

Release Presentation

ODS / P2015-03-CAT/ FVD, 6.0.1

ASAM ODS Version 6.0.1

Release Date: 2018 / 01 / 01

Deliverables

Overview

- ▶ Specification incl. API description
- ▶ Appendix including related documents
- ▶ IDL description of API interface
- ▶ **Definition of the structures for the GOOGLE Protocol Buffers**
- ▶ Basic data model as step express file
- ▶ XML schema files
- ▶ Example ATF/ATFX files
- ▶ ExampleQueryCode for CORBA Extended Query
- ▶ **ExampleCode for HTTP**
- ▶ Release presentation
- ▶ Revision History

Deliverables

Specification

The following documents are technical references for ASAM ODS Version 6.0.1:

- **Base Standard Documentation**

- ASAM_CAT_ODS_BS-01-15_Introduction_V6-0-1.pdf
- ASAM_CAT_ODS_BS-02-15_RelToOthers_V6-0-1.pdf
- ASAM_CAT_ODS_BS-03-15_Architecture_V6-0-1.pdf
- ASAM_CAT_ODS_BS-04-15_Base_Model_V6-0-0.pdf
- ASAM_CAT_ODS_BS-05-15_OO_API_V6-0-1.pdf
- ASAM_CAT_ODS_BS-06-15_RPC_API_V6-0-0.pdf
- ASAM_CAT_ODS_BS-07-15_ATF_XML_V6-0-1.pdf
- ASAM_CAT_ODS_BS-08-15_ATF_CLA_V6-0-0.pdf
- ASAM_CAT_ODS_BS-09-15_Physical_Storage_V6-0-1.pdf
- ASAM_CAT_ODS_BS-10-15_Mime_Types_V6-0-1.pdf
- ASAM_CAT_ODS_BS-11-15_HTTP-API_V6-0-1.pdf**
- ASAM_CAT_ODS_BS-12-15_TermsDefinitions_V6-0-1.pdf
- ASAM_CAT_ODS_BS-13-15_SymbolsAbbrev_V6-0-1.pdf
- ASAM_CAT_ODS_BS-14-15_Bibliography_V6-0-1.pdf
- ASAM_CAT_ODS_BS-15-15_Appendices_V6-0-1.pdf

Deliverables

Specification

- Base Standard Model and Interface Definitions
 - Model
 - asam33.exp (Step-Express)
 - ODSBaseModel_asam33.xml
 - ODSBaseModelAbstract_asam33.xml
 - CORBA OO API Interface Definition
 - ods531.idl
 - RPC Interface Definition
 - aods.x
 - **Google Protocol Buffer Definitions**
 - ods.proto
 - ods_notification.proto
 - ods_security.proto
 - XML Schema Files
 - ASAM_HDTypes.xsd
 - HelperSchema.xsd
 - ODSBaseModelSpecSchema.xsd
 - Schema.xsd

Deliverables

Specification

- **Associated Standards Documentation**
 - Noise Vibration Harshness
·ASAM_CAT_ODS_AS-1-1_NVH-Model_V1-5-3.pdf
 - Calibration
·ASAM_CAT_ODS_AS-1-1_Calibration_V1-1-2.pdf
 - Geometry
·ASAM_CAT_ODS_AS-1-1_Geometry_V1-0-1.pdf
 - Workflow
·ASAM_CAT_ODS_AS-1-1_Workflow_V1-0-1.pdf
 - Bus Data
·ASAM_CAT_ODS_AS-1-1_BusData_V1-0-1.pdf

Deliverables

Additional Files

Example ATF Classic File

- ▶ Example_ATF_CLA.atf

Example ATFX Files

- ▶ Example_AllTypes.atfx
- ▶ Example_Geometry.atfx
- ▶ Example_Bus.atfx
- ▶ Example_Bus_with_index.atfx
- ▶ Example_Simple.atfx
- ▶ Example_Workflow.atfx

