



Integrated result data management in the development process of vehicle systems based on the ASAM ODS standard

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Motivation



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ISO 26262

- **Validation of functional safety of critical components** with realtime simulation (e.g. ESC, EPS, TCU)



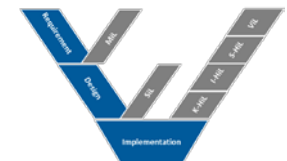
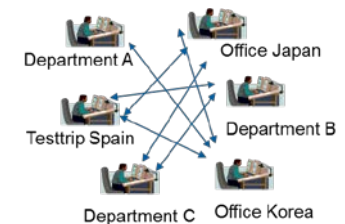
- **Real and Virtual Homologation of ESC**

→ **Careful handling of result data and documentation** in view of product liability

- **Development Process**

→ **Support of distributed development**

→ **Support of continuous process**



Result Data Management Status

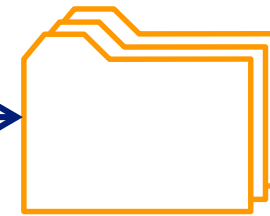
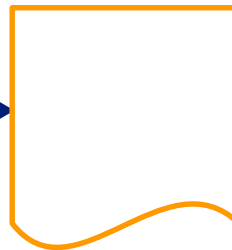


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Realtime Simulation

Simulation
System



File System



Test Bed

Automation

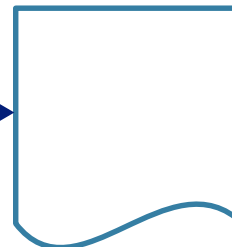


Database A



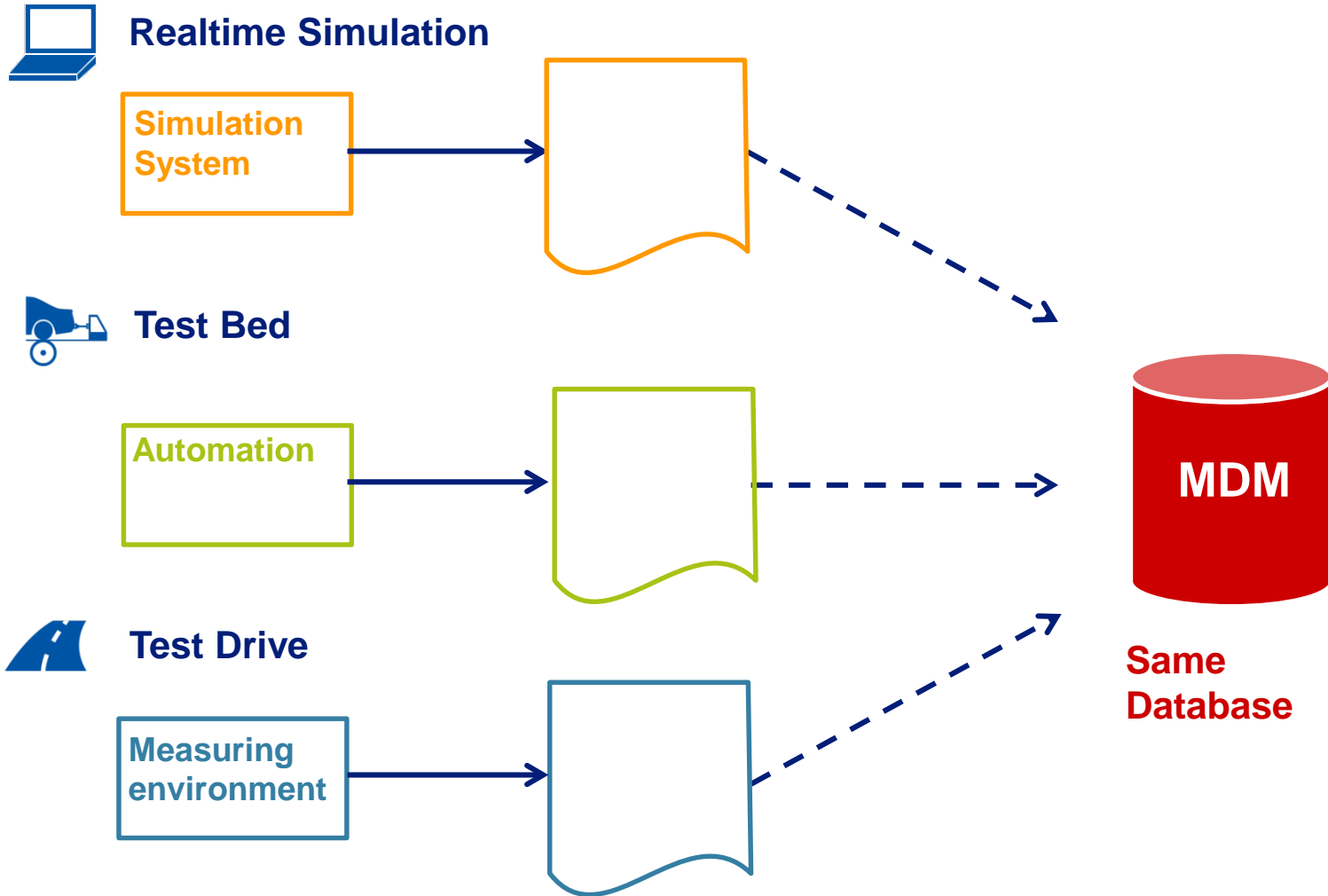
Test Drive

Measuring
environment



Database B

Result Data Management Goal



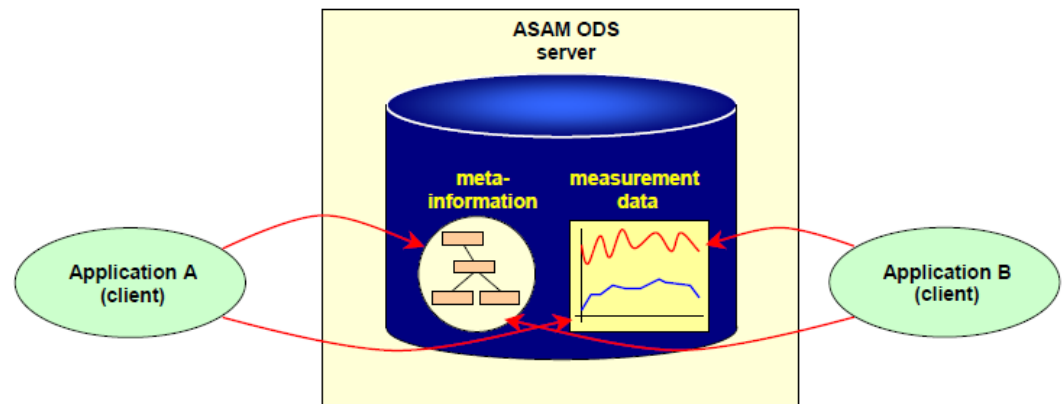
Result Data Management ASAM ODS Standard

Overview:

