# Release Notes Vin

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|---|---|
| Project | BMW AUTOSAR Core 4 Rel. 2 |
| Author | BMW AG |
| Release Date | 2017-02-23 |
| Version | 3.5.0 |
| Status | Release |
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## Revision History

| Version | Date | Issues |
|---|---|---|
| 3.5.0 | 2017-02-23 | BAC-5764, BAC-5691 |
| 3.4.2 | 2016-10-27 | BAC-5544, BAC-5437 |
| 3.4.1 | 2016-08-25 | BAC-5426, BAC-5407, BAC-5399, BAC-5286, BAC-5198 |
| 3.4.0 | 2016-03-17 | BAC-5049, BAC-5031, BAC-4928 |
| 3.3.0 | 2015-12-11 | BAC-4763, BAC-4756, BAC-4702, BAC-4629, BAC-4562 |
| 3.2.0 | 2015-07-10 | BAC-4471, BAC-4409, BAC-4349, BAC-4345, BAC-4335, BAC-4266, BAC-4265, BAC-4230, BAC-4163, BAC-4129, BAC-3558 |
| 3.1.0 | 2015-03-13 | BAC-4108, BAC-3980, BAC-3927, BAC-3868, BAC-3861, BAC-3822, BAC-3658 |
| 3.0.0 | 2014-10-29 | |

# 1   Package Enumeration Scheme

Every package carries a 3-digit version number. The following table explains how compatibility between versions can be determined from the version number:

| Changed Version | Example | Compatibility |
|---|---|---|
| Patch Version | 1.0.0 → 1.0.1 | A defect has been fixed. Versions are fully compatible. |
| Minor Version | 1.0.0 → 1.1.0 | API of package changed or a new feature was added. Versions may not be compatible. If the new package is used, other packages may be changed as well. |
| Major Version | 1.0.0 → 2.0.0 | Indicates the BAC4 Release, in which the module is delivered. Major Version 2 of a module refers to BAC4 Rel. 1. Major Version 3 of a module refers to BAC4 Rel. 2. |

# 2   Package Description

The Vin module is used to request the VIN over the bus, set the qualifier and hand it over to application software components.

This package is maintained by BMW AUTOSAR Core 4 Support, via ASCENT Jira (https://asc.bmwgroup.net/jira/browse/BSUP or https://asc.bmw.com/jira/browse/BSUP) or telephone hotline (+49-89-382-32233).

# 3   Revisions and Modifications

## 3.1   Revision 3.5.0 [Released]

| Item | Description |
|---|---|
| CR ID: | BAC-5764 |
| CR Headline: | Vin: Inter-ECU communication with SYNCHRONOUS-SERVER-CALL-POINT considered harmful |
| Description of Issues: | The RUNNABLE-ENTITY "Vin_SIAChallenge" uses a SYNCHRONOUS-SERVER-CALL-POINT "scp_generateAuthenticationCo" with TIMEOUT "0.0" for inter-ECU communication. This may cause the executing task to wait for ever, making it necessary to map the invoking DATA-RECEIVED-EVENT "dre_Challenge" to its own exclusive extended task, because other events mapped to the same task would never get executed if the communication is not finished. Please check for alternatives. |

| Description of Changes: | use asynchronous server call point for ChassisNumberAuthentication/generateAuthenticationCode |
|---|---|
| Changed Files: | generate/swcd/Vin_internal.arxml.tt<br>src/Vin_SIAdapter.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-5691 |
| CR Headline: | Signed message is requested only once |
| Description of Issues: | Signed message is requested only once |
| Description of Changes: | request MAC multiple times before going into error state |
| Changed Files: | generate/include/Vin_Cfg.h.tt<br>src/Vin_Ssv.c |
| Compatibility: | |

## 3.2   Revision 3.4.2 [Released]

| Item | Description |
|---|---|
| CR ID: | BAC-5544 |
| CR Headline: | Do not request MAC/Counterbase before reception of the VIN |
| Description of Issues: | Do not request MAC/Counterbase before reception of the VIN |
| Description of Changes: | Do not request MAC/Counterbase before reception of the VIN |
| Changed Files: | src/Vin.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-5437 |
| CR Headline: | Vin IntegrationManual: NvMNvBlockLength might depend on compiler |
| Description of Issues: | The values for NvMNvBlockLength given in the IntegrationManuals might be incorrect (depending on compiler optimisation). |
| Description of Changes: | Add a note on NVM block length in integration manual |
| Changed Files: | doc/IntegrationManual_Vin.pdf |
| Compatibility: | |

