openMDM® Working Group

Platform for implementing Test Data Management

www.peak-solution.de

Dr. Hans-Jörg Kremer
Background

„Why an open, vendor-independent platform for Test Data Management?“

- Huge amounts of test data are created during vehicle development
- Different development areas and test domains create test data
- Diverse domain-specific test methods, measuring systems, analysis tools and simulations are used to create and process the test data
- A variety of data formats are used for storing the created test data

A lack of transparency as well as increasing complexity of data analysis and long-term reusability of data
Challenges

„Central repository for test data“

- Uniform storage of test data coming from different data sources
- Independent from specific measurement and analysis tools
- Suitable for building integrated tool chains
- Management of the test context (meta data)
- Unambiguous interpretation of the stored test results
- User-friendly functions for browsing and finding test data
- Scalable in terms of data volume, number of users and global use
- Capabilities to protect information from unauthorized access
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„Collaboration of several companies“

- Start: 2014
- Aim: Development of an open source framework for the efficient implementation of test data management solutions based on the ASAM ODS standard
- Basis: A software framework called openMDM 4, mainly driven by Audi since 2010
- Intension: Creation of an organizational framework which makes it possible to drive collaborative development and push further improvements of openMDM more intensively
- Current members:
Overview openMDM®

Framework for Test Data Management

Integration of testing systems
- Road Tests
- Bench Tests
- Simulations

Integration of processing systems
- Analysis
- Reporting
- Exchange

openMDM®
- Frontend
- Backend
- ASAM ODS
Overview openMDM®

Backend Components

Integration of testing systems
- Road Tests
- Bench Tests
- Simulations

Integration of processing systems
- Analysis
- Reporting
- Exchange

Frontend
- Access Components
  - REST API
  - Java API
  - ODS Adapter

ASAM ODS
Overview openMDM®

Further data stores
Overview openMDM®

Scalability

Location 1

Location 2
Overview openMDM®

Platform for Test Data Management

Integration of testing systems
- Road Tests
- Bench Tests
- Simulations

Integration of processing systems
- Analysis
- Reporting
- Exchange

openMDM®
- Frontend
- Backend
- ASAM ODS
Overview openMDM®

Web Client

Navigator

Test Description

Search

Select

Preview (Channel)

Download

Files
Overview openMDM®

Web Client – Demo System

http://demo.openmdm.org/
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Beyond proprietary solutions for Test Data Management

- Standardized
- Open
- Vendor-independent
- Versatile
- Adaptable
- Future-proof

More information:

- Homepage of openMDM: [https://www.openmdm.org/](https://www.openmdm.org/)
- Project Page of openMDM: [https://projects.eclipse.org/projects/technology.mdmbl](https://projects.eclipse.org/projects/technology.mdmbl)

Check it out - Try it out (Proof of concept) - Become an active part of the openMDM Working Group ...
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Beyond proprietary solutions for Test Data Management

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