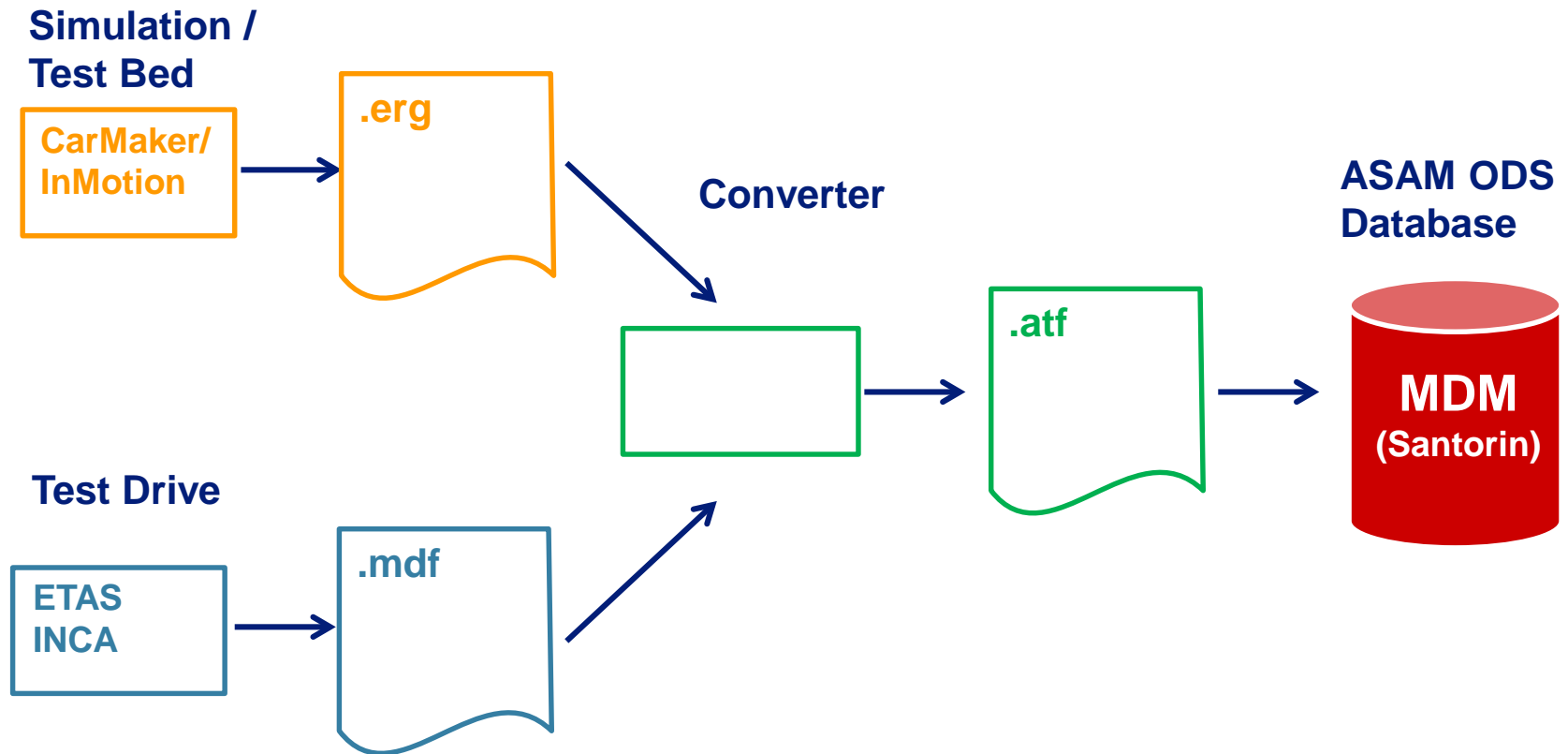
- Focuses on the persistent storage and retrieval of testing data
 - Application area: ADAS, Powertrain, NVH, durability and crash tests
 - Supported by various data producing and post processing tools
- Standard and tools are mature and stabile

Components:

