



Elektrobit

# EB tresos<sup>®</sup> AutoCore Generic 8

## Base documentation

release notes update for the Configurators module

product release 8.8.7



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# 1. Overview

This document provides you with the release notes to accompany an update to the `Configurators` module. Refer to the changelog [Section 2.1, “Change log”](#) for details of changes made for this update.

## Release notes details

- ▶ EB tresos AutoCore release version: 8.8.7
- ▶ EB tresos Studio release version: 29.2.1
- ▶ AUTOSAR R4.0 Rev 3
- ▶ Build number: B628559

## 2. Configurators module release notes

- ▶ Module version: 2.8.54.B628559
- ▶ Supplier: Elektrobit Automotive GmbH

### 2.1. Change log

This chapter lists the changes between different versions.

#### Module version 2.8.54

2023-04-13

- ▶ ASCCONFIGURATORS-1339 Fixed known issue: ECU Configuration Wizard incorrectly configures `DemObdDTC` and `DemEventOBDReadinessGroup`

#### Module version 2.8.48

2022-10-26

- ▶ Extended Com Transformer to support the configuration of the parameters `ComSignalInitValue` and `ComSignalDataInvalidValue` via `TextValueSpecification` and `CompuMethod` elements
- ▶ ASCCONFIGURATORS-1295 Fixed known issue: Dcm Transformer configures `DcmDspRoutine` container incorrectly
- ▶ Extended Com Transformer to support the configuration of `ComSignalGroup/ComTransferProperty` according to AUTOSAR R22-11
- ▶ Extended LinIf Transformer to Support J2602 networks
- ▶ Extended StbM Transformer to add support for sub-domain retrieval using the `GlobalTimeDomain.globalTimeSubDomain` reference list
- ▶ Extended LinIf Transformer to support the configuration of Lin Slaves
- ▶ Extended J1939Tp and PduR Transformers to support the configuration of J1939Tp on CAN FD
- ▶ Extended Transformer for Dcm to support the configuration of service `0x24/ReadScalingDataByIdentifier`

## Module version 2.8.47

2022-08-19

- ▶ Extended DoIP Transformer to support `DoIPInterface` containers

## Module version 2.8.46

2022-07-22

- ▶ Added Transformer for `IdsM`
- ▶ Extended TcpIp Transformer to configure `TcpIpArpTableSizeMax` and `TcpIpNdpMaxNeighborCacheSize`

## Module version 2.8.45

2022-07-04

- ▶ Extended Dcm Transformer to issue a warning if service `0x28/CommunicationControl` is configured for an `EthernetCluster`
- ▶ Extended Transformer for `IpduM` to support the configuration of `IpduMContained[Rx | Tx]Pdu` containers using `ContainerIPdu.containedIPduTriggeringProps`
- ▶ Extended Dcm Transformer to support `UINT8_DYN DcmDspDataType` in `DcmDspData`
- ▶ Updated Transformer for `Com` to not create default `ComIPduGroup` containers for PDUs that do not belong to any `ISignalIPduGroup`
- ▶ Extended Transformer for `Dcm` to support the configuration of service `0x29/Authentication`
- ▶ ASCCONFIGURATORS-1287 Fixed known issue: Dem Transformer configures `DemCallbackClearEventAllowed` container incorrectly
- ▶ Extended Transformer for `Dem` to support the configuration of `DemMILIndicatorRef` in `DemGeneral`
- ▶ ASCCONFIGURATORS-1290 Fixed known issue: Dcm Transformer configures `DcmDspDidDataPos` incorrectly for big-endian `DcmDspDidSignals`

## Module version 2.8.44

2022-05-13

- ▶ Removed configuration of obsolete `CanIf` parameter `CanIfTxPduDlc`
- ▶ Extended Transformer for `LinIf` to support `LinSlaveConfig.linConfigurableFrame` and `LinSlaveConfig.linOrderedConfigurableFrame`

- ▶ ASCCONFIGURATORS-1265 Fixed known issue: Dcm Transformer configures references to incorrect `DiagnosticSession` containers with identical short name
- ▶ ASCCONFIGURATORS-1266 Fixed known issue: Dcm Transformer configures references to incorrect `DiagnosticSecurityLevel` containers with identical short name
- ▶ ASCCONFIGURATORS-1268 Fixed known issue: Dem Transformer configures references to incorrect `DemEventClass` containers with identical short name
- ▶ ASCCONFIGURATORS-1272 Fixed known issue: Dcm Transformer configures `DcmDspAllComMChannelRef`, `DcmDspSpecificComMChannelRef` and `DcmDspComControlSubNodeComMChannelRef` references incorrectly
- ▶ ASCCONFIGURATORS-1269 Fixed known issue: FiM Transformer configures `FiMInputSumEventRef` references incorrectly
- ▶ ASCCONFIGURATORS-1271 Fixed known issue: FiM Transformer configures `FiMInhEventRef` references incorrectly
- ▶ ASCCONFIGURATORS-1275 Fixed known issue: Dcm Transformer configures `DcmDspDataUsePort` incorrectly
- ▶ ASCCONFIGURATORS-1274 Fixed known issue: Dcm Transformer configures `DcmDspRoutineUsePort` incorrectly
- ▶ Extended Transformers for Tls, Csm, and KeyM to support the cipher suite `TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256` and the configuration of certificates
- ▶ Improved user documentation describing the configuration of `ComSignal`, `ComSignalGroup`, and `ComGroupSignal` containers
- ▶ Adapted Com Transformer for Csm such that `CRYPTO-SERVICE-KEY/LENGTH` is interpreted as a bit length

## Module version 2.8.43

2022-04-08

- ▶ ASCCONFIGURATORS-1263 Fixed known issue: Dem Transformer causes `NullPointerException` on processing `DiagnosticTroubleCode` with identical short name
- ▶ Extended Transformer for PduR to configure `PduRDefaultValueElement` containers only for destination PDUs that are not directly sent via Ethernet

## Module version 2.8.42

2022-03-09

- ▶ Internal module improvement. This module version update does not affect module functionality

- ▶ Updated Transformers for SoAd, Tls, and Csm to support the configuration of DTLS connections
- ▶ Updated Transformers for Com to support for `RuleBasedValueSpecification` elements to configure the initial and invalid values of `ISignals`
- ▶ Extended DcmTransformer to configure `USE_DATA_SENDER_RECEIVER` in `DcmDspDataUsePort`
- ▶ Extended DemTransformer to configure `DemDebounceBehavior` and `DemDebounceCounterStorage` in `DemDebounceCounterBased`

## Module version 2.8.41

2022-01-28

- ▶ Updated Transformer for CanIf to configure `CanIfRxPduDlc` using `CanFrame.frameLength`

## Module version 2.8.40

2021-12-10

- ▶ Updated Transformer for Tls to the container structure of the ACG 8.8.4 `Tls` module
- ▶ ASCCONFIGURATORS-1243 Fixed known issue: SoAd Transformer does not configure `PduRoutes` or `SocketRoutes` for `PduActivationRoutingGroups` without `eventGroupControlType`
- ▶ Updated ComTransformer for TcpIp according to parameter changes related to IKE integration
- ▶ ASCCONFIGURATORS-1240 Fixed known issue: Dcm Transformer configures `DcmRteUsage` incorrectly for two or more `DiagnosticServiceTables`

## Module version 2.8.39

2021-11-12

- ▶ Internal module improvement. This module version update does not affect module functionality

## Module version 2.8.38

2021-10-08

- ▶ Extended Transformer for Com such that it creates the `ComTimeBase` container only if one of its contained parameters can be configured
- ▶ Updated Transformer for Com to configure `ComDataInvalidAction` only for received `ISignals` and `ISignalGroups` that provide specific values in `ComDataTypePolicy`





## Module version 2.8.37

2021-09-17

- ▶ Extended Transformer for TcpIp to configure parameters in `TcpIpIpConfig`, `TcpIpUdpConfig`, and `TcpIpTcpConfig`

## Module version 2.8.36

2021-08-20

- ▶ Extended `SdTransformer` to configure `SdSubscribeEventgroupRetryDelay`, `SdSubscribeEventgroupRetryMax`, `SdVersionDrivenFindBehavior`, and `SdBlacklistedVersions`
- ▶ Extended Transformers for `CanTSyn`, `FrTSyn`, and `StbM` to configure `CanTSynGlobalTimeNetworkSegmentId`, `FrTSynGlobalTimeNetworkSegmentId`, and `StbMTimeValidationRecordTableBlockCount`

## Module version 2.8.35

2021-06-25

- ▶ Extended `ComTransformers` for `Tls` and `Csm` to configure the TLS cipher suites `TLS_ECDHE_ECDSA_WITH_NULL_SHA` and `TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256`
- ▶ Extended `DcmTransformer` to configure `DcmDspDidRead` and `DcmDspDidWrite` subcontainers if either `DiagnosticServiceInstance` or `DiagnosticServiceClass` references a valid `DiagnosticAccessPermission`

## Module version 2.8.34

2021-05-28

- ▶ Extended `ComTransformer` for `EthIf` to configure `EthIfPortStartupActiveTime`
- ▶ ASCCONFIGURATORS-1215 Fixed known issue: `J1939Rm` Transformer configures identical short names for `J1939RmUpperComIPdu` and `J1939RmLowerComIPdu`

