Issue Report

License Number	Customer
CBD1700369	Nexteer Automotive Corporation Package: MSR BAC 4.x - ECU product "Electric Power Steering"

Maintenance Expiry Date

2018-08-01

SIP Version

19.06.14

SLP	Delivery Number
MSR BAC 4.x	D04

Report Creation Date

2018-01-30

Contact

In case of questions or the need for an update of the basic software delivery, please contact EmbeddedSupport@us.vector.com or your Vector contact person.

Table of Contents

1. Introduction

1.1 Resolving Issues

Reported issues are not automatically fixed with the next update delivery.
If a reported issue shall be fixed, please contact Vector agree on the issues that can be fixed with upcoming deliveries.
Please note that Vector may fix issues without explicit request.

1.2 Issue Classification

This Issue Report provides issues that have been detected since the last report. The issues have been classified to facilitate the assessment of their impact:

The chapter 'New Issues' lists issues that have been detected since the last report and which could not be excluded based on the use-case defined in the questionnaire. The issues are classified as follows:

- **Safety Related Issues:** Safety related issues have impact on the functional safety of the software module. If this issue interferes with the functional safety concept of the ECU, this module (or module configuration) must not be used for serial production in a safety-related project. The effect of the issue to the ECU functionality and functional safety has to be analyzed by the user as the software usage and its configuration is not known by Vector. The risk of change has also to be taken into account.
- **Runtime Issues without Workaround:** Runtime issues without a workaround require an update of the software delivery in case the issue affects the ECU overall functionality. The effect of an issue to the ECU functionality has to be analyzed by the customer as the software usage and its configuration is not known by Vector. The risk of change has also to be taken into account.
- **Runtime Issues with Workaround:** It is not recommended to update a delivery due to a runtime issue with a documented workaround. The effect of an issue to the ECU functionality has to be analyzed by the user as the software usage and its configuration is not known by Vector. The risk of change has also to be taken into account.
- **Not Released Functionality:** Not released functionalities (BETA) are either complete software modules or features in the software module that have not yet passed a complete development cycle (they are e.g. not or only partly tested). If a BETA issue ticket affects a complete software module, the software module must not be used for serial production. If a BETA issue ticket affects a feature in the software module, the user has to ensure that all BETA features are disabled as indicated for the serial production release of the ECU.
- **Apparent Issues:** Apparent issues are detected immediately when using the software module. If an issue does not show up while working with the software module, the ECU project is not affected by the issue. Apparent issues may or may not have workarounds.
- **Compiler Warnings:** As a service we also provide the known compiler warnings. The occurrence of a compiler warning may depend on the used software module configuration and compiler settings.

The chapter 'New Issues for Information' lists issues that are not relevant for the use-case that has been documented in the questionnaire provided to Vector. The issues may, however, be relevant for other use-cases. Additionally, issues that have been accepted or are tolerated by the OEM (as defined in the questionnaire) are reported here.

2. New Issues

2.1 Safety Relevant Issues

Safety related issues have impact on the functional safety of the software module. If this issue interferes with the functional safety concept of the ECU, this module (or module configuration) must not be used for serial production in a safety-related project.

The effect of the issue to the ECU functionality and functional safety has to be analyzed by the user as the software usage and its configuration is not known by Vector. The risk of change has also to be taken into account.

Index

ESCAN00097518 CRC32 calculations deliver wrong results

Component@Subcomponent:	MemService_AsrNvM@Implementation
First affected version:	5.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

CRC32s calculated internally by NVM are not as specified by AUTOSAR, i.e. the results may differ, depending on number of single CRC library calls done per NVM block.
Calculated values are still CRCs, but they don't match the results from using corresponding standardized CRC32 calculations

Since CRC handling is done internally, this is usually not visible to users.

The issue becomes visible, if NVM's configuration changed between a write and a read request (see below): Data may become unreadable due to failed CRC check.

When does this happen:

It happens at run-time during CRC calculation.
However this behavior is symmetric, i.e. calculated CRC during writes match the CRC calculated during reads. Data can be written and read back as expected.

In which configuration does this happen:

It happens for all blocks having CRC (NvMBlockUseCrc) enabled, and CRC type (NvMBlockCrcType) was set to CRC32 .
If (in a running project), the number of "Bytes per MainFunction" (NvMCrcNumOfBytes) was changed, existing data become unreadable, because same data result in different CRC.

Resolution Description:

Workaround:

In in a running project's configuration don't change the number of "Bytes per MainFunction" (NvMCrcNumOfBytes).

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097644	RTE dereferences NULL_PTR after execution of a mapped server runnable
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.13.00
Fixed in versions:	1.18.00

Problem Description:

What happens (symptoms):

RTE dereferences a null pointer after a mapped server runnable has been executed.
This usually results in an os trap.

When does this happen:

During runtime when a client with lower task priority calls a mapped server runnable with higher priority.

In which configuration does this happen:

This happens when multiple clients are connected to the same server, and the server runnable is mapped to a task with higher priority than at least one of the clients. This happens only for synchronous client server communication.

Resolution Description:

Workaround:

- map the server runnable to a task with lower priority than the client tasks
or
- create a proxy component that forwards the client calls to the server.
To do so a server port + server runnable is created for each client.
Each client is connected to the corresponding proxy server port.
A single proxy client port is connected to the server.
The server runnables of the proxy component calls the server through the single client port.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097829	Service 0x22: Overwritten call stack
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	7.02.00
Fixed in versions:	9.03.00, 8.06.02

Problem Description:

What happens (symptoms):

The call stack will be corrupted leading to indeterminable behavior.
The possible amount of overwritten memory depends on the largest configured DID.

After ECU reset, the normal operation should be possible.

When does this happen:

- When any asynchronous DID is requested via service 0x22.
AND
- The access to the DID specific data elements is configured to be via a C/S interface (in DCM ECUC: /Dcm/DcmConfigSet/DcmDsp/DcmDspData/DcmDspDataUsePort == USE_DATA_ASYNCH_CLIENT_SERVER or USE_PAGED_DATA_ASYNCH_CLIENT_SERVER)
AND
- The maximal length of that DID is larger than one byte.
AND
-The read operation of that DID is cancelled due to
 - an interruption by a request of another tester with higher priority
 OR
 - Reaching the RCR-RP limit.

In which configuration does this happen:

- Service 0x22 is supported and handled by DCM (in Dcm_Cfg.h: #define DCM_SVC_22_SUPPORT_ENABLED == STD_ON)
AND
- There is at least one DID with a data element (DcmDspData) configured to support paged read access (in Dcm_Cfg.h: #define DCM_DIDMGR_OPCLS_READ_PAGED_ENABLED == STD_ON)
AND
- The access to any data element is configured to be via a C/S interface (in DCM ECUC: /Dcm/DcmConfigSet/DcmDsp/DcmDspData/DcmDspDataUsePort == USE_DATA_ASYNCH_CLIENT_SERVER or USE_PAGED_DATA_ASYNCH_CLIENT_SERVER)
AND
 - DCM shall prioritize two or more diagnostic clients (e.g. OBD and UDS clients) (in Dcm_Cfg.h #define DCM_NET_PROTOCOL_PRIORITISATION_ENABLED == STD_ON)
 OR
 - RCR-RP transmission limitation is supported (in Dcm_Cfg.h #define DCM_DIAG_RCRRP_LIMIT_ENABLED == STD_ON)
AND
- There is an RTE used in the ECU project.
AND
- The server runnable entity of those data elements has OsTask mapping other than the one the Dcm_MainFunction/-Worker() is mapped to.

Resolution Description:

ESCAN00097829	Service 0x22: Overwritten call stack

Workaround:

- Avoid OS-Task mapping of affected DID data element server runnable entities to let RTE optimize the C/S calls to simple C-function calls without data copies.
OR
- Do not use RTE C/S ports but simple callout functions (i.e. specify for DcmDspDataUsePort one of the applicable XXX_FNC values).
OR
- Omit usage of paged-DIDs, increasing the DCM buffer to fit all the paged-DID data at least in a single DID request of SID 0x22.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097901	Rx Deferred Event Cache leads to unexpected ECU behaviour under high load

Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	8.01.00
Fixed in versions:	12.00.02, 13.03.03, 14.00.01

Problem Description:
What happens (symptoms):

The usage of deferred event cache leads to unexpected ECU behaviour under high load.

When does this happen:

Error may occur during run time, whenever it's temporarily required to open the interrupt locks. It is most likely to occur whenever Com_RxIndication is called in high frequency.

In which configuration does this happen:

ComDeferredEventCacheSupport == TRUE

Resolution Description:
Workaround:

(Increase ComRxDeferredEventCacheSize
AND
increase ComRxDeferredProcessingISRLockThreshold (if configurable)
AND
increase ComRxDeferredNotificationCacheSize (if configurable))

OR

Deactivate ComDeferredEventCacheSupport

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097911	Deferred PDUs are not processed using deferred event Cache
Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	8.01.00
Fixed in versions:	14.00.01, 13.03.03, 12.00.02

Problem Description:

What happens (symptoms):

Deferred Rx PDUs might not be processed if deferred event cache is enabled. This situation will sustain until the deferred event cache overflows.

When does this happen:

This issue may occur at runtime, whenever more deferred PDUs are received than the cache can store. In this case the fallback strategy will be applied.
If during processing of the deferred PDU's new deferred PDUs are received, they might not be cached properly.

In which configuration does this happen:

ComDeferredEventCacheSupport == TRUE
AND
type of processed Rx PDU is set to DEFERRED

Resolution Description:

Workaround:

If possible, set ComDeferredEventCacheSupport == FALSE. Otherwise no workaround is available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097946	Interrupts are still disabled when returning from ResumeOSInterrupts or ReleaseSpinlock after the corresponding suspension API has been interrupted
Component@Subcomponent:	Os_CoreGen7@Implementation
First affected version:	2.07.00
Fixed in versions:	2.15.00

Problem Description:

What happens (symptoms):

Interrupts are are not enabled when returning from ResumeOSInterrupts or ReleaseSpinlock.

When does this happen:

This happens rarely, when SuspendOSInterrupts, GetSpinlock or TryToGetSpinlock is interrupted by an interrupt or preempted by another task at a certain short sequence of instructions. In any of the two cases interruption (1) and preemption (2) the described symptoms will only show up under additional circumstances:

(1) Interruption:
The interrupt uses use one of these APIs as well.

(2) Preemption:
The preempting task first calls GetResource() for a Resource that is assigned to at least one ISR and then one of the APIs mentioned.

In which configuration does this happen:

This happens only if the configuration is as described below:

(1) Interruption:
This happens only if Category 2 interrupts are configured (/MICROSAR/Os/OsIsr/OsIsrCategory == CATEGORY_2).

(2) Preemption:
The preempted task is configured to allow preemption (configured with /MICROSAR/Os/OsTask/OsTaskSchedule == FULL).
The preempting task is configured to use an ISR resource (/MICROSAR/Os/OsIsr/OsIsrResourceRef == given Resource).

Above configuration restrictions are valid in case any of the described API functions is interrupted/preempted. In case of the spinlock API, an additional configuration restriction can be given:
In case one of the functions GetSpinlock or TryToGetSpinlock is interrupted/preempted, the symptoms only occur if the related Spinlock is configured with /MICROSAR/Os/OsSpinlock/OsSpinlockLockMethod == LOCK_CAT2_INTERRUPTS.

Resolution Description:

ESCAN00097946	Interrupts are still disabled when returning from ResumeOSInterrupts or ReleaseSpinlock after the corresponding suspension API has been interrupted

Workaround:

In order to avoid the issue the following APIs may not be used within interrupts.
- SuspendOSInterrupts (the ISR can be configured with EnableNesting = FALSE instead)
- GetSpinlock (with a spinlock that uses /MICROSAR/Os/OsSpinlock/OsSpinlockLockMethod == LOCK_CAT2_INTERRUPTS)
- TryToGetSpinlock (with a spinlock that uses /MICROSAR/Os/OsSpinlock/OsSpinlockLockMethod == LOCK_CAT2_INTERRUPTS)

Further, the APIs may not be nested within a GetResource()/ReleaseResource() pair where the respective resource is /MICROSAR/Os/OsIsr/OsIsrResourceRef of any OsIsr.

Additionally, if ESCAN00097942 is not present in the system, SuspendAllInterrupts can be used instead of SuspendOSInterrupts, and affected Spinlocks can be configured with /MICROSAR/Os/OsSpinlock/OsSpinlockLockMethod == LOCK_ALL_INTERRUPTS.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098052	Undefined behavior of OS after context switch (RH850)
Component@Subcomponent:	Os_PlatformRH850Gen7@Implementation
First affected version:	1.00.00
Fixed in versions:	2.14.00

Problem Description:

What happens (symptoms):

The OS shows undefined behavior after a context switch which may not be detected immediately.

When does this happen:

This happens always and immediately at certain types of context switches. However, it is very unlikely that this problem occurs in a well tested system. Please see the description of technical background for more information.

In which configuration does this happen:

The issue occurs independently from the configuration.

Technical Background:

The cause of the undefined behavior is that a set of OS scratch register values is destroyed at a context switch. Dependent on compiler options and OS settings, some of these registers may be in use by the OS code after return from a context switch. If so, OS data will be destroyed. The type of destroyed data depends on optimization decisions of the compiler. Because of the structure of the OS code, it is quite unlikely that the OS code has any of these registers in use across a context switch. The context of the application is not affected.

Resolution Description:

Workaround:

Do not allow compiler to inline functions

Resolution:

The described issue is corrected by modification of all affected work-products.

2.2 Runtime Issues without Workaround

Runtime issues without a workaround require an update of the software delivery in case the issue affects the ECU overall functionality. The effect of an issue to the ECU functionality has to be analyzed by the customer as the software usage and its configuration is not known by Vector. The risk of change has also to be taken into account.

Index

ESCAN00093702	PNC Wake-up Indication does not work as specified in AUTOSAR Ccl_Asr4ComMCfg5@Implementation
ESCAN00094333	Timeout Action Replace doesn't work for Rx SignalGroups with Array Access enabled Il_AsrComCfg5@Implementation
ESCAN00096806	Wrong signal specific ComXf transformations in fan-out / postbuild scenario Rte_Core@Implementation
ESCAN00097173	Missing variant-specific callbacks for N:1 FanIn with queued transformed signals Rte_Core@Implementation
ESCAN00097243	FrSM debug data cannot be found in the map file Ccl_Asr4SmFr@GenTool_GeneratorMsr
ESCAN00097324	Missing TxAcknowledge in configurations with multiple variants Rte_Core@Implementation
ESCAN00097662	Configured ClearDTC finished notification does not occur Diag_Asr4Dem@Implementation
ESCAN00097673	Rx Container PDUs with invalid content are forwarded to PduR Il_AsrIpduMCfg5@root
ESCAN00097699	Dem_SetWIRStatus is processed and returns E_OK for unavailable events Diag_Asr4Dem@Implementation
ESCAN00097748	Memory corruption of management information leads to dead lock of corresponding block If_AsrIfFeeSmallSector@Implementation
ESCAN00097813	Wrong transformer buffer size for fan in use case Rte_Core@Implementation
ESCAN00097848	Dem_GetWIRStatus returns E_OK for unavailable events Diag_Asr4Dem@Implementation
ESCAN00097849	Dem_GetEventEnableCondition returns E_OK for unavailable events Diag_Asr4Dem@Implementation
ESCAN00097850	Dem_GetEventAvailable returns AvailableStatus 'True' for events unavailable in variant Diag_Asr4Dem@Implementation
ESCAN00097951	Wrong marshalling/ unmarshalling of <XInt64> Signals Il_AsrComCfg5@GenTool_GeneratorMsr
ESCAN00098037	Some contained Tx Pdus with last-is-best semantic not appearing on the bus Il_AsrIpduMCfg5@Implementation

ESCAN00093702	PNC Wake-up Indication does not work as specified in AUTOSAR
Component@Subcomponent:	Ccl_Asr4ComMCfg5@Implementation
First affected version:	8.00.00
Fixed in versions:	9.00.00

Problem Description:

What happens (symptoms):

Expected behavior is that a specific PNC is woken up and corresponding I-PDU groups are switched on.
Symptoms depend on the value of ComM/ComMGeneral/ComMSynchronousWakeUp
- if it is on, all PNCs are woken up. All PNCs that are in state PNC_NO_COMMUNICATION switch to PNC_PREPARE_SLEEP state and corresponding I-PDU groups are switched on.
- if it is off, no PNC is woken up and corresponding I-PDU groups are not switched on.

When does this happen:

This happens at run-time when ComM_EcuM_PNCWakeUpIndication(PncId) is called and at least one PNC with id != PncId is in state PNC_NO_COMMUNICATION.

In which configuration does this happen:

PNC Wake-up functionality is enabled:
#define COMM_WAKEUPENABLEDOFPNC STD_ON has been generated to ComM_Cfg.h

PNC Wake-up functionality is enabled if at least one PNC fulfills the following conditions:
- the PNC is referenced by an EcuM Wake-up Source (EcuM/EcuMConfiguration/EcuMCommonConfiguration/EcuMWakeupSource/EcuMComMPNCRef) and
- the PNC is mapped to at least one EthIf Switch Port Group (ComM/ComMConfigSet/ComMPnc/ComMPortGroupsPerPnc).

Note, the main purpose of this functionality is configuration of Ethernet Switch Ports (switchable per PNC).

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094333	Timeout Action Replace doesn't work for Rx SignalGroups with Array Access enabled
Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	7.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

The timeout Replace action for rx SignalGroups with array access enabled does not replace the buffer value either with the initial value or the configured Rx Data Timeout Substitution Value.

When does this happen:

During call of Com_MainFunctionRx()

In which configuration does this happen:

In all configurations with rx SignalGroups which have a configured timeout > 0, timeout action set to Replace and array access is enabled.

Resolution Description:
Workaround:

Disable Array Access for signalGroups if applicable (no use of com-based transformer)

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096806	Wrong signal specific ComXf transformations in fan-out / postbuild scenario
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.08.00
Fixed in versions:	1.17.00

Problem Description:
What happens (symptoms):

In a fan-out scenario with signal specific transformation or in postbuild scenario with variant specific transformation
only a single ComXf transformer is used although the transformation properties differ.

When does this happen:

This happens during runtime

In which configuration does this happen:

ComXf is used in fan-out or postbuild scenario
Signal or variant specific transformation properties
The order of the signals within the pdu differs in the variants

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097173	Missing variant-specific callbacks for N:1 FanIn with queued transformed signals
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.05.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

Variants-specific callbacks are missing in a FanIn scenario with signal and variant-specific queued transformation.

When does this happen:

This happens during runtime

In which configuration does this happen:

- ComXf is used with fanin
- Postbuild is used
- Signal and variant-specific queued transformation

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097243	FrSM debug data cannot be found in the map file
Component@Subcomponent:	Ccl_Asr4SmFr@GenTool_GeneratorMsr
First affected version:	3.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

During A2L update several symbols of FrSM (that the FrSM generator actually registers through the CFG5 McData Service Interface) cannot be found in the map file.
FrSM_InternalState
FrSM_RequestedComMode
FrSM_StartupCounter
FrSM_Timer_ColdstartDelay
FrSM_Timer_RetryStartUp
FrSM_Timer_StartUpMonitoring
FrSM_WakeUpType

When does this happen:

After compilation when the A2L / calibration workflow is used to generate a complete A2L file with addresses of the target.

In which configuration does this happen:

Whenever generation of Debug Data is enabled in DaVinci Configurator and FrSM is used.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097324	Missing TxAcknowledge in configurations with multiple variants
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.11.00
Fixed in versions:	1.18.00

Problem Description:
What happens (symptoms):

Rte_Feedback reports RTE_E_NO_DATA or RTE_E_TIMEOUT although COM notified the transmission.

When does this happen:

During runtime.

In which configuration does this happen:

This happens when tx acknowledge is configured for a data element that is mapped to multiple signals (fan-out).
Moreover the project needs to use multiple postbuild variants.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097662	Configured ClearDTC finished notification does not occur
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	13.02.00
Fixed in versions:	14.03.00

Problem Description:
What happens (symptoms):

The configured ClearDTC finished notification does not occur.

When does this happen:

When a ClearDTC operation has finished.

In which configuration does this happen:

Dem ClearDTC notifications (/MICROSAR/Dem/DemGeneral/DemEventMemorySet/DemClearDTCNotification) are configured.
AND
NO notifications with /MICROSAR/Dem/DemGeneral/DemEventMemorySet/DemClearDTCNotification/DemClearDtcNotificationTime = START are configured
AND
One or more notifications with /MICROSAR/Dem/DemGeneral/DemEventMemorySet/DemClearDTCNotification/DemClearDtcNotificationTime = FINISH are configured

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097673	Rx Container PDUs with invalid content are forwarded to PduR
Component@Subcomponent:	Il_AsrIpduMCfg5@root
First affected version:	6.01.00
Fixed in versions:	8.00.02

Problem Description:
What happens (symptoms):

Defective Container PDUs with invalid layouts are forwarded to PduR via PduR_IpduMRxIndication().
The ECU continues to behave normally.

When does this happen:

Always and immediately.

In which configuration does this happen:

Any configuration where Postbuild Selectable is configured
AND
IpduMContainerRxPdu do not exist with the IpduMContainerRxHandleId == 0 and all IpduMContainerRxHandleIds in one Predefined Variant have Gaps in the numerical Range.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097699	Dem_SetWIRStatus is processed and returns E_OK for unavailable events
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	6.02.00
Fixed in versions:	12.01.04, 14.04.00

Problem Description:

What happens (symptoms):

API Dem_SetWIRStatus is processed and returns E_OK when called for an unavailable event.

When does this happen:

Always and immediately

In which configuration does this happen:

(Dem/DemGeneral/DemUserControlledWirSupport == TRUE)
AND
(
(Dem/DemConfigSet/DemEventParameter/DemEventAvailableInVariant == FALSE for the concerned event)
OR
(Dem/DemGeneral/DemAvailabilitySupport == DEM_EVENT_AVAILABILITY and concerned event is set unavailable by API Dem_SetEventAvailable)
)

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097748	Memory corruption of management information leads to dead lock of corresponding block
Component@Subcomponent:	If_AsrIfFeeSmallSector@Implementation
First affected version:	1.00.00
Fixed in versions:	2.00.01, 1.00.03

Problem Description:
What happens (symptoms):

Memory corruption (e.g. double bit error caused by reset) leads to not repairable NVM/FEE block. Application tries to write a block and FEE always stops processing the job because FLS issues an error while accessing FEE's management information.
FEE block can no longer be accessed by read or write jobs.

