Association for Standardisation of
Automation and Measuring Systems

ASAM ACI

Automatic Calibration Interface

Part 1 of 2

Programmers Guide

Version 1.4.0

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Base Standard

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Foreword

ASAM ACI is used in the area of ECU optimization and power train calibration. The standard connects the automatic calibration systems to the test bed automation system (AUSY). The interface consists of an object-oriented, client-server API, which offers services that are requested by the ACS (the client) and carried out by the AUSY (the server).
The services allow the ACS to preset the test bed environment, request specific measurement tasks and retrieve the measurement values from the AUSY. Based on these services, an ACS can automatically run a set of predefined tests, modify tests based upon earlier test results and even modify ECU calibration parameters of the test bed environment. The AUSY encapsulate the different test bed environment parameters and measurements by channels.
ASAM ACI (Automatic Calibration Interface) defines an interface between test stand automation systems (AUSY) and automated calibration systems (ACS).
The standard consists of:

- an specification as part 1 of the standard (explanation of the basics and interrelations of the services)
- an UML model as definition of the object oriented API
- mapping rules (which define the transformation from the generic model to the specific interface reference; additionally, the usage of the CORBA name service is described) [1] and
- the idl file (as CORBA technology Interface reference for the implementation of the interface at Client and Server-Side). Client and server can use different idl file versions.

To read the model content without a specific software tool, a Programmers Reference Guide as part 2 of the standard is published. This Guide contains the information's from the whole model, as generated report.

[1] The Corba technology reference mapping rules are not part of this version package. They are referenced to version 1.3.1 [2]