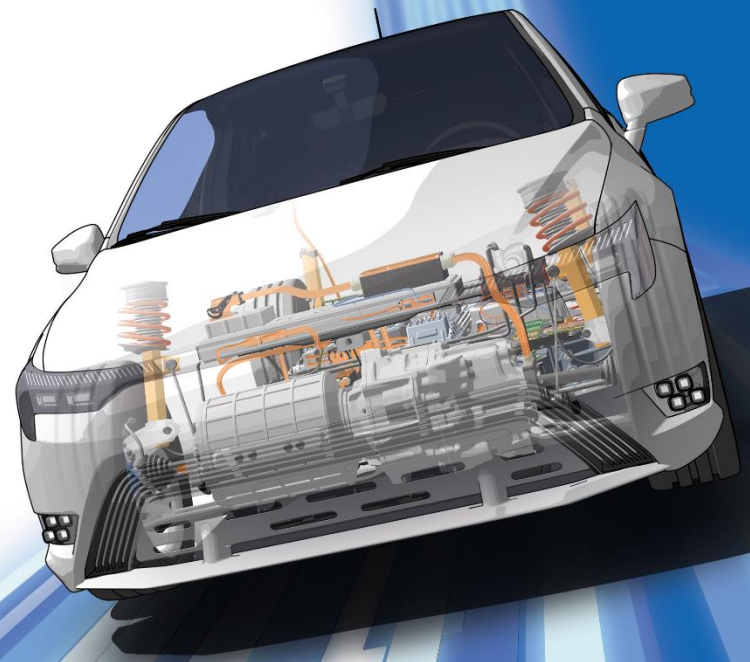
VECTOR CSM
TECHDAY

2023 MÜNCHEN DÜSSELDORF WOLFSBURG

Surfen auf der Datenflut – mit dem Vector Messdaten Management vMDM sicher zum Ziel