When does this happen:

A reset can lead to an error in the flash hardware (e.g. double bit error) which issues a FLS error during read accesses. If FEE's management information is somehow affected by a such an error, FEE will no longer be able to read or write this block.

In which configuration does this happen:

Every configuration.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097813	Wrong transformer buffer size for fan in use case
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.12.00
Fixed in versions:	1.18.00

Problem Description:
What happens (symptoms):

The buffer length check reduces the buffer length to a value that is smaller than the created transformation buffer.
Potentially, the returned data are invalid.

When does this happen:

This happens during runtime.

In which configuration does this happen:

This can happen in configurations with fan-in transformer use cases.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097848	Dem_GetWIRStatus returns E_OK for unavailable events
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	6.02.00
Fixed in versions:	12.01.04, 14.04.00

Problem Description:

What happens (symptoms):

API Dem_GetWIRStatus returns E_OK when called for an unavailable event.

When does this happen:

Always and immediately

In which configuration does this happen:

(Dem/DemGeneral/DemUserControlledWirSupport == TRUE)
AND
(
(Dem/DemConfigSet/DemEventParameter/DemEventAvailableInVariant == FALSE for the concerned event)
OR
(Dem/DemGeneral/DemAvailabilitySupport == DEM_EVENT_AVAILABILITY and concerned event is set unavailable by API Dem_SetEventAvailable)
)

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097849	Dem_GetEventEnableCondition returns E_OK for unavailable events
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	6.02.00
Fixed in versions:	14.04.00, 12.01.04

Problem Description:

What happens (symptoms):

API Dem_GetEventEnableCondition returns E_OK when called for an unavailable event.

When does this happen:

Always and immediately

In which configuration does this happen:

(Dem/DemGeneral/DemEnableConditionSupport)
AND
(
(Dem/DemConfigSet/DemEventParameter/DemEventAvailableInVariant == FALSE for the concerned event)
OR
(Dem/DemGeneral/DemAvailabilitySupport == DEM_EVENT_AVAILABILITY and concerned event is set unavailable by API Dem_SetEventAvailable)
)

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097850	Dem_GetEventAvailable returns AvailableStatus 'True' for events unavailable in variant
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	10.00.00
Fixed in versions:	14.04.00, 12.01.04

Problem Description:
What happens (symptoms):

API Dem_GetEventAvailable returns E_OK and AvailableStatus 'True' when called for an event unavailable in variant.

When does this happen:

Always and immediately

In which configuration does this happen:

Dem/DemGeneral/DemAvailabilitySupport == DEM_EVENT_AVAILABILITY
AND
Dem/DemConfigSet/DemEventParameter/DemEventAvailableInVariant == FALSE for the event the API Dem_SetEventAvailable is called for.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097951	Wrong marshalling/ unmarshalling of <XInt64> Signals
Component@Subcomponent:	Il_AsrComCfg5@GenTool_GeneratorMsr
First affected version:	11.00.00
Fixed in versions:	12.00.03, 13.03.05, 14.01.02

Problem Description:
What happens (symptoms):

Signals/ GroupSignals with ComSignalType <XInt64> are read / written incorrectly from/ to the bus.
A Rx Signal for example could be truncated when it's read by Com_ReceiveSignal.

When does this happen:

Issue occurs at runtime

In which configuration does this happen:

ComSignalType == UINT64 || SINT64
AND
ComBitPosition starts at byte boundary
AND
32 Bits < ComBitSize < 64 Bits
AND
Signal does not end at byte boundary

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098037	Some contained Tx Pdus with last-is-best semantic not appearing on the bus
Component@Subcomponent:	Il_AsrIpduMCfg5@Implementation
First affected version:	6.06.00
Fixed in versions:	6.07.01

Problem Description:
What happens (symptoms):

During transmission of a last-is-best container PDU, some contained PDUs are removed from the container before transmission. They are missing in the container.
The ECU continues to work normally.

When does this happen:

Always for the affected contained PDUs, never for unaffected contained PDUs.

In which configuration does this happen:

Configurations that match all of the following conditions:
- Contained last-is-best PDUs are configured
- At least one of the last-is-best PDUs has a header ID that is not unique in the IpduM module

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

2.3 Runtime Issues with Workaround

It is not recommended to update a delivery due to a runtime issue with a documented workaround. The effect of an issue to the ECU functionality has to be analyzed by the user as the software usage and its configuration is not known by Vector. The risk of change has also to be taken into account.

Index

Index

ESCAN00061207	DaVinci Configurator 5: Issue Reporting Procedure
Component@Subcomponent:	GenTool_ConfiguratorCfg5@Application
First affected version:	5.00.01
Fixed in versions:	

Problem Description:
This ticket describes the reporting of DaVinci Configurator 5 issues. This ticket is a general information and not an issue.

Issues of the DaVinci Configurator 5 tool are not part of the active issue reporting (i.e. this report). The DaVinci Configurator 5 issue list can be downloaded from our home page:

DaVinci Developer OpenIssue Lists: https://portal.vector.com/web/davinci/shared-folder?t=c2b431ff-5dae-4a72-83ec-b9c8ca17561c
DaVinci Configurator OpenIssue Lists: https://portal.vector.com/web/davinci/shared-folder?t=15d156f3-65d3-4b6e-8107-ec44051aebff

Resolution Description:
Workaround:

This is not an issue but only a reference to the tool specific issue reporting.
No changes to the delivery required.

ESCAN00089164	The EcuM stays in RUN state even if EcuM_KillAllRunRequests has been called
Component@Subcomponent:	SysService_Asr4EcuM@Implementation
First affected version:	3.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The ECU stays in RUN state, even if anyone has called the API EcuM_KillAllRunRequests.

When does this happen:

Always after EcuM_KillAllRunRequests() has been called and at least one channel is in a state unequal COMM_NO_COM_NO_PENDING_REQUEST.

In which configuration does this happen:

Only in configurations with ECUM_FIXED_BEHAVIOR is active (EcuM/EcuMGeneral/ EcuMEnableFixBehavior).

Resolution Description:

ESCAN00089164	The EcuM stays in RUN state even if EcuM_KillAllRunRequests has been called

Workaround:

The following shows a possible workaround to ignore all ComM channel states in case of an active KillAllRUNRequests.

Hint: EcuM_SetWakeupEvent considers wakeup events even if EcuM_KillAllRUNRequests() was called. This might cause that the EcuM transits from PostRun to Run again, because of a new occurred wakeup event.

The call of the API ComM_GetState() has to be mapped to an application function in case that it is called in context of EcuM.c. This can be done by configure the following header file as a User Configuration file in the EcuM configuration (EcuM/EcuMGeneral/EcuMUserConfigurationFile):

- Example Appl_ComM_EcuM.h:

```
#if defined (ECUM_SOURCE)
extern Std_ReturnType Appl_ComM_GetState(const NetworkHandleType Channel,
ComM_StateType* State);

# define ComM_GetState Appl_ComM_GetState
#endif
```

- Example Appl_ComM_EcuM.c:

```
#include "Std_Types.h"
#include "ComM.h"

#define ECUM_PRIVATE_CFG_INCLUDE
#include "EcuM_PrivateCfg.h"
#undef ECUM_PRIVATE_CFG_INCLUDE


Std_ReturnType Appl_ComM_GetState(const NetworkHandleType Channel, ComM_StateType*
State)
{
 Std_ReturnType retVal = E_OK;
 /* Verify that EcuM_KillAllRUNRequests() was not called */
 if ((EcuM_GetKillAllInProgress() & (0x01u)) == 0u)
 {
 retVal = ComM_GetState(Channel, State);
 }
 else
 {
 /* In case of an active KillAllRunRequest, set the virtual ComM State to no communication and no
request. */
 *State = COMM_NO_COM_NO_PENDING_REQUEST;
 }

 return retVal;
}
```

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00091305	EcuM with fixed state machine causes a Det error in Dem_Init because this module has been initialized two times
Component@Subcomponent:	SysService_Asr4EcuM@Implementation
First affected version:	3.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

In some situations the EcuM with fixed state machine calls Dem_Init() two times, this lead to a Det error thrown by the Dem with the message DEM_E_WRONG_CONDITION,

When does this happen:

During runtime of the EcuM API EcuM_StartupTwo().

In which configuration does this happen:

All of the following conditions have to be fulfilled to be affected by this issue:

- The Ecum with fixed state machine has to be active (EcuM/EcuMGeneral/EcuMEnableFixBehavior).
- The include Dem has to be active (EcuM/EcuMFixedGeneral/EcuMIncludeDem).
- At least one wakeup source has to be configured for wakeup validation (EcuM/EcuMConfiguration/EcuMCommonConfiguration/EcuMWakeupSource/EcuMValidationTimeout).
- At startup the standard wakeup source (ECUM_WKSOURCE_RESET) has to be cleared via the API EcuM_ClearWakeupEvent() to force a wakeup validation after startup and to prevent a transition to RUN state until this wakeup source is validated.

Resolution Description:

Workaround:

In case that the valid wakeup event during initialization (ECUM_WKSOURCE_RESET) is cleared in context of driver init list two or three and a wakeup event for validation is set the Dem_Init call has to be avoided.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00091550	Service 0x27: Dcm allows seed/key attempt earlier than the configured security delay time
Component@Subcomponent:	Diag_Asr4Dcm@GenTool_GeneratorMsr
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

A security delay timer expires too early. Dcm accepts new seed requests before the configured delay time is expired.

When does this happen:

If after last unsuccessful attempt responded with Nrc 0x36 (exceededNumberOfAttempts) a new seed request is sent before the expected delay time.

In which configuration does this happen:

- Service 0x27 is supported
AND
- There is more than one security level configured
AND
- Any delay time is configured for any security level (in Dcm_Cfg.h:
DCM_STATE_SEC_RETRY_ENABLED == STD_ON or
DCM_STATE_SEC_DELAY_ON_BOOT_ENABLED == STD_ON)
AND
- The dividend of a configured security delay time (in milliseconds) and the task cycle (also in milliseconds) is greater that 65535

Resolution Description:

Workaround:

The equation shall become true: (<TimeParameter> / DcmTaskTime) < 63535.

Therefore, the following workarounds are possible:
1) Increase the DcmTaskTime parameter value.
OR
2) Reduce the timeout value in the corresponding timing parameter.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00092116	Long runtime of flash library functions can delay the Rx frame processing
Component@Subcomponent:	FblDrvFlash_Rh850Rv40His@Impl_Base
First affected version:	1.06.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Flash library operations might be very runtime consuming.
This might delay the processing of a Rx frame that long, that the corresponding CAN mailbox has already been overwritten with the following Rx frame assigned to the mailbox.
The download will abort with a NRC 0x73 (WrongBlockSequenceCounter).

When does this happen:

During the flash routines of the flash library.

In which configuration does this happen:

-Usage of pipelined programming/early acknowledge
-So far the behavior has only been detected on F1H and F1K derivatives

Resolution Description:
Workaround:

Driving the system with a higher clock also speed up the flash operations and reduces their runtime.
(verified with R7F7015032+R7F7015874AFP @ 120MHz)

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00095664	Misleading description of the call sequence SetTransceiverMode and GetTransceiverWUReason at startup
Component@Subcomponent:	Ccl_Asr4SmFr@Doc_TechRef
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The Technical Reference describes that the wake up reason will be determined before the transition T01 is triggered.

But the Transceiver Mode is set to FRTRCV_TRCVMODE_NORMAL before the determination of the wakeup reason (FrIf_GetTransceiverWUReason) because the action does not depend at the result.

In which configuration does this happen:

FrSMIsWakeupEcu == TRUE
FrSmCheckWakeupReason == TRUE
wake up by Trcv is possible

Resolution Description:

Workaround:

Pay attention that the Transceiver Mode is set to FRTRCV_TRCVMODE_NORMAL before the determination of the wakeup reason (FrIf_GetTransceiverWUReason).

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096248	Validator PDUR12501 is not shown as error for PduRDestPduRef
Component@Subcomponent:	Gw_AsrPduRCfg5@GenTool_GeneratorMsr
First affected version:	9.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Validator message PDUR12501 is shown on a PduRDestPduRef. It is shown as information only, but in reality shall be an error message.

When does this happen:

During live validation in the DaVinci Configurator 5.

In which configuration does this happen:

The validator message is shown if the global Pdu of PduRDestPduRef is referenced by more than one other container. This kind of 1:N routing path is not supported.

Resolution Description:
Workaround:

Check if the validation message is shown for a PduRDestPduRef.
If No, then you're not affected.
If Yes, check if this is correctly configured. The PduR will only forward the Pdu to one of the destination container (the destination is chosen randomly while generating due to the internal Java structure). The routing to this destination container will then work as configured.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096249	Validator PDUR12501 is not shown as error for PduRSrcPduRef for not supported source modules
Component@Subcomponent:	Gw_AsrPduRCfg5@GenTool_GeneratorMsr
First affected version:	9.01.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Validator message PDUR12501 is shown on a PduRSrcPduRef. It is shown as information only, but in reality shall be an error message for source modules which do not support N:1 fan in on global Pdu level.

When does this happen:

During live validation in the DaVinci Configurator 5.

In which configuration does this happen:

The validator message is shown if the global Pdu of PduRSrcPduRef is referenced by more than one other container. This kind of N:1 routing path is only supported for communication interface Pdus of SoAd, CanIf and FrIf.

Resolution Description:

Workaround:

Check if the validation message is shown for a PduRSrcPduRef.
If No, then you're not affected.
If Yes, this kind of configuration is only supported for communication interface Pdus of the SoAd, CanIf and FrIf module. Everything else shall not be configured.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096508	Compression produces wrong output
Component@Subcomponent:	FblTool_Hexeditor_Hexview@Application_Dll
First affected version:	2.03.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The compressed output file contains invalid data

When does this happen:

During the compression of a file

In which configuration does this happen:

When the input file (uncompressed file) exceeds a specific size (64MB)

Resolution Description:

Workaround:

Split the file in smaller chunks (files) and compress them separately. After compressing merge the files together.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096510	Signature generation produces incorrect output
Component@Subcomponent:	FblTool_Hexeditor_Hexview@Application_Dll
First affected version:	2.03.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The generated signature is incorrect

When does this happen:

During the signature generation of a file

In which configuration does this happen:

When the input file (uncompressed file) exceeds a specific size (64MB)
AND
Data processing type 49 (ED25519PH on hashed Addr+Len+Data (SHA-512)) is used.

Resolution Description:

Workaround:

---

1. Add the address and length information in front of the actual data (e.g. *<length><data>). The address and length information are each 4 byte big. See manual chapter "2.2.3.5 Fill block data" or commandline interface "3.2.12 Fill region" and "3.2.13 Specify fill pattern".*
2. Calculate the SHA-512 over the <length><data> using the type 19 (SHA-512 Hash Algorithm) . See manual chapter "2.2.3.6 Create checksum" or commandline interface "3.2.7 Checksum calculation method".
3. Calculate the ED25519 over the SHA-512 checksum using the type 46 (ECDSA (ED25519PH) on Data). See manual chapter "2.2.3.7 Run Data Processing" or commandline interface "3.2.8 Run Data Processing interface".

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096640	Initialization state may be cached
Component@Subcomponent:	Xf_E2eXf@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):
---
a) The E2EXf reports to DET that it is uninitialized and returns with a hard runtime error for some signals.
b) After E2EXf was deinitialized, it still performs as if initialized for some signals.

When does this happen:

This can happen at the call of RTE_Read or RTE_Write for End-to-End protected signals in one OS application after E2EXF_Init (a) or E2EXF_DeInit (b) was called in another OS application.

In which configuration does this happen:

The issue can occur in a configuration with two or more OS applications that has E2EXf protected signals in several of those OS applications.

Resolution Description:
Workaround:

There are two possible workarounds:
1. The memory abstraction section START_SEC_VAR_ZERO_INIT_8BIT must be mapped to NOCACHE manually
2. In E2EXf_MemMap.h, change the target of the E2EXF_START_SEC_VAR_ZERO_INIT_8BIT to a NOCACHE section.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096716	Queued sender/receiver N:1 connections not detected
Component@Subcomponent:	Rte_Analyzer@Application
First affected version:	0.09.00
Fixed in versions:	1.01.00

Problem Description:

What happens (symptoms):

RteAnalyzer reports that configuration contains more queued connections and/or more APIs with queues.

When does this happen:

The error is issued during analysis of the code by RteAnalyzer in case the configuration is as described below.

In which configuration does this happen:

This happens for configurations with queued sender/receiver N:1 communication over partition boundaries, when all senders are mapped to the same OsApplication.

Resolution Description:

Workaround:

Ensure that the reported connections exist in the code. Afterwards, the message can be disregarded,

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096901	Possible incorrect interpretation of last page status
Component@Subcomponent:	If_AsrIfFeeSmallSector@Implementation
First affected version:	1.00.02
Fixed in versions:	2.00.01

Problem Description:

What happens (symptoms):

Depending on the content, a block might not be readable although it has been written correctly before.
FEE may interpret content incorrectly, in case FlsBlankCheck is disabled for a block's partition.

When does this happen:

If the last flash page of an instance is entirely filled with FlsEraseValue. FEE reads the last page of an instance to determine whether an erase abort has occurred. If the content of the last flash page of an instance matches the FlsEraseValue, FEE will interpret the last page as erased and consequently assumes an erase abort.

In which configuration does this happen:

This is issue is only relevant if parameter Fee/FeePartitionConfiguration/FeeFlsBlankCheckApi is set to FALSE.
This issue is _NOT_ relevant for FEE usage on RH850 platform, because RH850 requires parameter Fee/FeePartitionConfiguration/FeeFlsBlankCheckApi to be set to TRUE.

Resolution Description:

Workaround:

On RH850 platform it is highly recommended to enable parameter Fee/FeePartitionConfiguration/FeeFlsBlankCheckApi. With this parameter enabled, this issue does not apply.
If SmallSectorFee is used on a different platform, where no FlsBlankCheck is necessary, the last page of an instance should not match the FlsEraseValue. The user has to make sure that the last page of block is _NOT_ filled with the erase value.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097019	NON-RTE: Csm_MainFunction declaration is missing
Component@Subcomponent:	Security_AsrCsm@Implementation
First affected version:	1.01.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The declaration of the Csm_MainFunction is actually missing when the RTE is not part of the configuration.

When does this happen:

This issue happens always and immediately

In which configuration does this happen:

This issue happens with a non-RTE stack only

Resolution Description:

Workaround:

Declare the Csm_MainFunction within a global header file:

FUNC(void, CSM_CODE) Csm_MainFunction(void);

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097045	Dem_SetEventAvailable returns E_OK for events unavailable in variant
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	7.00.00
Fixed in versions:	12.01.04, 14.01.00

Problem Description:

What happens (symptoms):

API Dem_SetEventAvailable returns E_OK when called for an event unavailable in variant, although availability of this event cannot be changed during runtime.

When does this happen:

Always and immediately

In which configuration does this happen:

Dem/DemGeneral/DemAvailabilitySupport == DEM_EVENT_AVAILABILITY
AND
Dem/DemConfigSet/DemEventParameter/DemEventAvailableInVariant == FALSE for the event the API Dem_SetEventAvailable is called for.

Resolution Description:

Workaround:

Don't call API Dem_SetEventAvailable for an event unavailable in variant.
At least don't assume that an event unavailable in variant is set available during runtime although API returns E_OK.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097052	Data send completed trigger fired to early when Rte_ComSendSignalProxyPeriodic is used
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.02.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

A call to Rte_Write immediately triggers a runnable with data send completed trigger although COM did not call the confirmation callback, yet.

When does this happen:

During runtime.

In which configuration does this happen:

This happens when a signal is sent from a different partition than the partition that contains the COM module and when transmission acknowlegement is configured.
Moreover a runnable needs to be configured to be triggered on data send completion.
It only happens when there are no additional internal receivers and when /MICROSAR/Rte/RteGeneration/RteEnforceIoc is enabled in the RTE configuration.

Resolution Description:

Workaround:

Configure an additional internal receiver.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097081	DET error FRIF_E_INVALID_PDU_OWNER is thrown for Tx PDUs owned by CDD
Component@Subcomponent:	If_AsrIfFr@GenTool_GeneratorMsr
First affected version:	4.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

A DET error FRIF_E_INVALID_PDU_OWNER might be thrown for Tx PDUs owned by a Complex Device Driver "CDD".

When does this happen:

This happens in context of TxConfirmation for the transmitted PDU.

In which configuration does this happen:

This happens when the FrIf PDU has all of the following properties:
- Tx PDU
- PDU Owner is CDD (parameter FrIfUserTxUL set to CDD)
- A TriggerTransmit function is configured (parameter FrIfUserTriggerTransmitName set to a non-empty value)
- No TxConfirmation function is configured (parameter FrIfTxConfirmationName is empty)
- Tx confirmations are enabled for the PDU (parameter FrIfConfirm is true)

Resolution Description:
Workaround:

- Make sure a Tx confirmation function (parameter FrIfTxConfirmationName) is provided, if Tx confirmations are enabled (parameter FrIfConfirm) for a PDU with CDD as upper layer.
- If no Tx confirmation function is provided (parameter FrIfTxConfirmationName), manually disable Tx confirmations for the PDU (parameter FrIfConfirm).

Resolution:

Not yet available.

ESCAN00097141	The Xcp Module ID is not according to AR 4
Component@Subcomponent:	Cp_Asr4Xcp@Implementation
First affected version:	1.00.00
Fixed in versions:	1.00.01

Problem Description:

What happens (symptoms):

The service Xcp_GetVersionInfo() currently reports a MODULE_ID = 26. This value was used during the AR3 phase but is not according to AR4. In AR4 the MODULE_ID shall be 212.

When does this happen:

Always and immediately

In which configuration does this happen:

All configurations.

Resolution Description:

Workaround:

The version information returned by Xcp_GetVersionInfo() can be interpreted accordingly (with different MODULE_ID)

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097264	Service 0x2C: Valid DDDID definition requests always responded with NRC 0x31
Component@Subcomponent:	Diag_Asr4Dcm@Description
First affected version:	1.02.00
Fixed in versions:	9.01.00

Problem Description:
What happens (symptoms):

A diagnostic request for service 0x2C (DynamicallyDefineDataIdentifier) for definition of a DDDID (DynamicallyDefinedDID) is responded unexpectedly with NRC 0x31.

