



ASAM

Association for Standardization of
Automation and Measuring Systems

ASAM ODS

Open Data Services 6.1.0

Part 1 of 15

Introduction

Version 6.1.0

Date: 2020-01-01

Base Standard

Disclaimer

This document is the copyrighted property of ASAM e.V.
Any use is limited to the scope described in the license terms. The license terms can be viewed at www.asam.net/license

Table of Contents

Foreword	5
1 Introduction to ASAM ODS	7
1.1 Goals and Benefits of ASAM ODS	7
1.1.1 Positioning of ASAM ODS within ASAM	7
1.1.2 Drawbacks of Current Systems	9
1.1.3 Benefits of ASAM ODS	9
1.2 Technical Approach	11
1.2.1 The Data Model	11
1.2.2 The Interfaces	12
1.2.3 The Physical Storage	14
1.2.4 The ASAM Transport Formats (ATF)	15
1.2.5 Application Models	16
1.3 Impact on Products	17
1.4 Technological Level for Implementation	18
1.5 The ODS Data Model – A Deeper Insight	19
1.5.1 The Base Model	19
1.5.2 The Application Model	22
1.5.3 The Instances	24
1.6 The ODS Application Programming Interface (API) - A Deeper Insight	26
1.6.1 The HTTP-based API (HTTP-API)	29
1.6.1.1 The Entry Point	29
1.6.1.2 Access to the Application Model	29
1.6.1.3 Access to Descriptive and Mass Data	30
1.6.1.4 Transaction Handling	30
1.6.1.5 Miscellaneous Standard Functionality	30
1.6.1.6 Security Management Functionality	31
1.6.1.7 Notification Functionality	31
1.6.2 The Object-Oriented API (OO-API)	32
1.6.2.1 The Entry Point	32
1.6.2.2 Access to the Base Model	33
1.6.2.3 Access to the Application Model	34
1.6.2.4 Access to General Instances	34
1.6.2.5 Access to Result Data	35
1.6.2.6 Queries	36
1.6.3 The Procedural API (RPC-API)	37
1.7 The Physical Data Storage - A Deeper Insight	38
1.8 The ASAM Transport Format (ATF) - A Deeper Insight	42
1.8.1 ATF/CLA	43
1.8.2 ATF/XML	44
1.9 Application Models - A Deeper Insight	45
1.9.1 The NVH Application Model	45
1.9.2 The Calibration Application Model	45
1.9.3 The VSIM Application Model	45
1.9.4 The Geometry Application Model	46
1.9.5 The Workflow Application Model	46

1.9.6	The Bus Data Application Model	46
1.9.7	The Big Data Connector	46
	Figure Directory	48
	Table Directory	49