Example Code Extended Query CORBA OO API

- ▶ ExampleQueryCode.zip

Example Code HTTP API

- ▶ ExampleCode_HTTP.zip

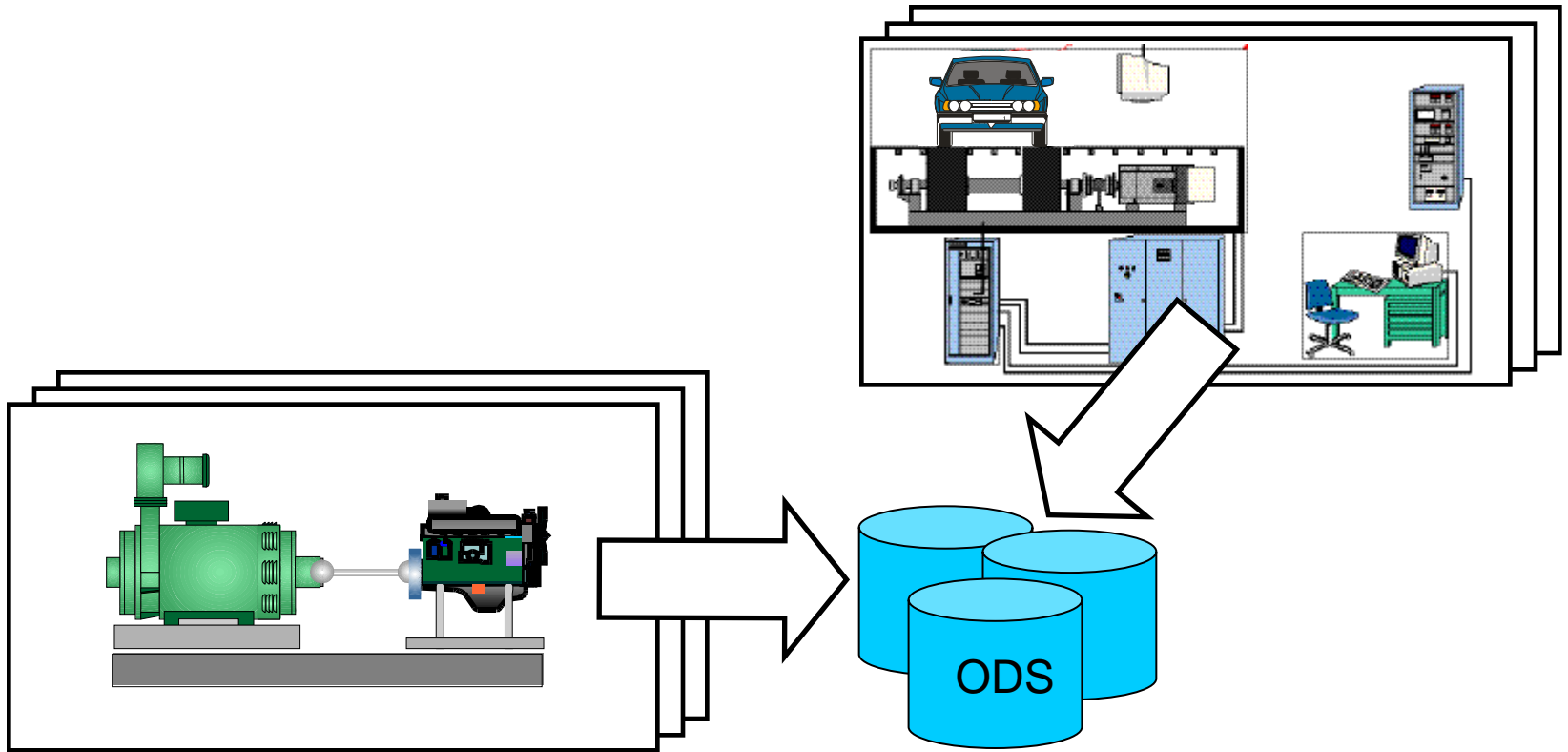
Revision History

- ▶ ODS_RevHistory_6_0_1.pdf

Introduction

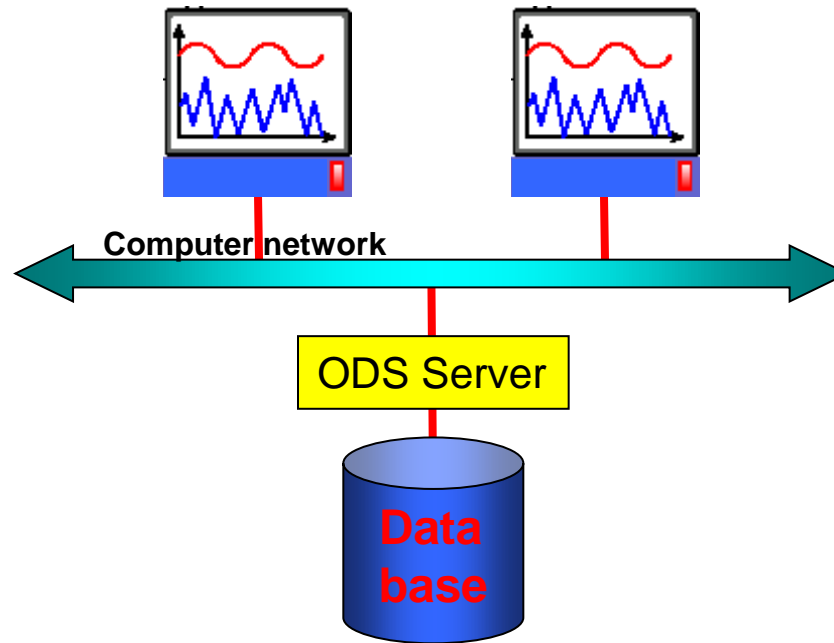
ASAM ODS 6.0.1