- Data Model
- Application Interfaces
- Physical Storage
- Transport Formats



Result Data Management Route

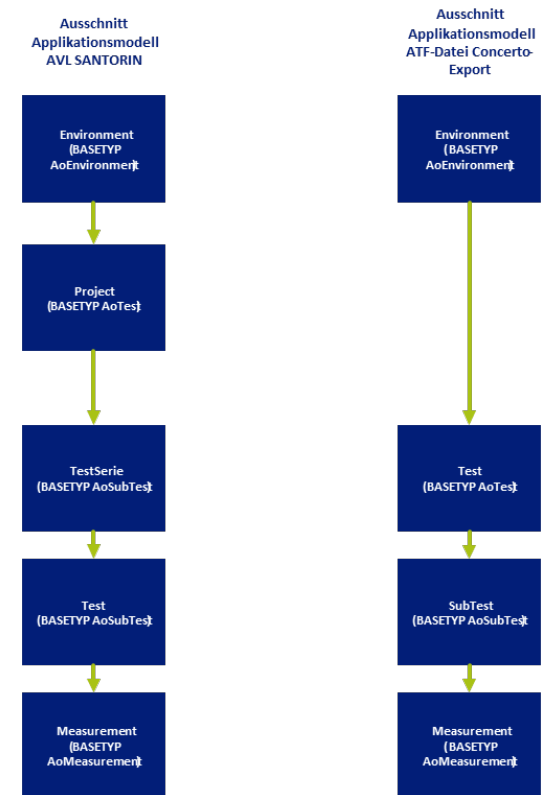


Result Data Management Challenge

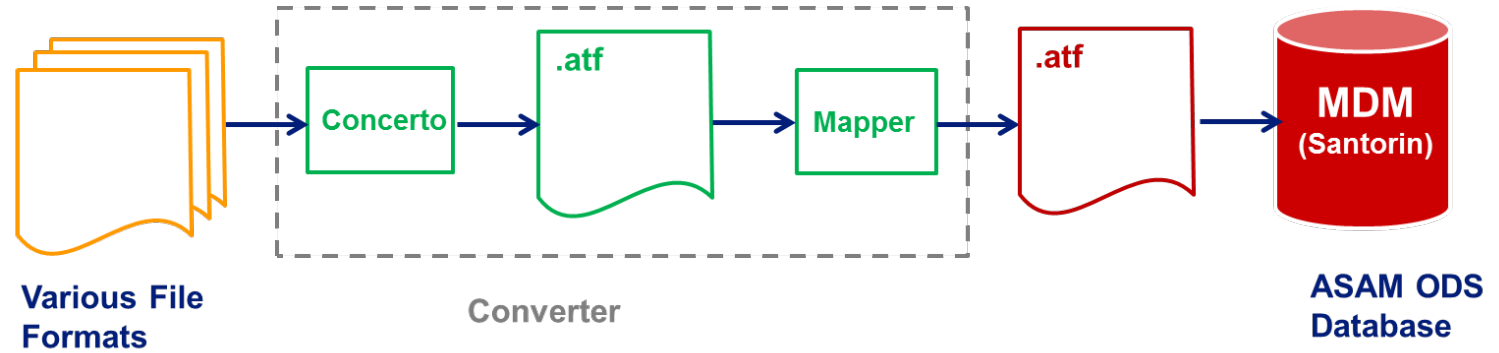
Prerequisite:

- Same application models (specific data model) in:
 - Structure
 - Attributes
 - Data handling