## Module version 2.8.33

2021-04-30

- ▶ Add support for `ConsumedServiceInstances` in multicast `SocketAddress` elements
- ▶ Internal module performance improvement. This module version update does not affect module functionality
- ▶ ASCCONFIGURATORS-1208 Fixed known issue: Com Transformer calculates incorrect `ComSignalType` when `dataTypePolicy` is set to `networkRepresentationFromComSpec`
- ▶ ASCCONFIGURATORS-1205 Fixed known issue: Dcm Transformer uses potentially invalid values to configure `DcmDspReadMemoryRangeInfo` and `DcmDspWriteMemoryRangeInfo` container creation
- ▶ Added Support AUTOSAR `SignalLength` SDG for the configuration of `ComBitSize`
- ▶ ASCCONFIGURATORS-1206 Fixed known issue: Dcm Transformer uses potentially invalid values to configure `DcmDspDidFreezeCurrentState`, `DcmDspDidResetToDefault` and `DcmDspDidShortTermAdjustment`
- ▶ ASCCONFIGURATORS-1207 Fixed known issue: Dcm Transformer uses potentially invalid values to configure `DcmDspVehInfoDataOrder` and `DcmDspVehInfoDataSize`
- ▶ Extended DcmTransformer to configure `DcmDemClientRef` for `DcmDslProtocolRow`

## Module version 2.8.32

2021-03-05

- ▶ Adapted ComTransformer for EthTSyn with fixed `GlobalTimeDomain` and `Port Structure`
- ▶ Extended ComTransformer for Eth to support the configuration according to the AUTOSAR 4.3 schema
- ▶ Extended ComTransformer for SecOC to support the configuration of `SecOCAuthPduHeaderLength`
- ▶ Extended DcmTransformer to configure `DcmDspDataEndianness` for `DcmDspData`
- ▶ ASCCONFIGURATORS-1189 Fixed known issue: Dem Transformer stops with an error when processing `DiagnosticDataElements` with identical names

## Module version 2.8.31

2021-02-12

- ▶ ASCCONFIGURATORS-1178 Fixed known issue: Dem Transformer uses potentially invalid value to configure `DemAgingCycleCounterThreshold`
- ▶ ASCCONFIGURATORS-1177 Fixed known issue: Dem Transformer uses potentially invalid `Id` field to configure `DemDidIdentifier`
- ▶ Extended transformer for SecOC to support the authentication of `DoIP` and `SomeIpTp Sdus`
- ▶ ASCCONFIGURATORS-1176 Fixed known issue: Dcm Transformer uses a potentially invalid `ID` field for `DcmDspMemoryIdInfo` container creation

## Module version 2.8.30

2021-01-22

- ▶ Added transformer for `Tls`

## Module version 2.8.29

2020-12-18

- ▶ Added transformer for `EcuM` to support the configuration of synchronous PNC wake-up
- ▶ Extended transformer for `SoAd` to consider two remote `SocketAddress` elements as distinct if at least one of them has a dynamic port assigned
- ▶ Extended transformer for `TcpIp` to configure the `TcpIpIpSecConfig` container
- ▶ Extended transformers for `TcpIp` and `Sd` to stop accessing the `EthernetCommunicationConnector` to `NetworkEndpoint` references since they will become obsolete in the future

## Module version 2.8.28

2020-10-23

- ▶ Extended transformers for `Dcm` to support the multiple `DiagnosticServiceTable` and to configure `DcmDspMaxDidToRead` parameter for `DiagnosticReadDataByIdentifier`
- ▶ Added transformers for `J1939Tp`, `J1939Nm`, `J1939Rm`, and `J1939Dcm`
- ▶ Extended transformers for `Dcm` to support Parallel Processing for OBD and UDS

## Module version 2.8.27

2020-09-25

- ▶ Extended transformers for `SoAd` and to `SoAd` to support the Ethernet service and communication model of the AUTOSAR R19-11 release
- ▶ ASCCONFIGURATORS-1151 Fixed known issue: Transformer for `Sd` does not create all `SdServerService/SdClientService` containers
- ▶ Extended transformer for `EthTSyn` to create one additional `EthTSynPortConfig` container if the configured ECU instance contains a switch
- ▶ Extended transformers for `TcpIp` and `SoAd` to configure `TcpIpIpFragmentationRxEnabled`, `TcpIpIpFragmentationTxEnabled`, and `SoAdSocketUdpRetryEnabled` depending on the MTU that is configured at the `EthernetCommunicationConnector`

- ▶ Extended transformer for `Com` such that no `ComSignal` containers are created for `ISignals` that have a bit offset assigned which does not lie in the user data area of its `NmPdu`

## Module version 2.8.26

2020-07-31

- ▶ Extended transformer for `FrTp` to support the configuration of a single `FrTpConnection` container using two `FlexrayTpConnection` elements
- ▶ Extended transformer for `Com` to support the configuration of `ComSignalType` for signals of type `ARRAY` that have an `SwBaseType` without valid `length` assigned

## Module version 2.8.25

2020-06-19

- ▶ Extended Transformer for `Sd` to support the configuration of `SdMulticastEventSoConRef` even if the `SoAdSocketConnectionGroup` container of the `SdEventHandler` contains more than one multicast `SoAdSocketConnection`
- ▶ Extended Transformer for `PduR` to support the simultaneous routing and local reception of `DoIp` SDUs that are received via functional addressing or are related to a `DiagnosticConnection`
- ▶ Added Transformer for the `Csm` module
- ▶ Internal module improvement. This module version update does not affect module functionality
- ▶ Extended transformer for `DoIp` to configure `DoIpChannel` containers for `DoIpTpConnection` elements that do not contain an `ident` sub element
- ▶ ASCCONFIGURATORS-1125 Fixed known issue: `DcmDslProtocolID` is not configured for `DoIpTpConnections`
- ▶ ASCCONFIGURATORS-1124 Fixed known issue: Empty `DemExtendedDataClass` containers are configured

## Module version 2.8.24

2020-05-22

- ▶ Extended Transformer for `SecOC` to support the configuration of `SecOCMessageLinkLen` and `SecOCMessageLinkPos`
- ▶ Extended Transformers for `EcuC`, `CanIf`, `CanNm`, `SoAd` and `TcpIp` to consider `IPduMapping.pduMaxLength` for the calculation of the payload length of a PDU

- ▶ Extended Transformer for `IpduM` to configure an Rx PDU fan-in for contained PDUs if they have the same header-id values assigned and their `ContainerIPdus` are configured as `AcceptAll`
- ▶ Extended Transformer for `TcpIp` to support the configuration of `TcpIpIPv4PathMtuTimeout`, `TcpIpIPv4PathMtuEnabled`, `TcpIpIPv6PathMtuTimeout` and `TcpIpIPv6PathMtuEnabled`
- ▶ ASCCONFIGURATORS-1114 Fixed known issue: During the import of the Diagnostic Extract, the `DiagnosticEvent` and `DiagnosticAging` are in common namespace and the duplicate names are not appended with a suffix "\_1" to the short name

## Module version 2.8.23

2020-04-27

- ▶ Extended Transformers for `FrIf` and `FrArTp` to support merging of `FrArTpConnection` elements with the same local/remote `Tp` address pair and to support the configuration of one and the same Tx N-PDU in different slots
- ▶ Extended Transformer for `Com` to support the configuration of PDUs that are received via `SecOC` and TP API
- ▶ Extended Transformer for `Com` to support the configuration of `ComDataInvalidAction`

## Module version 2.8.21

2020-02-21

- ▶ Extended Transformer for `FrArTp` to add N-PDUs to `FrArTpChannel` containers only if they are actually sent or received by the Ecu Instance
- ▶ ASCCONFIGURATORS-1087 Fixed known issue: `SoAdPduRoute` containers are not created for Broadcast/Multicast `SocketConnectionGroups`
- ▶ Extended Transformer for `DoIp` to support the configuration of more than one `DoIpUdpConnection` for a given remote tester address
- ▶ Extended Transformer for `Com` to support boolean `SwBaseType` elements of arbitrary bit lengths
- ▶ Extended Transformer for `ComM` to support the configuration of `ComMUser` containers
- ▶ Extended Transformers for `Com`, `LdCom`, `SecOC`, and `SoAd` to configure TP API for PDU Triggerings that are referenced by `EthTpConnection` elements

## Module version 2.8.20

2019-10-17

- ▶ Extended Transformer for `SomeIpTp` to support `SomeIpTpChannel` entities
- ▶ Extended Transformer for `TcpIp` to configure `TcpIpTcpKeepAliveEnabled`, extended Transformer for `SoAd` to configure `SoAdSocketTcpKeepAlive`
- ▶ Extended Transformer for `StbM` to support parameters `StbMOffsetCorrectionAdaptionInterval`, `StbMOffsetCorrectionJumpThreshold`, `StbMRateCorrectionMeasurementDuration` and `StbMRateCorrectionsPerMeasurementDuration`
- ▶ Extended Transformer for `LinIf` to prevent the configuration of `LinFrame` elements that the configured Ecu Instance sends or receives via `LinSlave` communication controllers
- ▶ ASCCONFIGURATORS-1074 Fixed known issue: Transformer for CanSM issues Null pointer exception for `CommunicationConnectors` that do not refer to valid `Controllers`

## Module version 2.8.19

2019-09-06

- ▶ ASCCONFIGURATORS-1064 Fixed known issue: Transformer for `SoAd` does not create Pdu Routes for dynamically configured local IP addresses

## Module version 2.8.18

2019-07-12

- ▶ Support array types for the `DcmDspRoutineSignalType`
- ▶ ASCCONFIGURATORS-1055 Fixed known issue: Transformers for `Com`, `ComM` issue a `NullPointerException` if PNC vector is missing

