Document Title	SWS_WatchdogInterface: Complete Change Documentation 4.3.0 - 4.3.1
Document Owner	AUTOSAR
Document Responsibility	AUTOSAR
Document Identification No	695

Document Status	Final
Part of AUTOSAR Standard	Classic Platform
Part of Standard Release	4.3.1

Table of Contents

1 SWS_WatchdogInterface

1.1 Specification Item SWS_WdgIf_00028

Trace References:

SRS_BSW_00323, SRS_SPAL_12448, SRS_MemHwAb_14023

Content:

If more than one watchdog driver is configured and the default development error detection is enabled for this module, the parameter DeviceIndex shall be checked for being an existing device within the module's services. Detected errors shall be reported to the Default Error Tracer (DET) with the error code WDGIF_E_PARAM_DEVICE and the called service shall not be executed. If the called function has a return value this value shall be set E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #73570: No "default error" in AUTOSAR

    Problem description:

    The DET was renamed from development error tracer to default error tracer.

    This change was most of the time done automatically and unfortunately renamed "developement error" to "default error".

    "default error" should always be followed by "tracer", otherwise, "development error" is probably the right term.

    This could increase the impact (compared to my selection of impacted document, but formally, the configuration parameters *DevErrorDetect are not using the correct description:
    "Switches the Default Error Tracer (Det) detection and notification..."

    The parameter switches on/off the developement error detection. The DET does not need to be detected and can be present even when the parameter is set to false.

    Agreed solution:

    Rename "default error" to "development error" in all impacted documents, but not in an automated way (Do not change "default error tracer" to "developement error tracer"!)

Blueprint/Example:
- sub chapter is now called "7.x Default errors"
- "[SWS_xxx_yyyyy]
In case default error detection is enabled for the xxxx module: The xxxx module shall check API parameters for validity and report detected errors to the DET. ()"
- "[SWS_xxx_yyyyy]
If default error detection is enabled: the function shall check that the service xxx_Init was previously called. If the check fails, the function shall raise the default error XXX_E_NOT_INITIALIZED otherwise (if DET is disabled) return E_NOT_OK. ()"
- "In case default errors are enabled,..."
- "module raises the Default error XXX_E_TRANSITION"
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The correct text would be:
- sub chapter is called "7.x Development errors"
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Solution for SWS_RTE:
– SWS_RTE —
- Change 4.8 Default errors to 4.8 Development errors
- Change "Errors which can occur at runtime in the RTE are classified as default errors" to "Errors which can occur at runtime in the RTE are classified as development errors"
- Remove [SWS_Rte_07676]
- Change [SWS_RTE_06611]"If a violation is detected the RTE shall report a default error to the DET." to "If a violation is detected the RTE shall report a development error to the DET."
- Change [SWS_Rte_06631]
[SWS_Rte_06631] d The RTE shall use the OS Application Identifier as the Instance Id to enable the developer to identify in which runtime section of the RTE the error

occurs. This Instance ID is even unique across multi cores and so implicitly allows the development error to be traced to a specific core. c(SRS_BSW_00337)

SRS_Libraries:
- In chapter "3 Acronyms and abbreviations": Rename "Development Error Tracer" to "Default Error Tracer"

SRS_SPALGeneral:
- In chapter "6.1.1.3.1 [SRS_SPAL_00157] ...": Rename "Development Error Tracer" to "Default Error Tracer"
- In chapter "6.1.1.4.2 [SRS_SPAL_12448] ...": Rename "Development Error Tracer" to "Default Error Tracer"

SRS_FlashTest:
- In chapter "6.1 Functional Requirements": Rename "Development Error Tracer" to "Default Error Tracer"
- In chapter "7 References":
Rename "Development Error Tracer" to "Default Error Tracer"
Rename "AUTOSAR_SWS_DevelopmentErrorTracer" to "AUTOSAR_SWS_DefaultErrorTracer"

SWS_MFXLibrary:
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SWS_MemoryAbstractionInterface:
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SWS_FlexRayNetworkManagement:
- In chapter "3.3 Related AUTOSAR documents":
Rename "Development Error Tracer" to "Default Error Tracer"
Rename "AUTOSAR_SWS_DevelopmentErrorTracer" to "AUTOSAR_SWS_DefaultErrorTracer"

SWS_CANStateManager:
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SWS_PDURouter:
- In chapter "3.1 Input documents": Rename "AU-TOSAR_SWS_DevelopmentErrorTracer" to "AUTOSAR_SWS_DefaultErrorTracer"

SWS_EEPROMDriver:
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–Last change on issue 73570 comment 47–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.2   Specification Item SWS_WdgIf_00058

Trace References:

SRS_BSW_00369

Content:

If default development error detection for the Watchdog Interface module is enabled, then the function WdgIf_GetVersionInfo shall check whether the parameter VersioninfoPtr is a NULL pointer (NULL_PTR). If VersioninfoPtr is a NULL pointer, then the function WdgIf_GetVersionInfo shall raise the development error WDGIF_E_INV_POINTER (i.e. invalid pointer) and return.

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Document ID 695: ChangeDocumentation

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