ASAM CAT GDI AS PID V2.0.0

P 03/08 GDI/PID Maintenance 2008

Dates and Deliverables

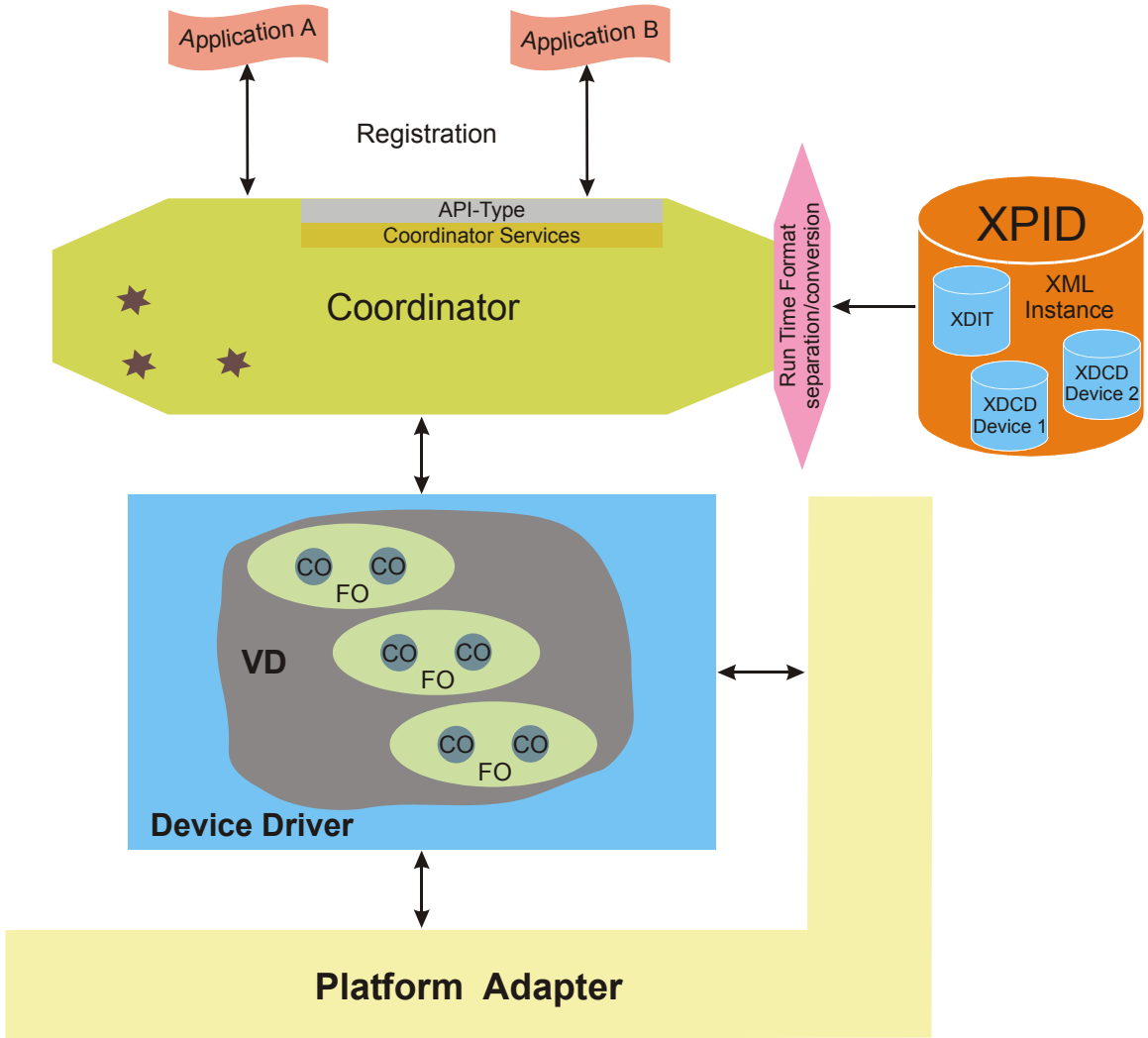
This version is seen as part of the ASAM GDI Base standard, for which reason it is named as Part 3 of this.