## Module version 2.8.17

2019-06-14

- ▶ Remove prefix for names of `DcmDspData` elements
- ▶ Extended Transformer for `ComM` to configure `ComMNmVariant` as `NONE` if the configured Ecu Instance does not send or receive PDUs on the `ComMChannel`
- ▶ Extended Transformers for `EcuC`, `CanNm`, `FrNm`, `UdpNm`, `PduR` and `Com` to configure received Nm User Data PDUs even if the signals contained in the Nm PDUs have no signal port assigned
- ▶ Extended Transformer for `SoAd` to configure `GeneralPurposeIPdu` elements of category `Dlt_TP` and `Dlt_IF`



- ▶ Extended Transformer for `SoAd` to configure `SoAdTxPduCollectionSemantics`
- ▶ ASCCONFIGURATORS-1041 Fixed known issue: During the import of the Diagnostic Extract, the creation of a configuration container in `Dem` throws an exception. This exception is caused by an illegal container short name

## Module version 2.8.16

2019-05-17

- ▶ Extended Transformer for `SoAd` to support Service Oriented Communication of System Description `.arxml` files
- ▶ Extended Transformer for `StbM` to configure `StbMIsSystemWideGlobalTimeMaster` for abstract Global Time Domains
- ▶ ASCCONFIGURATORS-1035 Fixed known issue: Transformer for `LinIf` configures `LinIfCollisionResolvingRef` incorrectly
- ▶ ASCCONFIGURATORS-1038 Fixed known issue: `Dcm` importer wrongly configures the `SessionRefs` and `SecurityLevelRefs` for the `ServiceInstance` value of `AccessPermissionValidity`

## Module version 2.8.15

2019-04-18

- ▶ Extended Transformer for `Dem` to support the configuration of the `DemOBDSupport` and the `DemOBDSupportKind` parameters
- ▶ Adapted Transformer for `TcpIp` to skip the configuration of `TcpIpStaticIpAddressConfig` containers if the parent `TcpIpLocalAddr` container has been created for a multicast address that is configured at runtime by `Sd`
- ▶ Adapted Transformer documentation for `Dcm` to correctly reflect the information for DiagnosticComControl (0x28) service
- ▶ Adapted Transformer for `Dcm` to fill the Data Access Interface by the DEXT importer
- ▶ Adapted Transformer documentation for `Dcm` to write `VARIABLE-SIZE` instead of `VARIABLE-LENGTH`
- ▶ Extended Transformer for `CanNm` to resolve short name collisions in the case that `NmPdu` elements are transmitted in different CAN networks using identical CAN Ids or CAN Id ranges
- ▶ Adapted Transformer for `Dcm` to also take into account `MAPPED-FLAT-SWC-SERVICE-DEPENDENCY` when configuring the `DcmDspRoutineUsePort`
- ▶ Extended Transformer for `Com` to configure `ComSignalDirection` and `ComSignalGroupDirection`
- ▶ Extended Transformers to support the reception of one and the same PDU via different networks

## Module version 2.8.13

2019-03-14

- ▶ ASCCONFIGURATORS-1006 Fixed known issue: Transformer for Xcp erroneously adds non-Xcp PDUs

## Module version 2.8.12

2019-02-15

- ▶ Extended Transformer for `Dcm` to configure the `DcmDspRequestRoutineResultsIn` container inside the `Dsp` container, only if the `REQUESTS` tag exists inside the `DiagnosticExtract`
- ▶ Extended Transformer for `IpduM` to configure `IpduMContainerQueueSize` by using `ContainerIPdu.minimumRxContainerQueueSize` and `ContainerIPdu.minimumTxContainerQueueSize`
- ▶ Extended Transformer for `StbM`, `EthTSyn`, `CanTSyn`, and `FrTSyn` to support configuration via AUTOSAR 4.4 `GlobalTimeDomain` elements
- ▶ Extended Transformer for `IpduM` to configure `IpduMContainerTxTriggerMode` of `IpduMContainerTxPdu` to `IPDUM_DIRECT`, if the `IpduMContainerTxPdu` is itself contained in a `SecuredIPdu`, i.e. a PDU that is processed in `SecOC`
- ▶ Extended Transformer for `ComM` to take the `PncMapping` references to `PhysicalChannel` elements into account for setting up the `ComMPnc` lists
- ▶ Extended Transformer for `ComM` to support the configuration of managed `ComMChannel` containers

## Module version 2.8.11

2019-02-05

- ▶ ASCCONFIGURATORS-996 Fixed known issue: `DiagnosticEventHandler` issues `NullPointerException` on Event that is not mapped onto an operation Cycle
- ▶ Extended Transformer for `Dem` to configure the `DiagnosticDemProvidedDataMapping.DataProvider` with the standardized values
- ▶ Extended Transformer for `IpduM` to configure `IpduMContainedTxPduPriority`

## Module version 2.8.10

2019-01-25

- ▶ Extended configuration of `CanTSynGlobalTimeFollowUpTimeout` in Transformer for `CanTSyn`



- ▶ Extended Transformer for `ComM` to configure `ComMPncEthIfSwitchPortGroupRef`
- ▶ Extended Transformers to allow execution in EB tresos Studio 26 and to support transformation of ASR 4.4 system description files
- ▶ Extended Transformers for `CanIf` and `FrIf` to configure `PduR` as upper layer for routed N-PDUs
- ▶ Extended Transformer for `Dem` to configure the `DemDtcStatusAvailabilityMask` parameter inside the `DemGeneral` container

## Module version 2.8.9

2018-12-13

- ▶ ASCCONFIGURATORS-977 Fixed known issue: Transformer for `EcuC` stops with an error if a sent PDU undergoes a tx fanout before `SecOC/lpduM` and before `<Bus<If` at the same time
- ▶ Extended Transformer for `Dcm` to configure the `DcmDspRoutineFixedLength` parameter of a `DcmDspRoutine`
- ▶ Extended Transformer for `Dem` to configure the `DemEventSignificance` parameter inside the `DemEventClass` container
- ▶ ASCCONFIGURATORS-980 Fixed known issue: Transformer for `SoAd` configures `SomeIpTp` N-PDUs as TP API PDUs instead of as IF API PDUs
- ▶ Extended Transformers for `IpduM`, `SecOC`, and `PduR` to support transmission of cryptographic PDUs in container PDUs and routing of cryptographic PDUs
- ▶ Extended Transformer for `Dem` to configure the `DemEventDestination` parameter inside the `DemEventClass` container
- ▶ Extended Transformer for `IpduM` to configure `IpduMContainerQueueSize`

## Module version 2.8.8

2018-10-26

- ▶ ASCCONFIGURATORS-964 Fixed known issue: Transformer for `EcuC` does not configure Routing-only Applicative TP SDUs
- ▶ Extended Transformers for `Com` and `LdCom` to support the configuration of `Tp` API for PDUs that are sent or received via `SomeIpTp`
- ▶ Extended Transformer for `ComM` to configure `ComMPncComSignal` entries as ERA if they are associated with a `COMM_GATEWAY_TYPE_PASSIVE` `ComMChannel`
- ▶ ASCCONFIGURATORS-971 Fixed known issue: Transformer for `FrTSyn` does not configure `FrTSynGlobalTimeSyncDataIDList` correctly

## Module version 2.8.7

2018-09-28

- ▶ Extended Transformer for `SoAd` to support use of "0.0.0.0" IPV4 addresses as dynamic remote IP addresses
- ▶ Extended Transformer for `IPduM` to support parameter `IpduMUnusedAreasDefault` in `IpduMContainerTxPduS`
- ▶ ASCCONFIGURATORS-957 Fixed known issue: Transformer for `SecOC` does not process cryptographic PDUs

## Module version 2.8.6

2018-08-24

- ▶ Removed configuration of `EthSwtPortSpeed` from Transformer for `EthSwt`

## Module version 2.8.5

2018-07-31

- ▶ Extended Transformer for `StbM`: Added support for the configuration of `StbMSynchronizedTimeBaseIdentifier`
- ▶ Extended Transformers to ignore Frames, PDUs, and Signals that are sent or received via `LinSlave` elements
- ▶ Extended Transformer for `LdCom` to support the configuration of a received PDU irrespective of its `minimumDelay`, `transmissionModeTrueTiming` and `transmissionModeCondition`
- ▶ Extended Transformer for `Com` to implement OEM specific fallback for configuration of `ComSignalType`
- ▶ Extended Transformer for `EcuC` to exclude secured PDUs and Pdus contained in a secured PDU from the Meta-Data handling
- ▶ Extended Transformer for `Dcm` to configure `DiagnosticDataTransfer`
- ▶ ASCCONFIGURATORS-951 Fixed known issue: Transformer for `IPduM` creates duplicated Contained Rx PDUs

## Module version 2.8.4

2018-06-22

- ▶ Removed creation of IPV4 limited broadcast address entries in Transformer for `TcpIp`

- ▶ Extended Transformer for `PduR` to configure `PduRRoutingGroup` containers
- ▶ Extended Transformer for `SecOC` to support the configuration of distinct Secured and Cryptographic PDU containers
- ▶ Extended Transformer for `EcuC` to configure Meta-Data for Ethernet PDUs that are received or sent by server components
- ▶ Extended Transformer for `EthSwt` to configure modified parameter `EthSwtPortPhysicalLayerType` and new parameter `EthSwtPortMacLayerType` in `EthSwtPort`