## 3.3   Revision 3.4.1 [Released]

| Item | Description |
|---|---|
| CR ID: | BAC-5426 |
| CR Headline: | VIN: Integration Manual: NvMBlockWriteProt true |
| Description of Issues: | In Integration Manual you can find:<br>NvMBlockWriteProt true<br>but Vin module cannot handle this |
| Description of Changes: | fix NVM configuration |
| Changed Files: | doc/IntegrationManual_Vin.pdf |

| Compatibility: | |
|---|---|

| Item | Description |
|---|---|
| CR ID: | BAC-5407 |
| CR Headline: | VIN: missing memory mapping of the code in Vin_Dlog.c and Vin_SIAdapter.c. |
| Description of Issues: | Missing memory mapping of the code in Vin_Dlog.c and Vin_SIAdapter.c. |
| Description of Changes: | Add missing memory mapping. |
| Changed Files: | src/Vin_Dlog.c<br>src/Vin_SIAdapter.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-5399 |
| CR Headline: | VIN: Vin_CurrentVin.Vin not initalized in VinInit |
| Description of Issues: | As Vin_CurrentVin.Vin is not initialized during c-startup ( Vin_START_SEC_VAR_NO_INIT_UNSPECIFIED) and not initialized in Vin_init, a reset does not clear the containing last received VIN. At next startup (without power-loss) the variable still contains the VIN. Therefore the reception of the bus-vin via Vin_ReceiveFromCom is ignored and Vin_NotifyVinReceived() is not called.<br>A call of Vin_ReceiveFromCom before Vin_Init also leads to this problem. |
| Description of Changes: | Always handle received VIN, if no VIN has been received before. |
| Changed Files: | src/Vin_Com.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-5286 |
| CR Headline: | Vin: Memcopy from struct to array |
| Description of Issues: | Using memcopy to copy data from an struct to an array is not allowed. |
| Description of Changes: | Copy single elements of struct to array instead of using memcpy. |
| Changed Files: | src/Vin_Com.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-5198 |
| CR Headline: | Please remove UUIDs |
| Description of Issues: | remove UUIDs in arxml files |
| Description of Changes: | remove UUIDs in arxml files |
| Changed Files: | generate/swcd/Vin_internal.arxml.tt |
| Compatibility: | |

## 3.4 Revision 3.4.0 [Released]

| Item | Description |
|---|---|
| CR ID: | BAC-5049 |
| CR Headline: | Vin: Write frequency of NVM blocks shall be specified in integration manual |
| Description of Issues: | For correct configuration/wearing estimation of flash, the write frequency of BAC modules for their specified NvM blocks shall be specified. Although most of the time NO exact number can be given as it is ECU, use case, environment (customer behaviour) specific a rough information should be given, that allows the integrator to make a conclusion on that. |
| Description of Changes: | Specify write frequency of NVM blocks in integration manual. |
| Changed Files: | doc/IntegrationManual_Vin.pdf |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-5031 |
| CR Headline: | Use getter method to get the VIN in case it is not delivered upon subscription |
| Description of Issues: | Use getter method to get the VIN in case it is not delivered upon subscription on Ethernet. |
| Description of Changes: | Use getter method to get the VIN in case it is not delivered upon subscription on Ethernet. |
| Changed Files: | autosar/Asr40/Vin_paramdef.arxml<br>generate/include/Vin_Cfg.h.tt<br>generate/make/Vin_Cfg.mak.tt<br>generate/swcd/Vin_internal.arxml.tt<br>generate/verify/Vin.autoverify.tt<br>src/Vin_SlAdapter.c<br>swcd/Vin_interfaces.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4928 |
| CR Headline: | Challenge shall not be reversed on Ethernet |
| Description of Issues: | Challenge shall not be reversed on Ethernet |
| Description of Changes: | do not reverse challenge on Ethernet |
| Changed Files: | src/Vin_Ssv.c |
| Compatibility: | |