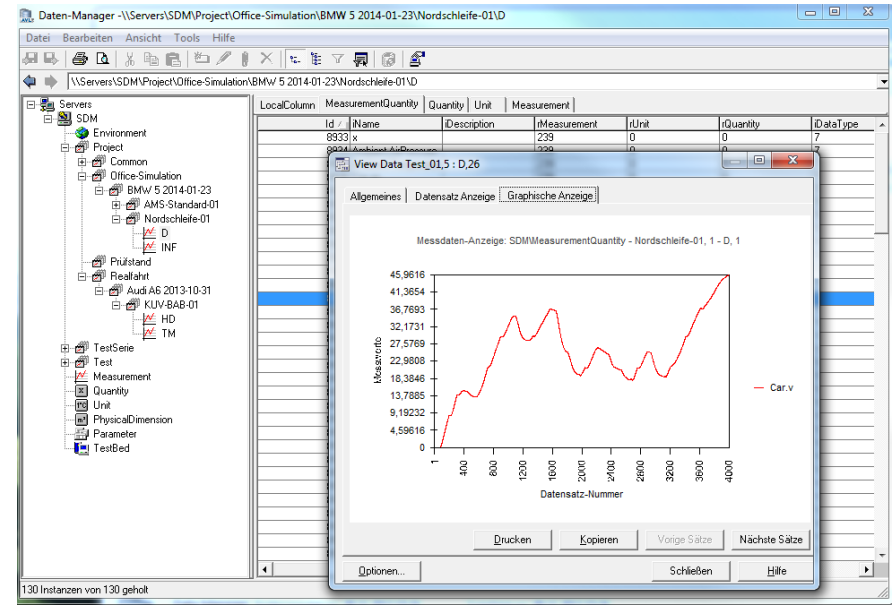
→ Development of an .atf file converter



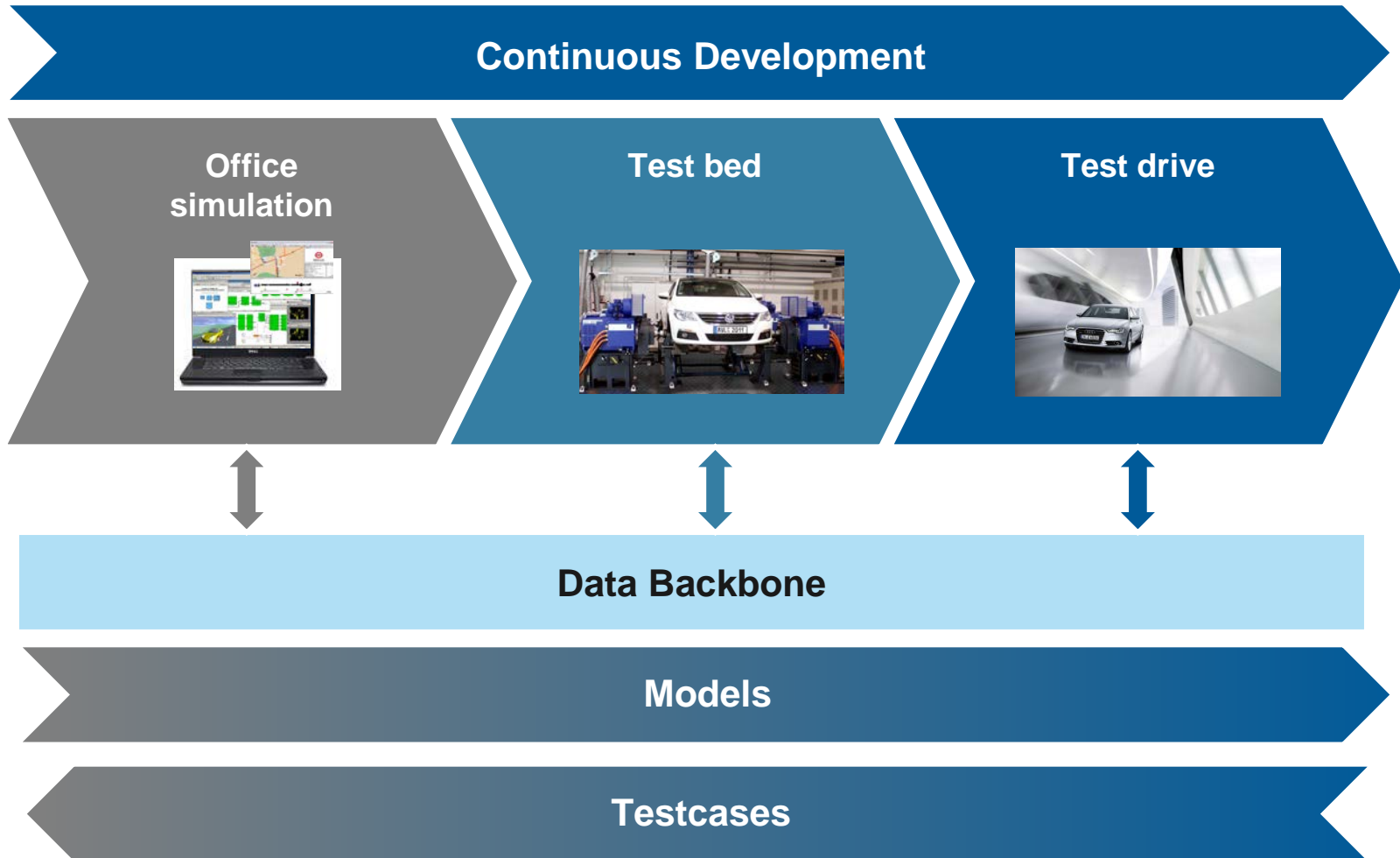
