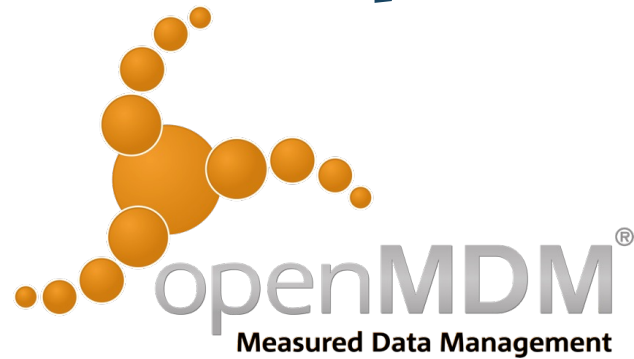


# openMDM is an Eclipse Working Group



## Our Members



MÜLLER-BBM  
VibroAkustik Systeme

SIEMENS

ARRK

KARAKUN

PEAK SOLUTION

ASAM

<https://openmdm.org/>



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# Open-Source Software – mdm-bl

1. Extensible ODS Application Model
2. API: Model- & Instance Data
3. Adapters to ODS Storage Systems
4. Example Web-UI ("Explorer")

The screenshot displays the openMDM5 Web Administration interface. On the left, a 'Navigator' shows a tree structure of data models under 'MDM', including 'Self Driving Project', 'Structure', 'Test', and 'Test Step'. The main area shows a 'Details' view for a 'Test Step' with a 'XY-ChartViewer' displaying a line graph of sensor data (acceleration\_x, acceleration\_y, brake\_pressure) over time. The interface includes a 'Shopping basket' at the bottom and a 'Language' dropdown set to 'English'.

On the right, a data model diagram illustrates the relationships between various entities. The entities are represented as boxes with their respective attributes and references:

- Context** (blue box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), Version (DT\_STRING), MinType (DT\_STRING), and Description (DT\_STRING). It has a reference to 'UnitUnderTest' (0..1).
- UnitUnderTest** (yellow box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), Version (DT\_STRING), MinType (DT\_STRING), Description (DT\_STRING), and DateCreated (DT\_DATE). It has a reference to 'TpUnitUnderTestRoot' (0..1).
- UnitUnderTestComp** (orange box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), MinType (DT\_STRING), Optional (DT\_BOOLEAN), DutyCycle (DT\_BOOLEAN), TestSequence (DT\_STRING), and Hardware (DT\_ENUM). It has references to 'TpUnitUnderTestComp' (0..1), 'TpUnitUnderTestAttr' (0..1), and 'TpUnitUnderTestComp' (0..1).
- UnitUnderTestAttr** (green box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), Description (DT\_STRING), ValueCopyable (DT\_BOOLEAN), ValueSet (DT\_STRING), ValueList (DT\_STRING), and Hardware (DT\_ENUM). It has a reference to 'TpUnitUnderTestAttr' (0..1).
- TestSequence** (yellow box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), Version (DT\_STRING), MinType (DT\_STRING), Description (DT\_STRING), and DateCreated (DT\_DATE). It has a reference to 'TpTestSequenceRoot' (0..1).
- TpTestSequenceComp** (orange box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), MinType (DT\_STRING), Optional (DT\_BOOLEAN), DutyCycle (DT\_BOOLEAN), TestSequence (DT\_STRING), and Hardware (DT\_ENUM). It has references to 'TpTestSequenceRoot' (0..1), 'TpTestSequenceComp' (0..1), 'TpTestSequenceAttr' (0..1), and 'TpTestSequenceComp' (0..1).
- CatTestSequenceComp** (green box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), MinType (DT\_STRING), Description (DT\_STRING), DateCreated (DT\_DATE), ValueCopyable (DT\_BOOLEAN), ValueList (DT\_STRING), ValueSet (DT\_STRING), and Hardware (DT\_ENUM). It has a reference to 'TpTestSequenceComp' (0..1).
- CatTestSequenceAttr** (green box): Attributes include ID (DT\_LONGLONG), Name (DT\_STRING), Description (DT\_STRING), ValueCopyable (DT\_BOOLEAN), ValueList (DT\_STRING), ValueSet (DT\_STRING), and Hardware (DT\_ENUM). It has a reference to 'TpTestSequenceAttr' (0..1).

# Benefit

Powerful features to create **multiple application specific models** for system components based on the **ODS standard** and living together **in one database**



# openMDM Application Model + API as ASAM ODS Associate Standard

Why?

- Sustainability for products that depend on openMDM
- Increase attractiveness of openMDM for other ASAM standards like OpenScenario and OpenDrive

Who already has confirmed active support of this project?

- Siemens DI SW
- Müller BBM VAS
- Peak Solution
- Karakun
- s+c computing (as non-member of openMDM but active member of ASAM)

Total commitment: 70 PD