After the issue occurred, the ECU is not blocked. All other services of the Dcm can be used normally.

When does this happen:

Every time the affected by the configuration DDDID is requested for definition with service 0x2C.

In which configuration does this happen:

- DCM supports and implements diagnostic service 0x2C (DynamicallyDefineDataIdentifier)
AND
- The affected DDDID is configured with 256 SourceItems (ECUC parameter /Dcm/DcmConfigSet/DcmDsp/DcmDspDidInfo/DcmDspDidAccess/DcmDspDidDefine/DcmDspDDDidMaxElements = 256)

Resolution Description:
Workaround:

Define only DDDID (DynamicallyDefinedDID) with "DcmDspDDDidMaxElements" up to 255 as restricted per AR DCM SWS 4.x.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097306	Freshness Value Manager function is called within exclusive area
Component@Subcomponent:	Il_AsrSecOC@Implementation
First affected version:	2.00.00
Fixed in versions:	6.00.00

Problem Description:

What happens (symptoms):

The Os error "E_OS_DISABLEDINT" occurs when the SecOC requests a Freshness Value from the FvM

When does this happen:

---

when SecOC requests a Freshness Value from the FvM.

In which configuration does this happen:

IF Query Freshness Value == RTE

Resolution Description:

Workaround:

Suspend only the BUS ISRs inside the EXCLUSIVE_AREA_RXSTATE.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097361	Service 0x2A: Wrong prioritisation between NRC 0x13 and 0x31
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	1.01.00
Fixed in versions:	9.04.00

Problem Description:

What happens (symptoms):

ECU response with NRC 0x31 instead of NRC 0x13.

When does this happen:

If a service 0x2A is requested with an unsupported transmissionMode and no periodicDataIdentifier.

In which configuration does this happen:

- Service 0x2A is supported (in Dcm_Cfg.h: DCM_SVC_2A_SUPPORT_ENABLED == STD_ON)

Resolution Description:

Workaround:

Use supplierIndication function notification to catch this length check.

Note: Since the supplier specific Xxx_Indication() calls is performed after the SID level checks are executed, no session, security or other verification shall be performed within this callout - only the length check.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097378	FrTp issues DET error in case of erroneous termination of a high level routing (PduR does not provide tx-data it assured, before)
Component@Subcomponent:	Tp_Iso10681@Implementation
First affected version:	2.04.04
Fixed in versions:	2.04.05

Problem Description:

What happens (symptoms):

In case this issue occurs the FrTp issues a DET error in the context of FrTp_TriggerTransmit() of a segmented transmission with source data coming from a different <Bus>Tp ("high level routing", e.g. CanTp)
After the issue occurred the FrTp correctly ends the routing (the routing cannot continue because the <Bus>Tp has stopped receiving data)

The consequence, the implication is that the behavior is as expected: After the receiving TP has stopped receiving due to an error, the transmitting TP stops transmission, also.
Only the additional DET is unwanted.

The issue causes the unwanted / unexpected DET once but after that ECU continues to work and works correctly.

When does this happen:

This happens only under specific circumstances namely in case:
- The receiving <Bus>Tp has successfully started receiving a segmented block of Pdus and encounters an error with one of the Pdus of this block that leads to the premature stop of the reception, e.g. a Sequence Number Error.
- And: Refer to "In which configuration does this happen:".

In which configuration does this happen:

/ActiveEcuC/FrTp/FrTpGeneral[FrTpDevErrorDetect] is TRUE (FRTP_DEV_ERROR_DETECT is STD_ON)
AND
The /ActiveEcuC/Dem module is active and configured.

Resolution Description:

Workaround:

The DET can be ignored. Thus there is no further workaround required.
Workaround could be to disable DET for FrTp.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097381	Service 0x27: PowerOn delay time not started on single false access attempt
Component@Subcomponent:	Diag_Asr4Dcm@Doc_TechRef
First affected version:	1.00.00
Fixed in versions:	9.03.00

Problem Description:

What happens (symptoms):

The ECU allows at power-on/reset immediate security access attempt. In other words: the first security access request for getting a new seed is positively responded, instead of sending NRC 0x37 (DelayTimeNotExpired).

When does this happen:

If the following sequence is ran:
- Security access request for getting seed of level X is positively responded.
- Security access request sending a key of level X failed with NRC 0x35 (i.e. prior reaching the false access attempt count limit).
- ECU is reset/powered down.
- ECU is online/powered on, already entered in a session supporting SID 0x27 and false access attempt delay time is not yet elapsed.
- Security access request for getting seed of level X is positively responded. <--- According to ISO14229-1:2013 NRC 0x37 is expected here.

In which configuration does this happen:

- Service 0x27 (SecurityAccess) is supported and implemented by DCM
AND
- The brute-force-attack prevention via access attempt count and delay time is enabled (in Dcm_Cfg.h #define DCM_STATE_SEC_RETRY_ENABLED == STD_ON)
AND
- The OEM does not override the defined in ISO14229-1:2013 defined behavior (i.e. the OEM may specify that the delay time at power-on/reset is started only if the restored attempt counter values is equal or greater than the specified limit other than single attempt)
AND
- The attempt counter(s) are stored into non-volatile memory (in Dcm_Cfg.h #define DCM_STATE_SEC_ATT_CNTR_EXT_STORAGE_ENABLED == STD_ON)
AND
- The false access attempt count limit is > 1 (in DCM ECUC there is at least one parameter: /Dcm/DcmConfigSet/DcmDsp/DcmDspSecurity/DcmDspSecurityRow/DcmDspSecurityNumAttDelay > 1)
AND
- The above affected level supports the non-volatile storage of its attempt counter (in DCM ECUC the corresponding parameter of container DcmDspSecurityRow: DcmDspSecurityAttemptCounterEnabled = TRUE)

Resolution Description:

ESCAN00097381	Service 0x27: PowerOn delay time not started on single false access attempt

Workaround:

The DCM application of the affected project shall implement the Xxx_SetSecurityAttemptCounter() API as follows:
- If DCM passed a value = 0, just store it into NvM
- If DCM passes a value > 0, and the last stored in NvM values is 0, then and only then store the value 255.
 Note: Value 255 is chosen to be configuration independent, in case the attempt count changes for instance from two to three.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097474	Incorrect calculation of 'Cycles Tested Since Last Failed' and 'Healing Counter Inverted'
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	13.04.00
Fixed in versions:	14.02.00

Problem Description:

What happens (symptoms):

The Dem returns incorrect values for the internal data elements 'Cycles Tested Since Last Failed' and 'Healing Counter Inverted'.

When does this happen:

Always when requesting the internal data elements 'Cycles Tested Since Last Failed' and 'Healing Counter Inverted' via extended data or snapshot records (by DCM service 19x04 or 19x06 or application APIs).

In which configuration does this happen:

(All events have no indicator (Dem/DemConfigSet/DemEventParameter/DemEventClass/DemIndicatorAttribute) configured OR an indicator with Dem/DemConfigSet/DemEventParameter/DemEventClass/DemIndicatorAttribute/DemIndicatorHealingCycleCounterThreshold <= 1)
AND
(Using data elements DEM_CYCLES_TESTED_SINCE_LAST_FAILED or DEM_HEALINGCTR_DOWNCNT (Dem/DemGeneral/DemDataClass/DemDataElementInternalData) in an extended data record (Dem/DemGeneral/DemExtendedDataRecordClass) or Did (Dem/DemGeneral/DemDidClass))
AND
(Any DTC has Extended Data Records (Dem/DemConfigSet/DemEventParameter/DemExtendedDataClassRef) or Snapshot Records (Dem/DemConfigSet/DemEventParameter/DemFreezeFrameClassRef) configured)

Resolution Description:

Workaround:

Create an internal dummy event referencing an indicator and Dem/DemConfigSet/DemEventParameter/DemEventClass/DemIndicatorAttribute/DemIndicatorHealingCycleCounterThreshold.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097520	Callout Dcm_FilterDidLookUpResult() is called with unexpected OpStatus
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	5.00.00
Fixed in versions:	9.01.00

Problem Description:
What happens (symptoms):

The callout Dcm_FilterDidLookUpResult() is initially called with OpStatus DCM_PENDING instead of DCM_INITIAL.

When does this happen:

When a specific DID within a DID range is requested over any DID related diagnostic service.
And the return value of the callout IsDidAvailable() is at least one time DCM_E_PENDING.
And the final return values of the very same callout are E_OK and DCM_DID_SUPPORTED.

In which configuration does this happen:

- Any DID related diagnostic service is supported
AND
- DID ranges with gaps are supported (in Dcm_Cfg.h: #define DCM_DIDMGR_OPTYPE_RANGE_ISAVAIL_ENABLED == STD_ON)
AND
- External DID look up filtering is supported (in Dcm_Cfg.h: #define DCM_DIDMGR_EXTENDED_LOOKUP_ENABLED == STD_ON)

Resolution Description:
Workaround:

- Just ignore the OpStatus within Dcm_FilterDidLookUpResult() if applicable (e.g. if filtering is done synchronously)
OR
- Manage the operation status by the application

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097583	Rte_Feedback does not return RTE_E_UNCONNECTED when a signal is not connected in all variants
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.05.00
Fixed in versions:	1.18.00

Problem Description:

What happens (symptoms):

Rte_Feedback does not return RTE_E_UNCONNECTED.

When does this happen:

During runtime.

In which configuration does this happen:

This happens when the configuration uses transmission acknowledgement for a port that does not contain
a data mapping for all variants.

Resolution Description:

Workaround:

Check the variant before calling the Rte_Feedback API.
Please note that the RTE does not provide a specific API for the variant check.
A possible solution could be to check the return value of an Rte_Read API that is unconnected in the same
variant or to set the variant through a CDD.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097659	Contained PDUs with sendTimeout = 0 not transmitted
Component@Subcomponent:	Il_AsrIpduMCfg5@Implementation
First affected version:	5.01.00
Fixed in versions:	6.06.05

Problem Description:
What happens (symptoms):

A continuously transmitted PDU (for example every 100ms) is sometimes seen on the bus only after 200, 300 or more ms.
A Queue Overflow DET occurs.

The ECU continues to behave normally.

When does this happen:

On transmission of a contained PDU.

In which configuration does this happen:

Configurations with Contained PDUs with ContainedPduSendTimeout = 0.

Resolution Description:
Workaround:

EITHER:
Configure the sendTimeout to 1.
OR:
Delete the sendTimeout parameter and configure the contained PDU to "trigger always".

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097707	Unexpected DET during wakeup
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	13.00.00
Fixed in versions:	14.03.00

Problem Description:

What happens (symptoms):

DET DEM_E_WRONG_CONDITION is reported from Dem_Init.
Reason for the DET is that the SatelliteInit cannot be performed if the satellite is not in state PREINITIALIZED

When does this happen:

During ECU wakeup

In which configuration does this happen:

Configurations using a single partition for the Dem module
AND
DemGeneral/DemDevErrorDetect == true

Configurations using multiple partitions cannot use Dem_Init and need to use the specific API Dem_MasterInit / Dem_SatelliteInit.
In the latter case, the DET is expected, and is not reported due to the check for PREINITIALIZED

Resolution Description:

Workaround:

The re-initialization of the satellite in Dem_Init is not necessary.

The issue can be circumvented in multiple ways:
1) The DET report can be ignored (return from DET) - the satellite initialization is not performed in that case.
2) Implement a different wakeup sequence: call Dem_MasterInit instead of Dem_Init

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097729	Add support for software component instance specific transformer handling
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.10.00
Fixed in versions:	1.18.00

Problem Description:

What happens (symptoms):

A RTE API returns an unexpected transformer error.

When does this happen:

During runtime.

In which configuration does this happen:

This happens when the configuration contains multiple instantiated software components and when both instances are connected
to a signal that is protected with E2EXf.

Resolution Description:

Workaround:

Use two different component types instead of instantiating the same component type multiple times.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097731	Service 0x10: Jump to FBL performed although forced RCR-RP could not be sent
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	7.02.00
Fixed in versions:	9.03.00

Problem Description:

What happens (symptoms):

For a HIS compatible jump to FBL DCM triggers always a reset, independently of whether the forced RCR-RP could be sent by the transmission layer or not.

When does this happen:

Whenever a jump to FBL is requested, e.g. via a 0x10 0x02 request.

In which configuration does this happen:

- Service 0x10 is supported (in Dcm_Cfg.h: #define DCM_SVC_10_SUPPORT_ENABLED == STD_ON)
AND
- Jump to bootloader is supported (in Dcm_Cfg.h: #define DCM_SVC_10_JMP2BOOT_ENABLED == STD_ON)
AND
- RCR-RP on jumping to the FBL is supported (in Dcm_Cfg.h: #define DCM_DIAG_RCRRP_ON_BOOT_ENABLED == STD_ON)

Resolution Description:

Workaround:

The workaround for this issue involves overriding default service handling for service "DiagnosticSessionControl" (0x10).

Please contact Vector for technical details and support on how to implement it in order to avoid any unwanted side effects.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097765	Wrong NOCACHE_ZERO_INIT sections in Os_MemMap.h
Component@Subcomponent:	Os_CoreGen7@GenTool_GeneratorMsr
First affected version:	2.07.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The generated NOCACHE_ZERO_INIT sections in Os_MemMap.h are wrong.

For example:

```
#ifdef OS_START_SEC_GLOBALSHARED_VAR_NOCACHE_ZERO_INIT_BOOLEAN /* PRQA S 0883
*/ /* MD_Os_0883 */
...
# undef MEMMAP_ERROR /* PRQA S 0841 */ /* MD_MSR_19.6 */
# pragma ghs section bss = ".OS_GLOBALSHARED_VAR_ZERO_INIT_bss" <= should be
".OS_GLOBALSHARED_VAR_NOCACHE_ZERO_INIT_bss"
# pragma ghs section data = ".OS_GLOBALSHARED_VAR_NOCACHE_ZERO_INIT"
# pragma ghs section sbss = ".OS_GLOBALSHARED_VAR_FAST_ZERO_INIT_bss" <= should be
".OS_GLOBALSHARED_VAR_FAST_NOCACHE_ZERO_INIT_bss"
# pragma ghs section sdata = ".OS_GLOBALSHARED_VAR_FAST_NOCACHE_ZERO_INIT"
# undef OS_START_SEC_GLOBALSHARED_VAR_NOCACHE_ZERO_INIT_BOOLEAN /* PRQA S 0841
*/ /* MD_MSR_19.6 */
#endif
```

When does this happen:

Always and immediately

In which configuration does this happen:

Any configuration

Resolution Description:

Workaround:

The linker-file can be patched manually.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097802	Activation reason data type uses bit access
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.09.00
Fixed in versions:	1.18.00

Problem Description:

What happens (symptoms):

In the struct Rte_ActivatingEvent_<ComponentTypeName>_Type in Rte.c, an activating event for a runnable specifies a bit field length. This leads to a Misra Warning "The behavior of bit fields not of type int is undefined".

When does this happen:

Always and immediately

In which configuration does this happen:

It happens when all of the following conditions are fulfilled:
- a runnable has an activation reason AND
- the runnable is not triggered by "On Operation Called", "On Mode Entry", "On Mode Exit" or "On Transition" AND
- RTE's optimization mode equals MEMORY

Resolution Description:

Workaround:

Set Rte's optimization mode to RUNTIME.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097860	Service 0x2F. Sender/receiver missing ReturnControlToEcu specifics
Component@Subcomponent:	Diag_Asr4Dcm@Doc_TechRef
First affected version:	8.06.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

In chapter "9.32 How to setup DCM for Sender-Receiver Communication" and more specifically "9.32.2 Application usage Scenario", there is missing an important hint to the ReturnControlToEcu" sequence that:
- In case the "inputOutputControlparameter" is equal to "ReturnControlToEcu" application shall not write any value to the "IOControlResponse" port. The reason is: the "ReturnControlToECU" operation is a synchronous "fire-and-forget" event, that does not need any confirmation resp. any confirmation will be ignored by DCM.

The problem that might arise is that if the application writes 0x00 into this S/R port, while DCM already processes the new SID 0x2F request with operation other than the "ReturnControlToECU", DCM might interpret this delayed response signal as an acknowledgment to the new SID 0x2F request and accomplish the request with positive response. The bigger problem could arise if one of the "controlState" parameter in the "ShortTermAdjustment" request were invalid - DCM will update the "underControl" mask enabling the alternate values to be active.

When does this happen:

Implementing the S/R port for IOControlRequest for operation ReturnControlToECU.

In which configuration does this happen:

- Service 0x2F is supported by DCM
AND
- There is any S/R IO-Control DID configured.

Resolution Description:
Workaround:

During SW-C development that uses the IO-DID S/R ports, pelase consider following important information:
- The controlled IO-DID data elements shall use the overriden by SID 0x2F values only depending on the corresponding "underControl" data element. The application shall not copy this variable, but use it directly as a shared memory between DCM and the mapped IO-port.
- In case the "inputOutputControlOperation" has the value 0x00 (ReturnControlToEcu) it is not allowed the application to write any value into the IOControlResponse S/R port. In the described case, the application shall just do nothing, since the only operation done here is the reset of the "underControl" register, which is already done by DCM.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097884	DET check for pre-initialized satellite missing in Dem_SetEventStatus and Dem_ResetEventDebounceStatus
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	13.04.00
Fixed in versions:	14.04.00

Problem Description:

What happens (symptoms):

On call of APIs Dem_SetEventStatus (or the deprecated API Dem_ReportErrorStatus) and Dem_ResetEventDebounceStatus it is not verified that the respective satellite is pre-initialized, if the Development Error Detection is enabled.
Therefore the API calls will be accepted between Dem_MasterPreInit and the completion of Dem_SatellitePreInit, but reported data will be lost when Dem_SatellitePreInit is finished.

When does this happen:

Always on call of API Dem_SetEventStatus and Dem_ResetEventDebounceStatus between Dem_MasterPreInit and the completion of Dem_SatellitePreInit (or the completion of Dem_PreInit which pre-initializes both master and satellite).

In which configuration does this happen:

Development Error Detection enabled

Resolution Description:

Workaround:

Verify that APIs Dem_SetEventStatus (or the deprecated API Dem_ReportErrorStatus) and Dem_ResetEventDebounceStatus are not used before Dem pre-initialization (Dem_SatellitePreInit or Dem_PreInit) is finished.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097982	TXEN related error flags are not reliably detected in polling mode
Component@Subcomponent:	DrvTrans_Tja1082FrdiospiAsr@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

In Simple Error Indication Mode the error flags are not latched. That means that they are only visible as long as they persist.
The visibility duration of some errors is very short especially those that are related to the TXEN pin (Bus error, TXEN clamped). The duration is to short to reliably detect them in polling mode.

As a result such errors may go unnoticed and no DEM error is thrown.

When does this happen:

Always and immediately.

In which configuration does this happen:

When bus error detection is used

Resolution Description:

ESCAN00097982	TXEN related error flags are not reliably detected in polling mode

Workaround:

Use a user.cfg file:

```
/* User Config File Start */

#if defined (FRTRCV_30_TJA1082_SOURCE)
extern Dio_LevelType ApplDio_ReadChannel(Dio_ChannelType DioChannel);
#define Dio_ReadChannel ApplDio_ReadChannel
#endif

/* User Config File End */
```

and provide the following function (pseudo code):

```
Dio_LevelType ApplDio_ReadChannel(Dio_ChannelType DioChannel)
{
 Dio_LevelType level;

 level = Dio_ReadChannel(DioChannel);
 if(DioChannel == DioConf_DioChannel_DioChannel_ERRN)
 {
 if(INTERRUPT_FLAG_ERRN == TRUE)
 {
 level = STD_LOW;
 }
 CLEAR_INTERRRUPT_FLAG_ERRN;
 }

 return level;
}
```

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098000	Missing description of limitations to application data callbacks
Component@Subcomponent:	Diag_Asr4Dem@Doc_TechRef
First affected version:	7.00.00
Fixed in versions:	8.04.00

Problem Description:

What happens (symptoms):

At the moment the Dem only uses the Dem Master specific implementation of application data callbacks.
Due to this when using APIs Dem_GetEventFreezeFrameDataEx() or Dem_GetEventExtendedDataRecordEx() (which are provided on the Dem Satellites via the DiagnosticInfo port interface) a correct processing via the Rte can not be guaranteed in all situations/configurations.
The TechRef lacks the descriptions of the necessary restrictions (see Workaround).

When does this happen:

Always and immediately

In which configuration does this happen:

All

Resolution Description:

Workaround:

Description of the missing restrictions is as follows:
When using APIs Dem_GetEventFreezeFrameDataEx() or Dem_GetEventExtendedDataRecordEx() the following restrictions hold to guarantee a correct callback processing via the Rte:
> Don’t map application data callback runnables to Os tasks.
> Provide application data callbacks on the same Os application as the Dem Master is located.
> If you use Sender/Receiver data callbacks, map the runnables Dem_GetEventFreezeFrameDataEx() and Dem_GetEventExtendedDataRecordEx() to the same Os task as Dem_MasterMainFunction.

Also only call APIs Dem_GetEventFreezeFrameDataEx() and Dem_GetEventExtendedDataRecordEx() from the master partition.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098036	Cyclic PDUs with a ComGwRoutingTimeout are triggered when started if ComTxDlMonTimeBase is configured
Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	8.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Periodic or Mixed Tx ComIPdu's with a configured ComGwRoutingTimeout might get triggered after their respective ComIPduGroup is started.

When does this happen:

This issue occurs at runtime after the ComIPduGroup is started within the next Com_MainFunctionTx call.

In which configuration does this happen:

Tx ComIPdu is part of any routing relation
AND
ComGwRoutingTimeout is configured for the Tx ComIPdu
AND
ComMainfunctionTimingDomainSupport is enabled
AND
ComTxDlMonTimeBase is configured

Resolution Description:
Workaround:

Deactivate ComTxDlMonTimeBase

OR

Set resolution of ComTxDlMonTimeBase higher than ComTxCycleCounterTimeBase, such that ComTxCycleCounterTimeBase is a multiple of ComTxDlMonTimeBase.

Resolution:

The described issue is corrected by modification of all affected work-products.