## 3.5 Revision 3.3.0 [Released]

| Item | Description |
|---|---|
| CR ID: | BAC-4763 |
| CR Headline: | Vin: Naming of Rte_Write function is wrong |

| Description of Issues: | The name of function Rte_Write_Vin_SSVErrorCode_ErrorCode is wrong. |
|---|---|
| Description of Changes: | correct Rte_Write_Vin_SSVErrorCode_ErrorCode to Rte_Write_SSVErrorCode_ErrorCode |
| Changed Files: | src/Vin_Ssv.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4756 |
| CR Headline: | Vin: IntegrationManuals: signal names for Ethernet |
| Description of Issues: | Currently, the IntegrationManuals are using signal short names as given in the DBN / BNE for Can/Flexray communication. The names for ethernet are different and can't always be found without greater effort. |
| Description of Changes: | added a note on the signal names in Ethernet |
| Changed Files: | doc/IntegrationManual_Vin.pdf |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4702 |
| CR Headline: | Vin: Adapt ECUC and SWCD schema to 4.2.2 |
| Description of Issues: | Adapt ECUC and SWCD schema to 4.2.2 |
| Description of Changes: | Adapt ECUC and SWCD schema to 4.2.2 |
| Changed Files: | autosar/Asr40/Vin_paramdef.arxml<br>generate/swcd/Vin_internal.arxml.tt<br>swcd/Vin_ext_interfaces.arxml<br>swcd/Vin_interfaces.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4629 |
| CR Headline: | Integration Manual Vin: P-Port VinRequest |
| Description of Issues: | Mapping of P-Port VinRequest is not clear |
| Description of Changes: | clarify data mapping in integration manual |
| Changed Files: | doc/IntegrationManual_Vin.pdf |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4562 |
| CR Headline: | Vin: ID_FN_INQY change in BNE |
| Description of Issues: | For SP2018, ID_FN_INQY has changed: - the comment "ACHTUNG: Dieses Signal bildet bezüglich des Byte-Orderings eine Ausnahme ..." is deleted in the Message Katalog - the byte order of the values in the code table for ID_FN_INQY are changed (e.g. the code value for "Fahrgestellnummer" is changed from 0x0380 to 0x8003) |

| Description of Changes: | Switched endianess in default values of VinRequestMessageIdentifier and SecureVinRequestMessageIdentifier. |
|---|---|
| Changed Files: | autosar/Asr40/Vin_paramdef.arxml |
| Compatibility: | |

## 3.6  Revision 3.2.0 [Released]

| Item | Description |
|---|---|
| CR ID: | BAC-4471 |
| CR Headline: | Not receiving the MAC is should not be considered an error for the SSV |
| Description of Issues: | Not receiving the MAC is should not be considered an error for the SSV -] Qualifier should remain in pending in this case. |
| Description of Changes: | Do not consider not receiving the MAC an error for the SSV, i.e. do not go into an error state |
| Changed Files: | src/Vin_Ssv.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4409 |
| CR Headline: | Support runnables in concurrent tasks |
| Description of Issues: | Support runnables in concurrent tasks |
| Description of Changes: | Support runnables in concurrent tasks |
| Changed Files: | generate/swcd/Vin_internal.arxml.tt<br>include/Vin.h<br>src/Vin.c<br>src/Vin_Com.c<br>src/Vin_Ssv.c<br>swcd/Vin_interfaces.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4349 |
| CR Headline: | Vin: Missing INIT-VALUE |
| Description of Issues: | RTE51034 Unconnected data element prototoype 'Flag' of port 'FscsmVK_Established' of component 'Vin' does not provide an initial value. |
| Description of Changes: | added init value to FscsmVK_Established |
| Changed Files: | generate/swcd/Vin_internal.arxml.tt |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4345 |
| CR Headline: | Vin: Helper macros not compliant with SW-C design |
| Description of Issues: | Vin_Helper.h shall include only Vin_Version.h. |

