Release Presentation

ODS / P2015-03-CAT/ FVD, 6.0.0

ASAM ODS Version 6.0.0

Release Date: 2017 / 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

Deliverables
Specification

The following documents are technical references for ASAM ODS Version 6.0.0:

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

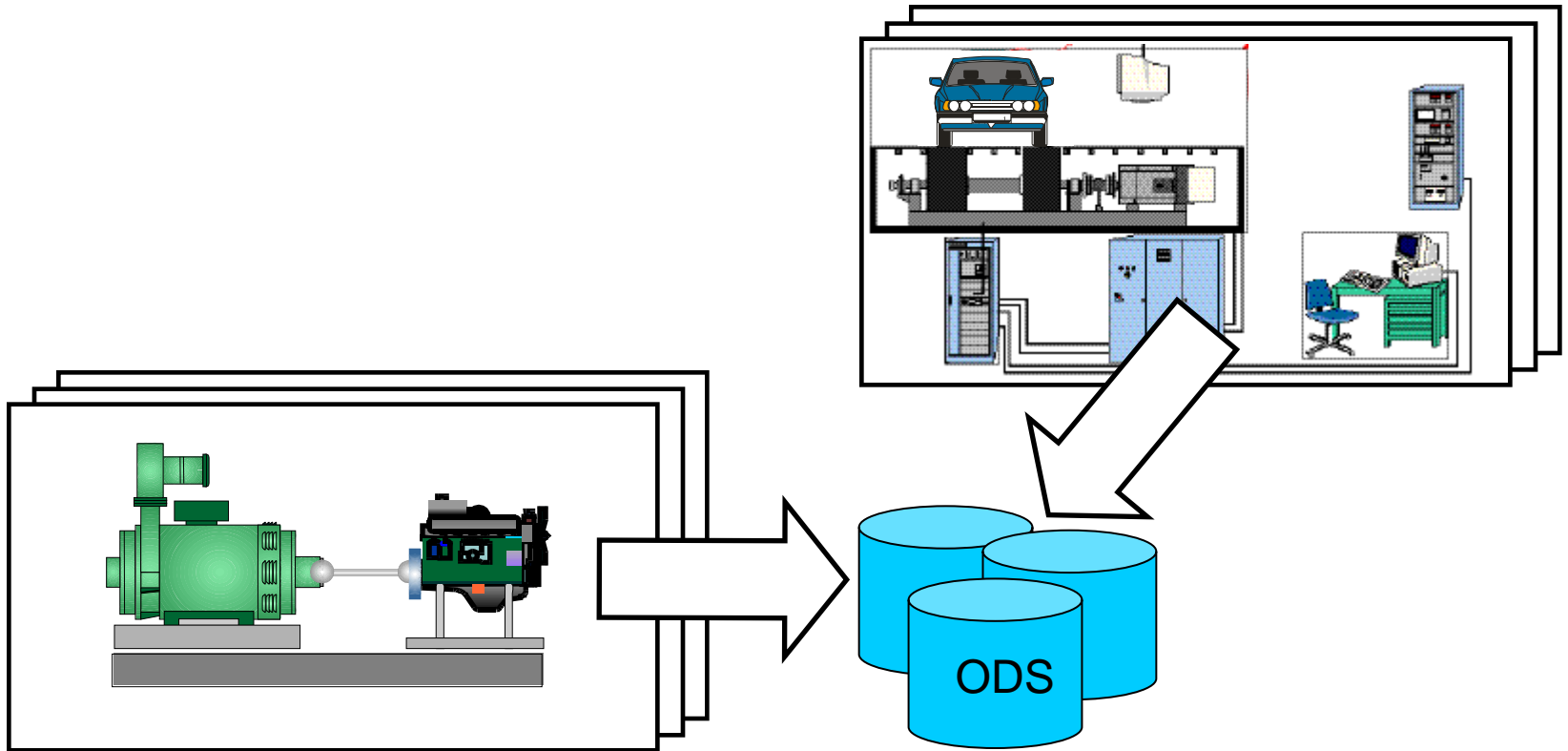## **Example Code Extended Query CORBA OO API**