2.4 Not Released Functionality

Not released functionalities (BETA) are either complete software modules or features in the software module that have not yet passed a complete development cycle (they are e.g. not or only partly tested). If a BETA issue ticket affects a complete software module, the software module must not be used for serial production. If a BETA issue ticket affects a feature in the software module, the user has to ensure that all BETA features are disabled as indicated for the serial production release of the ECU.

Index

ESCAN00083894	BETA version - the BSW module has a feature with BETA state (FEAT-1440) Ccl_Asr4SmFr@Implementation
ESCAN00088830	BETA version - the BSW module has a feature with BETA state (Memory Protection in trusted applications) Os_CoreGen7@Implementation
ESCAN00089701	BETA version - the BSW module has a feature with BETA state (Executing trusted applications in non privileged mode) Os_CoreGen7@Implementation
ESCAN00092470	BETA version - the BSW module has a feature with BETA state (FEAT-1454) SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
ESCAN00092764	BETA version - the BSW module has a feature with BETA state (FEAT-1454) Ccl_Asr4ComMCfg5@Implementation
ESCAN00093797	BETA version - the BSW module has a feature with BETA state (Barriers) Os_CoreGen7@Implementation
ESCAN00093813	BETA version - the BSW module has a feature with BETA state (Fast Trusted Functions) Os_CoreGen7@Implementation
ESCAN00096772	BETA version - Virtual key elements are only provided as a BETA feature. DrvCrypto_CryWrapper@Implementation
ESCAN00096853	BETA version - the Program (MSR_Bmw_SLP4) is in BETA state. MSR_Bmw_SLP4@Preconfig

ESCAN00083894	BETA version - the BSW module has a feature with BETA state (FEAT-1440)
Component@Subcomponent:	Ccl_Asr4SmFr@Implementation
First affected version:	2.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA software
- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not or only partly tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.
- ESCAN00083893Allow Wake Up Attempts On Both Channels

To ensure that only productive code is used verify that:
- Switch FRSM_WAKEUP_ON_BOTH_CHANNELS_ALLOWED is disabled in configuration tool

Resolution Description:

ESCAN00088830	BETA version - the BSW module has a feature with BETA state (Memory Protection in trusted applications)
Component@Subcomponent:	Os_CoreGen7@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA feature:

- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.

- Memory Protection in trusted applications.

To ensure that only productive code is used verify that:

- OsTrustedApplicationWithProtection is false for all applications.

Resolution Description:

Workaround:

Do not use memory protection for trusted.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00089701	BETA version - the BSW module has a feature with BETA state (Executing trusted applications in non privileged mode)
Component@Subcomponent:	Os_CoreGen7@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA feature:

- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.

- Executing trusted applications in non privileged mode is implemented as a BETA feature:

To ensure that only productive code is used verify that:

- IsPrivileged is TRUE for all trusted applications

Resolution Description:

API Extensions:

No extension of the API.

API Changes:

No modification of the API.

Module handling changes:

No modification of the module handling.

For a detailed description of the API and the handling of the module refer to the Technical Reference.

ESCAN00092470	BETA version - the BSW module has a feature with BETA state (FEAT-1454)
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	10.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA software
- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not or only partly tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.
- Configuration of Switch Ports (Mode Request Port (BswM_EthIf_PortGroupLinkStateChg))

Additonal:
Currently the BswM general switch BswMEthIfEnabled is not set via a Auto-Validation. During fixing of this BETA ESCAN a validation has to be implemented which ensures that the BswMEthIfEnabled is true if the EthIf calls this API and if the Mode Request Port is configured in BswM.

Resolution Description:

ESCAN00092764	BETA version - the BSW module has a feature with BETA state (FEAT-1454)
Component@Subcomponent:	Ccl_Asr4ComMCfg5@Implementation
First affected version:	8.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA software
- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not or only partly tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.
- FEAT-1454: Configuration of Switch Ports (switchable per PNC)

The above feature/function has following limitations:
- CFG5 do not provide any validations rules. A proper feature configuration has to be ensured manually.
- Use case PB-L is not supported.
- PNCs having at least one /MICROSAR/ComM/ComMConfigSet/ComMPnc/ComMPortGroupsPerPnc require a ComM user.

To ensure that only productive code is used verify that:
- /MICROSAR/ComM/ComMConfigSet/ComMPnc/ComMPortGroupsPerPnc does not exist.
and
- ensure that COMM_WAKEUPENABLEDOFPNC is defined to STD_OFF in ComM_Cfg.h.
Note: otherwise MSSV fails with error message 'assertion 'COMM_WAKEUPENABLEDOFPNC: "STD_ON"' == '"STD_OFF"' does not hold'.

Resolution Description:

ESCAN00093797	BETA version - the BSW module has a feature with BETA state (Barriers)
Component@Subcomponent:	Os_CoreGen7@Implementation
First affected version:	2.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA software
- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not or only partly tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.
- Using barriers to synchronize tasks is implemented as a BETA feature.

To ensure that only productive code is used verify that:
- No barriers (/MICROSAR/Os/OsBarrier) are configured in the configuration tool.

Resolution Description:

API Extensions:

No extension of the API.

API Changes:

No modification of the API.

Module handling changes:

No modification of the module handling.

For a detailed description of the API and the handling of the module refer to the Technical Reference.

ESCAN00093813	BETA version - the BSW module has a feature with BETA state (Fast Trusted Functions)
Component@Subcomponent:	Os_CoreGen7@Implementation
First affected version:	2.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA software
- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not or only partly tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.
- Os_CallFastTrustedFunction() API

To ensure that only productive code is used verify that:
- No elements are configured in /MICROSAR/Os/OsApplication/OsApplicationFastTrustedFunction

Resolution Description:

ESCAN00096772	BETA version - Virtual key elements are only provided as a BETA feature.
Component@Subcomponent:	DrvCrypto_CryWrapper@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA software
- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not or only partly tested and not all quality measures have taken place

Which functionality is BETA:

The following feature/function is in BETA state.
- Usage of virtual key elements

To ensure that only productive code is used verify that:
- optional CryptoKeyElementVirtualTargetRef may not be used
- CRYPTO_30_CRYWRAPPER_KEYELEMENTINFOVIRTUALUSEDOFKEYELEMENTINFO is set STD_OFF

Exclusion: It can be used when the keys are located in hardware.

Resolution Description:

ESCAN00096853	BETA version - the Program (MSR_Bmw_SLP4) is in BETA state.
Component@Subcomponent:	MSR_Bmw_SLP4@Preconfig
First affected version:	19.06.00
Fixed in versions:	

Problem Description:

What is the impact of BETA software:

BETA software
- must not be used in productive projects as they may result in unpredictable ECU behavior
- may not provide all features intended for the productive project
- is not or only partly tested and not all quality measures have taken place

Which functionality is BETA:

The complete BSW module is in BETA state

//ToDo
- set the state to ANALYZED
- assign the BETA ESCAN to the most affected sub-package
- add a separate BETA ESCAN to each sub-package only, if there is a risk of undetected delivery of BETA functionality (e.g. sub-package is used in different package branches)
- remove ToDo checklist

Resolution Description:

2.5 Apparent Issues

Apparent issues are detected immediately when using the software module. If an issue does not show up while working with the software module, the ECU project is not affected by the issue. Apparent issues may or may not have workarounds.

Index

Index

Index

Index

Index

ESCAN00066621	BAC4: Temporary PNC ID for partial network ANHAENGERBETRIEB
Component@Subcomponent:	GenTool_CsAsrLegacyDb2SystemDescr@Application
First affected version:	1.05.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The PNC ID of the partial network ANHAENGERBETRIEB is unkown yet. For this reason, a temporary ID 23 hat been set.

When does this happen:

The temporary ID is used if a Fibex file contains signals for the ANHAENGERBETRIEB PNC.

In which configuration does this happen:

The ANHAENGERBETRIEB PNC is used for BMW PWF (Parken Wohnen Fahren) configurations.

Resolution Description:

Workaround:

No workaround available.

Resolution:

TBD

ESCAN00072123	Dcm violates DCM796: ReadDataLength has two arguments if DcmDspDataUsePort configured to USE_DATA_ASYNCH_CLIENT_SERVER
Component@Subcomponent:	Diag_Asr4Dcm@GenTool_GeneratorMsr
First affected version:	1.02.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Actual version of DCM differs operation arguments for operation ReadDataLength depending on parameter DcmDspDataUsePort. For DcmDspDataUsePort configured to USE_DATA_ASYNCH_CLIENT_SERVER ReadDataLength is generated with following arguments: In Dcm_OpStatusType OpStatus, Out UInt16 DataLength

For DcmDspDataUsePort configured to USE_DATA_SYNCH_CLIENT_SERVER ReadDataLength is generated with argument Out UInt16 DataLength, which is correct.

This violates following AUTOSAR Requirement:

Dcm796
Service name: Length Xxx_ReadData
Syntax: Std_ReturnType Xxx_ReadDataLength(
 uint16* DataLength
)
Service ID[hex]: 0x36
Sync/Async: Synchronous
Reentrancy: Non Reentrant
Parameters (in): None
Parameters (inout): None
Parameters (out): DataLength Length of the data to be writen/read
Return value: Std_ReturnType E_OK: this value is always returned.
Description: data length of a Data. This function requests the application to return the

AUTOSAR does not differ between Asynch and synchronous for configured for parameter DcmDspDataUsePort

When does this happen:

For DID with variable Length and DcmDspDataUsePort configured to USE_DATA_ASYNCH_CLIENT_SERVER

In which configuration does this happen:

For DID with variable Length and DcmDspDataUsePort configured to USE_DATA_ASYNCH_CLIENT_SERVER/USE_DATA_ASYNCH_FNC

Resolution Description:

ESCAN00072123	Dcm violates DCM796: ReadDataLength has two arguments if DcmDspDataUsePort configured to USE_DATA_ASYNCH_CLIENT_SERVER

Workaround:

Use synchronous client server/ call out function DID data ports.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00073545	Final FBL response not cancelled on protocol preemption
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	1.05.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

The ECU will process the FBL final response even if there is higher protocol request sent.

When does this happen:

When immediately after reprogramming of the ECU has ended, the very first request after ECU powers on in the application is a hi-priority one (i.e. OBD).

In which configuration does this happen:

- Any configuration where the ECU shall be able to send a final response without request after reset.
AND
- Protocol prioritisation is to be supported (i.e. OBD vs. UDS).

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00074983	Necessary step to update a SIP is not documented
Component@Subcomponent:	MSR_UserManual_Startup_Bmw_BAC4x@Doc_UserMan
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

All the BAC Module Version parameters in container "CommonPublishedInformation" of each BAC-Module is not updated during SIP-Update.
This results in the fact that the module is generated with a wrong version.
Which results in compiler errors.

When does this happen:

@ Compile time

In which configuration does this happen:

If an existing Configuration is updated to a new SIP
&&
The BMW BAC-Module Version is changed

Resolution Description:

Workaround:

---

no Workaround
Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00078508	[depends on derivative] Illegal flash block table configuration cause unintended block erase
Component@Subcomponent:	FblDrvFlash_Rh850Rv40His@Impl_Base
First affected version:	0.90.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

If the code flash contains gaps where no flash exists and the user configure a flash block in this area, the flash driver will erase the next valid flash block (first block with start address bigger than the illegal configured block).

When does this happen:

Always and immediately

In which configuration does this happen:
---
all configurations, but not all derivatives

Note: The gap between user area and extended user area is not relevant. Until now, no known derivative is affected by this issue!

Resolution Description:
Workaround:

Well configured flash block table, which corresponds to the real flash block structure.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00079070	(Multi Core only) Reprogramable reset vector works only for CPU1
Component@Subcomponent:	FblDrvFlash_Rh850Rv40His@Impl_Base
First affected version:	1.02.00
Fixed in versions:	1.07.00

Problem Description:

What happens (symptoms):

Only Reset vector of CPU can be reprogrammed via provided API

When does this happen:

Always and immediately

In which configuration does this happen:

FLASH_ENABLE_SET_RESETVECTOR_API must be set

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00079399	Linker error: '<Cdd>_Transmit' : undeclared identifier
Component@Subcomponent:	Cdd_AsrCddCfg5@Description
First affected version:	2.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Linker error in PduR_Lcfg.c: '<Cdd>_Transmit' : undeclared identifier

The Cdd_AsrCddCfg5 is not derived according to the ASR 4.0.3 rules and allows a LOWER-MULTIPLICITY of 0 for the CddPduRLowerLayerRxPdu and CddPduRLowerLayerTxPdu instead of the LOWER-MULTIPLICITY of 1.
The generic ASR PduR according to the ASR 4.0.3 Specification has no information to deactivate a communication direction (e.g. a Parameter in the PduRBswModules).

When does this happen:

The error is issued by the linker after compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Rx only Cdd with a CddPduRLowerLayerContribution (just receive pathways exits)

The <CddName>.h file contains the following define:
<CddName>_LOWERLAYERCOMIF_TX is defined to STD_OFF

Resolution Description:
Workaround:

Implement the not required '<Cdd>_Transmit' API on your own in a c and h file of your choice and add the header file with a user config file to the PduR configuration that the compiler does not throw a warning.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00081436	Using FlashDriver_SetResetVector() might cause exception
Component@Subcomponent:	FblDrvFlash_Rh850Rv40His@Impl_Base
First affected version:	1.02.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

When using FlashDriver_SetResetVector() an exception occurs.

When does this happen:

When code called from wdTriggerFct (typically FblLookForWatchdog()) is not located in RAM. This may apply e.g. to the Communication Wrapper task functions.

In which configuration does this happen:

---

if FLASH_ENABLE_SET_RESETVECTOR_API is enabled.

Resolution Description:

Workaround:

Either manually handle memDrvDeviceActive in the updater or locate any code referenced by FblLookForWatchdog() in RAM

Resolution:

None.

ESCAN00086584	E2E Generation fails silently
Component@Subcomponent:	SysService_E2ePw@Generator
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

E2EPW source code is not generated by execution of the E2EPW generator from DaVinci Configurator Pro, although no error message is reported.

When does this happen:

This error occurs for wrong user configurations, in some cases if the E2E generator is not capable of producing source code for a configuration, but the E2E preprocessor is not able to detect the issue.

In which configuration does this happen:

This occurs in configurations where the data length of a E2E protected signal group is set incorrectly in the ECU extract of system description (possibly by manual configuration in DaVinci Developer).

Resolution Description:

Workaround:

If no E2EPW source code is generated, please
- navigate to the tab "Generation Result" in DaVinci Configurator
- right click on E2EPW, select "Show Generation Console Output"
- an error message will be displayed that explains the error based on the intermediate E2E configuration file. Please find the description of this file in the E2EPW User Manual.

Resolution:

---

n.a.

ESCAN00087948	Update Bits are not cleared if Com_IpduGroupControl is called with initialize = false
Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

After a IpduGroup is stared with initialize = false a Signal is transmitted with set Update Bit although signal was not updated since the IpduGroup was stopped.

When does this happen:

---

during the call of Com_IpduGroupControl or Com_IpduGroupStart.

In which configuration does this happen:

If Tx UpdateBits are used
AND
if Com_IpduGroupControl/ Com_IpduGroupStart is used with initialize = false

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00087958	Wrong return value of GetTaskState when called from PostTaskHook
Component@Subcomponent:	Os_CoreGen7@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

GetTaskState returns SUSPENDED for current task when called from PostTaskHook.
Return 'RUNNING' instead.

When does this happen:

In PostTaskHook the task is still running.

In which configuration does this happen:

Configuration invariant.

Resolution Description:

Workaround:

Do not use the API GetTaskState for the current task in the PostTaskHook.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00088036	Compiler error: PduR_FrIfTxConfirmation is not defined
Component@Subcomponent:	If_AsrIfFr@GenTool_GeneratorMsr
First affected version:	2.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

A compilation error occurs because the symbol PduR_FrIfTxConfirmation is not defined.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Configuration having all of the following characteristics:
1. PduR/PduRBswModules/PduRTxConfirmation is set to FALSE.
2. A PduR/PduRRoutingTables/PduRRoutingTable/PduRRoutingPath/PduRDestPdu where the parameter PduR/PduRRoutingTables/PduRRoutingTable/PduRRoutingPath/PduRDestPdu/PduRTransmissionConfirmation is not instantiated.
3. A FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfTxPdu where the parameter FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfTxPdu/FrIfConfirm is set to TRUE and the FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfTxPdu/FrIfUserTxUL is set to PDUR.
4. The PduRDestPdu and the FrIfTxPdu have a reference to the same EcucDefs/EcuC/EcucPduCollection/Pdu.

Resolution Description:
Workaround:

Manually set the parameter FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfTxPdu/FrIfConfirm to FALSE in all the FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfTxPdu that have the parameter FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfTxPdu/FrIfUserTxUL set to PDUR

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00088219	CAL90005 Generator (MICROSAR Cal Generator) failure, because of an exception
Component@Subcomponent:	SysService_AsrCal@GenTool_GeneratorMsr
First affected version:	3.02.01
Fixed in versions:	4.00.01

Problem Description:

What happens (symptoms):

Cal throws exception:

CAL90005 Generator (MICROSAR Cal Generator) failure, because of an exception (1 message)
CAL90005 Exception in Cal generator during Validation encountered:
com.vector.cfg.gen.core.utils.exceptions.GeneralParameterException:
AtomicBitAccessableInBitfield could not be resolved. No EcuC or Board Module was found.
/ActiveEcuC/Cal

When does this happen:

---

if parameter /ActiveEcuC/EcuC/EcucGeneral[AtomicVariableAccess] is not configured

In which configuration does this happen:

---

if parameter /ActiveEcuC/EcuC/EcucGeneral[AtomicVariableAccess] is not configured

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00089109	Software stack monitoring for non trusted functions not supported
Component@Subcomponent:	Os_CoreGen7@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Stack monitoring in software is not supported for non trusted functions.

When does this happen:

Always

In which configuration does this happen:

In systems where non trusted functions and software stack checks are used:
In configuration:
/ActiveEcuC/Os/<Application>/OsApplicationNonTrustedFunction is used and /ActiveEcuC/Os/OsOS[OsStackMonitoring] = TRUE

Resolution Description:
Workaround:

If a MPU is available, protect stacks by MPU.
In case that no MPU is available, user has to ensure that stack overflow does not occur during execution of non trusted functions. Otherwise non trusted functions shall not be used.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00091118	EcuM causes a Rte Det error (RTE_E_DET_UNINIT) in the shutdown sequence while the Nvm write all is performed
Component@Subcomponent:	SysService_Asr4EcuM@Implementation
First affected version:	3.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

The Rte throws a Det error with the ID RTE_E_DET_UNINIT during the shutdown sequence.

When does this happen:

Always during the NvM_WriteAll() is performed.

In which configuration does this happen:

Only in configurations with all the following parameters are set to true:

/ActiveEcuC/EcuM/EcuMGeneral/EcuMEnableFixBehavior
/ActiveEcuC/EcuM/EcuMFixedGeneral/EcuMModeSwitchRteAck
/ActiveEcuC/EcuM/EcuMFixedGeneral/EcuMIncludeNvramMgr
/ActiveEcuC/Rte/RteGeneration/RteDevErrorDetect

Resolution Description:
Workaround:

The only workaround is to filter this DET message.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00091723	Generator error IPDUM90005 is reported for PduR routing paths from non-Com upper layer to IpduM
Component@Subcomponent:	Il_AsrIpduMCfg5@GenTool_GeneratorMsr
First affected version:	7.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

During code generation, IPDUM90005 is reported, code generation is aborted.

When does this happen:

During code generation.

In which configuration does this happen:

Any configuration where the IpduM is involved in a Tx routing path with an upper layer that is not the Com module.

Resolution Description:
Workaround:

A configuration where the IpduM is involved in a Tx routing path with an upper layer that is not the Com module is not supported.
Update your system description and model the upper layer as Com.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00092622	A change of the main function period does not lead to a rebuild of the SWC description
Component@Subcomponent:	SysService_Asr4EcuM@GenTool_GeneratorMsr
First affected version:	1.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

The SWC description file is not updated after a change of the EcuM main function period.

When does this happen:

After change of the parameter /MICROSAR/EcuM/EcuMGeneral/EcuMMainFunctionPeriod.

In which configuration does this happen:

In all configurations.

Resolution Description:
Workaround:

Adapt another parameter which leads to a rebuild of the SWC description, e.g. rename of a sleepmode [/EcuM/EcuMConfiguration/EcuMCommonConfiguration/EcuMSleepMode].

After rebuild the name of this sleepmode can be switched back to the old name, the rename is only necessary to trigger a rebuild.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00092644	ConsistencyRT00002 after adding multiple ComStackContributions of the same type
Component@Subcomponent:	Cdd_AsrCddCfg5@GenTool_GeneratorMsr
First affected version:	2.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

ConsistencyRT00002 is thrown

When does this happen:

---

1) you add an unnecessary ComStackContribution that voids the allowed multiplicity
2) you remove the unnecessary ComStackContribution by delete or undo to comply with the allowed multiplicity again
3) the above exception is thrown

In which configuration does this happen:

Any configuration containing the module Cdd_AsrCddCfg5

Resolution Description:

Workaround:

Restart CFG5 and the message is gone again.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00092790	Unused parts of a multiplexed PDU contain old data for non-aligned dynamic parts
Component@Subcomponent:	Il_AsrIpduMCfg5@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

A transmitted multiplex PDU with configured Unused Area Default Value contains non-default values in unused areas.

The ECU continues to behave normally.

When does this happen:

During transmission or triggertransmit of a multiplexed PDU.

In which configuration does this happen:

Any configuration where two or more dynamic parts of the same multiplexed PDU use different parts in the PDU, i.e. don't perfectly overlap.

Resolution Description:

Workaround:

Configure additional segments in IpduM and matching signals in Com with the desired Unused Areas Default Value as initial values in Com so all dynamic parts of a given multiplexed PDU completely overlap.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00092892	Compiler error: function "EcuM_BswErrorHook" has no prototype
Component@Subcomponent:	SysService_Asr4EcuM@Implementation
First affected version:	2.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Compiler throws the following error:

function "EcuM_BswErrorHook" has no prototype

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Only in configurations with any PB Modules but EcuM is not configured as PB

AND

The module which uses the API EcuM_BswErrorHook() includes 'EcuM.h' instead of 'EcuM_BswErrorHook.h'.