VECTOR

Collect – Document – Analyze - Explore

Store data reliable and secure

Document recorded data with meta data

Explore data with powerful engineering tools

Collect and manage constantly growing volume of measurement data

Run automated data analysis

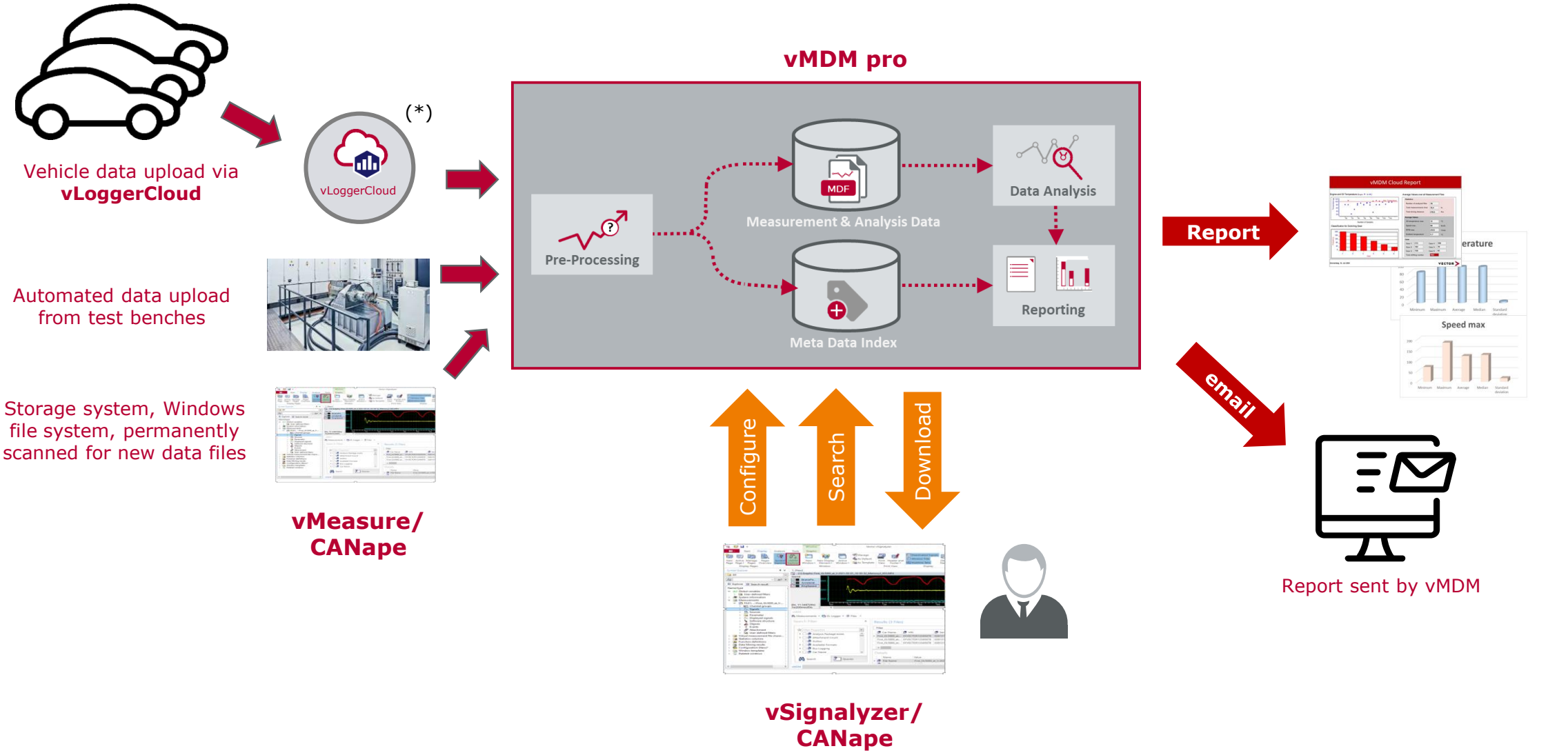
Compute statistics and metrics

Localize anomalies and identify the affected systems and vehicles

Rely on common automotive standards and modern cloud technologies

Worldwide access to your measurement data

vMDM - Core Element in Measurement Data Management

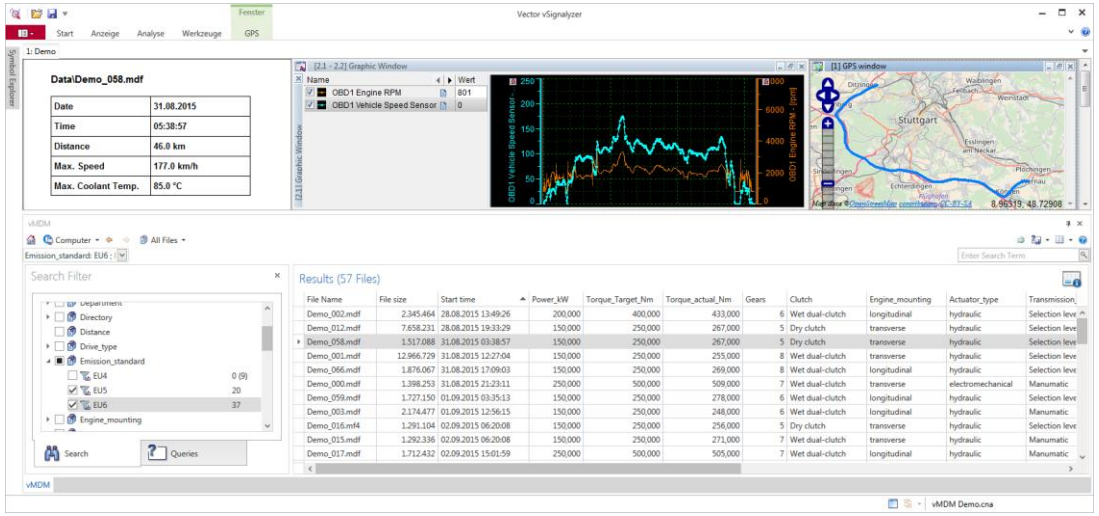


(*) vLoggerCloud

vSignalyzer – the vMDM Frontend Tool

Data analysis at its best

vSignalyzer is the data analysis tool of choice for automotive engineers around the globe.