## Module version 2.8.3

2018-05-25

- ▶ Extended Transformer for `Com` to configure `ISignalIPduGroup` elements that refer to `NmPdu` elements
- ▶ Extended Transformers for `Com`, `SecOC`, `IpduM`, `PduR`, and `EcuC` to support tx fan-out in between these modules
- ▶ Extended Transformers for `Com` and `SomeIP` to support sending and receiving of `ComIPdu` elements via TP API
- ▶ Extended Transformer for `CanIf` to support `CAN_TSYN` as value for `CanIfRxPduUserRxIndicationUL` and `CanIfTxPduUserTxConfirmationUL`
- ▶ Extended Transformer for `Dcm` to configure custom sub-services for `DiagnosticEcuReset`
- ▶ ASCCONFIGURATORS-922 Fixed known issue: `EthIfCtrlMtu` is configured incorrectly
- ▶ Changed Transformer for `EthIf`: Length of VLAN tag is no longer subtracted from `EthIfCtrlMtu`
- ▶ Extended Transformer for `IPduM` to configure the `offset` and `updateIndicationBitPosition` parameters in `IpduMContained[Rx|Tx]Pdu`, added support for `ContainerIPduHeaderTypeEnum.no-Header`
- ▶ Extended Transformer for `LdCom` to support the configuration of a received PDU irrespective of its `transferProperty`
- ▶ Extended Transformer for `DoIp` to support `IPV6` during configuration of `VehicleAnnouncement` container
- ▶ Extended Transformer for `PduR` to configure `PduRTpThreshold` only if the `PduRRoutingPath` container holds exactly one `PduRDest` subcontainer
- ▶ Extended Transformer for `FrTSyn` to configure `FrTSynGlobalTimeSequenceCounterJumpWidth` in the context of a `FrTSynGlobalTimeSlave` container
- ▶ ASCCONFIGURATORS-921 Fixed known issue: `CanIfRxPduDlc` is configured incorrectly
- ▶ Extended Transformer for `SoAd` to configure `SoAdSocketTcpInitiate` only in `TcpIpl SoAdSocketConnectionGroup` containers that contain exactly one `SoAdSocketConnection` sub container

## Module version 2.8.2

2018-04-20

- ▶ **ASCCONFIGURATORS-904 Fixed known issue:** MultiplexedIPdus that are sent and received at the same time are configured incorrectly
- ▶ **Extended Transformer for Dcm to configure references** DcmDspReadMemoryRangeSecurityLevelRef in DcmDspReadMemoryRangeInfo **and** DcmDspReadMemoryRangeByLabelInfo, DcmDspWriteMemoryRangeSecurityLevelRef in DcmDspWriteMemoryRangeInfo **and** DcmDspWriteMemoryRangeByLabelInfo
- ▶ **Extended Transformer for Dcm to configure** DiagnosticRequestOnBoardMonitoringTestResults
- ▶ **Extended Transformer for Com to configure** ComIPduGroupRef **only for** ComPduGroup containers whose direction is not opposite to the referencing PDU
- ▶ **Extended Transformer for Dcm to configure** DiagnosticRequestVehicleInfo

## Module version 2.8.1

2018-03-16

- ▶ **ASCCONFIGURATORS-890 Adapted Transformer for Dcm to enable the** DcmProcessingConditions container **only in the case when a** DcmModeCondition **or a** DcmModeRule **exists**
- ▶ **Extended Transformer for Dcm to configure the** OBDMODE\_0x0A (DiagnosticRequestEmissionRelatedDTCPermanentStatus) **service**
- ▶ **Extended Transformer for ComM to configure the parameter** ComMPncPrepareSleepTimer
- ▶ **Extended Transformers for Nm, UdpNm, CanNm, and FrNm to configure the parameters** NmRepeatMsgIndEnabled, NmNodeDetectionEnabled, NmNodeIdEnabled **either by using the** NmCluster **data or by using the** NmEcu **data as a fallback**
- ▶ **Extended Transformer for SecOC to configure parameters** SecOCSecured[Rx|Tx]PduOffset **and** SecOCSecured[Rx|Tx]PduLength **in** SecOCRxPduSecuredArea
- ▶ **Extended Transformer for StbM to support the configuration of** StbMSynchronizedTimeBase container **for** GlobalTimeDomains **that are not linked to any network**
- ▶ **Extended Transformer for SecOC to configure parameter** SecOCAuthenticationBuildAttempts **in** SecOCRxPduProcessing **and** SecOCTxPduProcessing
- ▶ **Extended Transformer for Dcm to support the configuration of** DcmDspMemory container **for the** DiagnosticWriteMemoryByAddress **and** DiagnosticReadMemoryByAddress **services.**
- ▶ **Extended Transformer for ComM to also take routed PDUs into account for setting up the** PNC **to** ComM-Channel **references**

## Module version 2.8.0

2018-02-16

- ▶ Extended Transformers for DoIP and PduR to not configure DoIP SDUs that are either sent and have their DiagPduType field set to DiagRequest or that are received and have their DiagPduType field set to DiagResponse
- ▶ Extended Transformer for FrTSyn to configure FrTSynGlobalTimeOfsDataIDList and FrTSynGlobalTimeSyncDataIDList configuration containers
- ▶ Extended Transformer for Dem to configure the DemInternalDataElementClass and DemExternalCSDDataElementClass choices of the DemDataElementClass ChoiceContainer
- ▶ ASCCONFIGURATORS-878 Fix configuration of DcmDsdSubServiceId for the DiagnosticComControl
- ▶ ASCCONFIGURATORS-879 Fix configuration of Data Access Interface in the case of a DiagnosticIOControlService
- ▶ Extended Transformer for Dcm to configure DiagnosticRequestDownload, DiagnosticRequestUpload, DiagnosticRequestTransferExit
- ▶ Extended Transformer for StbM to configure parameters StbMTimeLeapFutureThreshold, StbMTimeLeapPastThreshold, and StbMClearTimeleapCount
- ▶ Extended Transformer for SecOC to configure parameters SecOCAuthDataFreshnessLen, SecOCAuthDataFreshnessStartPosition, SecOCUseAuthDataFreshness, and SecOCSecuredRxPduVerification
- ▶ Added Transformer for SomeIpTp
- ▶ Transformers for EcuC, CanNm, FrNm, UdpNm, PduR, Com, and ComM now configure PNC ERA PDUs and signals for ACTIVE as well as PASSIVE PNC gateways
- ▶ Adapted Transformer for CanTSyn to configure the CanTSynGlobalTimeSequenceCounterJumpWidth parameter in CanTSynGlobalTimeSlave

## Module version 2.7.11

2018-01-19

- ▶ Internal module improvement. This module version update does not affect module functionality

## Module version 2.7.10

2017-12-15

- ▶ Extended Transformer for Dcm to support DcmDspPid configuration

- ▶ Extended Transformer for `Dcm` to configure the `OBDMode_0x02` (`DiagnosticRequestPowertrainFreezeFrameData`) service
- ▶ Extended Transformer for `Dcm` to configure the `OBDMode_0x01` (`DiagnosticRequestCurrentPowertrainDiagnosticData`) service
- ▶ Extended Transformer for `Dcm` to configure the `OBDMode_0x04` (`DiagnosticClearResetEmissionRelatedInfo`) service
- ▶ Extended `DcmTransformer` for `DcmDspComControl` to configure the `DcmDspComControlSubNode` sub-container
- ▶ Extended Transformer for `SecOC` to configure the `SecOCPduType` parameter for authentic PDUs
- ▶ ASCCONFIGURATORS-859 Fixed known issue: `ComTransferProperty` is configured incorrectly for `SignalGroups`
- ▶ Extended Transformer for `CanNm` to configure the `CanNmNodeIdEnabled` parameter for `NmEcus`
- ▶ ASCCONFIGURATORS-864 Fixed known issue: `ComTimeout` and `ComFirstTimeout` are configured incorrectly for `SignalGroups`

## Module version 2.7.9

2017-11-17

- ▶ Extended Transformer for `EthSwt` to also accept value of `CouplingPort.VlanMembership.defaultPriority` if all `defaultPriority` values of a `CouplingPort` are identical
- ▶ Modified the import of the Variable-size DID signals.
- ▶ Extend the `DcmTransformer` in order to also configure the `DcmDspRequestResultsRoutineSupported` and `DcmDspStopRoutineSupported`
- ▶ Adapted Transformer for `IpduM`: `IpduMContainedRxInContainerPduRef` is only configured if `RxAcceptContainedIPdu` of the associated `ContainerIPDU` is set to `ACCEPT-CONFIGURED`
- ▶ Adapted Transformer for `SoAd`: `SoAdSocketRemoteIpAddress` is now explicitly configured if `Ipv4Configuration/ipv4Address` or `Ipv6Configuration/ipv6Address` is set to `ANY`
- ▶ Extended Transformer for `Dcm` to configure the `OBDMode_0x08` (`RequestControlOfOnBoardDevice`) service
- ▶ Support fragmentation of PDU size bigger than MTU in `SoAdTransformer` and `TcpIpTransformer`

## Module version 2.7.8

2017-10-20

- ▶ Extended Transformer for `Dcm` to configure the `OBDMode_0x03` and `OBDMode_0x07` services

- ▶ Improved handling of `ConsumedServiceInstance` elements linked to `ProvidedServiceInstance` elements which in turn are not connected to any `SocketConnection` or `SocketConnectionBundle`
- ▶ Modified the configuration of `DcmDspDidInfo` and of its subcontainers: `DcmDspDidControl`, `DcmDspDidRead` and `DcmDspDidWrite`