Result Data Management Realization



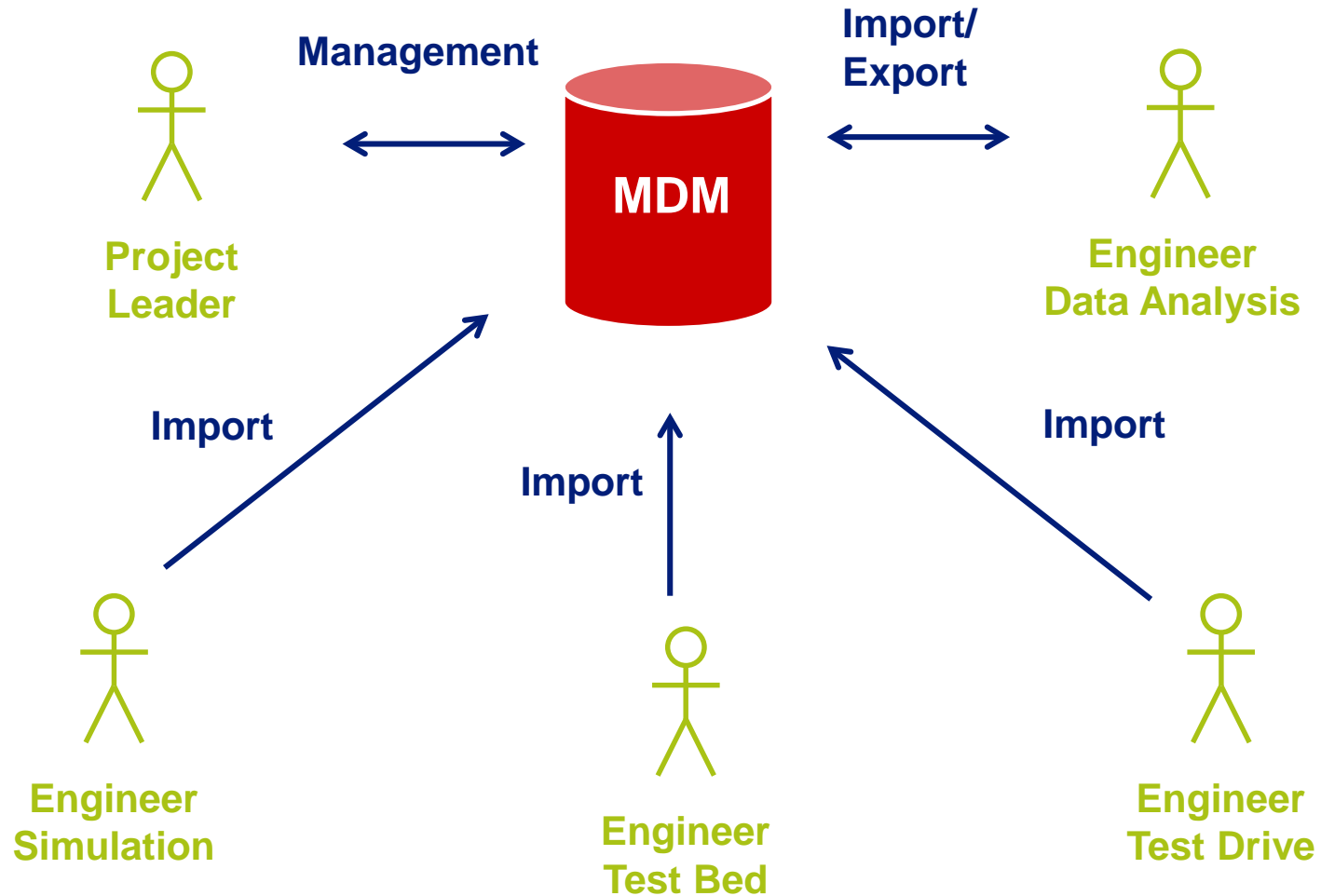
→ For the first time all result data in one database