Resolution Description:
Workaround:

Include the file 'EcuM_Error.h' additional to the include 'EcuM.h', e.g. via a user configuration file.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00092955	Compiler error: incompatible types - from 'const <MSN>_PCConfigType *' to 'const <MSN>ConfigType *const
Component@Subcomponent:	SysService_Asr4EcuM@GenTool_GeneratorMsr
First affected version:	4.00.00
Fixed in versions:	
Problem Description:	

ESCAN00092955	Compiler error: incompatible types - from 'const <MSN>_PCConfigType *' to 'const <MSN>ConfigType *const

What happens (symptoms):

The compiler throws an error like the following:

1> EcuM_Init_Cfg.c
1>GenData/EcuM_Init_Cfg.c(86): error C4133: 'initializing' : incompatible types - from 'const CanNm_PCConfigType *' to 'const EcuM_PbConfigType *const '
1>GenData/EcuM_Init_Cfg.c(87): error C4133: 'initializing' : incompatible types - from 'const EcuM_PCConfigType *' to 'const SchM_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(88): error C4133: 'initializing' : incompatible types - from 'const SchM_ConfigType *' to 'const Can_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(89): error C4133: 'initializing' : incompatible types - from 'const Can_PCConfigType *' to 'const CanIf_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(90): error C4133: 'initializing' : incompatible types - from 'const CanIf_PCConfigType *' to 'const Com_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(91): error C4133: 'initializing' : incompatible types - from 'const Com_PCConfigType *' to 'const PduR_PBConfigType *const '
1>GenData/EcuM_Init_Cfg.c(92): error C4133: 'initializing' : incompatible types - from 'const PduR_PCConfigType *' to 'const CanSM_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(93): error C4133: 'initializing' : incompatible types - from 'const CanSM_PCConfigType *' to 'const CanNm_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(103): error C4133: 'initializing' : incompatible types - from 'const CanNm_PCConfigType *' to 'const EcuM_PbConfigType *const '
1>GenData/EcuM_Init_Cfg.c(104): error C4133: 'initializing' : incompatible types - from 'const EcuM_PCConfigType *' to 'const SchM_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(105): error C4133: 'initializing' : incompatible types - from 'const SchM_ConfigType *' to 'const Can_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(106): error C4133: 'initializing' : incompatible types - from 'const Can_PCConfigType *' to 'const CanIf_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(107): error C4133: 'initializing' : incompatible types - from 'const CanIf_PCConfigType *' to 'const Com_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(108): error C4133: 'initializing' : incompatible types - from 'const Com_PCConfigType *' to 'const PduR_PBConfigType *const '
1>GenData/EcuM_Init_Cfg.c(109): error C4133: 'initializing' : incompatible types - from 'const PduR_PCConfigType *' to 'const CanSM_ConfigType *const '
1>GenData/EcuM_Init_Cfg.c(110): error C4133: 'initializing' : incompatible types - from 'const CanSM_PCConfigType *' to 'const CanNm_ConfigType *const '

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

In variant configurations with modules which uses different EcuC init phases in different variants (/MICROSAR/EcuC/EcucGeneral/BswInitialization/InitFunction/InitPhase).

E.g.
VARIANT_1: InitPhase = NO_INIT
VARIANT_2: InitPhase = INIT_TWO_MCAL

Resolution Description:

ESCAN00092955	Compiler error: incompatible types - from 'const <MSN>_PCConfigType *' to 'const <MSN>ConfigType *const

Workaround:

To resolve this the content of theCONT EcuM_GlobalConfigRoot in EcuM_Init_Cfg.c has to be reordered to fit to the struct EcuM_GlobalConfigRootType.

e.g.

```
CONST(EcuM_GlobalConfigRootType, ECUM_CONST) EcuM_GlobalConfigRoot =
{
 {
 BswM_Config_CanNm_Ptr,
 EcuM_Config_CanNm_Ptr,
 CanNm_Config_CanNm_Ptr,
 },
 {
 BswM_Config_ClassB_Ptr,
 CanNm_Config_ClassB_Ptr, <===== Wrong position, must be the last one
 EcuM_Config_ClassB_Ptr,
 },
 {
 BswM_Config_ClassC_Ptr,
 CanNm_Config_ClassC_Ptr, <===== Wrong position, must be the last one
 EcuM_Config_ClassC_Ptr,
 }
};

typedef struct
{
 CONSTP2CONST(BswM_ConfigType, TYPEDEF, BSWM_INIT_DATA) CfgPtr_BswM_Init;
 CONSTP2CONST(EcuM_PbConfigType, TYPEDEF, ECUM_INIT_DATA) CfgPtr_EcuM_Init;
 CONSTP2CONST(CanNm_ConfigType, TYPEDEF, CANNM_INIT_DATA) CfgPtr_CanNm_Init;
} EcuM_GlobalPCConfigType;
```

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00093171	MainFunctions still declared for AR4
Component@Subcomponent:	Cp_XcpOnFrAsr@Implementation
First affected version:	3.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The FrXcp_MainFunctionRx/Tx are declared in the AR4 use case. As a result a MISRA warning will occur.

When does this happen:

Always and immediately

In which configuration does this happen:

---

all configurations

Resolution Description:

Workaround:

The MISRA warning has no functional impact and can be ignored.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00093405	Auto Configuration - Invalid multiplicity after manual adaptations of container BswMAvailableActions
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	10.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

User-modifications about a changed BswMAvailableActions subcontainer are recognized by the Auto Configuration assistant but even if they should be kept, the assistant will re-create the original action. This leads to an invalid model because the user modification is not removed by the assistant.

Example:
- Configure Communication Control is used and Reinitialize TX is turned ON, Finish is clicked.
- the /MICROSAR/BswM/BswMConfig/BswMModeControl/BswMAction CC_EnableDM_<I-PDU-Group> has a BswMDeadlineMonitoringControl container which is deleted within the Basic Editor
- Instead another BswMAvailableActions subcontainer is created of another type, e.g. BswMComMModeLimitation
- Configure Communication Control is used once again and Finish is clicked. An option if offered to either keep this modification or to restore it, but independent of the choice, the original BswMDeadlineMonitoringControl is restored without removing the user modification. Because the user modification is not removed the multiplicity of the container BswMAvailableActions[0...1] is violated.

When does this happen:

During the configuration with DaVinci Configurator in the BSW Management Editor in the following sequence:
- Configure <Auto Configuration> is clicked
- Finish is clicked
- Some objects like a /MICROSAR/BswM/BswMConfig/BswMModeControl/BswMAction/BswMAvailableActions/BswMDeadlineMonitoringControl container are deleted or changed
- Configure <Auto Configuration> is clicked once again
- Finish is clicked
- the dialog 'Manual Adaptions' does pop up
- Finish is clicked in the 'Manual Adaptions' dialog

In which configuration does this happen:

Any configuration using one of the Auto Configurations in BSW Management in DaVinci Configurator

Resolution Description:

Workaround:

Redo the previously manual changes that have been overwritten.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00093413	Auto Configuration Module Initialization - Changed User Include Files always restores
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	2.00.01
Fixed in versions:	

Problem Description:
What happens (symptoms):

If the EcuM_Init_PBCfg.h entry in the User Config File (/MICROSAR/BswM/BswMGeneral/BswMUserIncludeFiles/BswMUserIncludeFile) list is overwritten by some other value or being replaced, it is being restored after the Module Configuration Auto Configuration is applied again and the other value might be removed.

When does this happen:

During the configuration with DaVinci Configurator in the BSW Management Editor in the following sequence:
- Configure Module Initialization is clicked
- Finish is clicked
- One of the /MICROSAR/BswM/BswMGeneral/BswMUserIncludeFiles/BswMUserIncludeFile has the value EcuM_Init_PBCfg.h, this one is being changed or deleted.
- Configure Module Initialization is clicked once again
- Finish is clicked
- the dialog 'Manual Adaptions' does not pop up or it pops up but the change is not displayed
- Finish is clicked in the 'Manual Adaptions' dialog if it is displayed

In which configuration does this happen:

Any configuration using the Module Initialization Auto Configurations in BSW Management in DaVinci Configurator

AND

EcuM is configured as Postbuild Loadable or Postbuild Selectable

Resolution Description:
Workaround:

Redo the previously manual changes that have been overwritten.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094259	Auto-Configuration Communication Control shows an error in case of not available module Com
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	2.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Auto-Configuration shows the following error:

Configuration *error*

Reason for *error*:
Could not collect all necessary informations. Solve errors in depending Modules first!

To see following errors in the Validation view execute on-demand generator validation!

Container ComConfig does not exist. Element def.: /[ANY]/Com/ComConfig

When does this happen:

Always during configuration.

In which configuration does this happen:

In all configurations without the module Com.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094298	The Ecu does not startup properly in some MultiCore configurations
Component@Subcomponent:	SysService_Asr4EcuM@GenTool_GeneratorMsr
First affected version:	2.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The Ecu does not startup properly, e.g. communication does not start , the application is not started, the configuration variant is not detected correct etc.

When does this happen:

Always after startup of the Ecu.

In which configuration does this happen:

In MultiCore configurations with parameter "/EcuM/EcuMGeneral/EcuMBswCoreId" set to another value than to the ID of the master core

AND

The OS symbols OS_CORE_ID_<X> are provided as a enumeration and not as a preprocessor define.

Resolution Description:

Workaround:

Create a header file with the following content and add it to /MICROSAR/EcuM/EcuMGeneral/EcuMUserConfigurationFile:

```
#if defined(ECUM_CFG_H)

# undef ECUM_CORE_ID_STARTUP
# undef ECUM_CORE_ID_BSW
# define ECUM_CORE_ID_STARTUP <Core Id as Numerical Value, e.g. '0>
# define ECUM_CORE_ID_BSW <Core Id as Numerical Value, e.g. '1>

#endif
```

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094319	Auto-Configuration Communication Control: Init Mode of Lin Schedule Indication is missing
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	10.01.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

A validator in Cfg5 reports the following warning:

BSWM01057 Init Mode of CC_LinScheduleIndication_<Schedule Name> is not known.
Set BswMBswModeInitValueMode(value=) to LinSMConf_LinSMSchedule_<NAME>
/ActiveEcuC/BswM/BswMConfig/BswMArbitration/
CC_LinScheduleIndication_LIN00_<Schedule_Name>/BswMModeInitValue/
BswMBswModeInitValue[BswMBswModeInitValueMode]
/ActiveEcuC/BswM/BswMConfig/BswMArbitration/
CC_LinScheduleIndication_LIN00_<Schedule_Name>

When does this happen:

Always after configuring the Auto-Configuration Communication Control.

In which configuration does this happen:

Only in configurations with at least one Lin channel

AND

Auto-Configuration Communication Control is configured.

Resolution Description:

Workaround:

Set the normal schedule via the provided solving action.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094541	Auto-Configuration Communication Control: Rules without expressions are created and so validation errors are shown
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	11.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The validation tab shows the following message:

AR-ECUC02008 Invalid multiplicity (3 messages)
AR-ECUC02008 Mandatory parameter BswMRuleExpressionRef is missing in CC_<CHANNELNAME>_<PNCNAME_RX
BswMRuleExpressionRef
/ActiveEcuC/BswM/BswMConfig/BswMArbitration/CC_<CHANNELNAME>_<PNCNAME>
AR-ECUC02008 Mandatory parameter BswMRuleExpressionRef is missing in CC_<CHANNELNAME>_<PNCNAME_RX_DM
BswMRuleExpressionRef
/ActiveEcuC/BswM/BswMConfig/BswMArbitration/CC_<CHANNELNAME>_<PNCNAME>
AR-ECUC02008 Mandatory parameter BswMRuleExpressionRef is missing in CC_<CHANNELNAME>_<PNCNAME_TX
BswMRuleExpressionRef
/ActiveEcuC/BswM/BswMConfig/BswMArbitration/CC_<CHANNELNAME>_<PNCNAME>

When does this happen:

Always after execution of the Communication Control assistant.

In which configuration does this happen:

In configurations with PNCs where at least one PduGroup is mapped to different PNCs

AND

Not all PNCs of a channel are configured (selected) in the Communication Control assistant.

Resolution Description:

Workaround:

Rules must be deleted manually from configuration.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094612	WdgM_GetTickCount is called with suspended interrupts
Component@Subcomponent:	SysService_Asr4WdM@Implementation
First affected version:	5.02.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

WdgM_GetTickCount is called with suspended interrupts. If the timebase source is configured to be an Os counter, this results in an error. It is not allowed to call Os-APIs with suspended interrupts. The consequence is that the Os will run in error hook and will shutdown.

When does this happen:

Always and immediately if an Os Counter is used as timebase.

In which configuration does this happen:

/MICROSAR/WdgM/WdgMGeneral/WdgMTimebaseSource == WDGM_OS_COUNTER_TICK

Resolution Description:

Workaround:

Implement WDGM_EXCLUSIVE_AREA_0 with an OS resource and assign all tasks to this resource, to which the following runnable/schedulabe entities are mapped:
- WdgM_Init
- WdgM_MainFunction
- All runnables calling any CheckpointReached operation

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094770	Csm_GetSizeOfJob() macro definition is missing if no job is configured
Component@Subcomponent:	Security_AsrCsm@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

When no job is configured, the Csm_GetSizeOfJob() macro is not being defined.

When does this happen:

This happens during compile time

In which configuration does this happen:

This happens in all configurations when no job is configured

Resolution Description:

Workaround:

Configure at least one job.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094875	Compiler error: dld.exe: warning: Undefined symbol 'MemIf_*_WriteWrapper' in file 'obj/MemIf_Cfg.o'
Component@Subcomponent:	If_AsrIfMem@GenTool_GeneratorMsr
First affected version:	5.02.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compiler error: dld.exe: warning: Undefined symbol 'MemIf_*_WriteWrapper' in file 'obj/MemIf_Cfg.o'

When does this happen:

During linking the project

In which configuration does this happen:

Windriver Diab compiler for PPC version is used (tested with version 5.9.4.8)

Resolution Description:

Workaround:

Redefine MEMIF_LOCAL_INLINE to MEMIF_LOCAL (e.g. in Compiler_Cfg.h)

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00094994	Compiler error: 'SecOC_GetAuthenticPduDataContainerAuthenticPdu undefined
Component@Subcomponent:	Il_AsrSecOC@root
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compiler error occurs

1>..\..\..\..\BSW\SecOC\SecOC.c(1856): error C4013: 'SecOC_GetAuthenticPduDataContainerAuthenticPduStartIdxOfRxPduInfo' undefined; assuming extern returning int
1>..\..\..\..\BSW\SecOC\SecOC.c(1857): error C4013: 'SecOC_GetAuthenticPduDataContainerAuthenticPduLengthOfRxPduInfo' undefined; assuming extern returning int
1>..\..\..\..\BSW\SecOC\SecOC.c(1921): error C4013: 'SecOC_GetSecuredPduDataContainerAuthenticPduStartIdxOfRxPduInfo' undefined; assuming extern returning int

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

IF on Rx side ONLY Rx Processings are configured with Authentic PDUs with the length 0.

Resolution Description:

Workaround:

Configure a dummy Rx Processing with a Authentic Pdu with a length != 0.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00095259	Compiler error: WdgIf uses undefined memory sections
Component@Subcomponent:	If_Asr4IfWd@GenTool_GeneratorMsr
First affected version:	2.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

WdgIf uses memory section which are not defined. The WdgIf assumes erroneously that Os provides these sections. This error leads to a compiler error like: #error "MemMap.h, wrong pragma command"
The sections of the WdgIf
- WDGIF_START_SEC_VAR_INIT_8BIT / WDGIF_STOP_SEC_VAR_INIT_8BIT
- WDGIF_START_SEC_VAR_INIT_16BIT / WDGIF_STOP_SEC_VAR_INIT_16BIT
- WDGIF_START_SEC_VAR_INIT_32BIT / WDGIF_STOP_SEC_VAR_INIT_32BIT
are mapped to
(Gen6)
- <ApplicationName>_START_SEC_VAR_<InitPolicy>_8BIT / <ApplicationName>_STOP_SEC_VAR_<InitPolicy>_8BIT
- <ApplicationName>_START_SEC_VAR_<InitPolicy>_16BIT / <ApplicationName>_STOP_SEC_VAR_<InitPolicy>_16BIT
- <ApplicationName>_START_SEC_VAR_<InitPolicy>_32BIT / <ApplicationName>_STOP_SEC_VAR_<InitPolicy>_32BIT.
(Gen7)
- OS_START_SEC_<ApplicationName>_VAR_<InitPolicy>_8BIT / OS_STOP_SEC_<ApplicationName>_VAR_<InitPolicy>_8BIT
- OS_START_SEC_<ApplicationName>_VAR_<InitPolicy>_16BIT / OS_STOP_SEC_<ApplicationName>_VAR_<InitPolicy>_16BIT
- OS_START_SEC_<ApplicationName>_VAR_<InitPolicy>_32BIT / OS_STOP_SEC_<ApplicationName>_VAR_<InitPolicy>_32BIT.

Os currently supports only "InitPolicy" {-, NOINIT, ZEROINIT}. The actually needed init policy is "INIT".

When does this happen:

Only if a multi core plattform is used and the WdgIf is configured to use the state combiner functionality.

In which configuration does this happen:

If a container "/MICROSAR/WdgIf/WdgIfStateCombiner" is configured
AND
if /MICROSAR/WdgIf/WdgIfGeneral/WdgIfUseStateCombiner == true

Resolution Description:
Workaround:

Provide the missing memory sections and locate them in a proper memory section.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00095310	Compiler error: identifier EcuM_GlobalConfigRoot not declared
Component@Subcomponent:	SysService_Asr4EcuM@GenTool_GeneratorMsr
First affected version:	7.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The compiler throws the following (or similar) error:

"../../../external/BSW/EcuM/EcuM.c", line 2959: error (dcc:1525): identifier EcuM_GlobalConfigRoot not declared

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Only in PB-S configurations with MCAL modules which do only support PB-L.

Resolution Description:

ESCAN00095310	Compiler error: identifier EcuM_GlobalConfigRoot not declared

Workaround:
---
1. Workaround:
This workaround does only work if in /ActiveEcuC/EcuC/EcucGeneral/BswInitialization no entry exists for one of those MCAL modules with entry "AdditionalInitCode" and without a ConfigPtrName set.

Add MCAL modules which do only support PB-L to the list of individual Postbuild modules in the configuration of the module EcuC:

EcuC/EcucGeneral/PostbuildLoadable/IndividualPostBuildLoadableModule

2. Workaround:
If Workaround 1 is not working because of the restrictions mentioned in the 1. workaround please use the following workaround:

Adaption of the files EcuM_Init_Cfg.h and EcuM_Init_Cfg.c. The adaption of these files is okay because these are template files.

Adapt the EcuM_Init_Cfg.h as follows:
...
extern CONST(EcuM_GlobalConfigRootType, ECUM_CONST) EcuM_GlobalConfigRoot;
...

Adapt the EcuM_Init_Cfg.c as follows:
....
CONST(EcuM_GlobalConfigRootType, ECUM_CONST) EcuM_GlobalConfigRoot =
{
<CONTENT>
};
....

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00095571	EcuM causes a Rte warning about a not existing mode request type map
Component@Subcomponent:	SysService_Asr4EcuM@GenTool_GeneratorMsr
First affected version:	3.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

During validation the Rte throws the following warning:

Mode Declaration Group <EcuM_Mode> of Component <EcuM> has no mode request type map. Each Mode Declaration Group used in the SW-C's ports has to have a unique mapping to an implementation data type. The Mode Group Data Type is set to <uint8>.

Help:
- define a mode request type map.

When does this happen:

During validation of the Rte.

In which configuration does this happen:

If /MICROSAR/EcuM/EcuMGeneral/EcuMEnableFixBehavior is set

OR

If /MICROSAR/EcuM/EcuMFlexGeneral/EcuMModeHandling is set

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096007	IoHwAb - Init Values not configurable for complex data type (e.g Array, structure...)
Component@Subcomponent:	EcuAb_AsrIoHwAb@GenTool_GeneratorMsr
First affected version:	6.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

No Init-Value for configured complex Data Type could be set.

When does this happen:
---
when a data type is created by the user and he wants to set a Init Value on the port prototype

In which configuration does this happen:

Every configuration with IoHwAb and with Data Types != from base types

Resolution Description:
Workaround:

Currently, for Arrays and Records no initial values can be configured. So a user has to connect a port with a data element referencing an array or a record always with the counterpart in an application within the DaVinci Developer.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096465	Wrong macro used to activate "ECC Safe Read" feature in static code.
Component@Subcomponent:	FblWrapperFlash_Rh850Rv40His@Impl_Base
First affected version:	1.07.00
Fixed in versions:	1.08.00

Problem Description:

What happens (symptoms):

The static code uses (expects) FLASH_ENABLE_MACHINE_CHECK_ECC_DETECTION macro instead of FBL_FLASH_ENABLE_ECC_SAFE_READ (which is generated by the configuration tool) to activate the code for the ECC Safe Read feature, so this feature won't be active.

When does this happen:

At compile time, when the ECC Safe Read option was activated in the configuration tool.

In which configuration does this happen:

FblHalECCSafeRead == True

Resolution Description:

Workaround:

The following compatibility define has to be set in the user configuration file

```
#if defined( FBL_FLASH_ENABLE_ECC_SAFE_READ )
# define FLASH_ENABLE_MACHINE_CHECK_ECC_DETECTION
#else
# define FLASH_DISABLE_MACHINE_CHECK_ECC_DETECTION
#endif
```

ESCAN00096516	Compiler error: Wrong generated Rte_IocSend calls for queued communication
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.03.00
Fixed in versions:	1.17.00

Problem Description:
What happens (symptoms):

Compiler reports unresolved symbols, like Rte_IocSend_<Identifier>.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens for configurations with queued sender/receiver N:1 communication over partition boundaries, when all senders are mapped to the same OsApplication an "Enforce IOC" (Microsar Parameter) is not set.

Resolution Description:
Workaround:

Add an addition sender which is mapped to another OsApplication than the other senders.
OR
Use a PR-Port instead of a R-Port on receiving side.
OR
Activate "Enforce IOC" parameter.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096559	Wrong signal type for data conversion
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.12.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

The COM module reports that the signal data type is invalid.

When does this happen:

After the RTE generator run in the calculation phase.

In which configuration does this happen:

This happens when data conversion for COM signals is configured.