## Module version 2.7.7

2017-09-22

- ▶ Removed workaround in the configuration of `IpduMContainerTxTriggerMode` that was required by a `SecOC` restriction which has been resolved in the meantime
- ▶ Added support for the configuration of `ContainerIPdu` elements that are sent and received by the same `EcuInstance`
- ▶ Extended Transformers for `CanTSyn`, `FrTSyn` and `EthTSyn` to support AUTOSAR RFC 75119
- ▶ Extended Transformer for `Com` to configure the `ComTransferProperty` of an `I-SIGNAL-GROUP` by taking the `ComTransferProperty` values of the contained `I-SIGNAL` elements into account
- ▶ Extended Transformer for `CanTSyn` to configure time domain specific data-ID lists
- ▶ Extended Transformer for `SecOC` to reflect the `SecOC` parameter changes in ACG 8.3 and ACG 8.4
- ▶ Adapted Transformers for `CanNm`, `FrNm`, `UdpNm` and `Nm` to reflect that several parameters in the modules have been moved from the general containers to the `Nm` channel related containers
- ▶ ASCCONFIGURATORS-818 Fixed known issue: Validation error for `DcmDspRoutineInfo` if no signal is configured
- ▶ Extended `DcmTransformer` for `DcmDspComControl` to configure the `DcmDspComControlAllChannel` and `DcmDspComControlSpecificChannel` subcontainers

## Module version 2.7.6

2017-08-24

- ▶ ASCCONFIGURATORS-808 Fixed known issue: Incomplete import of Diagnostic configuration for `DcmDspDataType`, `DcmDspDataSize`, and `DcmDspRoutineSignalType`
- ▶ ASCCONFIGURATORS-815 Fixed known issue: Received `SecuredIPdus` with `rxSecurityVerification` set to `false` are not routed via Gateway
- ▶ ASCCONFIGURATORS-814 Fixed known issue: Configuration of one and the same PDU for sending and receiving on the same VLAN does not work

## Module version 2.7.4

2017-07-28

- ▶ Extended Transformer for PduR to support the fan-out of PDUs on different VLANs of the same Ethernet network
- ▶ Extended Transformer for Com to support the configuration of 64-bit signed/unsigned signal datatypes
- ▶ Modified Transformer to correctly create and configure `DcmDspDidInfo` for `DiagnosticIoControlService`
- ▶ Extended Transformer for `DcmProcessingCondition` to configure `DcmModeRule` and `DcmModeCondition`
- ▶ Extended Transformer for `Can` to make instance suffix creation robust against invalid `RxIdentifierRanges`
- ▶ ASCCONFIGURATORS-805 Fixed known issue: Received `SecuredIPdu` in `ContainerIPDU` with `rxSecurityVerification` set to `false` causes error during configuration import
- ▶ ASCCONFIGURATORS-807 Fixed known issue: Importer stops with an error if VLANs of Switch Ports are not connected to Ecu Instance
- ▶ Modified `DemTransformer` (`DiagnosticExtendedDataRecordHandler` and `DiagnosticEnableConditionGroupHandler`) to reduce the number of configured `DemExtendedDataClass` and `DemEnableConditionGroup` containers

## Module version 2.7.3

2017-06-29

- ▶ Extended Transformer for `ComM` to configure `ComMPncComSignalChannelRef` in `ERA ComMPncComSignal` containers
- ▶ Extended Transformer for `EthIf` to support `MaximumTransmissionUnit` from `EthernetCommunicationConnector` as well as from `EthernetCommunicationController`
- ▶ Extended Transformer for `SecOC` to support the configuration of `GeneralPurposeIPdu` elements in `SecOCTxAutenticPduLayer` or `SecOCRxAutenticPduLayer` containers
- ▶ Extended Transformer for PduR to support the fanout of sent `SecuredIPdu` elements
- ▶ Extended Transformer for `EthIf` and `EthSwt` to support managed switching of switch ports

## Module version 2.7.2

2017-06-02

- ▶ Extended Transformer for `Dcm` to configure `DiagnosticPeriodicID`



- ▶ Extended Transformer for PduR to support the configuration of routing-only multiplexed PDUs and the configuration of multiplexed PDUs that contain routing-only demultiplexed PDUs
- ▶ Extended Transformer for PduR, CanIf, Frlf, and LinIf to support the configuration of routed Xcp PDUs
- ▶ Modified `DiagnosticDIDHandler`, `DiagnosticDynamicallyDefineDataIdentifierHandler`, and `DiagnosticIOControl` to reduce the number of configured `DcmDspDidInfo` containers
- ▶ Extended Transformer for SecOC to support `SecureCommunicationFreshnessProps` and `SecureCommunicationAuthenticationProps` for the configuration of SecOC PDUs
- ▶ Extended Transformer for IpduM to support the configuration of `IpduMContainerTxTriggerMode`
- ▶ Extended Transformers for CanTSyn and FrTSyn to support `GlobalTimeDomain.globalTimePduTriggering` as well as `GlobalTimeDomain.globalTimePdu`

## Module version 2.7.1

2017-05-05

- ▶ Modified `DemTransformer` to reduce the number of configured `DemFreezeFrameClass` and `DemFreezeFrameRecNumClass` elements
- ▶ Configured `DemDTCClass` to suport DTC of type `DiagnosticTroubleCodeObd`
- ▶ Changed the way how the `DcmDspDataType` is configured based on Byte Array Signals
- ▶ Extended Transformer for Dcm to configure `DcmDslBuffer`
- ▶ Improved the configuration of `DiagnosticOperationCycles` and `DiagnosticAgingCycles`
- ▶ Extended `DcmTransformer` to set the `DcmDslProtocolSessionRef` reference to every `DcmDslProtocolRow`

## Module version 2.7.0

2017-03-31

- ▶ Extended Transformer for Dcm to configure `ClearDiagnosticInformation`
- ▶ Extended Transformer for Dcm to configure `DiagnosticWriteMemoryByAddress` services
- ▶ Extended Transformer for Dcm to configure `DiagnosticReadMemoryByAddress` services
- ▶ Extended Transformers for CanNm, FrNm, and UdpNm to configure `<Bus>NmPnResetTime`
- ▶ Extended Transformer for Dem to configure property `<Bus>DemAgingCycleRef` from the `DemEventClass`
- ▶ Extended Transformers for UdpNm and Nm to support `UdpNmChannels` associated with `EthernetPhysicalChannels/VLANs`

- ▶ Extended Transformer for Com to take `ISignal.iSignalType` into account for the calculation of signal data types
- ▶ Extended Transformer for LinIf to support the configuration of `AssignNad`, `AssignFrameId`, and `UnassignFrameId` frames using AUTOSAR 4.3.0 `LinSlaveConfig` entities
- ▶ Extended Transformer for Com to support the configuration of `ComSignal/ComFirstTimeout`
- ▶ Extended Transformers for `CanTSyn` and `FrTSyn` to support the configuration of data-ID lists
- ▶ Extended Transformer for `EthTSyn` to support the configuration of data-ID lists and `EthTSynFramePrio`
- ▶ Extended Transformers for Com and SoAd to support the IPV4 and IPV6 address value `ANY`
- ▶ Extended Transformer for `UdpNm` to support the configuration of `UdpNmImmediateNmCycleTime` and `UdpNmImmediateNmTransmissions`
- ▶ Extended Transformers for `CanNm`, `FrNm`, `UdpNm`, and `Nm` to use `NmCluster.nmPncParticipation` for the configuration of `<Bus>NmComUserDataSupport` and `<Bus>NmPnEnabled`
- ▶ Extended Dcm to support `DcmDslProtocolPriority`
- ▶ Added Transformer for `FiM`
- ▶ Set the `DiagnosticPeriodicRate` category in the `DiagnosticPeriodicTransmission` field in the DcmDsp container

## Module version 2.6.10

2017-03-03

- ▶ Extended Transformer for Dcm to configure `DiagnosticIOControl`
- ▶ Configured `DcmDsdSidTabSubfuncAvail` parameter for `DiagnosticEcuReset`, `DiagnosticRoutineControl` and `DiagnosticReadDTCInformation` services
- ▶ Added Transformer for `Xcp`
- ▶ Modified Dem and Dcm configurators to not create an additional `configSet` container if one already exists
- ▶ ASCCONFIGURATORS-666 Fixed known issue: The `DcmRteUsage` is configured based on other parameters `DcmDspDataUsePort` and `DcmDspRoutineUsePort`
- ▶ Added support for IPV6 IP addresses to Transformers for `Tcplp` and `SoAd`
- ▶ Moved the available subfunction for diagnostic service `DynamicallyDefineDataIdentifier` from the configuration of the `DataIdentifier` (DID) to the configuration of the diagnostic service
- ▶ ASCCONFIGURATORS-652 Fixed known issue: Dcm importer wrongly adds session and security levels for a `DiagnosticService`
- ▶ ASCCONFIGURATORS-719 Fixed known issue: Dem configuration generates an error if `DiagnosticDataIdentifier` and `DiagnosticDataElement` have the same `ShortName`

## Module version 2.6.9

2017-02-03

- ▶ ASCCONFIGURATORS-651 Fixed known issue: Fixed Dcm error if a DID and one of its aggregated `DiagnosticDataElement` have the same `SHORT-NAME`
- ▶ ASCCONFIGURATORS-662 The `DcmDsdSubServiceSecurityLevelRefs` for the `SubServices` of `DiagnosticSecurityAccess` will not be configured.
- ▶ Extended Transformer for SecOC to support the configuration of secured PDUs of type `DcmIPdu`
- ▶ Extended Transformer for SecOC to support the configuration of secured PDUs for which `IPdu-Port.rxSecurityVerification` is set to `false`
- ▶ Extended Transformer for ComM to check whether a given PNC ID actually lies within the specified PNC vector
- ▶ Extended Transformer for TcpIp to add limited broadcast address entries if they are needed for DHCP
- ▶ Created ECU parameter configuration in the Bsw module Dcm for UDS service `ReadDataByPeriodicIdentifier` from information contained in the diagnostic extract
- ▶ Extended Dcm to configure the `DcmDspDataUsePort` parameter concerning the cases described by `ServiceNeeds/DiagnosticValueNeeds.processingStyle`
- ▶ ASCCONFIGURATORS-665 Fixed known issue: Fixed Dem configurator to configure the `DemEventPriority` parameter
- ▶ Extended Transformer for Dcm to configure `DynamicallyDefineDataIdentifier`

