

Integration Manual Srv

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1 Introduction

1.1 General

For a general introduction to the BAC4 Platform Modules please refer to [1].

This document only describes topics related to the SWT BAC4 Module.

This Integration Manual describes the basis functionality, API and the configuration of the BMW system function Srv.

1.2 Functional overview

The Srv (Service) module contains some general purpose functions commonly used by other modules like Dlog, Prog and Bm. It is used in Application, Bootloader and Bootmanager.

2 Acronyms and Abbreviations

Abbreviation/Acronym	Description
AUTOSAR	Automotive Open System Architecture
BAC	BMW AUTOSAR Core
ECU	Electronic Control Unit

3 Related documentation

3.1 BMW Specifications

- [1] BAC4 General Concept for the Module Integration
BAC4_General_Concepts_for_the_Module_Integration.pdf

3.2 AUTOSAR Specifications

- [2] Specification of Diagnostic Communication Manager
AUTOSAR_SWS_DiagnosticCommunicationManager

4 Limitations

No limitations known.

5 Software Architecture

5.1 Dependencies on AUTOSAR modules

Dcm

The module Dcm [2] is needed for the type definition Dcm_ProgConditionsType.

5.2 Dependencies on BMW modules

6 Integration

6.1 Configuration of other Modules

Nothing to be done here.

6.2 Configuration

The Srv configuration contains the following containers:

- Srv General

6.2.1 General

This container contains the configuration (parameters) of the Srv module. Note that these configuration parameters also affect the configuration of other modules such as Dlog, Prog, etc.

6.2.1.1 HandleEccRam

This should be enabled if the hardware handles ECC errors in RAM.

6.2.1.2 HandleEccRom

This should be enabled if the hardware handles ECC errors in ROM.

6.2.1.3 MultiCpuEnable

This should be enabled if a multi CPU ECU is used. Note that communication to the slave CPUs is done via integrator/user defined functions. Please consult the corresponding modules' integration manuals for details about those functions.

6.2.1.4 FeatureSet

Defines the feature set that will be provided. For SRV_FS_BOOTMANAGER and SRV_FS_BLU it is reduced to save space in Bootmanager and Blu, respectively. Should be SRV_FS_FULL in Bootloader and Application.

6.3 Configuration of the RTE

No RTE needed.

6.4 Software Integration

6.4.1 Startup/Initialisation

Nothing to be done here.

6.4.2 Normal Operation

Nothing to be done here.

6.4.3 Shutdown/Deactivation

Nothing to be done here.