| Description of Changes: | include only Vin_Version.h in Vin_Helper.h |
|---|---|
| Changed Files: | include/Vin_Helper.h |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4335 |
| CR Headline: | Dlog, Fscsm, Swt, Vin: All [Module]_ext_interfaces.arxml should be conform to AUTOSAR Blueprint |
| Description of Issues: | All Types, CompuMethods, Interfaces etc. in [Module]_ext_interfaces.arxml shall be defined according to the definitions in the AUTOSAR Blueprint for BSWServiceInterfaces. In particular ImplementationDataTypes shall have category TPYE_REFERENCE instead of VALUE. |
| Description of Changes: | use TYPE_REFERENCE instead of VALUE for implementation data types |
| Changed Files: | swcd/Vin_ext_interfaces.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4266 |
| CR Headline: | Transmission acknowledgment for 1:n communication not supported |
| Description of Issues: | Transmission acknowledgment for 1:n communication not supported |
| Description of Changes: | remove unnecessary TRANSMISSION-ACKNOWLEDGE |
| Changed Files: | generate/swcd/Vin_internal.arxml.tt |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4265 |
| CR Headline: | add Vin_ChangeIndicator |
| Description of Issues: | add Vin_ChangeIndicator as described by BAC-1921 and requested by BSUP-3669. |
| Description of Changes: | added Vin_ChangeIndicator as described by BAC-1921 and requested by BSUP-3669. |
| Changed Files: | generate/swcd/Vin_internal.arxml.tt<br>include/Vin_Helper.h<br>src/Vin.c<br>src/Vin_Com.c<br>src/Vin_Ssv.c<br>swcd/Vin_interfaces.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4230 |
| CR Headline: | Make max number of VIN requests configurable |

| Description of Issues: | Make max number of VIN requests configurable. |
|---|---|
| Description of Changes: | Make max number of VIN requests configurable. |
| Changed Files: | autosar/Asr40/Vin_paramdef.arxml<br>generate/include/Vin_Cfg.h.tt<br>generate/verify/Vin.autoverify.tt<br>src/Vin.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4163 |
| CR Headline: | Vin: Remove R-Port "LifeCycleLoopback", change P-Port "LifeCycle" to PR-Port |
| Description of Issues: | Remove R-Port "LifeCycleLoopback", change P-Port "LifeCycle" to PR-Port. |
| Description of Changes: | remove R-Port LifeCycleLoopBack and use PR-Port for LifeCycle instead |
| Changed Files: | generate/swcd/Vin_internal.arxml.tt |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-4129 |
| CR Headline: | Make SSV-ld postbuild configurable |
| Description of Issues: | Make SSV-ld postbuild configurable |
| Description of Changes: | Make SSV-ld postbuild configurable |
| Changed Files: | autosar/Asr40/Vin_paramdef.arxml<br>generate/include/Vin_Cfg.h.tt<br>generate/include/Vin_PBCfg.h.tt<br>generate/src/Vin_PBCfg.c.tt<br>generate/verify/Vin.autoverify.tt<br>make/Vin_defs.mak<br>make/Vin_rules.mak<br>sample/include/Vin_MemMap.h.sample<br>src/Vin_Ssv.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-3558 |
| CR Headline: | Vin: Extention of VIN-Request for Ethernet |
| Description of Issues: | The Vin module shall support also Ethernet. |
| Description of Changes: | - add SI adapter SWC - adapted request behavior to SI adapter - added configuartion switch to enable or disable SI adapter |
| Changed Files: | autosar/Asr40/Vin_paramdef.arxml<br>generate/include/Vin_Cfg.h.tt<br>generate/make/Vin_Cfg.mak.tt<br>generate/swcd/Vin_internal.arxml.tt<br>generate/verify/Vin.autoverify.tt |

| | | |
|---|---|---|
| | make/Vin_defs.mak make/Vin_rules.mak src/Vin_SlAdapter.c src/Vin_Ssv.c swcd/Vin_interfaces.arxml | |
| Compatibility: | | |

