



# Release Notes StdDiagGeneric

Project BMW AUTOSAR Core 4 Rel. 3 and adaptive BMW AUTOSAR Core Rel. 1

Author BMW AG

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Version 5.3.0

Status Release

Hotline +49 89 382 - 32233 (classic) / +49 89 382 - 22522 (adaptive)

Contact bac@bmw.de (classic) / abac@bmw.de (adaptive)

https://asc.bmw.com/jira/browse/BSUP (extern) https://asc.bmwgroup.net/jira/browse/BSUP (intern)

### **Revision History**

Version	Date	Issues
5.3.0	2017-12-14	BAC-6628, BAC-6248
5.2.0	2017-11-09	BAC-6469, BAC-6249
5.1.1	2017-10-12	BAC-5176, BAC-6230, BAC-6241, BAC-6433
5.1.0	2017-08-10	BAC-6148, BAC-6134
5.0.0	2017-06-29	

Company Bayerische Motoren Werke Aktiengesellschaft

Postal address BMW AG 80788 München

Office address Forschungs- und Innovationszentrum (FIZ) Hufelandstr. 1

80937 München **Telephone** Switchboard +49 89 382-0

Internet www.bmwgroup.com

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### 1 Module Description

The main functionality of the StdDiag module is to handle the active session states ("subsessions") of the default diagnostic session and the extended diagnostic session. It ensures that the programming preparation process (i.e. the transition from the diagnostic default session via the extended diagnostic session to the programming session) is only successful, if the diagnostic requests are received in the correct sequence and all necessary preconditions are fulfilled. It also checks whether diagnostic requests shall be rejected or allowed in the different session states.

The StdDiag module also provides diagnostic service handlers for - clearing the secondary error memory - reading the active session state - reading the programming preconditions - reading the SGBD-Index - diagnostic communication loopback functionality - handling Diagnostic Log and Trace settings - handling IDRL basic functionality

#### 2 Revisions and Modifications

#### Revision 5.3.0 [Released]

Item	Description
CR ID:	BAC-6628
CR Headline:	Adapt generated code comment to new PAGe generator
Description of Issues:	Name of IDRL Client in comment of StdDiag_DIDArray is not generated correctly with latest PAGe version.
Description of Changes:	Adapt generation of comment to latest PAGe version.
Changed Files:	generate/src/StdDiag_Cfg.c.pgen
Compatibility:	

Item	Description
CR ID:	BAC-6248
CR Headline:	Provide callback mechanism to establish intrinsic safety
Description of Issues:	Provide an asynchronous callback mechanism to establish intrinsic
	safety for long running user callouts.
Description of Changes:	Provided callback interfaces for long running applications.
Changed Files:	include/StdDiag.h
	src/StdDiag_ProgPreparation.c
Compatibility:	

### Revision 5.2.0 [Released]

Item	Description
CR ID:	BAC-6469
CR Headline:	StdDiag: Extended Session handling
Description of Issues:	Flash Acceptance Test (FAT) fails due to wrong session states after processing diagnostic requests to change (extended) energy mode.





Description of Changes:	Corrected active session states depending on energy mode settings.
Changed Files:	src/StdDiag_ProgPreparation.c
Compatibility:	

Item	Description
CR ID:	BAC-6249
CR Headline:	Provide PostBuild configuration of SGBD-Index
Description of Issues:	Parameter "StdDiagSgbdIndex" shall be post build selectable.
Description of Changes:	Moved parameter "StdDiagSgbdIndex" to adapter part and add
	post build support.
Changed Files:	include/StdDiag.h
	CMakeLists.txt
	cfgdesc/StdDiag_paramdef.arxml
	src/StdDiag_SgbdIndex.c
	generate/include/StdDiag_Cfg.h.pgen
Compatibility:	

# Revision 5.1.1 [Released]

Item	Description
CR ID:	BAC-5176
CR Headline:	BAC modules paramdef violate TPS_ECUC_06004
Description of Issues:	According to AUTOSAR_TPS_ECUConfiguration TPS_ECUC_06004 an AdminData field is required at the beginning of every ECU Configuration Parameter Definition XML file.
Description of Changes:	Added AdminData field containing module version and release date.
Changed Files:	cfgdesc/StdDiag_paramdef.arxml
Compatibility:	

Item	Description
CR ID:	BAC-6230
CR Headline:	Usage of IMPLEMENTATION-CONFIG-CLASSES in BMW modules is invalid according to ASR4.2.2
Description of Issues:	Elements IMPLEMENTATION-CONFIG-CLASSES containing ECUC-IMPLEMENTATION-CONFIGURATION-CLASS are deprecated. They shall be replaced by VALUE-CONFIG-CLASSES/ECUC-VALUE-CONFIGURATION-CLASS and/or MULTIPLICITY-CONFIG-CLASSES/ECUC-MULTIPLICITY-CONFIGURATION-CLASS
Description of Changes:	Replaced IMPLEMENTATION-CONFIG-CLASSES by VALUE-CONFIG-CLASSES, added MULTIPLICITY-CONFIG-CLASSES where necessary.
Changed Files:	cfgdesc/StdDiag_paramdef.arxml





Compatibility:	
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Item	Description
CR ID:	BAC-6241
CR Headline:	StdDiag: wrong NegReponseCode for \$10 02 in default session
Description of Issues:	Diagnostic request to switch from default to programming session
	is answered with wrong negative response code.
Description of Changes:	Corrected negative response code from 0x7F
	(ServiceNotSupportedInActiveSession) to 0x7E
	(SubFunctionNotSupportedInActiveSession)
Changed Files:	src/StdDiag_ProgPreparation.c
Compatibility:	

Item	Description
CR ID:	BAC-6433
CR Headline:	Schema of paramdefs, paramconfs and SWCDen should be AUTOSAR_4-3-0_STRICT_COMPACT.xsd
Description of Issues:	Schema of parameter definition files and SWCDs should be conform to AUTOSAR_4-3-0_STRICT_COMPACT.xsd
Description of Changes:	Adapted parameter definition files and SWCDs to schema AUTOSAR_4-3-0_STRICT_COMPACT.
Changed Files:	cfgdesc/StdDiag_paramdef.arxml
Compatibility:	

## Revision 5.1.0 [Released]

Item	Description
CR ID:	BAC-6148
CR Headline:	StdDiag: Programming Precondition Check shall not fail in case of missing PWF status
Description of Issues:	Programming Precondition Check fails if no PWF signal is available.
Description of Changes:	Accept unknown PWF state as valid Programming Precondition.
Changed Files:	src/StdDiag_ProgPreparation.c
	include/StdDiag_StmAdapter.h
Compatibility:	

Item	Description
CR ID:	BAC-6134
CR Headline:	StdDiag: Svkaktuell fails in extendedSession.FlashModeActivated
Description of Issues:	RDBI-Job fails with ConditionsNotCorrect in Status
	ExtendedSession.FlashModeActivated.
Description of Changes:	Allowed execution of all RDBI jobs in any state.
Changed Files:	src/StdDiag_ProgPreparation.c
Compatibility:	





## Revision 5.0.0 [Released]

Item	Description
CR ID:	
CR Headline:	Initial Release for SP2021
Description of Issues:	Initial Release for SP2021
Description of Changes:	Initial Release for SP2021
Changed Files:	
Compatibility:	