Resolution Description:

Workaround:

Set the signal type parameter to user defined and select the value that is expected by COM.
In case the RTE generator selected SINT24 or UINT24 create type reference data types in the configuration
uint24 => uint32
sint24 => sint32
and select SINT32 or UINT32 in the COM configuration.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096581	PduRTxBuffer references are incorrectly validated for transport protocol 1:N/N:1 routing paths with API forwarding PduRDestPdu
Component@Subcomponent:	Gw_AsrPduRCfg5@GenTool_GeneratorMsr
First affected version:	11.01.00
Fixed in versions:	13.00.00, 12.01.00

Problem Description:

What happens (symptoms):

A validation error PDUR10501 is shown incorrectly for PduRDestPdus which are API Forwardings.: PDUR10501 All PduRDestTxBufferRefs of gateway PduRDestPdus have to reference the same PduRTxBuffers for a 1:N/N:1 transport protocol routing path.

When does this happen:

The error message is always shown for PduRDestPdus mentioned below. The message is shown during live validation in the DaVinci Configurator 5.

In which configuration does this happen:

The incorrect validation message is shown for either:
- 1:N transport protocol routings with a PduRDestPdu which is a API Forwarding
- N:1 transport protocol routings with a PduRDestPdu which is a API Forwarding

The message is only shown if the API Forwarding does not reference the same PduRTxBuffers like the Gateway PduRDestPdus (which is the correct configuration).

Resolution Description:

Workaround:

Set the same PduRTxBuffers for the API Forwarding PduRDestPdu as for the Gateway PduRDestPdus.
Another validation error 'PDUR11500 The PduRDestTxBufferRef PduRDestTxBufferRef(value=XXXXX) must only be configured for gateway routing paths.' is shown. Set the PduRDestTxBufferRef parameter for the API Forwarding PduRDestPdu to user defined. The error will be reduced to a warning. It does not affect the generation of the PduR.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096582	Non-interactive Mode fails
Component@Subcomponent:	_3rdParty_McalIntegration_Helper@VectorIntegration
First affected version:	2.02.01
Fixed in versions:	2.02.03

Problem Description:
What happens (symptoms):

The non-interactive mode doesn't work: Running the batch file Script_MCAL_Prepare.bat (starts the 3rdParty MCAL Integration Helper tool) with the parameter --auto (providing a derivative) it is expected to finish the tool without user action. Instead a GUI window opens expecting a user action / dialog.

When does this happen:

Starting the 3rdParty MCAL Integration Helper tool via Script_MCAL_Prepare.bat.

In which configuration does this happen:

Any.

Resolution Description:
Workaround:

No workaround available.

ESCAN00096615	RTE Analyzer fails due to duplicated runnable functions
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.09.00
Fixed in versions:	1.17.00

Problem Description:
What happens (symptoms):

Rte Analyzer aborts with error message:
ERROR: Linking globals named 'Dem_GetEventUdsStatus': symbol multiply defined!

When does this happen:

The error is issued by RTE Analyzer during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when the configuration contains multiple service components with different names and
the same runnable entity symbol.
Moreover one service component needs to contain different runnables with the same symbol.

Resolution Description:
Workaround:

Remove the implementation of the regarded service component runnable from all but one RteAnalyzer stubs.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096629	Linker error: unresolved symbol error for not existing callout function referenced in Det_Cfg.o in case of disabled DET
Component@Subcomponent:	SysService_AsrDet@GenTool_GeneratorMsr
First affected version:	10.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

If the DET is disabled and a callout funtion is configured which does not exist an unresolved symbol error is thrown by the linker.

When does this happen:

The error is issued by the linker during linking of the code in case the configuration is as described below.

In which configuration does this happen:

The issue occurs if all of the following conditions apply:
1) The DET is disabled by setting DetEnableDet = false
AND
2) One or more callout functions are configured, e.g. DetErrorHook, DetReportRuntimeErrorCallout or DetReportTransientFaultCallout
AND
3) At least one of the configured callout functions does not exist

Resolution Description:

Workaround:

The following workarounds are possible:
1) In order to disable the DET remove it from the configuration.
2) Don't link Det_Cfg.o in case DET is disabled in your configuration.
3) Provide the configured callout functions also for a disabled DET.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096634	Compiler error: Missing transformationBuffer variable when using implicit communication
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.13.00
Fixed in versions:	1.17.00

Problem Description:
What happens (symptoms):

Compilation fails because the RTE accesses a variable transformationBuffer_0 that is not available.
Compiler error: undeclared identifier.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when the configuration contains senders that use implicit communication with data element
invalidation enabled and data transformation is used.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096635	Compiler error: Missing variable name in case of multiple receivers when ComXf is used
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.08.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

Compilation of the RTE fails because in Rte.c an Rte_COMCbk function passes a buffer &[0] to Com_ReceiveSignalGroupArray.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when ComXf is configured for a signal group that is received from different software components in different partitions.

Resolution Description:

Workaround:

Receive the signal only in one software components and forward the data within the component to the other components.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096774	Compiler error: Duplicated variable definitions in analyzer stubs
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.09.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

Compilation in RTE Analyzer fails because the analyzer stubs contain multiple variable declarations with the same name.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when the indirect API is configured.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096815	Compiler error: undeclared identifier Rte_CalprmRom_
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.16.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

Compilation fails because the compiler reports the usage of an undeclared identifier starting with Rte_CalprmRom_ in an OS application specific Rte_InitMemory.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when the configuration uses multicore or memory protection and when online calibration method single pointered is used.

Resolution Description:

Workaround:

Extend MemMap.h so that it provides the extern declaration when the RTE is compiled.

```
#if defined(RTE_CORE) && defined(Rte_CalprmElementGroup_<name>)
extern CONST(<name>_Type, RTE_CONST_DEFAULT_RTE_CALPRM_GROUP)
Rte_CalprmRom_<name>;
#endif
```

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096830	Compiler error: undeclared identifier retTransformer
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.04.00
Fixed in versions:	1.17.00

Problem Description:
What happens (symptoms):

Compilation fails because the compiler reports the usage of an undeclared identifier retTransformer inside Rte_ComSendSignalProxyPeriodic.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:
---
fan-out scenario
signal specific transformation
e2e protection
write from non bsw partition

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096900	Compiler error: identifier EcuM_Get<***> not declared
Component@Subcomponent:	SysService_Asr4EcuM@GenTool_GeneratorMsr
First affected version:	8.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

The compiler throws one of the following errors:

Compiler error: identifier EcuM_GetValidationTimeoutTable not declared
Compiler error: identifier EcuM_DecValidationTimeoutTable not declared
Compiler error: identifier EcuM_SetValidationTimeoutTable not declared
Compiler error: identifier EcuM_GetReasonOfWakeupSourceList not declared
Compiler error: identifier EcuM_GetChannelOfWakeupSourceList not declared

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

In variant configurations
AND
At least one variant don't use parameter EcuMValidationTimeout | EcuMComMChannelRef | EcuMResetReasonRef (Value = 0 or not existent)
AND
Another variant use parameter EcuMValidationTimeout | EcuMComMChannelRef | EcuMResetReasonRef

Resolution Description:
Workaround:

Ensure that the parameters EcuMValidationTimeout | EcuMComMChannelRef | EcuMResetReasonRef are existent in all variants OR are not existent in all variants. But the existence for each of them has to be consistent over all variants.

It is sufficient to configure a dummy wakeup source which is not used by the code to ensure this.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096914	Compiler error: CSM 4.2 deprecated APIs are not supported
Component@Subcomponent:	Security_AsrCsm@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

SWCs, BSWs and CDDs using the old API will produce compiler errors regarding mismatching APIs. The CsmUseDeprecated ECUC parameter has no functionality.

The AUTOSAR 4.3.0 specification is not fully compatible with the old AUTOSAR 4.2 APIs and behaviour. Therefore the Vector Informatik CSM 4.3 does not support backward compatible APIs (deprecated).

When does this happen:

This happens at compile time

In which configuration does this happen:

This error occurs while mixing SWCs, BSWs or CDDs using AUTOSAR CSM 4.2 interface with the new CSM 4.3 interface.

Resolution Description:
Workaround:

Upgrade SWCs, CDDs or BSWs or downgrade the CSM.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096922	Asynchronous MAC Generation/Verification not possible if CSM does not support the callback according SWS_Csm_00455
Component@Subcomponent:	Il_AsrSecOC@GenTool_GeneratorMsr
First affected version:	4.00.00
Fixed in versions:	7.00.00

Problem Description:

What happens (symptoms):

Compiler error occurs if Csm expects callback interfaces according SWS_Csm_00970 with two parameters (Crypto_JobType* job, Csm_ResultType result)
SecOC provideds a callback according SWS_Csm_00455 with 1 parameter (Std_ReturnType Result)

When does this happen:

Always during compile time is configuration is as described below:

In which configuration does this happen:

SecOC uses an asynchronous Csm Job.
AND
CSM does not support callback according SWS_Csm_00455
AND
Not CSM 4.2. is used.

Resolution Description:

Workaround:

Use CSM in synchronous mode.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096969	Misleading function return code description for API Dcm_GetTesterSourceAddress
Component@Subcomponent:	Diag_Asr4Dcm@Doc_TechRef
First affected version:	7.02.00
Fixed in versions:	9.03.00

Problem Description:
What happens (symptoms):

API Dcm_GetTesterSourceAddress always returns E_OK, even if the TesterSourceAddress has an invalid value.

When does this happen:

At runtime, if invalid function arguments are passed (e.g. invalid DcmRxPduId, NULL pointer for the return value etc.)

In which configuration does this happen:

This happens in all configurations where
- Dev error detect is disabled with Dcm/DcmConfigSet/DcmGeneral/DcmDevErrorDetect (DCM_DEV_ERROR_DETECT == STD_OFF)

Resolution Description:
Workaround:

Consider the E_NOT_OK return value to be returned only under following condition DCM_DEV_ERROR_DETECT == STD_ON.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096982	AssertionError: The getMaxUnsignedValueForNumBytes utility allows only up to 4 bytes!
Component@Subcomponent:	Diag_Asr4Dcm@GenTool_GeneratorMsr
First affected version:	1.02.00
Fixed in versions:	9.00.00

Problem Description:

What happens (symptoms):

The DCM generator invokes assertion with message: "The getMaxUnsignedValueForNumBytes utility allows only up to 4 bytes!"

When does this happen:

Each and every time DCM configuration shall be generated.

In which configuration does this happen:

- One of the following diagnostic services is to be handled within DCM: 0x23 (ReadMemoryByAddress), 0x2C 0x02 (DynamicallyDefineIdentifier by MemoryAddress) or 0x3D (WriteMemoryByAddress) (in Dcm_Cfg.h: DCM_SVC_XX_SUPPORT_ENABLED == STD_ON for any XX ={23, 2C, 3D}

AND

- The memory layout shall not be capable of supporting MID (MemoryID) (ECUC parameter: /Dcm/DcmConfigSet/DcmDsp/DcmDspMemory/DcmDspUseMemoryId == FALSE)

AND

- The user has defined a custom ALFID (AddressAndLengthFormatIDentifier) values, with more than four byte address (ECUC parameter: /Dcm/DcmConfigSet/DcmDsp/DcmDspMemory/DcmDspMemoryAddressAndLengthFormatIdentifier/DcmDspMemorySupportedAddressAndLengthFormatIdentifier has any values of the kind: 0x25, 0x45 or any 0xX5).

Note: The affected configuration is invalid and shall be rejected by a validation followed by a meaningful explanation.

Resolution Description:

Workaround:

Since the affected configuration is invalid i.e. without MID the maximum address size cannot exceed four bytes, either enable MID support or reduce the address size.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097053	Compiler error: Empty struct DCM_DIDMGROPTYPEREADCONTEXTTYPE_TAG
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	4.01.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

During Dcm.c compilation with VC compiler following error occurs:
error C2016: C requires that a struct or union has at least one member

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

- Service 0x22 (ReadDataByIdentifier) is active and handled by DCM
AND
- DCM is configured to support DIDs with multiple signals (in Dcm_Cfg.h: #define DCM_DIDMGR_MULTISIGNAL_ENABLED == STD_ON)
AND
- None of the multi signal DIDs support read operation (in Dcm_Cfg.h: #define DCM_DIDMGR_MSIG_OPTYPE_READ_ENABLED == STD_OFF)
AND
- None of single signal DIDs does support paged read access (in Dcm_Cfg.h: #define DCM_DIDMGR_OPCLS_READ_PAGED_ENABLED == STD_OFF)

Resolution Description:

Workaround:

Split a DID with a read access having a single signal into two data signals.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097056	Compiler error: 'Offset' : is not a member of 'DCM_DIDMGROPTYPEREADCONTEXTTYPE_TAG'
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	4.01.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

During Dcm.c compilation with VC compiler following error occurs:
error C2039: 'Offset' : is not a member of 'DCM_DIDMGROPTYPEREADCONTEXTTYPE_TAG'

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

- Service 0x22 (ReadDataByIdentifier) is active and handled by DCM
AND
- DCM is configured to support DIDs with multiple signals (in Dcm_Cfg.h: #define DCM_DIDMGR_MULTISIGNAL_ENABLED == STD_ON)
AND
- None of the multi signal DIDs support read operation (in Dcm_Cfg.h: #define DCM_DIDMGR_MSIG_OPTYPE_READ_ENABLED == STD_OFF)
AND
- At least one of DIDs does support paged read access (in Dcm_Cfg.h: #define DCM_DIDMGR_OPCLS_READ_PAGED_ENABLED == STD_ON)

Resolution Description:

Workaround:

Split a DID with a read access having a single signal into two data signals.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097061	"FrTSyn_RxIndication" is wrongly shown as Rx indication function
Component@Subcomponent:	If_AsrIfFr@GenTool_GeneratorMsr
First affected version:	4.01.02
Fixed in versions:	

Problem Description:

What happens (symptoms):

"FrTSyn_RxIndication" is wrongly shown as Rx indication function (FrIfRxIndicationName) for FrIfRxPdus where FrIfUserRxIndicationUL is set to "NONE".

NOTE: This is just a display problem.

When does this happen:

Always and immediately.

In which configuration does this happen:

This happens in configurations were a FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfRxPdu has the parameter FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfRxPdu/FrIfUserRxIndicationUL set to "NONE" and the parameter FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfRxPdu/ FrIfRxIndicationName exists.

Resolution Description:

Workaround:

If the parameter FrIf/FrIfConfig/FrIfPdu/FrIfPduDirection/FrIfRxPdu/FrIfUserRxIndicationUL is set to NONE, the value of FrIfRxIndicationName can be ignored, since no Rx indications are given for FrIfRxPdus.

Resolution:

Not yet available.

ESCAN00097086	Compiler error: Undefined reference to `Com_GetTxFilterInitValueArrayBasedFilterInitValue
Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	9.00.00
Fixed in versions:	14.00.00

Problem Description:

What happens (symptoms):

Compile error occurs in Function Com_TxSignal_EvaluateFilter:
Undefined reference to `Com_GetTxFilterInitValueArrayBasedFilterInitValueLengthOfTxSigInfo'

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This error will occur in configuration, where
- Rx UINT8_N Signal/ Group Signal with a Filter exists (NEVER || MASKED_NEW_DIFFERS_MASKED_OLD)
AND
- At least one Tx Signal /Group Signal with (Application Type != UINT8_N) with ((Filter != ALWAYS) or (transferProperty == TRIGGERED_ON_CHANGE || TRIGGERED_ON_CHANGE_WITHOUT_REPETITION)) exists
AND
- all Tx Signal /Group Signals with (Application Type == UINT8_N) are configured without any Filter and without any OnChange-TransferProperty

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097087	Null pointer exception when a data element is missing
Component@Subcomponent:	Rte_Asr4@GenTool_GeneratorMsr
First affected version:	4.08.00
Fixed in versions:	4.17.00

Problem Description:

What happens (symptoms):

RTE generation aborts with a null pointer exception when a connection connects two ports with incompatible interfaces and when no port interface mapping is configured.

When does this happen:

During generation.

In which configuration does this happen:

This happens when

Resolution Description:

Workaround:

Rename the data element or configure a port interface mapping.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097148	WdgMGlobalStateChangeCbk / WdgMLocalStateChangeCbk function prototype generated with incompatible signature compared to RTE
Component@Subcomponent:	SysService_Asr4WdM@GenTool_GeneratorMsr
First affected version:	2.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The WdgMGlobalStateChangeCbk / WdgMLocalStateChangeCbk function prototype gets generated by the WdgM generator (in WdgM_PBcfg.h) even if the Service Port is connected and the Server Runnable is created and the prototype is already generated by Rte (in Rte_WdgM_<Application name referenced from WdgMGlobalMemoryAppTaskRef>.h).

In addition the signature of the prototypes of WdgM does not match the prototypes defined by the Swc template. The Rte generates Std_ReturnType as return value, the WdgM void. This is because the swc-files contains the erroneous return value (E_NOT_OK) instead of no return value.

When does this happen:

At compiling time.

In which configuration does this happen:

When WdgMGlobalStateChangeCbk / WdgMLocalStateChangeCbk is configured and Rte is used (WdgMUseRte==true).

Resolution Description:

ESCAN00097148	WdgMGlobalStateChangeCbk / WdgMLocalStateChangeCbk function prototype generated with incompatible signature compared to RTE

Workaround:

Follow the description of parameter /MICROSAR/WdgM/WdgMConfigSet/WdgMMode/
WdgMGlobalStateChangeCbk and /MICROSAR/WdgM/WdgMGeneral/WdgMSupervisedEntity/
WdgMLocalStateChangeCbk of BSWMD version 6.01.01.

The following description are in this version:

Callback function for notifying Watchdog Manager global status change.

Note:
If WdgMUseRte is configured as true and thus the receiver of the callback is an application above the RTE, the the user has to configure this parameter with the name of a C function which shall be called by WdgM. Within a separate file where this function is defined the user has to include the corresponding Rte application header file and call the Rte function. The Rte function is named according the following convention:

Rte_Call_WdgM_<OsApplicationName>_globalStateChangeCbk_Core<CoreAssignment>_GlobalStat

where OsApplicationName is entry in WdgMGlobalMemoryAppTaskRef
and CoreAssignment is the entry in WdgMModeCoreAssignment.

If WdgMGlobalMemoryAppTaskRef is not configured, the following pattern has to be applied:
Rte_Call_WdgM_globalStateChangeCbk_Core<CoreAssignment>_GlobalStatusCallback
where CoreAssignment is the entry in WdgMModeCoreAssignment.

Only if this naming convention is followed, the API of the RTE can be used within the callback.

Callback function for notifying the supervised entity's status change.

Note:
If WdgMUseRte is configured as true and thus the receiver of the callback is an application above the RTE, the the user has to configure this parameter with the name of a C function which shall be called by WdgM. Within a separate file where this function is defined the user has to include the corresponding Rte application header file and call the Rte function. The Rte function is named according the following convention:

Rte_Call_WdgM_<OsApplicationName>_localStateChangeCbk_<SupervisedEntityName>_LocalStatu

where OsApplicationName is entry in WdgMGlobalMemoryAppTaskRef of the relating WdgMMode
and SupervisedEntityName is the entry in WdgMSupervisedEntity.

If WdgMAppTaskRef is not configured, the following pattern has to be applied:
Rte_Call_WdgM_localStateChangeCbk_<SupervisedEntityName>_LocalStatusCallback
where SupervisedEntityName is the entry in WdgMSupervisedEntity.

Only if this naming convention is followed, the API of the RTE can be used within the callback.
"

Resolution:

ESCAN00097148	WdgMGlobalStateChangeCbk / WdgMLocalStateChangeCbk function prototype generated with incompatible signature compared to RTE
The described issue is corrected by modification of all affected work-products.	

ESCAN00097168	EcuM debug data cannot be found in the map file
Component@Subcomponent:	SysService_Asr4EcuM@GenTool_GeneratorMsr
First affected version:	1.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

During A2L update several symbols of EcuM (that the EcuM generator actually registers through the CFG5 McData Service Interface) cannot be found in the map file.
EcuM_ExpiredWakeups
EcuM_PendingCheckWakeups
EcuM_PendingWakeups

When does this happen:

After compilation when the A2L / calibration workflow is used to generate a complete A2L file with addresses of the target.

In which configuration does this happen:

Whenever generation of Debug Data is enabled in DaVinci Configurator and EcuM is used.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097203	Compiler error: "conversion of data types, possible loss of data" in case of large buffers
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	1.03.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Following compiler errors might be reported:
Error: Dcm.c, line 36235: error C4244: '=' : conversion from 'Dcm_CfgNetBufferSizeMemType' to 'Dcm_DidMgrDidLengthType', possible loss of data
Error: Dcm.c, line 13586: error C4244: '=' : conversion from 'const Dcm_CfgDidMgrOptimizedDidLengthType' to 'uint16', possible loss of data
Error: Dcm.c, line 25946: error C4244: '=' : conversion from 'const Dcm_CfgDidMgrOptimizedDidLengthType' to 'Dcm_DidMgrDidLengthType', possible loss of data

In many cases (dependent on compiler option settings) this might be reported as warning.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

- At least one DCM buffer is larger than 65535bytes (ECUC parameter DcmDslBufferSize > 65535) AND
 - Service 0x22 (ReadDataByIdentifier) is handled within DCM (in Dcm_Cfg.h #define DCM_SVC_22_SUPPORT_ENABLED == STD_ON)
 OR
 - Service 0x2A (ReadDataByPeriodicIdentifier) is handled within DCM (in Dcm_Cfg.h #define DCM_SVC_2A_SUPPORT_ENABLED == STD_ON)
 OR
 - Service 0x2C (DynamicallyDefineDataByIdentifier) is handled within DCM (in Dcm_Cfg.h #define DCM_SVC_2C_SUPPORT_ENABLED == STD_ON)
 OR
 - Service 0x2F (InputOutputControlByIdentifier) is handled within DCM (in Dcm_Cfg.h #define DCM_SVC_2F_SUPPORT_ENABLED == STD_ON)

Note: Such buffer sizes are typically used in case of Bootloader applications.