‣ ExampleQueryCode.zip

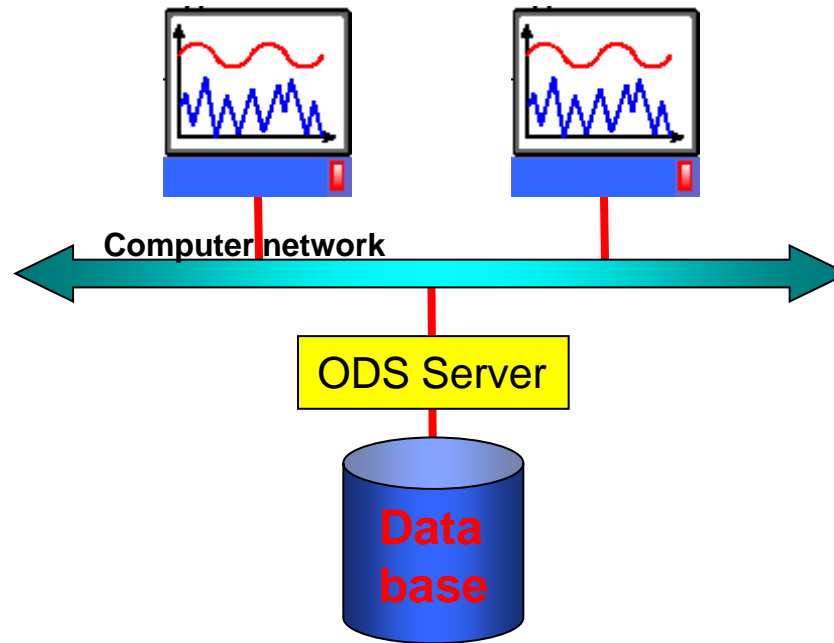## Example Code HTTP API

‣ ExampleCode_HTTP.zip

Introduction
ASAM ODS 6.0.0

‣ ASAM ODS is a standard for archiving test data persistently.

ASAM ODS 6.0.0

‣ 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.

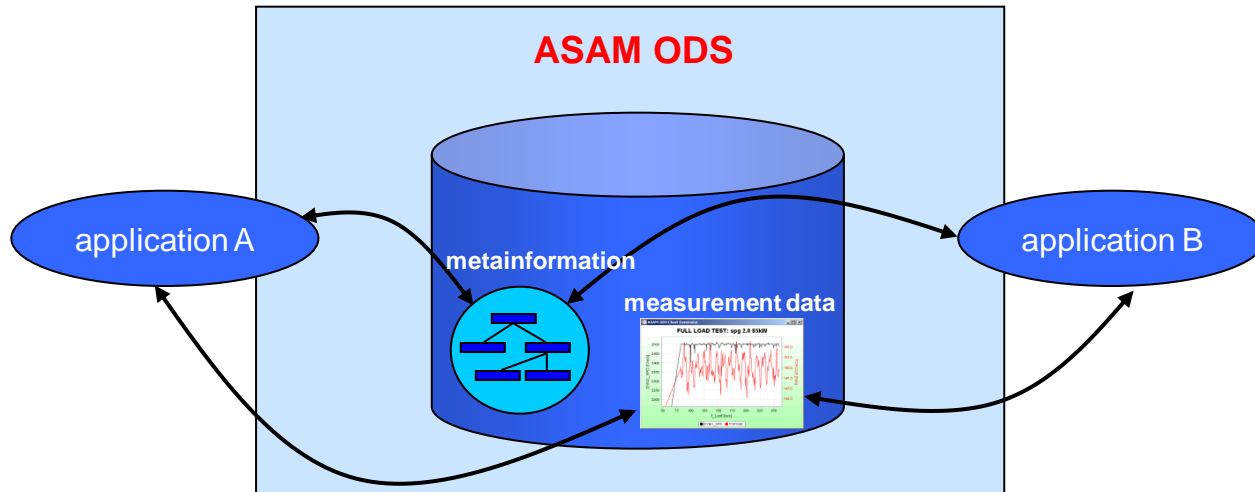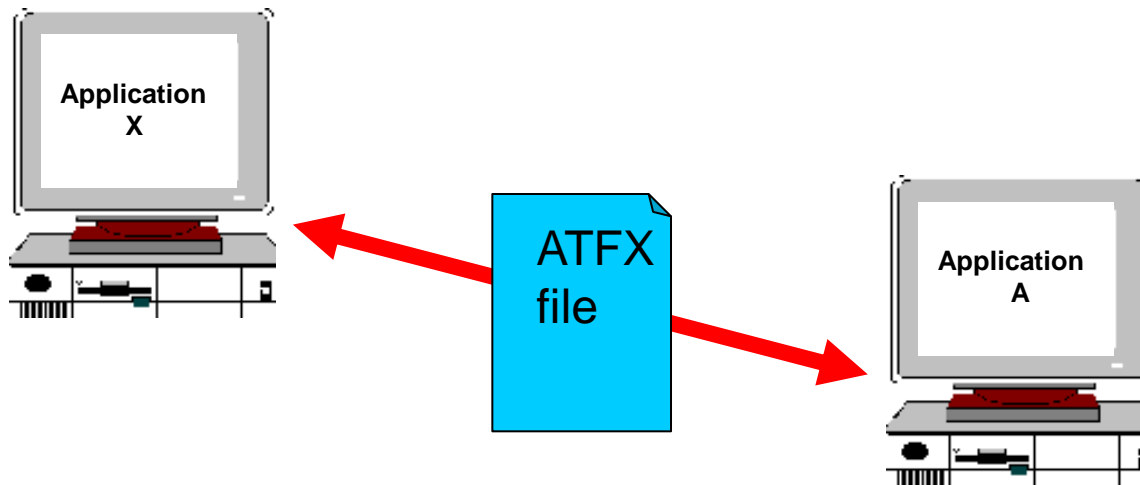# ASAM ODS 6.0.0

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 6.0.0

ASAM ODS defines

‣ a file format for the exchange of test result data

ASAM ODS 6.0.0

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 6.0.0

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 6.0.0

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 6.0.0

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 6.0.0

‣ ASAM ODS 6.0.0 is fully compatible with the previous ODS 5.3.x standard