

openMDM in the world of Big Data



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openMDM in Škoda Auto

6 openMDM applications in Škoda Auto and even more in VW Group.


Many different use cases in product development and quality assurance areas.

Business process behind the measured data is mostly the same. **Or is it?**

Test data lifecycle in electrical and electronics vehicle testing

Business process

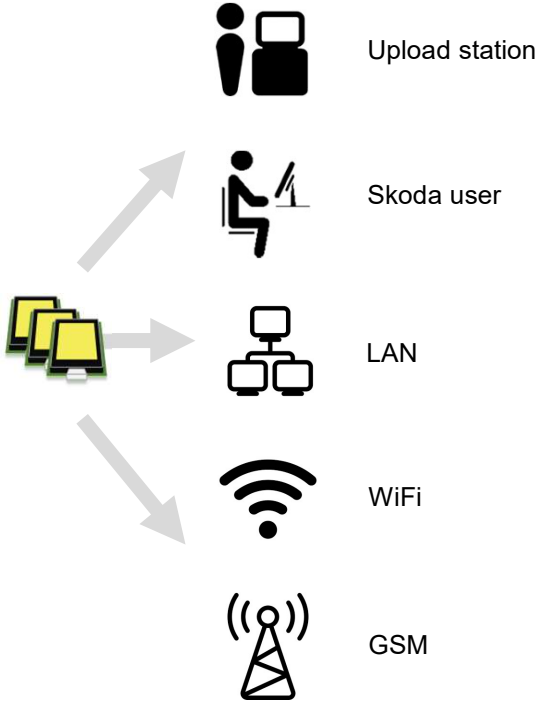
Data recording



Standard
CAN/CAN_FD
LIN
UART
Debugging Ethernet
BroadR-Reach Ethernet 100MB/1000MB

Optional
Debugging OCU
Private BUSes CAN/LIN
Analog/Digital signals
CCP/XCP communication
Diagnostics
Video
Audio description of failure

Data transfer



Upload station


Skoda user

LAN

WiFi

GSM

Data storage, processing and analysis



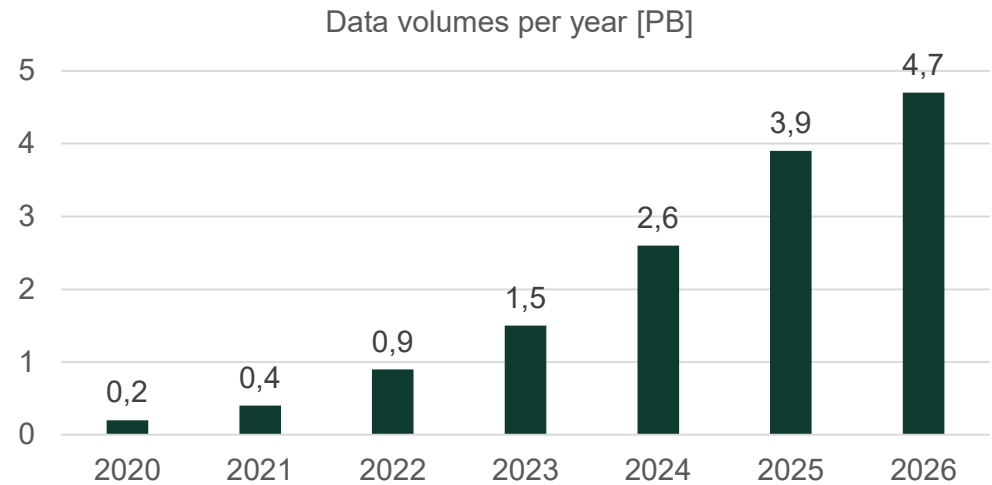
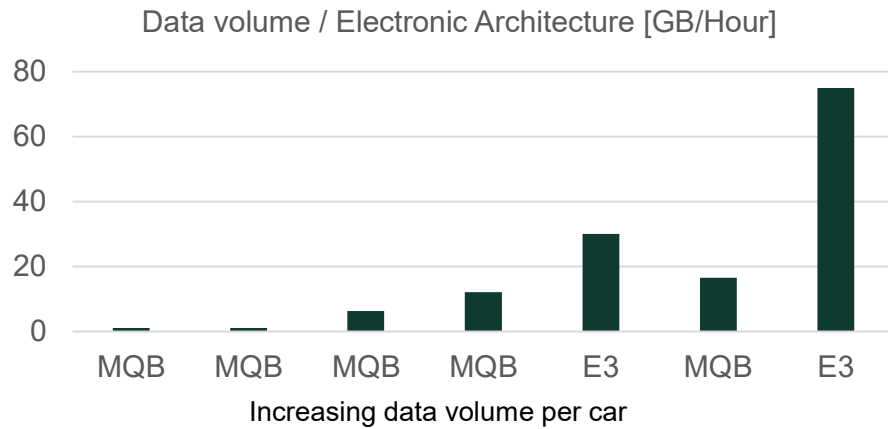
Test data lifecycle in electrical and electronics vehicle testing

Main use cases

- Trace conversion
- Trace cut-out
- Trace signal analysis
- Error and signal statistics
- System statistics
- Data analysis and advanced analytics

Test data lifecycle in electrical and electronics vehicle testing

Data volumes



Data volumes needed to be stored, processed and analyzed per year.