The vMDM Explorer in vSignalyzer

Explorative analysis

vSignalyzer is fully integrated with vMDM - exploring data from the cloud feels like working with local data.

It optimizes data transfer from the cloud to reduce your cost and waiting time.

Authoring tool for cloud-based data analysis

Development of automated data analysis jobs can be a complex task, depending on your requirements.

vSignalyzer supports you in all phases from prototyping to development & test until deployment of the final analysis jobs in the vMDM cloud.

Meaningful vMDM reports developed with vSignalyzer

Get the Information you are looking for

- Pre-processing to automatically find anomalies, search patterns, events and calculate characteristic quantities
  - Max switching currents, voltage drop and slope gradients
  - Fluctuations and tolerance checks
  - Determination of gear shifts and gear shift times
- Aggregation of meta data
- Extensive CANape function library with mathematical, Boolean, statistical functions as well as the functions of the eMobility Analyzer
- Conversion of raw data format to the powerful, standardized mf4 format
- Definition of pre- and post-processing with standard CANape/vSignalyzer on-board tools

Pre-Processing Results

- Immediate display of the results of pre-processing in the vMDM Explorer.
  - In the example shown: Number of automatically detected dips of the inverter efficiency

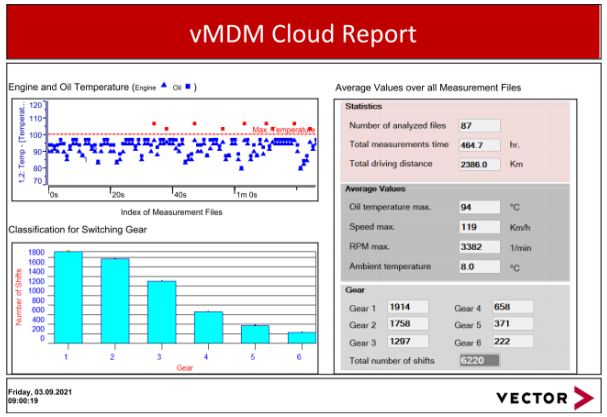
File Name	Author	Department	Power	BatteryCap...	Range	Software V...	Calibration...	NumberOfHits	Project	Subject	Preprocessing State
SW-I_EMOT_20...	Test Engineer	testing	120 kW	45 kWh	190 km	InvEff_V01SP3	V01SP3_CAL003	7,000	eDrivetrain	Inverter	Success
SW-I_EMOT_20...	Test Engineer2	Validation	120 kW	40 kWh	180 km	InvEff_V01SP2	V01SP3_CAL003	2,000	eDrivetrain	Inverter	Success
Flugzeugmotor...	Test Engineer	Testing	120 kW	45 kWh	190 km	InvEff_V01SP3	V01SP3_CAL001	2,000	eDrivetrain	Inverter	Success
SW-I_EMOT_20...	Test Engineer2	testing	120 kW	45 kWh	185 km	InvEff_V01SP3	V01SP3_CAL003	7,000	eDrivetrain	Inverter	Success
eDrive_1.mf4	Test Engineer	testing	120 kW	45 kWh	190 km	InvEff_V01SP3	V01SP3_CAL003	3,000	eDrivetrain	Inverter	Success
eDrive_0.mf4	Test Engineer	testing	120 kW	45 kWh	190 km	InvEff_V01SP3	V01SP3_CAL003	2,000	eDrivetrain	Inverter	Success
SW-I_EMOT_20...	Test Engineer2	testing	115 kW	45 kWh	185 km	InvEff_V01SP3	V01SP3_CAL004	7,000	eDrivetrain	Inverter	Success