## Module version 2.6.8

2017-01-05

- ▶ ASCCONFIGURATORS-652 Fixed known issue: Fixed Dcm importer wrongly adds session and security levels for a `DiagnosticService`
- ▶ Extended Transformer for Can: Add support for the configuration of `CanObjectId` in multi-`CanController` scenarios
- ▶ Extended Transformer for EthIf to support `EthIfController`, `EthIfPhysController`, and `EthIfSwitch` configuration containers

## Module version 2.6.7

2016-12-02

- ▶ ASCCONFIGURATORS-654 Fixed known issue: Transformer for DoIP does not configure all `DoIPTcp-Connection` containers

- ▶ Extended Transformer for Dcm to configure `ControlDTCSetting`
- ▶ Extended Transformer for IpduM to support multiplexed PDUs and secured PDUs In container PDUs
- ▶ Added Transformer for SecOC

## Module version 2.6.6

2016-11-04

- ▶ Added Transformer for FrArTp
- ▶ Extended Transformers for Com and PduR to support bidirectional routing of PDUs and signals
- ▶ Extended Transformer for SoAd: `ProvidedServiceInstance` and `ConsumedEventGroup` elements are considered for the configuration of `SoAdSocketFramePriority`

## Module version 2.6.5

2016-10-21

- ▶ ASCCONFIGURATORS-606 Fixed known issue: The parameter `DcmDspDataInfoRef` is not set and its container `DcmDspData` is not referenced by DIDs, if no Base Data Type can be determined
- ▶ Extended Transformer for Dcm to configure `DiagnosticEcuReset`
- ▶ ASCCONFIGURATORS-607 Fixed known issue: The parameter `DcmDspRoutineSignalLength` is not configured if the `DiagnosticDataElement` evaluates to a non-array element
- ▶ ASCCONFIGURATORS-608 Fixed known issue: Import ECU configuration erroneously configures `SubServices` for the Dcm `RoutineControl` service
- ▶ Extended Transformer for TcpIp to configure `TcpIpAssignmentPriority`
- ▶ Adapted Transformer for Nm: `NmChannelId` is not configured any more
- ▶ Adapted Transformer for TcpIp to support AUTOSAR 4.2.2 parameter structure
- ▶ Extended Transformers for PduR and SoAd to support PDU routing between `<Bus>Tp` and SoAd
- ▶ Extended Transformer for Sd to support AUTOSAR RFC 73286
- ▶ Added Transformer for EthSwt
- ▶ Extended Transformer for Dem to configure `DiagnosticExtendedDataRecord`

## Module version 2.6.4

2016-09-09

- ▶ ASCCONFIGURATORS-614 Fixed known issue: Transformer for Dcm configures DcmDslProtocolRx-TesterSourceAddr incorrectly
- ▶ Extended Transformer for DoIP to support configurations without DiagnosticConnections in the imported system model
- ▶ Added Transformers for CanTSyn and FrTSyn
- ▶ Added Transformer for AUTOSAR 4.0 Dem: Added support for configuring DiagnosticTroubleCode, DiagnosticTroubleCodeGroup, DiagnosticEvent, DiagnosticEnableCondition, DiagnosticEnableConditionGroup and DiagnosticIndicator into Dem
- ▶ Extended Transformer for Dem to configure DiagnosticDataElements and DiagnosticFreezeFrames
- ▶ Extended Transformer for Dcm to configure DiagnosticReadDTCInformation
- ▶ Extended Transformer for Dcm to configure /DcmDspRoutine/DcmDspRoutineUsePort

## Module version 2.6.3

2016-08-05

- ▶ ASCCONFIGURATORS-604 Fixed known issue: Configuration of vehicle announcement in DoIP assumes incorrect remote IP address
- ▶ ASCCONFIGURATORS-599 Fixed known issue: Default Buffer Assignment does not support CAN 2.0 and CAN FD PDUs with identical CAN Ids

## Module version 2.6.2

2016-07-01

- ▶ ASCCONFIGURATORS-594 Fixed known issue: Upper layer of UserDefinedIPdus and GeneralPurposeIPdus is configured incorrectly in <Bus>If modules
- ▶ Extended Transformer for Tcp to configure at least one TcpIpAddrAssignment container for each TcpIpLocalAddr entry

## Module version 2.6.1

2016-05-25

- ▶ Extended Transformer for SoAd to support SoAdSocketConnection elements without shortLabel attribute

- ▶ Extended Transformer for Can, Eth, Fr, Lin to support the configuration parameter set defined by the AUTOSAR 4.2.2 standard
- ▶ Extended Transformer for Dcm to configure `DiagnosticRoutineControl`

## Module version 2.6.0

2016-04-29

- ▶ ASCCONFIGURATORS-569 Fixed known issue: Upper Layer for UUDT DcmIPdus is configured incorrectly in CanIf, LinIf, and FrIf

## Module version 2.5.5

2016-04-01

- ▶ ASCCONFIGURATORS-557 Fixed known issue: Creation of the Dcm configuration from system description does not calculate the value of `DcmDspDataSize` correctly for non-array data instances
- ▶ Extended Transformers for Can and CanIf to create dedicated HOHs for CAN-FD Frames

## Module version 2.5.4

2016-03-04

- ▶ ASCCONFIGURATORS-558 Fixed known issue: Transformer for LinIf does not support `LinSlaveConfig` elements without `LinSlaveConfigIdent`
- ▶ Extended Transformer for SoAd to configure `SoAdSocketTcpKeepAliveProbesMax`, `SoAdSocketTcpKeepAliveInterval`, and `SoAdSocketTcpKeepAliveTime`
- ▶ Extended Transformer for ComM to configure `ComMPNCGatewayType`

## Module version 2.5.3

2016-02-05

- ▶ Added input data validity checks to Transformer for Dcm

## Module version 2.5.2

2016-01-15

- ▶ ASCCONFIGURATORS-533 Fixed known issue: Transformer for Com configures ComSignalDataInvalidValue and ComSignalInitValue for UINT8\_N signals incorrectly
- ▶ ASCCONFIGURATORS-534 Fixed known issue: Transformer for Sd creates unnecessary SdConsumedMethods and SdProvidedMethods configuration containers
- ▶ ASCCONFIGURATORS-537 Fixed known issue: Transformer for ComM configures ComMChannelId incorrectly
- ▶ Extended Transformer for LinIf: Add support for LinSlaveConfig elements
- ▶ ASCCONFIGURATORS-506 Fixed known issue: Transformers for PduR and Com do not conform to TPS\_SYST\_01056
- ▶ Extended Transformers: Resolved naming conflicts for PDUs received with the same CAN ID on different busses
- ▶ ASCCONFIGURATORS-535 Fixed known issue: Transformer for CanIf does not support CAN FD PDU configuration according to Autosar 4.2.2

## Module version 2.5.1

2015-11-06

- ▶ ASCCONFIGURATORS-518 Fixed known issue: Configuration import into Com incorrectly reports error on inconsistent endianness in group signals
- ▶ Removed Transformers for ComXf, SomIpXf, E2EXf
- ▶ Adapted Transformer for PduR: Add routing paths for UserDefinedIPdus and GeneralPurposeIPdus
- ▶ ASCCONFIGURATORS-525 Fixed known issue: ComM channel retrieval for Multiplexer PDUs leads to internal assertion failure
- ▶ Adapted Transformer for DoIp: Adaptations according to DoIP related changes in AUTOSAR 4.2.2 system model
- ▶ Added Transformer for Dcm

## Module version 2.5.0

2015-10-09

- ▶ Adapted Transformer for CanNm, UdpNm: Nm PDU user data byte length is now calculated by subtracting the non user data byte length from the total PDU byte length, removed support for obsolete parameter UdpNmBusLoadReductionEnabled
- ▶ Adapted Transformer for CanIf: Extended support for CAN Id range reception according to AUTOSAR RFC 66324

- ▶ Added support for Com datatype retrieval for DataTypePolicy "transformingISignal"
- ▶ Adapted Transformer for EthTSyn, StbM: Added support for the configuration of EthTSynGlobalTimeTx-Period, StbMOffsetTimeBase
- ▶ Adapted Transformer for CanNm: Implemented parameter mapping of CanNmCarWakeUpFilterEnabled, nmCarWakeUpRxEnabled according to AUTOSAR RFC 65423

## Module version 2.4.4

2015-08-14

- ▶ Adapted Transformer for TcpIp: TcpIpAddressType is now also configured for TcpIpLocalAddr entries that have TcpIpStaticIpAddressConfig/TcpIpStaticIpAddress set to ANY
- ▶ Adapted Transformer for UdpNm: UdpNmChannelConfig container is only configured for VLANs on which Nm PDUs are sent
- ▶ Adapted Transformer for SoAd: SoAdSocketConnectionGroup/SoAdPduHeaderEnable is set to true if at least one transmitted PDU is associated with a valid header id
- ▶ Added proxy UdpNm Transformer to package dreisoft.tresos.comimporter.api.transformer.asr41 since the extension of the UdpNm module expects the Transformer to reside in that package
- ▶ Adapted Transformer for Sd: SdInstance containers are only created for VLANs in which the configured ECU executes at least one Client Service or Server Service
- ▶ Adapted Transformer for ComXf, SomeIPXf, E2EXf: Transformer technologies that contain either "1" or "1.0.0" as version number are processed now