Achievement Continuous Process

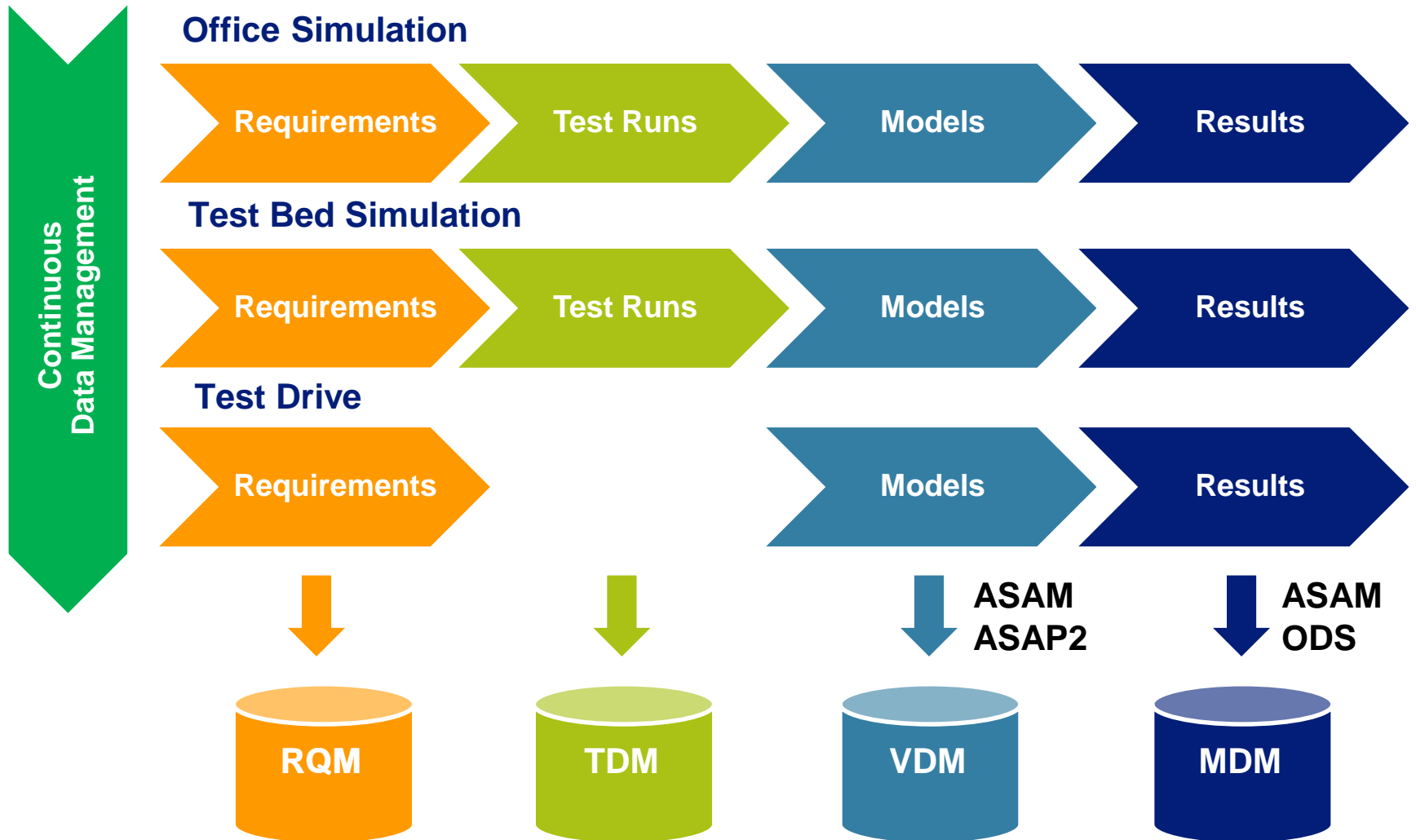


Achievement Process Support



→ Continuous result data management

Data Management Process



Outlook

Audi
Vorsprung durch Technik



- Use of the same application model
- Direct import of (.mdf files)
- Setting-up of a productive environment



THANK YOU



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