Resolution Description:

Workaround:

Ignore the warning since no DID can have size of more than 16KB, since largest DcmDspDidDataPos can accept only up to 8KB and the largest DID signal can have only up to 8KB. So the largest DID can be a DID with a signal starting at position 8191 and having 8192 bytes.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097242	FrIf debug data cannot be found in the map file
Component@Subcomponent:	If_AsrIfFr@GenTool_GeneratorMsr
First affected version:	4.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

During A2L update several symbols of FrIf (that the FrIf generator actually registers through the CFG5 McData Service Interface) cannot be found in the map file.
FrIf_Status.CurrentCycle
FrIf_Status.CurrentJobNumber
FrIf_Status.JobListExecutionEnabled
FrIf_Status.State

When does this happen:

After compilation when the A2L / calibration workflow is used to generate a complete A2L file with addresses of the target.

In which configuration does this happen:

Whenever generation of Debug Data is enabled in DaVinci Configurator and FrIf is used.

Resolution Description:
Workaround:

Since the FrIf_Status variable is now an array, manually edit the generated a2l file and add the index to all the FrIf_Status occurrences.

Take into account that the FrIf_Status array will contain 2 elements instead of one, if the macro FrIf_CommonMaxNumberOfClusters is not defined as 1.

Resolution:

A resolution is not yet available.

ESCAN00097274	Compiler error: Incompatible Rte_MemCpy prototypes
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.13.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

Compilation fails because the prototype for Rte_MemCpy or Rte_MemCpy32 is incompatible to the prototype in the RTE implementation.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when the platform does not define uint16_least and uint32_least to the same types and when the configuration contains a component with
sender-receiver communication or inter-runnable variables with arrays.

Resolution Description:

Workaround:

Typedef uint16_least and uint32_least to the same type.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097291	Compiler error: Use of undeclared identifier Rte_Appl_AckFlags
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.02.00
Fixed in versions:	1.18.00

Problem Description:

What happens (symptoms):

Compilation fails because a Rte_Feedback API accesses Rte_Appl_AckFlags that do not exist.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when a signal is sent from a different partition than the partition that contains the COM and
when transmission acknowledgement is configured.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097303	Compiler error: Call to job finished runnable misses parameters
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.08.00
Fixed in versions:	1.18.00

Problem Description:

What happens (symptoms):

Compilation fails because a task calls a notify job finished runnable without arguments.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when an NvBlock SWC is configured and when the NvM_MainFunction and the job finished runnable are mapped to different tasks.

Resolution Description:

Workaround:

Do not map the job finished runnable to a task.
It will then be executed in the context of the task that schedules NvM_MainFunction.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097355	Auto-Configuration Ecu State Handling: Self run request timeout value is not shown correct in case of 0
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	11.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The overview page of the Auto-configuration Ecu State handling does not show the correct value for the self run request timeout. Instead it shows the default value (0.1).

When does this happen:

Always if the value is set to 0.

In which configuration does this happen:

In all configurations with Auto-Configuration Ecu State Handling configured

AND

Value of self run request timeout is set to 0.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097450	Generator Error for SipHash Primitive
Component@Subcomponent:	Security_AsrCsm@GenTool_GeneratorMsr
First affected version:	2.03.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Generator Error SipHash enum value is missing.

When does this happen:

Always

In which configuration does this happen:

If a primitive using SipHash is configured.

Resolution Description:
Workaround:

To use SipHash:
1. Set GenerateAlgorithmFamily to CRYPTO_ALGOFAM_CUSTOM
2. Set "User Defined Value" for GenerateAlgorithmFamily
3. Set AlgorithmFamilyCustom to CRYPTO_ALGOFAM_SIPHASH

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097457	Matrix dimensions are swapped for two dimensional arrays in A2L file
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

A measurement tool displays rows as columns and columns as rows.

When does this happen:

During measurement and calibration.

In which configuration does this happen:

This happens when the configuration contains arrays with two dimensions.

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097458	Compiler error: undefined symbol Dem_Event_GetTripCount
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	13.04.00
Fixed in versions:	14.02.00

Problem Description:
What happens (symptoms):

Functions 'Dem_Data_CopyCyclesTestedSinceLastFailed' and 'Dem_Data_CopyHealingCounterDownwards' will not compile due to an undefined symbol 'Dem_Event_GetTripCount'.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

((All events have Dem/DemConfigSet/DemEventParameter/DemEventClass/DemEventFailureCycleCounterThreshold <= 1)
OR (Dem/DemGeneral/DemMultipleTripSupport == FALSE))
AND
(All events have no indicator (Dem/DemConfigSet/DemEventParameter/DemEventClass/DemIndicatorAttribute) configured OR an indicator with Dem/DemConfigSet/DemEventParameter/DemEventClass/DemIndicatorAttribute/DemIndicatorHealingCycleCounterThreshold <= 1)
AND
(Using data elements DEM_CYCLES_TESTED_SINCE_LAST_FAILED or DEM_HEALINGCTR_DOWNCNT (Dem/DemGeneral/DemDataClass/DemDataElementInternalData) in an extended data record (Dem/DemGeneral/DemExtendedDataRecordClass) or Did (Dem/DemGeneral/DemDidClass))
AND
(Any DTC has Extended Data Records (Dem/DemConfigSet/DemEventParameter/DemExtendedDataClassRef) or Snapshot Records (Dem/DemConfigSet/DemEventParameter/DemFreezeFrameClassRef) configured)

Resolution Description:
Workaround:

Create an internal dummy event referencing an indicator and Dem/DemConfigSet/DemEventParameter/DemEventClass/DemIndicatorAttribute/DemIndicatorHealingCycleCounterThreshold.

(Adding a dummy event with Dem/DemConfigSet/DemEventParameter/DemEventClass/DemEventFailureCycleCounterThreshold > 1 will also remove the compile error, but the Dem won't calculate the data elements 'Cycles Tested Since Last Failed' and 'Healing Counter Inverted' correctly then, see ESCAN00097474).

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097476	RTE01004 error during contract phase generation (Could not read back DVCfgRteGen data)
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.12.00
Fixed in versions:	1.18.00

Problem Description:

What happens (symptoms):

RTE generation is incorrectly aborted with RTE01004 'Could not read back DVCfgRteGen data' error message.

When does this happen:

During contract phase header generation.

In which configuration does this happen:

This happens for all configuration when 'Contract phase header' is selected as 'Generation Mode' inside Cfg5 project settings.

Resolution Description:

Workaround:

Change Cfg5 project settings so that 'Template file and contract phase header' is selected as 'Generation Mode'.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097477	Code generation is not possible due to error RTE13068 - Insufficient data type to represent mode value
Component@Subcomponent:	Ccl_Asr4ComMCfg5@GenTool_GeneratorMsr
First affected version:	7.00.00
Fixed in versions:	9.00.01

Problem Description:

What happens (symptoms):

DaVinci Configurator reports the following error
[Error] RTE13068 - Insufficient data type to represent mode value
- The Mode Transition Value of Mode Declaration Group <ComMMode> is set to <3>.
This value can not be represented by <ComM_ModeType> data type.

When does this happen:

The error is issued by the RTE generator during calculation phase.

In which configuration does this happen:

This issue is reported as a preventive measure. We assume that the issue does not occur.
It was detected in a DaVinci Configurator Service Pack, which is not distributed anymore.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097512	Outdated single controller limitation
Component@Subcomponent:	If_AsrIfFr@Doc_TechRef
First affected version:	4.01.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Although multiple FlexRay Controllers are now supported, some parts of the technical reference still mention this limitation.

For example, the text "For the parameter FrIf_CtrlIdx only the value 0 is allowed" can be found several times under the API Description chapter.

Note: The outdated limitation can also be found in some comments in the implementation. For example, the text "Multiple FlexRay CCs are currently not supported, so no index translation is required" appears several times.

When does this happen:

Always and immediately.

In which configuration does this happen:

All of them.

Resolution Description:

Workaround:

Ignore the limitation, since multiple FlexRay controllers are supported.

Resolution:

Not yet available

ESCAN00097519	Validation Error: Csm shall include Crypto_30_CryWrapper_GeneratedTypes.h even if CryWrapper is not instantiated
Component@Subcomponent:	DrvCrypto_CryWrapper@GenTool_GeneratorMsr
First affected version:	2.01.01
Fixed in versions:	

Problem Description:

What happens (symptoms):

Validation "CRYPTO1007: Inclusion in Csm missing." occurs and shows issue that Crypto_30_CryWrapper_GeneratedTypes.h is not included by Csm even if CryWrapper is not used in configuration.

When does this happen:

During configuration if Csm is instantiated in configuration but CryWrapper is not.

In which configuration does this happen:

In configurations which instantiated Csm but not CryWrapper.

Resolution Description:

Workaround:

Simply executed the solving action (Add Crypto_30_CryWrapper_GeneratedTypes.h as include for Csm) and provide the path to the Crypto_30_CryWrapper_GeneratedTypes.h as include path to the used compiler. As an alterantive, an empty header could also be provided as long as CryWrapper shall not be used in this configuration.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097525	RTE49999 when transformers are not configured for all fan-out signals
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.04.00
Fixed in versions:	1.18.00

Problem Description:
What happens (symptoms):

ESCAN00097564	Compiler error: Non defined function referenced in DEM Code
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	13.02.00
Fixed in versions:	14.03.00

Problem Description:
What happens (symptoms):

The DEM code cannot compile.

Typical compiler error explanations may be:
error C2064 and error C2100 in Visual C compiler.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Dem ClearDTC notifications (/MICROSAR/Dem/DemGeneral/DemEventMemorySet/DemClearDTCNotification) are configured.
AND
ONE or MORE notifications with /MICROSAR/Dem/DemGeneral/DemEventMemorySet/DemClearDTCNotification/DemClearDtcNotificationTime = START are configured
AND
NO notifications with /MICROSAR/Dem/DemGeneral/DemEventMemorySet/DemClearDTCNotification/DemClearDtcNotificationTime = FINISH are configured

Resolution Description:
Workaround:

Also configure a notifications with /MICROSAR/Dem/DemGeneral/DemEventMemorySet/DemClearDTCNotification/DemClearDtcNotificationTime = FINISH
You only need to provide an empty implementation of this notification.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097649	Compiler error: Rte_Write writes a variable that does not exist
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.09.00
Fixed in versions:	1.18.00

Problem Description:
What happens (symptoms):

The compiler states: undeclared identifier

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

- LdCom is used with external Signal
- Write from non bsw partition
- Data transformation is disabled

Resolution Description:
Workaround:

Create another receiver port in the same component as the LdCom sender port and connect it the LdCom sender port.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097683	A generated value is not in range of the specified datatype
Component@Subcomponent:	Il_AsrComCfg5@GenTool_GeneratorMsr
First affected version:	3.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

An error is reported in the configurator with following error message:
COM90500 The value 122040 with comment () is not in the range of the specified datatype UINT_16.

When does this happen:

During generation of COM

In which configuration does this happen:

In configurations in which any generated table has more than 65535 entries
AND
/PduR/PduRBswModules/PduRTransportProtocol for COM is set to FALSE

Resolution Description:
Workaround:
---
1) Use LdCom instead of COM for large PDUs

or

2) Enable /ActiveEcuC/PduR/Com[1:PduRTransportProtocol] and configure one Dummy TP PDU

Resolution:

No modification of code as it would cause performance problems and use a lot of RAM, especially in Post-Build configurations.

ESCAN00097684	Warning RTE49999 when XcpEvent support is enabled
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.00.00
Fixed in versions:	1.18.00

Problem Description:
What happens (symptoms):

RTE generator prints a warning RTE49999 AST property is undefined.
Compilation fails because a task calls the XcpEvent API with the undfined identifier UNDEFINED.

When does this happen:

During generation.

In which configuration does this happen:

This happens when XcpEvent support is enabled and when a task contain only server runnables as executable entities.

Resolution Description:
Workaround:

Map the server runnables to another task that also contains runnables with different trigger.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097686	Compiler error due to invalid Job structure
Component@Subcomponent:	Security_AsrCsm@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compile error may rise due to missing jobId element in the Crypto_JobType when using other CryptoDriver´s then Vectors.
Also naming of the element length in Crypto_PrimitiveInfoType is incorrect and will lead to compiler error if a third party driver accesses it.

When does this happen:

The error is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Third party crypto drivers are used.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097856	[Error] PostBuildXmlGen50009 - Symbol Fr_NumberOfCtrlRegs not accessible via root structure(s) (missing references).
Component@Subcomponent:	DrvFr_XErayAsr@GenTool_GeneratorMsr
First affected version:	4.02.00
Fixed in versions:	5.00.02

Problem Description:

What happens (symptoms):

The PostBuildXml generator throws the following errors:

[Error] PostBuildXmlGen50009 - Symbol Fr_NumberOfCtrlRegs not accessible via root structure(s) (missing references).
[Error] PostBuildXmlGen50009 - Symbol Fr_NumberOfCcBufs not accessible via root structure(s) (missing references).
[Error] PostBuildXmlGen50009 - Symbol Fr_CtrlRegs not accessible via root structure(s) (missing references).
[Error] PostBuildXmlGen50009 - Symbol Fr_CcBufs not accessible via root structure(s) (missing references).

When does this happen:

Always and immediately during generation of the PB hex file.

In which configuration does this happen:

In all POST-BUILD-LOADABLE configurations where only one FrController is configured.

Resolution Description:

Workaround:

As workaround ignore the errors since they have no effects on the generated hex file of the FR.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097876	Generated data streams toggle with each code generation if <MSN>ReduceDataByStreaming is enabled
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	2.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Generated Code has to be recompiled or added again to the Users CMS because
the order in streamed CONST arrays is not deterministic and changes by chance with each code generation.

When does this happen:

At generation time.

In which configuration does this happen:

Any configuration where <MSN>ReduceDataByStreaming returns true.

Resolution Description:

ESCAN00097900	DET error occurs during reception CAN FD PDU
Component@Subcomponent:	Il_AsrSecOC@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

DET error in the function RxIndication occurs during runtime if a PDU is received that is greater than the configured Global PDU length of the secured PDU.
This can happen if the CAN diver added padding to the PDU.

When does this happen:
---
during runtime.

In which configuration does this happen:

If Secured PDUs are received by CAN FD
AND
the configured Secured PDU Global PDU length is not a CAN FD length (... 8, 12, 16, 20, 24, 32, 48, 64)

Resolution Description:
Workaround:

Set the Global Pdu Length of the Secured PDU to the next valid CAN FD length (..., 8, 12, 16, 20, 24, 32, 48, 64)

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097910	Dcm_Swc.arxml: Missing values of Mode-Declarations in Mode-Declaration-Groups
Component@Subcomponent:	Diag_Asr4Dcm@GenTool_GeneratorMsr
First affected version:	3.00.00
Fixed in versions:	9.04.00

Problem Description:

What happens (symptoms):

RTE validation issues the following message:
RTE13077 - ModeDeclarationGroup <NameMDG> with explicit order does not specify a value for mode <NameMode>.

When does this happen:

At RTE generation time.

In which configuration does this happen:

- At least one "/Dcm/DcmConfigSet/DcmProcessingConditions/DcmModeRule" exists;
AND
- This ModeRule has at least one DcmArgumentRef to a "/Dcm/DcmConfigSet/DcmProcessingConditions/DcmModeCondition";
AND
- This ModeCondition has configured DcmBswModeRef:
 - DcmContextModeDeclarationGroupPrototype is set to a DCM ModeDeclarationGroup prototype;
 AND
 - DcmTargetModeDeclaration is set to a valid ModeDeclaration;

Resolution Description:

Workaround:

Use a DaVinci Cfg5 version smaller than 5.14.8.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097938	Custom Algorithm modes and families lead to validation errors.
Component@Subcomponent:	Security_AsrCsm@GenTool_GeneratorMsr
First affected version:	1.01.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

If custom family or custom mode is selected, the validation of the primitive configuration leads to an error even if the underlying crypto driver supports this configuration.

When does this happen:

Always

In which configuration does this happen:

If custom family or custom mode is used in primitive configuration.

Resolution Description:
Workaround:

To use a custom algorithm family:
1. Set GenerateAlgorithmFamily to CRYPTO_ALGOFAM_CUSTOM
2. Set "User Defined Value" for GenerateAlgorithmFamily
3. Set AlgorithmFamilyCustom to the custom name.

Same holds for algorithm mode.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097971	RTE49999: Mismatching constant values
Component@Subcomponent:	Rte_Asr4@Generator
First affected version:	4.07.00
Fixed in versions:	4.18.00

Problem Description:

What happens (symptoms):

RTE generation aborts with an error message
RTE49999 Mismatching constant values: <cfull> and <celement>
although the elements use the same value.

When does this happen:

During generation.

In which configuration does this happen:

This happens when the configuration contains sender-receiver communication where a sender only receives a subset of the record elements of the sender.
The problem occurs when the receiving component does not have a port access to the receiver port.

Resolution Description:

Workaround:

Configure port accesses for the receivers.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097972	Linaro compiler selection does not generate correct define
Component@Subcomponent:	Os_CoreGen7@GenTool_GeneratorMsr
First affected version:	2.13.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compilation aborts with an error:
Undefined or unsupported compiler

When does this happen:

Always

In which configuration does this happen:

Linaro GCC compiler is selected.

Resolution Description:

Workaround:

Define OS_CFG_COMPILER_LINARO via compiler options.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098057	Generated data streams toggle with each code generation if <MSN>ReduceDataByStreaming is enabled
Component@Subcomponent:	Il_AsrComCfg5@GenTool_GeneratorMsr
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Generated Code has to be recompiled or added again to the Users CMS because
the order in streamed CONST arrays is not deterministic and changes by chance with each code generation.

When does this happen:

At generation time.

In which configuration does this happen:

Any configuration where /ComReduceDataByStreaming returns true.

Resolution Description:

Workaround:

Configure ComReduceDataByStreaming to false if available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098062	RTE49999: When InitializeImplicitBuffers is configured for implicit connections to NvBlock SWCs
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.09.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

RTE Generator aborts with a RTE49999 error.

When does this happen:

During generation.

In which configuration does this happen:

This happens when all of the following conditions are true:
- /MICROSAR/Rte/RteGeneration/RteInitializeImplicitBuffers is configured to true
- the access to the data elements is implicit
- the configuration contains a sender-receiver connection to a NvBlock SWC and the NvBlock has no RAM block init value
 or
 the nv port is not connected

Resolution Description:

Workaround:

Connect all Nv ports with implicit accesses.
Configure RAM block init values for the NvBlocks.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098068	Null pointer exception when a service dependency contains an invalid pim reference
Component@Subcomponent:	Rte_Asr4@GenTool_GeneratorMsr
First affected version:	4.00.00
Fixed in versions:	4.18.00

Problem Description:

What happens (symptoms):

RTE generator aborts with a null pointer exception.

When does this happen:

During generation.

In which configuration does this happen:

This happens when the configuration contains incomplete service dependencies e.g.

```
 <ROLE-BASED-DATA-ASSIGNMENT>
 <ROLE>ramBlock</ROLE>
 <USED-DATA-ELEMENT/>
 </ROLE-BASED-DATA-ASSIGNMENT>
```

instead of

```
 <ROLE-BASED-DATA-ASSIGNMENT>
 <ROLE>ramBlock</ROLE>
 <USED-DATA-ELEMENT>
 <LOCAL-VARIABLE-REF DEST="VARIABLE-DATA-PROTOTYPE">/path/to/pim</LOCAL-VARIABLE-REF>
 </USED-DATA-ELEMENT>
 </ROLE-BASED-DATA-ASSIGNMENT>
```

Resolution Description:

Workaround:

Configure a valid reference.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098104	RTE Analyzer reports false out of bound accesses
Component@Subcomponent:	GenTool_IRAnalyzer@Application
First affected version:	0.09.00
Fixed in versions:	1.01.00

Problem Description:

What happens (symptoms):

RTE generator reports an out of bound access although all write accesses are within the bounds.

When does this happen:

This happens during analysis of write accesses with multiple possible pointer targets.
This means write accesses to array elements or write accesses to e.g. function parameters that get passed different values in different call sites.
This only happens when the write access does not write the entire object.
E.g. when an element in a structure is written.
This only happens when the write access is an assignment, not a memcpy or memset.

In which configuration does this happen:

This happens in all configurations.
See description above for the code structure of the analyzed code that leads to the ESCAN.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098155	Inconsistencies of Technical Reference regarding Dem usage
Component@Subcomponent:	SysService_Asr4WdM@Doc_TechRef
First affected version:	1.02.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The technical reference was updated. In an earlier version of the WdgM the Dem was not directly connected to the WdgM. A wrapper was needed to handle the Dem. Now the documentation was updated, because there was a description how to implement this wrapper on several passage.

This description confuses the customer and is fixed.

When does this happen:

Missing updated documentation after further development of the component.

In which configuration does this happen:

Always

Resolution Description:

Workaround:

No workaround available.
This is only an inconsistency in user documentation and therefore a workaround is not applicable.
A "textual" workaround is that a wrapper is no more needed for Dem usage.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098167	RTE01081 Model object </MICROSAR/IoHwAb_swc/ComponentTypes/IoHwAb> of command line parameter -m is invalid.
Component@Subcomponent:	Rte_Asr4@GenTool_GeneratorMsr
First affected version:	4.00.00
Fixed in versions:	4.18.00

Problem Description:

What happens (symptoms):

RTE SWC Template generation in CFG5 aborts with an error message
RTE01081 Model object </MICROSAR/IoHwAb_swc/ComponentTypes/IoHwAb> of command line parameter -m is invalid.

When does this happen:

During SWC template generation.

In which configuration does this happen:

This happens in configuration that contain the IoHwAb component.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

2.6 Compiler Warnings

As a service we also provide the known compiler warnings. The occurrence of a compiler warning may depend on the used software module configuration and compiler settings.