## 3.7 Revision 3.1.0 [Released]

| Item | Description |
|---|---|
| CR ID: | BAC-4108 |
| CR Headline: | VIN: VIN becomes invalid if one single signal is invalid |
| Description of Issues: | The received VIN should be marked as invalid if one ore more single signal contains '0xFF' (invalid content). Currently the VIN is only marked as invalid if all single signals contains '0xFF'. |
| Description of Changes: | ignore VIN, if one signal is invalid |
| Changed Files: | src/Vin_Com.c |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-3980 |
| CR Headline: | Move SSV from Fscsm to Vin |
| Description of Issues: | Move SSV from Fscsm to Vin |
| Description of Changes: | Move SSV from Fscsm to Vin |
| Changed Files: | Makefile autosar/Asr40/Vin_paramdef.arxml generate/include/Vin_Cfg.h.tt generate/include/Vin_Version.h.tt generate/swcd/Vin_internal.arxml.tt generate/verify/Vin.autoverify.tt include/Vin.h include/Vin_Dlog.h include/Vin_Helper.h include/Vin_Ssv.h make/Vin_check.mak make/Vin_defs.mak make/Vin_rules.mak sample/include/Vin_MemMap.h.sample src/Vin.c src/Vin_Com.c src/Vin_Dlog.c src/Vin_Fscsm.c src/Vin_Ssv.c swcd/Vin_ext_interfaces.arxml swcd/Vin_interfaces.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-3927 |
| CR Headline: | Correct ConfigClass to PRE-COMPILE |
| Description of Issues: | The ConfigClass of parameters TimeoutInitialVinRequest and TimeoutSubsequentVinRequests should be PRE-COMPILE instead of PUBLISHED-INFORMATION. |
| Description of Changes: | set config class to PRE-COMPILE for TimeoutInitialVinRequest and TimeoutSubsequentVinRequests |
| Changed Files: | autosar/Asr40/Vin_paramdef.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-3868 |
| CR Headline: | Dlog, StbMBTestClient, Swt, Vin: DataTypes of ModeSwitch and ModeRequest interfaces |
| Description of Issues: | For ModeSwitch-Interfaces and ModeRequest-Interfaces (S/R-Interface) related to the same ModeDeclarationGroup the following shall apply: the data type of the VariableDataPrototype of the ModeRequest-Interface (S/R-interface) shall be identical to the ImplementationDataType that the ModeDeclarationGoup is mapped to via a ModeRequestTypeMap. this ImplementationDataType shall be extended with an ENUM-like CompuMethod that corresponds to the Modes of the ModeDeclarationGroup the ModeDeclarationGroup shall have EXPLICIT_ORDER, the modes shall have values according to the corresponding CompuMethod if the APIs Rte_Switch_...() or Rte_Write_...() are called with literal values, only the literal values RTE_MODE_[ModeDeclarationGroup]_[ModeDeclaration] shall be used. variables used in context of the APIs Rte_Switch_...(), Rte_Mode_...(), Rte_Read_...() and Rte_Write_...() shall be of the same ImplementationDataType, and shall only be set to or be compared with literal values RTE_MODE_[ModeDeclarationGroup]_[ModeDeclaration] the type Rte_ModeType_[ModeDeclarationGroup] is deprecated and shall not be used. Exceptions: if the mode requestor does not reference the ModeDeclarationGroup, the enumeration macros [EnumLiteral] derived from the CompuMethod can be used to request a mode via Rte_Write_...() (in this case the macros RTE_MODE_[ModeDeclarationGroup]_[ModeDeclaration] are not visible for the requestor) if the mode manager does not provide a ModeRequest-Interface: a CompuMethod is not necessary the category of the ModeDeclarationGroup can be either ALPHABETIC_ORDER (default) or EXPLICIT_ORDER the ModeRequestTypeMap can map the ModeDeclarationGroup directly to a platform type like uint8 or uint16 |

| Description of Changes: | - use explicit order for mode declaration groups - use RTE_MODE... constants for evaluating mode values |
|---|---|
| Changed Files: | src/Vin.c<br>swcd/Vin_interfaces.arxml |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-3861 |
| CR Headline: | Vin: Content of tag [VENDOR-ID] in *_internal.arxml |
| Description of Issues: | The [VENDOR-ID] in *_internal.arxml shall be set to 5 (i.e. BMW Vendor-Id). |
| Description of Changes: | change vendor id to 5 |
| Changed Files: | generate/swcd/Vin_internal.arxml.tt |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-3822 |
| CR Headline: | Vin User Guide contains a TODO |
| Description of Issues: | Vin user guide contains:<br>4.2 Evaluating the Qualifier TODO |
| Description of Changes: | add content to section 4.2 "Evaluating the Qualifier"." |
| Changed Files: | doc/UserGuide_Vin.pdf |
| Compatibility: | |

| Item | Description |
|---|---|
| CR ID: | BAC-3658 |
| CR Headline: | Vin: Adapt makefiles to EA requirements |
| Description of Issues: | Adapt makefiles to EA requirements |
| Description of Changes: | Adapt makefiles to EA requirements |
| Changed Files: | make/Vin_defs.mak |
| Compatibility: | |

## 3.8 Revision 3.0.0 [Released]

| Item | Description |
|---|---|
| CR ID: | |
| CR Headline: | Initial Release for SP2018 |
| Description of Issues: | Initial Release for SP2018 |
| Description of Changes: | Initial Release for SP2018 |
| Changed Files: | |
| Compatibility: | |