## Module version 2.4.3

2015-06-19

- ▶ Adapted Transformers for SoAd and Sd to support seamless service migration/AUTOSAR RFC 61738

## Module version 2.4.2

2015-05-22

- ▶ Update Transformer for Nm according to changes in AUTOSAR RFC 61777
- ▶ ASCCONFIGURATORS-467 Fixed known issue: Transformer for Com issues "zero length BigInteger" error message
- ▶ Added Transformers for EthTSyn, StbM
- ▶ Implemented ComDataType retrieval in Transformer for Com according to AUTOSAR RFC 65384



- ▶ ASCCONFIGURATORS-469 Fixed known issue: Transformer for IpduM configures IpduMSelectorField-Position in MostSignificantByteFirst selector fields incorrectly
- ▶ Added Transformer for E2EXf
- ▶ Added Transformer for ComXf
- ▶ Extended Transformers for Com, IPduM, PduR, CanIf, FrIf, SoAd, EcuC to support Container/Contained PDUs

## Module version 2.4.1

2015-02-20

- ▶ Transformer for LinIf now configures LinIfComMNetworkHandleRef
- ▶ Transformer for FrIf now configures FrNm fan-in PDU according to FlexRay slot number, base cycle and cycle repetition parameters
- ▶ Transformers for Com and ComM now configure sent PNC IRA signals
- ▶ Transformers for EcuC, CanNm, FrNm, UdpNm, PduR, Com, ComM now configure PNC ERA PDUs and signals only for ACTIVE PNC gateways
- ▶ Added Transformer for SomelpXf

## Module version 2.4.0

2015-01-07

- ▶ ASCCONFIGURATORS-430 Fixed known issue: Transformer for Com configures initial values and invalid values of UINT8\_N signals incorrectly
- ▶ ASCCONFIGURATORS-440 Fixed known issue: Transformers stop with an error if direct Tp SDU of FrTpConnection is not available
- ▶ Added support for 1..\* cardinality of CanNmRxPdu containers in Transformer for CanNm
- ▶ Added support for PNC ERA PDU configuration in Transformers for EcuC, CanNm, FrNm, UdpNm, PduR, Com, ComM
- ▶ Added support for PNC Identifier configuration according to AUTOSAR RFC 52483 in Transformer for ComM

## Module version 2.3.0

2014-10-03

- ▶ Made Sd Transformer robust against duplicated routing groups
- ▶ ASCCONFIGURATORS-423 Fixed known issue: Transformer for Com generates wrong ComSignalType for signals assigned to "Array" SwBaseType
- ▶ Extended Transformers to support AUTOSAR 4.2.1 system model files as input
- ▶ Added support for dynamic length signals in Com

## Module version 2.2.2

2014-09-05

- ▶ Added Transformers for CanSM, FrSM, LinSM and EthSM
- ▶ Added Transformer for DoIP
- ▶ Added Transformer for LdCom

## Module version 2.2.1

2014-08-07

- ▶ Adapt configuration of SdClientServiceActivationRef, SdServerServiceActivationRef according to AUTOSAR 4.1.3 Upstream Mapping
- ▶ Adapt Transformer for Eth so that the MAC address is configured according to AUTOSAR
- ▶ Added Transformer for UdpNm
- ▶ Transformer for Sd now configures Sd Control PDUs
- ▶ Transformer for PduR handles routing of Diagnosis PDUs according to AUTOSAR RFC 63555
- ▶ Transformer for Com now supports dataTypePolicy values other than "legacy"
- ▶ ASCCONFIGURATORS-387 Fixed known issue: FrTpTransformer configures FrTpRxPduPoolRef and FrTpTxPduPoolRef incorrectly
- ▶ ASCCONFIGURATORS-393 Fixed known issue: Transformer for CanTp configures identical symbolic names for received N-PDUs used for Data and FC at the same time
- ▶ ASCCONFIGURATORS-394 Fixed known issue: Transformer for FrIf configures incorrect PDU references to EcuC
- ▶ ASCCONFIGURATORS-391 Fixed known issue: PNC ISignalIPduGroups are only considered if the configured ECU instance directly references them
- ▶ Transformer for Sd now supports the configuration of combined Tcp/Udp services
- ▶ ASCCONFIGURATORS-399 Fixed known issue: Transformer for ComM sets ComMNMVariant to "NONE" for LIN Clusters

- ▶ ASCCONFIGURATORS-395 Fixed known issue: Transformers create User Data PDU containers for Nm PDUs containing signals that are not processed by the ECU
- ▶ Transformers for CanNm, FrNm, and UdpNm now configure the links to the associated ComM channels
- ▶ Transformers for ComM now configures ComMChannelId
- ▶ ASCCONFIGURATORS-396 Fixed known issue: Transformer for Nm does not configure NmComUserDataSupport
- ▶ Transformer for Com now configures ComGWMMapping entries for group signals

## Module version 2.2.0

2014-04-25

- ▶ ASCCONFIGURATORS-349 Fixed known issue: Transformer for PduR sets up incorrect routing paths for reversed FlexRay Tp SDUs
- ▶ ASCCONFIGURATORS-355 Fixed known issue: Transformer for Com does not create gateway mapping entries for signal groups
- ▶ ASCCONFIGURATORS-346 Fixed known issue: Transformer for LinIf configures AssignNad frame incorrectly
- ▶ ASCCONFIGURATORS-354 Fixed known issue: Transformer for LinIf reports an error if it encounters AssignFrameIdRange schedule table entries without PID
- ▶ Extended Transformers to support AUTOSAR 4.1.2 system model files as input; added Transformer for Sd

## Module version 2.1.10

2014-01-17

- ▶ Integrated handling for CanTp N-PDUs assigned to multiple CanTp connections
- ▶ Integrated AUTOSAR 4.0 ComM Transformer

## Module version 2.1.9

2013-10-11

- ▶ Internal module improvement. This module version update does not affect module functionality

## Module version 2.1.8

2013-09-13

- ▶ Removed configuration of PN ERA PDUs which are not yet supported by CanNm and FrNm

## Module version 2.1.7

2013-06-14

- ▶ ASCCONFIGURATORS-296 Fixed known issue: The configuration of one and the same CanNm PDU for sending and receiving results in a naming conflict
- ▶ Added support for `CONTAINED-I-SIGNAL-I-PDU-GROUP-REF` to detect PNC-enabled NmClusters
- ▶ Added support for routed-only Tp-SDUs in PduR
- ▶ Added configuration of `CanNmPnFilterMaskByte` in CanNm
- ▶ Added support for configuration of `ComTxModeTrue` for sent PDUs without PDU Timing in Com

## Module version 2.1.6

2013-05-10

- ▶ ASCCONFIGURATORS-277 Fixed known issue: Com Transformer restricts signals to be contained at most once per FlexRay frame
- ▶ ASCCONFIGURATORS-279 Fixed known issue: CanNm Transformer issues exception if handed over Can Network contains Rx Nm PDUs but no CAN Frame Triggerings
- ▶ ASCCONFIGURATORS-276 Fixed known issue: If a PDU is sent and received at the same time and fan-out takes place for the sent PDU, the received PDU instance is configured incorrectly
- ▶ ASCCONFIGURATORS-283 Fixed known issue: LinTp Transformer produces name clashes when importing from AUTOSAR 3.x LinTp configurations
- ▶ ASCCONFIGURATORS-286 Fixed known issue: CanTp Transformer cannot handle `CAN-TP-CONNECTIONS` without `TP-SDU-REF`

## Module version 2.1.5

2013-02-08

- ▶ ASCCONFIGURATORS-230 Fixed known issue: Transformer for AUTOSAR 4.0 Com configures signal invalid values and signal init values  $> 2^{53}-1$  incorrectly
- ▶ ASCCONFIGURATORS-250 Fixed known issue: `ComTxModeNumberOfRepetition` is not configured correctly for AUTOSAR 4.0.3 Com configurations
- ▶ ASCCONFIGURATORS-254 Fixed known issue: LinIf Transformer uses wrong set of PDUs for retrieval of TxPdu fan-out information

- ▶ ASCCONFIGURATORS-256 Fixed known issue: PduR Transformer cannot handle <any bus>-PDU to Ethernet-PDU gateway mappings
- ▶ ASCCONFIGURATORS-258 Fixed known issue: FrIf Transformer does not configure FrIfCluster.gdBit according to upstream mapping
- ▶ Implemented support for TP-SDUs referenced by multiple PDU triggerings
- ▶ Removed configuration of <Net>NmPnFilterMaskByte due to unclear upstream mapping rule
- ▶ Added pure gateway routing support

## Module version 2.1.4

2012-10-12

- ▶ AUTOSAR 4.0 FrIf/FrNm: Added support for FrNm Rx PDU fan-in
- ▶ ASCCONFIGURATORS-230 Fixed known issue: Transformer for Com does not create GroupSignal if SignalTriggering is missing

## Module version 2.1.3

2012-09-14

- ▶ AUTOSAR 4.0 Com: Added support for Com Rx Signal DataFilters
- ▶ AUTOSAR 4.0 Com: Adapted ComSignalType configuration: Special handling of type BOOLEAN

## Module version 2.1.2

2012-08-17

- ▶ AUTOSAR 4.0 Com: User-defined prefix is added to group signal containers
- ▶ AUTOSAR 4.0 SoAd: Adapted according to configuration changes
- ▶ AUTOSAR 4.0 Nm: Adapted according to configuration changes
- ▶ AUTOSAR 4.0 Com: Adapted configuration of parameter ComSignalType according to AUTOSAR 4.-0 Rev 3 System Template