Big Data analytics and Measured Data Management

What are the options?



Robust data management



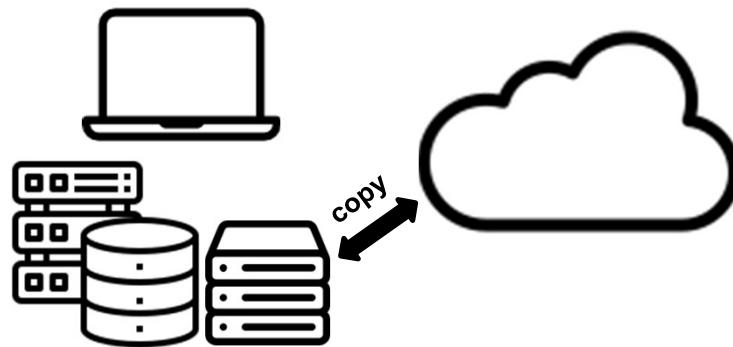
Data storage and processing capabilities

Big Data analytics and Measured Data Management

What are the options?



Robust data management



Integration?
Solutions mostly based on data replication



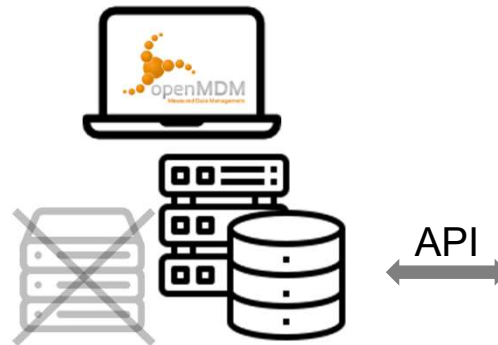
Data storage and processing capabilities

Big Data analytics and Measured Data Management

Škoda CARP – Car Analytics and Research Platform

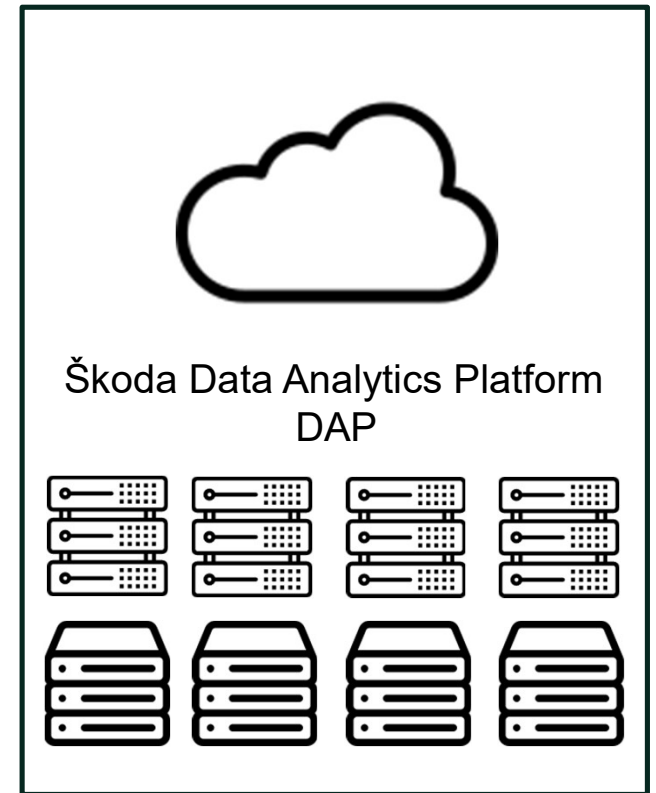
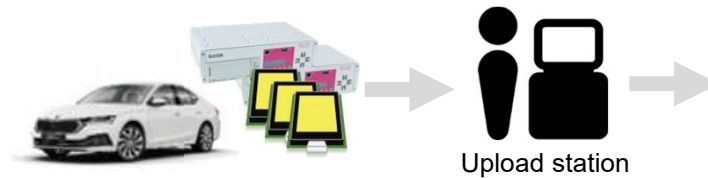
openMDM

- Data management
- Data visualization
- Job / script definition and request
- Data download / upload
- Administration
- No mass data storage or data replication



DAP

- Mass data storage
- Data tiering (hot, warm, archive)
- Job / script execution
- Resource management
- Network usage management
- Analytical capabilities
- GIT (DEVOPS)



Thank you



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