The Deliverable from 31.08.2009 contains:

- Specification document (named Programmers Guide PID),
- Templates and
- Example for GDI Demo

Introduction:

Usage of Parameterization Instance Description in GDI



Approach

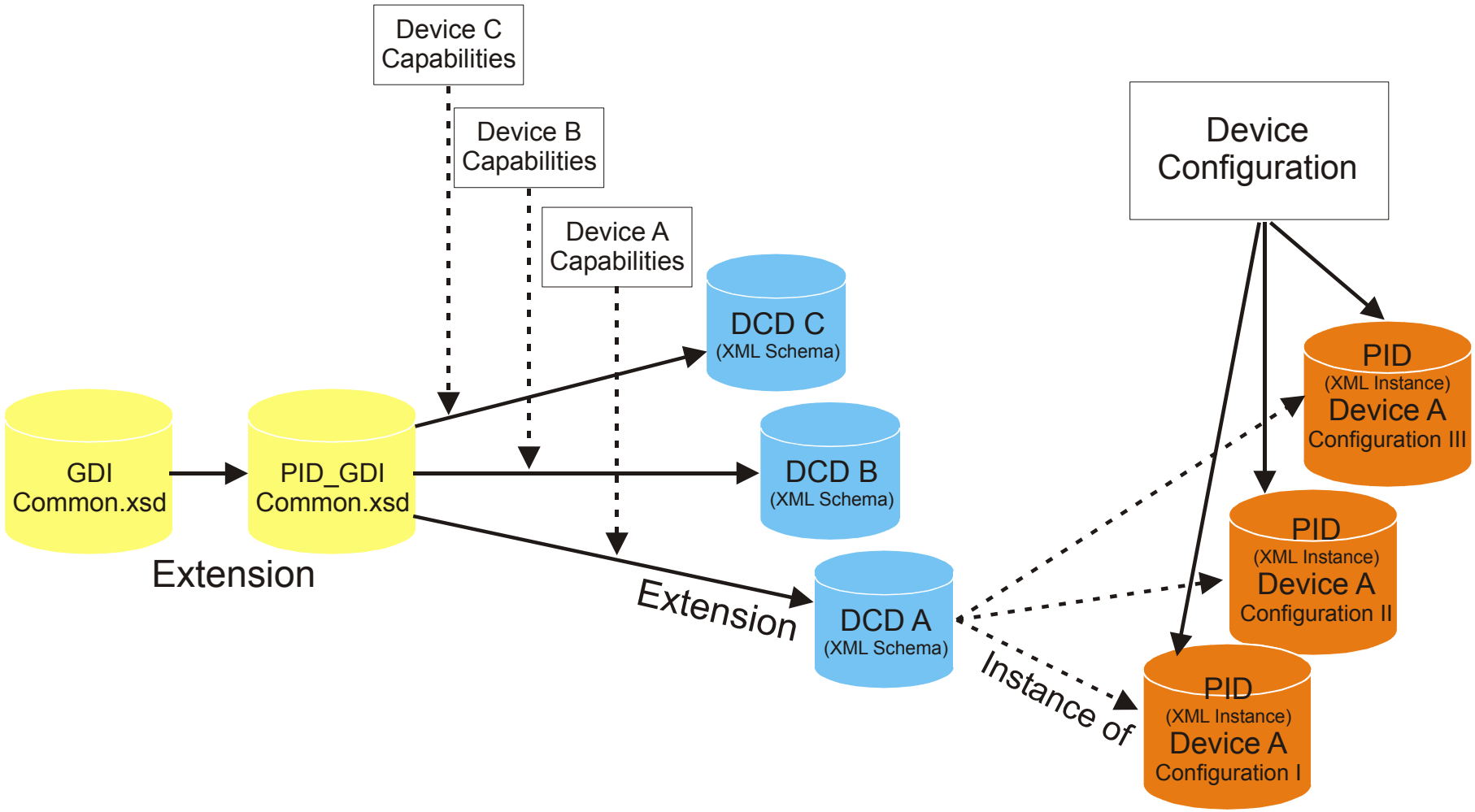
Goal

- Description of Device Capability
- Description of Device Information Text
- Definition of Parameterization Instance Description (values and sequences)