Index

ESCAN00064376	Compiler warning: cast increases required alignment of target type Cp_XcpOnFrAsr@Implementation
ESCAN00067159	Compiler warning: cast truncates constant value MemService_AsrNvM@Implementation
ESCAN00074793	Compiler warning: Condition is always constant Diag_Asr4Dem@Implementation
ESCAN00079347	[BMW only] Compiler warning: incompatible redeclaration of variable "flashCode" FblWrapperFlash_Rh850Rv40His@Impl_Base
ESCAN00088061	BswM_Lcfg.c: warning: 'function' : conversion from 'const BswM_ImmediateUserStartIdxOfModeReqeustMappingType' to 'BswM_SizeOfImmediateUserType', possible loss of data SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
ESCAN00089972	Compiler warning: Useless assignment to variable StdReturnValue. Assigned value not used. Ccl_Asr4SmFr@Implementation
ESCAN00090161	Compiler warning: condition evaluates always to true/false Ccl_Asr4ComMCfg5@Implementation
ESCAN00090806	Compiler warning: C4310: cast truncates constant value Gw_AsrPduRCfg5@Implementation
ESCAN00090831	Compiler warning: integer conversion resulted in a change of sign Il_AsrComCfg5@Implementation
ESCAN00091295	Compiler warning: dead assignment / variable set but not used Ccl_Asr4ComMCfg5@Implementation
ESCAN00096807	Compiler warning: possible loss of data due to implicit cast from uint16 to uint8 Ccl_Asr4ComMCfg5@Implementation
ESCAN00096913	Compiler warning: Static function 'Rte_QUnqueueElementCallbackSpecific<OsApplicationName>()' is not used within this translation unit Rte_Core@Implementation
ESCAN00097289	Compiler warning: integer literal is too large to be represented in a signed integer type, interpreting as unsigned Rte_Core@Implementation
ESCAN00097339	Compiler warning: possible truncation at implicit conversion Diag_Asr4Dem@Implementation
ESCAN00097692	Compiler warning: conversion from 'int' to 'Dcm_CfgNetBufferSizeOptType' Diag_Asr4Dcm@Implementation
ESCAN00097980	Compiler warning: Unreferenced formal parameter due to reduction of rom data Il_AsrComCfg5@Implementation
ESCAN00098070	Compiler warning: NvM_Cfg.c: 'ServiceId' : unreferenced formal parameter MemService_AsrNvM@GenTool_GeneratorMsr

ESCAN00064376	Compiler warning: cast increases required alignment of target type
Component@Subcomponent:	Cp_XcpOnFrAsr@Implementation
First affected version:	2.07.00
Fixed in versions:	
Problem Description:	

ESCAN00064376	Compiler warning: cast increases required alignment of target type

What happens (symptoms):

Please analyze warnings and decide wether a runtime impact can be ruled out.

Customer requests fix of following warning:
Line 2: ../../../external/BSW/FrXcp/FrXcp.c:1541: warning: [10348] cast increases required alignment of target type
 in FrXcp_MainFunctionRx:
 XcpCommand((P2CONST(uint32, AUTOMATIC, FRXCP_APPL_DATA))&FrXcp_ReceiveFrameCache[pduIdx].fc[XCP_FRAME_START]);

Background and filtered source:
\\vistrfs1\vgroup\PES\20_Sales\50_Order\5012000-5012999\5012865\CBD1200349_D00-Compiler_Warnings

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Compiler
Version: Reading specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/specs no tricore derivate specified set to -mcpu=tc12 Reading processor specific specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/tricore.specs Reading specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/tricore.specs
OptimizationOptions: -Os -pipe
AdditionalOptions: -x c -c -g -o obj\.o -nostartfiles -save-temps -DBRS_TIMEBASE_CLOCK=75 -DQUARTZ_CLOCK=20 -DEVA_BOARD_VEBN00211 -DGNU=1 -fno-common -mcpu=TC13-FPU_ERR13X_OP1 -fno-builtin -mwarnprqa=off -maligned-access -maligned-data-sections -I- -mno-warn-smalldata-initializers -msmall-pid -gdwarf-2
WarningOptions: -W -Wall -Wundef -Wpointer-arith -Wbad-function-cast -Wcast-qual -Wcast-align -Wstrict-prototypes -Wmissing-prototypes -Wredundant-decls -Wnested-externs -Winline -Werror-implicit-function-declaration -Wmissing-noreturn
Assembler
Version: Reading specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/specs no tricore derivate specified set to -mcpu=tc12 Reading processor specific specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/tricore.specs Reading specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/tricore.specs
AdditionalOptions: -Wa, -als -x assembler-with-cpp -Wundef -gdwarf-2 -c -nostartfiles -o obj\.o
Linker
Version: Reading specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/specs no tricore derivate specified set to -mcpu=tc12 Reading processor specific specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/tricore.specs Reading specs from D:/uti/Compiler/TriCore/GNU_3_4_5_8/bin/../lib/gcc/tricore/3.4.5/tricore.specs
AdditionalOptions: -o TsiStandard.elf -Xlinker -Map -Xlinker TsiStandard.map -mcpu=TC13-FPU_ERR13X_OP1 -nostartfiles --no-demangle --cref -LD:\uti\Compiler\TriCore\GNU_3_4_5_8\lib -LD:\uti\Compiler\TriCore\GNU_3_4_5_8\tricore\lib --start-group -lgcc -los --end-group -Xlinker -T -Xlinker TsiStandard.ld
Librarian
Version: GNU ar version 2.13 (tricore) using BFD version 2.13 (2008-12-10)
Flags: -rvsc makesupport.xml

// If the warning will never be resolved, explain the background. Else remove the text block and fix the warning.
Hint:

ESCAN00064376 Compiler warning: cast increases required alignment of target type

---
The compiler warning is known and has been analyzed thoroughly for its impact on the code.
Nevertheless it will not be fixed due to XXXXXXXX ADD REASON HERE XXXXXXXX

Resolution Description:
Workaround:

No workaround required as correct alignment is guaranteed by the GenTool option "Frame Alignment".

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00067159 Compiler warning: cast truncates constant value

Component@Subcomponent:	MemService_AsrNvM@Implementation
First affected version:	3.08.01
Fixed in versions:	

Problem Description:
What happens (symptoms):

>..\..\bsw\nvm\nvm_crc.c(229) : warning C4310: cast truncates constant value

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

CANoeEmu + VS2008
It depends on definition of uint16_least: Warning occures only if uint16_least is not of type int.

Hint:

The compiler warning is known and has been analyzed thoroughly for its impact on the code.
Nevertheless it will not be fixed, because the cast confirms and enforces this behavior (i.e. the value SHALL be truncated, if necessary).
Additionally: Why uint16_least is not (unsigned) int? -> this data type fulfills all requirements on a 16 bit unsigned value...

Resolution Description:
Workaround:

No workaround necessary.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00074793	Compiler warning: Condition is always constant
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	4.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compiler warning 'Condition is always constant'

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Configurations without DTCs
AND
Precompile configuration

Resolution Description:

Workaround:

The warning can be ignored

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00079347	[BMW only] Compiler warning: incompatible redeclaration of variable "flashCode"
Component@Subcomponent:	FblWrapperFlash_Rh850Rv40His@Impl_Base
First affected version:	1.01.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

The Greenhills compiler issues the following warning when compiling the fbl_flio.c:

"../../../CBD1400010/BSW/Flash/fbl_flio.c", line 95: warning #1544-D:
incompatibility associated with redeclaration of variable "flashCode"
: data type differs from earlier declaration's unspecified type
V_MEMRAM0 V_MEMRAM1 vuint8 V_MEMRAM2 flashCode[FLASH_SIZE];

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Warning occurs always.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00088061	BswM_Lcfg.c: warning: 'function' : conversion from 'const BswM_ImmediateUserStartIdxOfModeReqeustMappi to 'BswM_SizeOfImmediateUserType', possible loss of data
Component@Subcomponent:	SysService_Asr4BswMCfg5@GenTool_GeneratorMsr
First affected version:	7.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

BswM_Lcfg.c: warning: 'function' : conversion from 'const BswM_ImmediateUserStartIdxOfModeReqeustMappingType' to 'BswM_SizeOfImmediateUserType', possible loss of data

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

All

Resolution Description:

ESCAN00089972	Compiler warning: Useless assignment to variable StdReturnValue. Assigned value not used.
Component@Subcomponent:	Ccl_Asr4SmFr@Implementation
First affected version:	2.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Useless assignment to variable StdReturnValue. Assigned value not used.
- Compiler warns for an unused assigned value. Can be accepted
StdReturnValue is set to E_NOT_OK as default value

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

If development error detection is disabled.
Detected with WindRiver DiabData 5.9.4.7, but other compiler might also be affected.

Resolution Description:

Workaround:

Cause of the Warning does not lead to side effects and can be set to the ignore list.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00090161	Compiler warning: condition evaluates always to true/false
Component@Subcomponent:	Ccl_Asr4ComMCfg5@Implementation
First affected version:	7.00.01
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compiler warns for conditional expression being constant
a) in the function ComM_Init() when checking the generated data. Compiler warns about condition being always false in the following conditions:
if (ComM_GetWakeupStateOfChannel(ComM_ChannelIndex) >= COMM_MAX_NUMBER_OF_STATES)
if (ComM_GetSizeOfChannel() != ComM_GetSizeOfChannelPb())
if (ComM_GetSizeOfPnc() != ComM_GetSizeOfPncPb())
As secondary effect compiler might warn about unreachable code/statement.

b) in the function ComM_PncProcessRxSignalEra() compiler warns about condition being always true in
if(ComM_IsSynchronizedOfPnc(pncIndex))

c) in the functions ComM_PncSetBitInSignal() and ComM_PncClearBitInSignal() when checking the generated data. Compiler warns about condition being always true in
if(signalByteIndex < ComM_GetSizeOfPncSignalValues())

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:
---
a) occurs when COMM_DEV_ERROR_DETECT == STD_ON

b) occurs when
- 'Pnc Support' is enabled in ComM (/MICROSAR/ComM/ComMGeneral/ComMPncSupport)
AND
- 'Pnc Gateway Enabled' is enabled in ComM (/MICROSAR/ComM/ComMGeneral/ComMPncGatewayEnabled)
AND
- Only one PNC exists (COMM_ACTIVE_PNC == 1U, can be found in ComM_Cfg.h).

c) occurs when 'Pnc Support' is enabled in ComM (/MICROSAR/ComM/ComMGeneral/ComMPncSupport)

Hint:

The compiler warning is known and has been analyzed thoroughly for its impact on the code. Nevertheless it will not be fixed because no simple remedy exist.
The warning is caused by an if-statement applied on external configuration data. Configuration data is const for the given compilation context but might be changed at post-build time.

Resolution Description:

ESCAN00090806	Compiler warning: C4310: cast truncates constant value
Component@Subcomponent:	Gw_AsrPduRCfg5@Implementation
First affected version:	7.00.00
Fixed in versions:	11.00.00

Problem Description:

What happens (symptoms):

Compiler warns for cast truncates constant value

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

If the uint8_least is of type unsigned char

The Platform_Types.h contains the following define

typedef unsigned char uint8_least; /* At least 8 bit */

Hint:

The compiler warning is known and has been analyzed thoroughly for its impact on the code. Nevertheless it will not be fixed due to ensure that the init value is large enough. A cast to a smaller value is acceptable and has no impact on the application.

#define PDUR_INVALID_VARARRAYIDX ((uint16)0xFFFF) is cast for unsigned char to 0xFF which is correct.

Resolution Description:

Workaround:

---

ignore the warning

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00090831	Compiler warning: integer conversion resulted in a change of sign
Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compiler warns that "integer conversion resulted in a change of sign".

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

If the compiler WindRiver Diab is used. (found with version 5.9.4.2.)

Hint:

The compiler warning is known and has been analyzed thoroughly for its impact on the code.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00091295	Compiler warning: dead assignment / variable set but not used
Component@Subcomponent:	Ccl_Asr4ComMCfg5@Implementation
First affected version:	5.00.00
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compiler warns about an useless assignment to a local variable. Typically the warnings refer to local variables 'channel', 'errorId', 'Status' or 'User'.
Example compiler warning strings:
"Useless assignment to variable 'abc'. Assigned value not used."
"Removed dead assignment"

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

EcuC Parameter 'Dummy Statement Kind' is set to 'SelfAssignment'. This can be detected in ComM_Cfg.c: #define COMM_DUMMY_STATEMENT(v) (v)=(v)

Hint:

The compiler warning is known and has been analyzed thoroughly for its impact on the code. Nevertheless it will not be fixed because no simple remedy exist.
If Dummy Statement is switched off, other compiler warnings might occur e.g. "Unused/ unreferenced variable".

Resolution Description:

ESCAN00096807	Compiler warning: possible loss of data due to implicit cast from uint16 to uint8
Component@Subcomponent:	Ccl_Asr4ComMCfg5@Implementation
First affected version:	8.01.01
Fixed in versions:	

Problem Description:

What happens (symptoms):

Compiler warns about possible loss of data due to conversion from uint16 to uint8 (implicit cast) for example
ComM.c(1287): warning C4244: '=' : conversion from 'const ComM_PncPbIndType' to 'ComM_PncIterType', possible loss of data

Code example and explanation:

typedef uint8_least ComM_PncIterType;
...
ComM_PncIterType pncIndex;
pncIndex = ComM_GetPncPbInd(pncPbIndIter); // the warning occurs because ComM_GetPncPbInd() returns a value of type uint16

There is no implication of this warning when using the code nevertheless. There is no loss of data because ComM_GetPncPbInd() returns a value that is always less than 64, which is the maximum number of partial network clusters (PNCs).

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

- Pnc Support is enabled (#define COMM_PNC_SUPPORT STD_ON can be found in ComM_Cfg.h) and
- ComM module has configuration variant Postbuild Loadable (#define COMM_CONFIGURATION_VARIANT COMM_CONFIGURATION_VARIANT_POSTBUILD_LOADABLE can be found in ComM_Cfg.h)
and
- the type uint8_least is defined to uint8 (typedef unsigned char uint8_least can be found in Platform_Types.h)

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00096913	Compiler warning: Static function 'Rte_QUnqueueElementCallbackSpecific<OsApplicati is not used within this translation unit
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.04.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

Compiler warns for an unused function.

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

On a partitioned or multicore system with fanin queued communication at least on one partition/core and no queued communication on another partition/core.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097289	Compiler warning: integer literal is too large to be represented in a signed integer type, interpreting as unsigned
Component@Subcomponent:	Rte_Core@Implementation
First affected version:	1.05.00
Fixed in versions:	1.17.00

Problem Description:

What happens (symptoms):

Compiler issues a warning: integer literal is too large to be represented in a signed integer type, interpreting as unsigned when
a lower limit define from the RTE is used.

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

This happens when the configuration contains application data type that are mapped to signed 64-bit integer types
and when the lower limit is configured to -9223372036854775808.

Resolution Description:

Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097339	Compiler warning: possible truncation at implicit conversion
Component@Subcomponent:	Diag_Asr4Dem@Implementation
First affected version:	13.06.00
Fixed in versions:	14.03.00

Problem Description:
What happens (symptoms):
---
compiler issues a warning due to value truncation

ctc E560: ["..\..\..\external\BSW\Dem\Dem_DTC_Implementation.h" 1272/25] possible truncation at implicit conversion to type "unsigned char"
ctc E560: ["..\..\..\external\BSW\Dem\Dem_Event_Implementation.h" 1540/15] possible truncation at implicit conversion to type "unsigned char"

When does this happen:

The warning is issued by the compiler during compilation of the code

In which configuration does this happen:
---
compiler handles enumeration size as integer instead of as small as the values allow

Resolution Description:
Workaround:

If there exist compiler settings that limit the enum size, this can prevent the warning.
Otherwise the warning can be ignored.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097692	Compiler warning: conversion from 'int' to 'Dcm_CfgNetBufferSizeOptType'
Component@Subcomponent:	Diag_Asr4Dcm@Implementation
First affected version:	4.01.00
Fixed in versions:	9.02.00

Problem Description:

What happens (symptoms):

Compiler warns for possible loss of data: Check if cast is missing and if there is really a data loss due to an implicit/explicit cast on the target platform

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

- Service 0x22 is supported and handled by DCM (in Dcm_Cfg.h: #define DCM_SVC_22_SUPPORT_ENABLED == STD_ON)
AND
- DCM is configured to support DIDs with multiple signals (in Dcm_Cfg.h: #define DCM_DIDMGR_MULTISIGNAL_ENABLED == STD_ON)
AND
- At least one DID supports read operation (in Dcm_Cfg.h: #define DCM_DIDMGR_OPTYPE_READ_ENABLED == STD_ON)

Resolution Description:

Workaround:

Ignore the warnings, since there is no danger of data value truncation.

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00097980	Compiler warning: Unreferenced formal parameter due to reduction of rom data
Component@Subcomponent:	Il_AsrComCfg5@Implementation
First affected version:	1.00.00
Fixed in versions:	

Problem Description:
What happens (symptoms):

Compiler warning occurs: Unreferenced formal parameter

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

/MICROSAR/Com/ComGeneration/ComReduceConstantData2Define is enabled
OR
/MICROSAR/Com/ComGeneral/ComOptimizeConstArrays2Define is enabled (in older releases).

Hint:

The compiler warning is known and has been analyzed thoroughly for its impact on the code. Nevertheless it will not be fixed due to existence of a sufficient workaround.

Resolution Description:
Workaround:

Disable

/MICROSAR/Com/ComGeneration/ComReduceConstantData2Define (in newer releases)
OR
/MICROSAR/Com/ComGeneral/ComOptimizeConstArrays2Define (in older releases).

Resolution:

The described issue is corrected by modification of all affected work-products.

ESCAN00098070	Compiler warning: NvM_Cfg.c: 'ServiceId' : unreferenced formal parameter
Component@Subcomponent:	MemService_AsrNvM@GenTool_GeneratorMsr
First affected version:	3.01.02
Fixed in versions:	

Problem Description:
What happens (symptoms):

1> NvM_Cfg.c
1>..\..\Appl\GenDataVtt\NvM_Cfg.c(588): warning C4100: 'ServiceId' : unreferenced formal parameter

with Visual Studio compiler

When does this happen:

The warning is issued by the compiler during compilation of the code in case the configuration is as described below.

In which configuration does this happen:

Any configuration with disabled NvMMultiBlockCallback and NvMBswMMultiBlockJobStatusInformation

Resolution Description:
Workaround:

No workaround available.

Resolution:

The described issue is corrected by modification of all affected work-products.

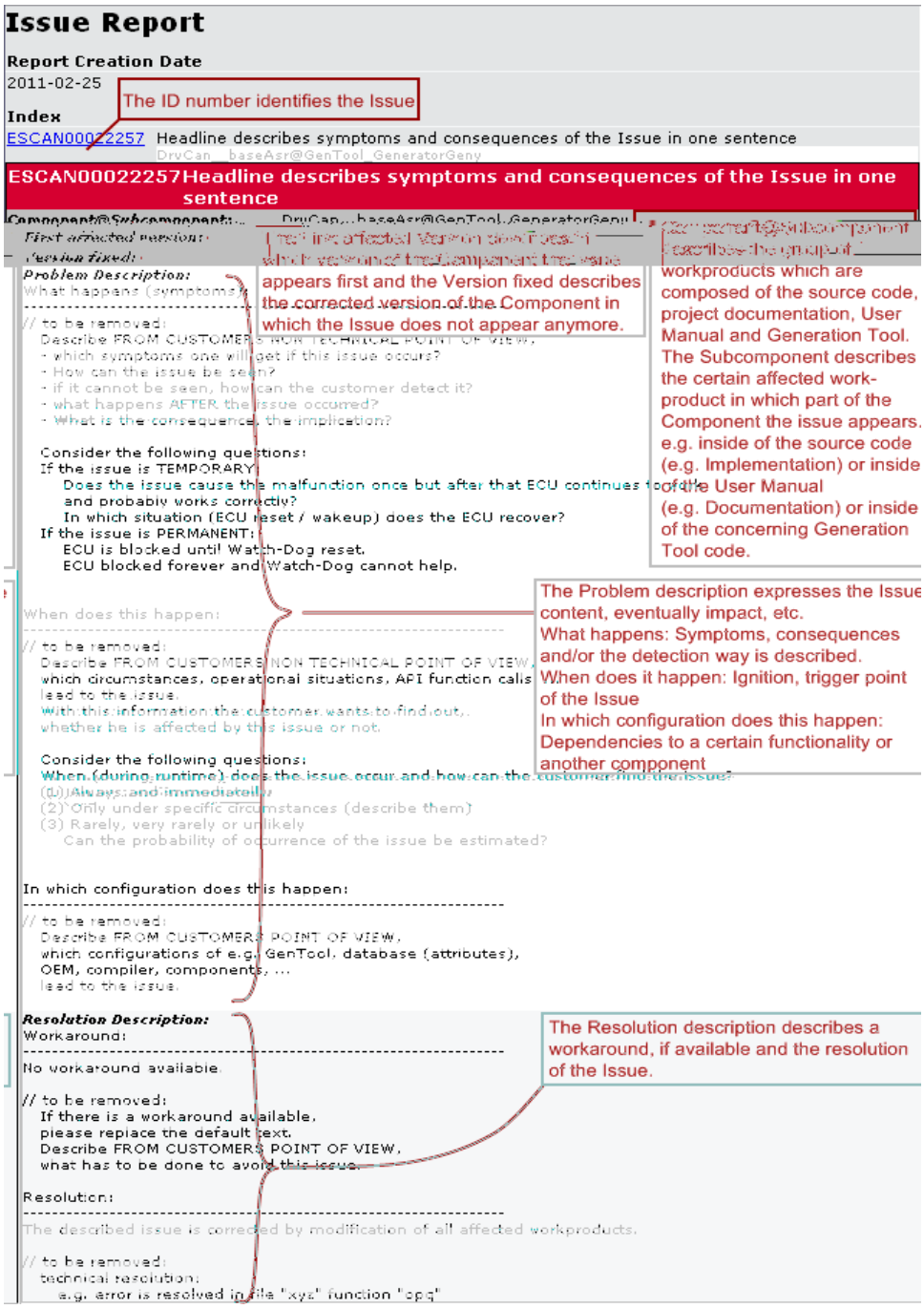
3. New Issues for Information

Issues which should not have an effect on the usage of the license as the issues are relevant for use cases other than those defined in the questionnaire. The list contains issues that have been detected since the last report.

Issues listed in this section are not relevant for the use case that has been documented in the questionnaire provided to Vector. However, the issues may be relevant for other use cases. Also issues that have been accepted or are tolerated by the OEM (as defined in the questionnaire) are reported here.

No issue to be reported.

4. Report Legend



5. 3rd Party Software Issues

This issue report does not include issues of 3rd party software. If 3rd party software was included in the SIP, the documentation of the issue reporting process is included in the SIP: .\Doc \DeliveryInformation\IssueHandling_<Name>.pdf. Please follow the given instructions.

6. Quality Management Contact

Quality Management
Productline Embedded Software (PES)

Vector Informatik GmbH
Ingersheimer Str. 24
D-70499 Stuttgart

Phone: +49 711 80670-3700
Fax: +49 711 80670-399
eMail: QualityPES@vector.com