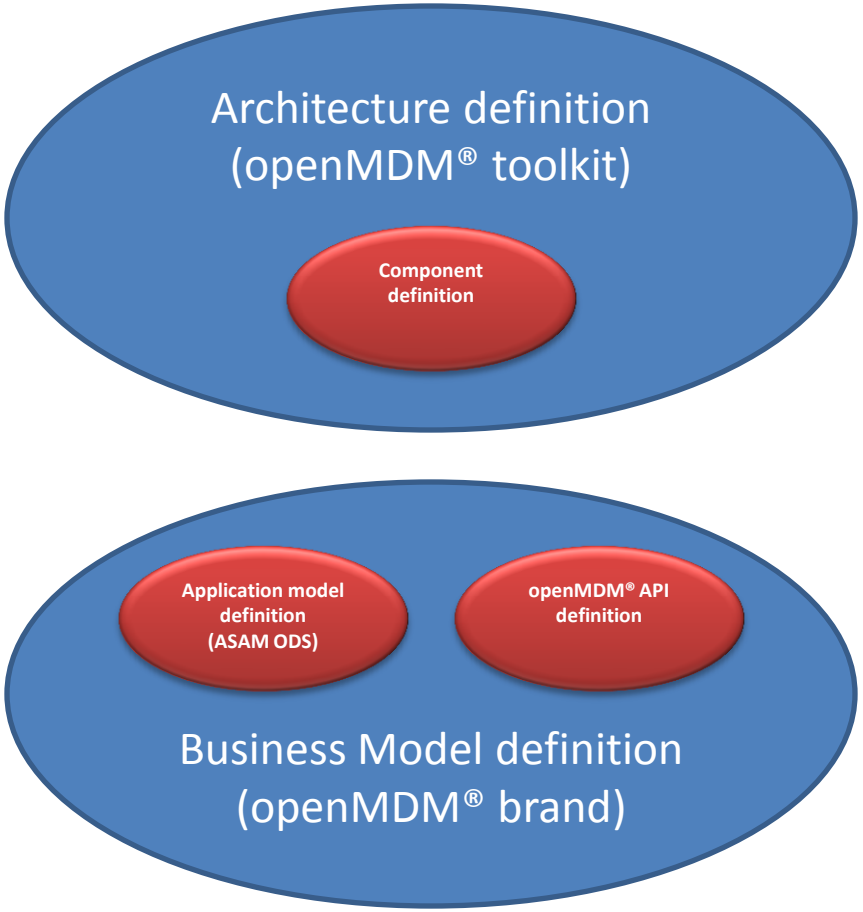
# Participants

| | | |
|---|---|---|
| Andreas.Benzing@ics-ag.de | AC | present |
| andreas.hofmann@highqsoft.de | | present |
| andres.almiray@canoo.com | | present |
| C.Weyermann@Peak-Solution.de | | present |
| christian.rechner@audi.de | AC | conferencing / temporarily |
| Gerwin.Mathwig@daimler.com | SC, PL MDM@WEB | present |
| Hans.Bothe@highqsoft.de | SC | |
| hans-dirk.walter@canoo.com | QC | present |
| hj.kremer@peak-solution.de | SC | |
| m.koller@peak-solution.de | | present |
| reinhard.pirthauer@epos-cat.de | | |
| Sebastian.Dirsch@gigatronik.com | | present |
| sibylle.peter@canoo.com | | present |
| stefan.beese@epos-cat.de | PL MDM\|BL | present |
| Stefan.Ebeling@bmw.de | QC | |
| stefan.holz@gigatronik.com | SC | present |
| Sven.wittig@audi.de | SC | present |
| SWartini@MuellerBBM-vas.de | AC | present |
| Ulrich.Bleicher@bmw.de | SC | |
| Viktor.Stoehr@gigatronik.com | | conferencing / temporarily |