- ▶ ASAM ODS is a standard for archiving test data persistently.



ASAM ODS 6.0.1

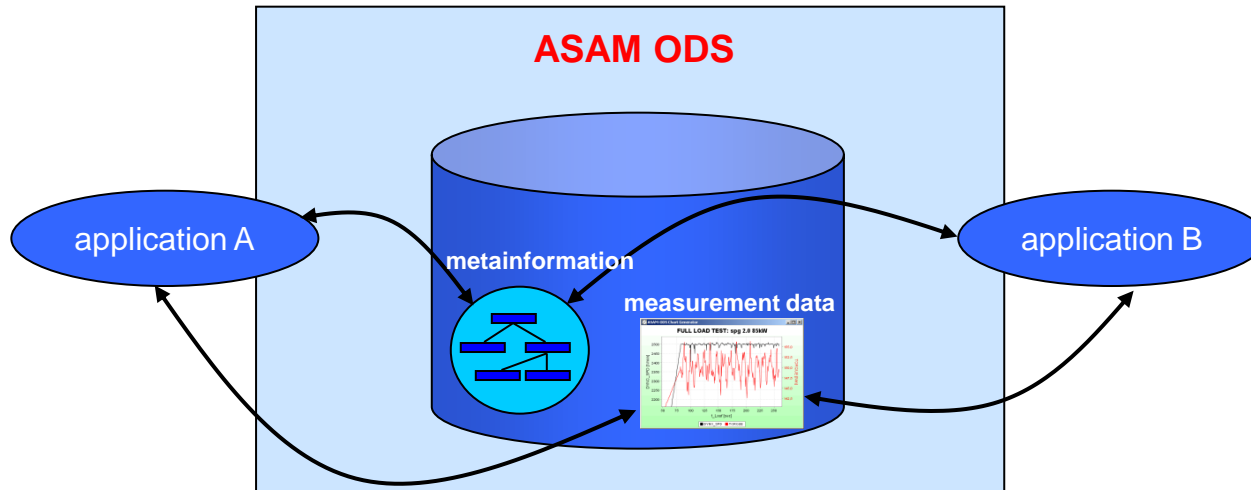
- ▶ ASAM ODS defines Application Programming Interfaces for a server. The server is a front end to a traditional database.
- ▶ The server is accessible via a TCP/IP computer network.