General

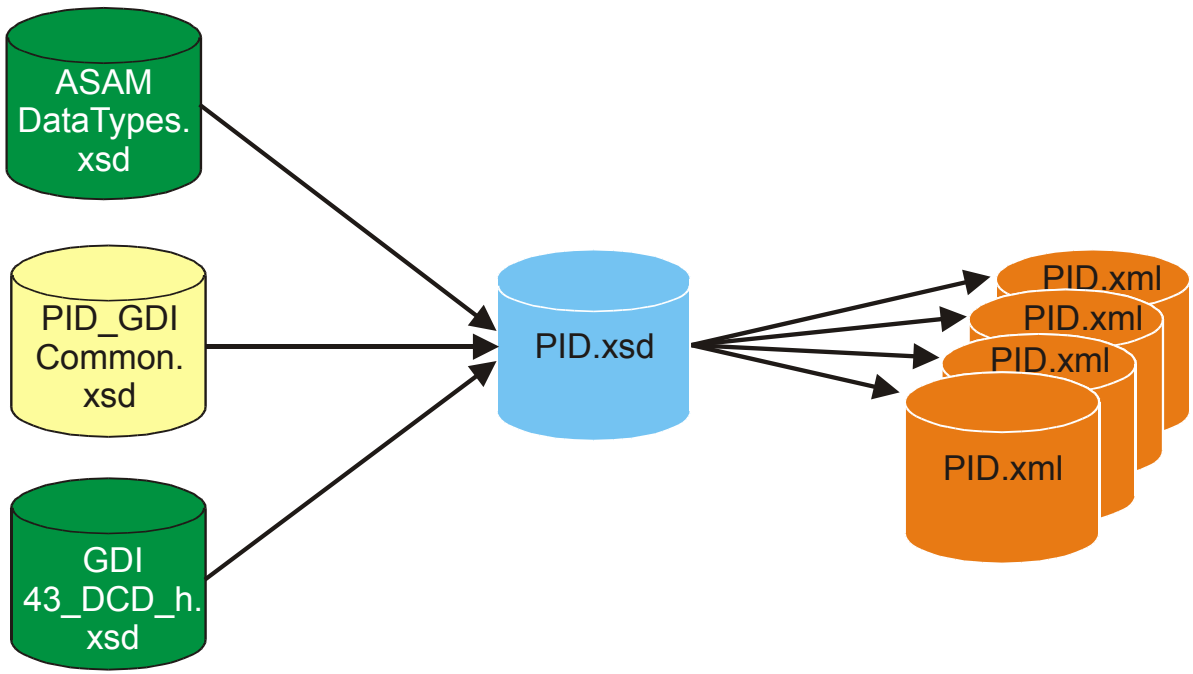
- Adjustment with ISO 20242-4 (General Part and Annex A), e.g. attribute naming
- Description of a Device Capability is independent from parameterization
- PID xsd is seen as a specialization of GDI xsd

Generation Process



Content

- PID as specialization of GDI contains description of Device Capabilities (classical DCD Content) and definition of Parameterization Description (instance names, initialization order [instance values and instantiation sequences])
- PID consist of one xsd DCD and multiple xml instances



What's New

- Class identification is done by category content and not by class naming
- ModuleControl is defined for compatibility reasons with IDL ASCII DCD
- Example GDI Demo uses an derivation from PID_GDICommon and shows different instances

Advantage

- Complete Offline Configuration possible
- Configuration is separated from generation of Device capability description
- Configuration can be created in multi step process
- Supplier specific information's can be easily added as extension of PID xsd and PID xml
- Real Class and Instance Names used for the objects
- Any data type can be used as ordered value

Compatibility Rules for xsd

- Description and parameterization can be realized for GDI Versions 4.3.2 and 4.4.0 (respective 4.5.0)

- GDI requires no derivation from GDICommon (if GDI Schema content, specified via category entries is contained in instance); The usage of ASAM DataTypes and THeader is required (both are not in ISO 20242-4)
- PID requires no derivation from PID_GDICommon (if PID GDI Schema content, specified via category entries is contained in instance); The usage of ASAM DataTypes and GDI43_dcd_H is required; ordered value shall be used in case of single and multiple initialization

Next Steps

The deliverable shall be integrated into the base standard (Version 4.5.0), which was considered at setup of PID specification