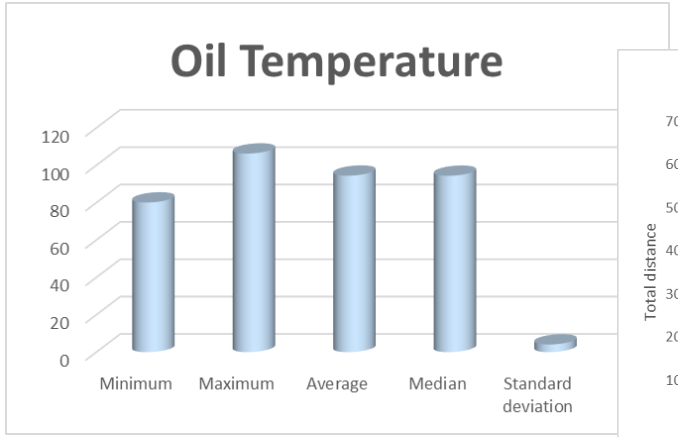
- Advantages:
  - No manual, time-consuming searching of the measurement files
  - Direct conclusion on affected measurement and configuration of the measurement object (e.g. SW status, used parameter set)

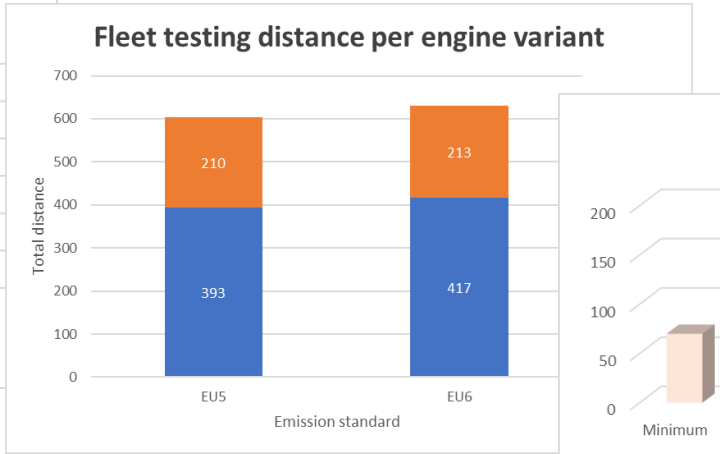
vMDM – Automated Data Analysis in the Cloud

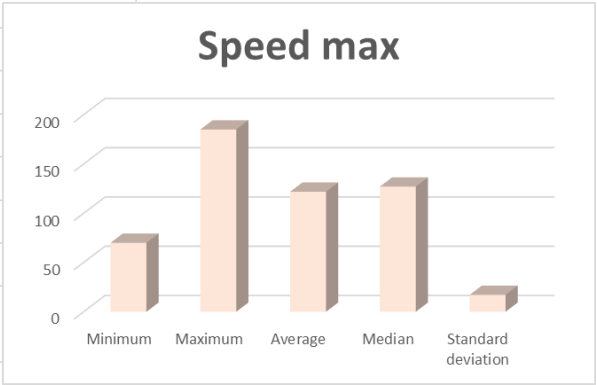
- vMDM offers 2 types of reports:
  - vMDM Index Reports for the evaluation of meta data
  - vMDM CASL/PDF Reports for the evaluation of measurement data
- The vMDM Explorer offers full access to the reports

- Reports are generated based on a report job (schedule, filter for measurement data)
- Email notification for successful and/or filed reports jobs









What our customers say about vMDM

Large OEM:

"After successful implementation of the required used cases, vMDM is firmly established in the tool chain at our company. The data stored and the analyses in vMDM have a direct impact on the design of the product properties. vMDM enables the existing knowledge to be made visible."

OEM/Tier1 with Technical Centers distributed worldwide:

"vMDM significantly supports us in establishing uniform processes for data analysis of recorded measurement files."

Engineering Service Provider:

"Thanks to the capabilities of vMDM, we can now run the specific analyses and evaluations required to assess product quality."

For more information about Vector
and our products please visit

www.vector.com

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