What is vMDM?

vMDM (Vector Measurement Data Management) is the solution for efficient management of large data volumes from development, test bench operation and vehicle tests. With vMDM, you can save your measurement data securely, protect it against unauthorized access and simplify the exchange of measurement data between distributed teams. With vMDM, large-scale CPU-intensive analyses, statistical metrics and reports are performed centrally on a server without any computational requirements on the engineer’s workstation.

Overview of Advantages

- Secure storage of measurement data from test benches, road testing and endurance testing
- Data protection through organization of measurement data files in the cloud with user-specific permissions
- Easy searching, filtering and display of measurement data
- Automatic indexing of measurement data on import
- Flexible data indexing based on metadata containing measurement attributes, calculated metrics, and data provided by other systems
- Automated data analysis and data mining without any computational load on the user’s PC
- Project-specific reporting of measurement data and statistical analysis
- Scalable solution for multi-user environments
- Familiar working environment through seamless integration with the Vector tool landscape. You define scripts, data analytics and data mining functions as usual in vSignalyzer or CANape.
- Minimum IT investment and operational cost for Software-as-a-Service operation

Highlights of Version 2.0

- Automated data analysis (data mining) and report generation provide you with valuable information – even in large data repositories.
- The freely configurable pre-processing function allows you to perform important standard analyses as soon as you have imported the measurement data. This means that just a short time after performing the measurement, the data is available to you for flexible search queries and further processing in reports.
- You can create statistical reports quickly and easily for your data repository or a subset of it. To select the data, you use all the filter capabilities present in vMDM in the usual way.

Overview of the most important vMDM components
Functions
> Secure storage of measurement data in the cloud
> Setup and management of user permissions
> Saved queries for easy re-execution of search requests
> Index from descriptive data (metadata) of the measurement files or from other systems
> Integration in CANape, vSignalizer and vMeasure exp for navigation, searches and data transfer
> Interactive analysis of the measurement data stored in vMDM Server on end-user computer using either CANape or vSignalizer
> Automated data analysis (data mining) and report generation in vMDM
> Freely configurable pre-processing when loading the measurement files
> Creation of statistical reports in vMDM

SaaS: Fast Introduction & Concentration on the Essentials
To ensure high efficiency and profitability, use vMDM as a Software-as-a-Service solution (SaaS). This removes the need for time- and cost-intensive installation and maintenance work in your IT infrastructure. So you can concentrate on your core business.

Scalable Multi-User Solution
vMDM is scalable as a multi-user system depending on the expected data volume and the required computing performance. The measurement data is organized customer- or project-specific and is securely protected against unauthorized access by means of user-specific roles and permissions.

Measurement Data Index for Optimized Search Operations
Thanks to the measurement data index, data can be retrieved quickly, queries for specific views can be defined and analysis tasks can be restricted to specific measurement data. vMDM determines additional index data during its initial analysis of the measurement files as part of the pre-processing done when files are first loaded into the system. This permits extensive statistical metrics, analysis profiles and event counts in categorized measurement files in just a few clicks of the mouse.

Analysis of Measurement Data
Alongside analysis of the metadata stored in the index, vMDM also permits the signal-oriented analysis of the recorded measurement data. In this case, the data mining function familiar from CANape/vSignalizer is used and allows you to fully automate the analysis of large data volumes on the vMDM Server quickly and easily. The analysis results are stored as reports which can be consulted by users at any time.

Data Security
The data in vMDM is protected against unauthorized access by many different measures (encrypted data transfer, client separation, ISO 27001). vMDM user authorizations, specific read/write permissions and protection against accidental deletion all make secure measurement data management possible.

System Requirements
> Client computer with CANape/vSignalizer and vMDM license option
> Internet access

More information: www.vector.com/vMDM

Configuration of the vMDM indexing schema