## Module version 2.1.1

2012-06-15

- ▶ AUTOSAR 4.0 SoAd: Implemented configuration of `SoAdSocketConnectionGroup` containers
- ▶ AUTOSAR 4.0 Transformers: PDU Router fan-out support has been added

## Module version 2.1.0

2012-05-16

- ▶ AUTOSAR 4.0 CanIf, CanTp: Adapted parameter configuration according to configuration changes in AUTOSAR 4.0 Rev 3

## Module version 2.0.6

2012-04-13

- ▶ AUTOSAR 4.0 SoAd: Adaptation due to removed/obsolete parameter `SoAdPduHeaderEnable`

## Module version 2.0.5

2012-03-27

- ▶ Added support for the configuration of partial networks for AUTOSAR 4.0 FrNm
- ▶ Integrated AUTOSAR 4.0 Transformers for modules SoAd, EthIf, Eth, TcpIp
- ▶ ASCCONFIGURATORS-187 Fixed known issue: AUTOSAR 4.0 Com: Fixed signal data type calculation algorithm

## Module version 2.0.4

2012-02-17

- ▶ Removed obsolete AUTOSAR 3.x Transformers
- ▶ Added support for the configuration of partial networks for AUTOSAR 4.0 CanNm

## Module version 2.0.3

2012-01-20

- ▶ Integrated AUTOSAR 4.0 Transformers for modules Lin, LinIf, and LinTp

- ▶ Added User Data Nm PDU support to the involved AUTOSAR 4.0 Transformers EcuC, PduR, Com, and CanNm, FrNm

## Module version 2.0.2

2011-10-12

- ▶ Integrated AUTOSAR 4.0 Transformers for modules Fr, FrIf, CanTp, CanNm, FrTp, FrNm, Nm
- ▶ ASCCONFIGURATORS-138 Fixed known issue: FrNm: Fixed Rx/Tx Nm PDU handling

## Module version 2.0.0

2011-09-02

- ▶ ASCCONFIGURATORS-86 Fixed known issue: IpduM: Transformer for AUTOSAR 3.x IpduM configures `IPduMTxSelectorValue`
- ▶ ASCCONFIGURATORS-85 Fixed known issue: IpduM, EcuC: Containers for Demultiplexed PDUs are only created if the Com module actually processes them
- ▶ Integrated AUTOSAR 4.0 Transformers for modules EcuC, Can, CanIf, IpduM, PduR, and Com

## Module version 1.1.2

2011-04-08

- ▶ ASCCONFIGURATORS-51 Fixed known issue: LinIf: Fixed references to EcuC PDU collection
- ▶ Improvement CanTp: Support configuration of multicast CanTp connection channels

## Module version 1.1.1

2011-03-11

- ▶ Improvement CanTp, CanIf, EcuC: Duplication of CanTp Tx N-PDUs has been introduced
- ▶ Improvement LinIf: Transformer configures `LinIfFramePriority` if provided via LDF importer
- ▶ Transformer for generic Nm was added
- ▶ Improvement Com: Support for zero bitsize signals has been added

## Module version 1.1.0

2011-02-03

- ▶ Requirements tracing: Resolve unmapped tests, unmapped requirements
- ▶ Improvement CanNm, FrNm, CanIf, LinIf, Com: Transformers use new Meta-Model 6/AUTOSAR 3.1.4 System parameters for module configuration
- ▶ Improvement CanIf, Can: Transformers use better naming schema for configuring HOH containers

## Module version 1.0.2

2010-11-18

- ▶ ASCCONFIGURATORS-28 Fixed known issue: AUTOSAR 2.1/3.x Com: Com data types calculated correctly from integral system model data types with open ranges

## Module version 1.0.1

2010-10-08

- ▶ Improvement AUTOSAR 3.x LinIf: Conditional frames obtain `LinIfInternalPdu` as `LinIfPduDirection` during com imports
- ▶ ASCCONFIGURATORS-22 Fixed known issue: AUTOSAR 2.1/3.x Com: Bit offsets and length parameters of signal groups are correctly exported

## Module version 1.0.0

2010-09-10

- ▶ First implementation of Configurators

## 2.2. New features

- ▶ Configuration support for Csm has been added.

## 2.3. Elektrobit-specific enhancements

This module is not part of the AUTOSAR specification.



## 2.4. Deviations

This module is not part of the AUTOSAR specification.

## 2.5. Limitations

This chapter lists the limitations of the module. Refer to the module references chapter *Integration notes*, subsection *Integration requirements* for requirements on integrating this module.

- ▶ `ComSignalInitValue/ComSignalDataInvalidValue` when importing from FIBEX

Description:

When importing from FIBEX, initial and invalid values that have been defined as bit pattern that represent `FLOAT` values are interpreted as integral values and written to `ComSignalInitValue/ComSignalDataInvalidValue` as such.

Rationale:

Initial and invalid values are defined as `INTERNAL-CONSTRS` in FIBEX, which requires these values to be integral values.

- ▶ `CanTpChannel/CanTpChannelMode` when importing from FIBEX

Description:

When importing from FIBEX, only elements of `CanTpChannel` that contain a single `CanTpRxNSdu/CanTpTxNSdu` are created. Also, the `CanTpChannelMode` of these elements `CanTpChannel` is always set to `CANTP_MODE_HALF_DUPLEX`.

Rationale:

FIBEX 3.x only supports a single `TP-CONNECTION` per `TP-CHANNEL`.

- ▶ `ISignal.dataTypePolicy:networkRepresentationFromComSpec` requires either a `SenderReceiverToSignalMapping` or a `SenderReceiverToSignalGroupMapping`

Description:

An `ISignal` that has `dataTypePolicy` set to `networkRepresentationFromComSpec` requires a `SenderReceiverToSignalMapping` or a `SenderReceiverToSignalGroupMapping`. These mapping elements reference a `PortPrototype` which contains a `PortComSpec` that defines the `NetworkRepresentation`. A `DataMapping` other than `SenderReceiverToSignalMapping` or `SenderReceiverToSignalGroupMapping` is not supported.

- ▶ `ISignal.dataTypePolicy`: Data type retrieval via `networkRepresentationFromComSpec` and `ImplementationDataType` is only supported for plain `ISignal` elements

Description:

In the AUTOSAR System Template 4.2 Rev 2, [TPS\_SYST\_02006] and [TPS\_SYST\_02079] describe the data type retrieval via `ImplementationDataType` in the case that no `SenderComSpec` or `ReceiverComSpec` is available. This is currently only implemented for plain signals, not for `ISignals` that represent group signals.

- ▶ `ComIPdu/ComIPduCounter` is not configured

Description:

`ComIPdu/ComIPduCounter` configuration containers are not configured even if the imported AUTOSAR System Description file contains `SIGNAL-I-PDU-COUNTER` elements.

Rationale:

The ACG Com module does not support `ComIPdu/ComIPduCounter` configuration containers.

- ▶ `ComIPdu/ComIPduReplication` is not configured

Description:

`ComIPdu/ComIPduReplication` configuration containers are not configured even if the imported AUTOSAR System Description file contains `SIGNAL-I-PDU-REPLICATION` elements.

Rationale:

The ACG Com module does not support `ComIPdu/ComIPduReplication` configuration containers.

- ▶ `ComSignal/ComRxDataTimeoutAction` and `ComSignalGroup/ComRxDataTimeoutAction` are not configured

Description:

`ComSignal/ComRxDataTimeoutAction` and `ComSignalGroup/ComRxDataTimeoutAction` are not configured even if the imported system model contains `HANDLE-TIMEOUT-TYPE` elements.

Rationale:

The imported system model can contain two or more `HANDLE-TIMEOUT-TYPE` elements that are related to one and the same `ComSignal/ComRxDataTimeoutAction` or `ComSignalGroup/ComRxDataTimeoutAction` parameter. Since these `HANDLE-TIMEOUT-TYPE` elements may contain different values, a configuration is not possible.

- ▶ `FrController/FrFiFo` is not configured

Description:

`FrController/FrFiFo` configuration containers are not configured even if the imported AUTOSAR System Description file contains `FLEXRAY-FIFO-CONFIGURATION` elements.

Rationale:

Not all types of FlexRay communication controllers can be configured using the parameters provided in `FrController/FrFiFo`. It is therefore required to configure `FrController/FrFiFo` by hand, while taking into account the type of FlexRay communication controller that is in use.

- ▶ No support for tx fan-out of PDUs that are contained in `CONTAINER-I-PDU` elements

Description:

While the AUTOSAR System Template 4.2 Rev 1 indicates that PDUs contained in `CONTAINER-I-PDU` elements can be subject to a tx fan-out in the PduR module, the Transformer for PduR currently does not support this feature.

Rationale:

The tx fan-out support for contained PDUs requires a dedicated extension of the Transformer for PduR which has not yet been implemented.

- ▶ `AssignNAD` frames referencing Lin slave nodes which are not declared in the imported LDF file lead to import errors

Description:

During LDF imports, it is required that all `AssignNAD` frames in the LDF file reference Lin slave nodes which are also present in the file. If this is not the case, an error is issued.

Rationale:

The AUTOSAR System Model, which serves as internal data storage during the import, does not provide the possibility to store an `AssignNAD` frame without referencing the related slave node at the same time. Since the EB tresos Studio importer framework is built on top of the AUTOSAR System Model, this parameter cannot be configured.

## 2.6. Open-source software

Configurators does not use open-source software.