ASAM ODS 6.0.1

ASAM ODS defines

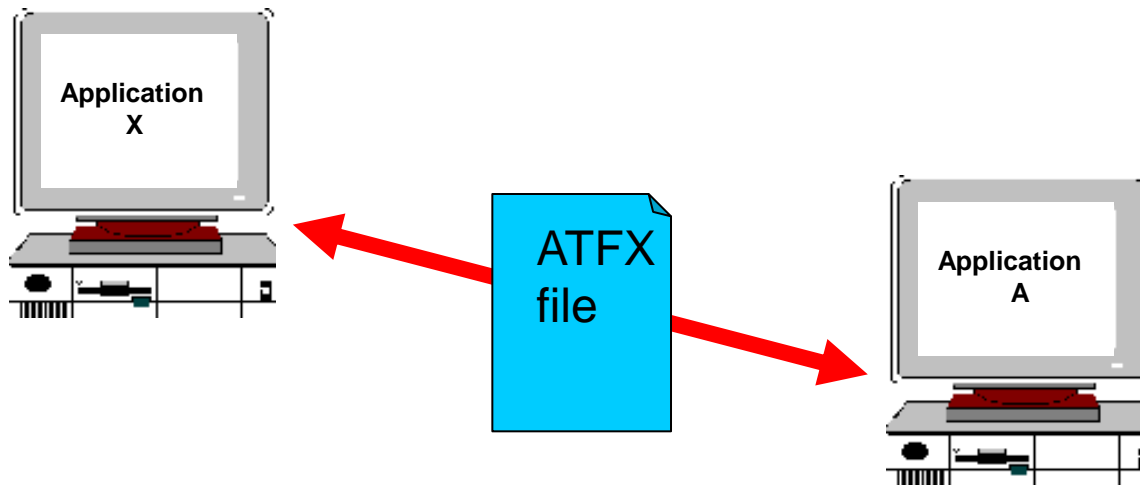
- ▶ a Basic Data Model which can be mapped to customer specific applications (engine test, brake test, engine calibration, ... etc.)
- ▶ a Meta Data Model enabling a client application to navigate through domain specific or application specific data structures



ASAM ODS 6.0.1

ASAM ODS defines

- ▶ a file format for the exchange of test result data



ASAM ODS 6.0.1

ASAM ODS

- ▶ defines data models for dedicated applications like
 - NVH data
 - Test stand calibration data
 - VSIM (crash test data model, provided by ISO)
 - Workflows
 - Geometry data
 - Bus data (New)
- ▶ supports gateways to foreign data formats

Marketing

The following feature will improve the ASAM marketing

HTTP - API

In addition to RPC and CORBA a HTTP-API has been specified

Major characteristics of the new API are:

- ▶ W3C HTTP transport protocol
- ▶ Binary & Json data serialization via Google Protocol Buffers 3.0
- ▶ W3C SSE notifications for change events
- ▶ Usable with reverse proxy

What's New?

ASAM ODS 6.0.1

HTTP-API

- ▶ Read and Set Context Variables
- ▶ Read Instances and Mass Data
- ▶ Read Value Matrix
- ▶ Create and Update Instances and Mass Data
- ▶ Copy Instances
- ▶ Delete Instances
- ▶ Read Write n:m Relations
- ▶ Transaction Handling
- ▶ Read and Manipulate Application Model
- ▶ Get Base Model
- ▶ Create ASAM Path
- ▶ Access Files
- ▶ Control Files by ODS Server
- ▶ Read and Update Security Settings
- ▶ Retrieve Notifications (POOL-mode and PUSH-mode)

What's New?

ASAM ODS 6.0.1

Notifications are possible in POOL- and PUSH-mode.

Source code examples for the main use cases are provided for

- ▶ C++
- ▶ C#
- ▶ JAVA
- ▶ JAVAnano
- ▶ PYTHON

What's New?

ASAM ODS 6.0.1

MDF4: Improvements of Interoperability

- ▶ Support of a set of conversion methods for numeric and textual information
Chapter 4 Base Model Conversion types:
 - ▶ value->value with interpolation
 - ▶ value->value without interpolation
 - ▶ valuerange->value
 - ▶ value->text
 - ▶ valuerange->text
- ▶ Added Preview storage definition
- ▶ Additional mimetypes and parameter definitions for quantities, which are used by external Components e.g. to handle preview channels
- ▶ Improved Rules for Integration of MDF Files as External Components
Chapter 2.3. in ASAM_CAT_ODS_BS-02-15_RelToOthers

Compatibility

ASAM ODS 6.0.1

- ▶ ASAM ODS 6.0.1 is fully compatible with the previous ODS 5.3.x standard