# Status Architecture / BL



# Status Architecture / BL

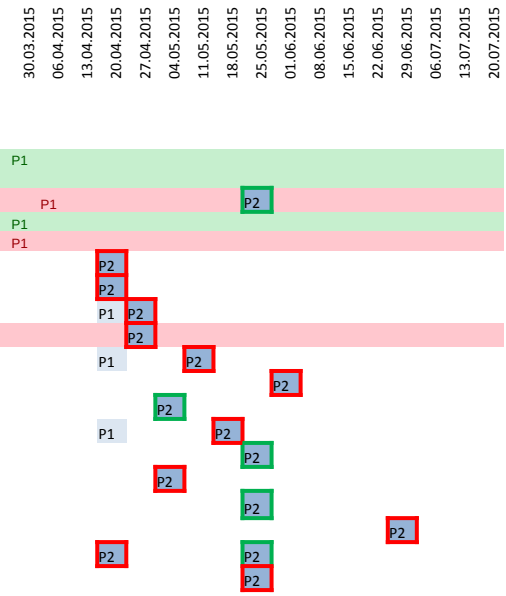


# Status Architecture / BL

| Status | Milestone | Responsible | Item |
|---|---|---|---|
| done | M010000 | CANOO | publication of the application framework technology decision proposal for decision |
| done | M020000 | CANOO | publication of the communication technology decision proposal for decision |
| delay | M030000 | CANOO | publication of the first Release of the complete architecture definition for review to the whole community |
| done | M040000 | AC | decision on the application framework technology |
| delay | M050000 | AC,SC | decision on the communication technology |
| in progress | M060000 | AC | review of the architecture |
| delay | M070000 | SC | review of the architecture by openMDM ® community members as community service |
| delay | M080000 | AC | release of architecture definition |
| delay | M090000 | EPOS | publication of the first UML definition of the openMDM® 5 API |
| delay | M100000 | AC | release of the definition of the UML definition openMDM® 5 API |
| delay | M110000 | EPOS | delivery of the MDM API ODS implementation |
| open | M120000 | EPOS | delivery of the modularized application model |
| delay | M130000 | AC | release of the definition of the openMDM® 5 application model |
| open | M140000 | EPOS | delivery of the installable application model version (suitable for setting up an openMDM® 5 ODS server) |
| waiting | M150000 | EPOS | project setup for business layer |
| open | M160000 | EPOS | delivery of the first application frame by April 30th |
| open | M170000 | EPOS | delivery of the openMDM® integration server |
| open | M180000 | CANOO | declaration of which interfaces are openMDM® core |
| open | M190000 | EPOS | delivery of the core business interfaces definition |

Week (2015)

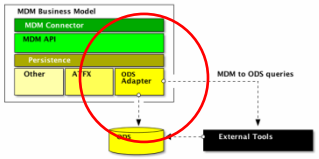
30.03.2015 06.04.2015 13.04.2015 20.04.2015 27.04.2015 04.05.2015 11.05.2015 18.05.2015 25.05.2015 01.06.2015 08.06.2015 15.06.2015 22.06.2015 29.06.2015 06.07.2015 13.07.2015 20.07.2015




P2 second planning update, Milestone estimated

P2 second planning update, Milestone confirmed by responsable

# HQL positioning within architecture




For static parts of the ASAM ODS Application model incl. Handling of files and their properties

Tbd: For dynamic / generic Parts of the ASAM ODS Application model

Query Collection

PlainOldJavaObjects

Dynamic Properties Support

openMDM® 5 API

Incl. mass storage handling

Criteria API (JPA)

parse

String Query

DS Function

Tbd: streaming of data

Persistence

other

ASAM ODS ATFX

ODS client

HQL

ASAM ODS DB Adapter

# Committments

After a detailed discussion of the HQL features presented by Andreas Hofmann and the positioning of HQL within the openMDM® architecture the participants of the meeting agree on the following statements:

- HQL fits to the openMDM® 5 architecture
- HQL simplifies the implementation of the openMDM® 5 API significantly
- HighQSoft HQL provides ASAM ODS 5.3 compatibility, that is, any ASAM ODS server can be deployed in the lower layers

Therefore the contribution of HQL by HighQSoft is highly welcome. The participants recommend the AC and SC to act respectively.

# ToDo ´s

- The terms used within the architecture documents have to be reviewed, if necessary cleared and included to the openMDM® EWG‘s glossary. Conflicts between the wordings of „old MDM style“ and the new architecture have to be resolved (CANOO).
- Description of what the modules mentioned in the architecture picture (Criteria API, DS function, String  query..) do (CANOO).

- Identifying dynamic and static parts of the application model, map them into API functionality (EPOS, within existing milestone API UML Design)
- Structuring of the API with respect to the functionality presented to the layers above (EPOS, within existing milestone API UML Design)
- Structuring of the API with respect of the functionality accessed from lower layers (EPOS, within existing milestone API UML Design)

# Open Issues

This is a part containing questions which arose writing the minutes. I attach them, because they are related to the API but not part of the project.

- What happens, if possibly the application models of different data sources differ (at least in their dynamic parts)? Which way conflicts are resolved?
- Who will provide the openMDM® connector or at least a first implementation to get an initial system to work?
- Within the architecture pictures it should be reflected, that ATFX also is standardized by ASAM ODS. Therefore, a wording like „ASAM ODS ATFX“ and „ASAM ODS DB“ seems better – even because an ASAM ODS application model applies to both of them. It should be cleared, if the application model structure definied by EPOS must apply th the ATFXes also or not.