DDS

What's New in Version 21.3?

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1 DDS: Purpose and scope

This document describes the improvements and changes of the current DDS version compared to the previous versions.

2 DDS - What's new in 21.3.R0

2.1 New Features, Major Improvements

Key	What's New In Dds
ADDS-19549	**ExpMDX** Upgrade to support MDX version 1.2 instead of version 1.1; Both MDX import and export now work with MDX version 1.2.,
ADDS-19150	**ExpSrc** The source export is now able to create a VarCodIni.c file for each module instead of just a single c file for all modules. The name of the file is suffixed by an "_" and the name of the correlated module. To enable VarCodIni-File splitting there is a new option "**SplitInitCode4DataVariants**". The value of the option must be set according to what is specified in ADD for the project. The option is persisted during ImpADD in a dependend *.gpp file which is included by the main gpp file. Therefore to enable the splitting to take effect, the project must be reloaded between ImpADD and ExpSrc processing (which is automatically the case in batch mode).
ADDS-19052	**ExpA2** Support of LAYOUT attribute for MEASUREMENTs. If the LAOUT is set to COLUMN_DIR it is written. ROW_DIR is the default LAYOUT and therefore omitted in the output. There is a new option "DepositeDirection4OnlineAndParameterValues", which controls whether the layout should be by row or by column for MEASUREMENTs und CHARACTERISTICs. The option applies to onlines and parameters, but not to axes and maps.
ADDS-18954	**ImpADD / ExpA2 / ExpSrc** In previous versions of DDS, RTE entities where already generally filtered out by ADD during the ImpADD process. In contrary to this behavior, RTE entities are now imported from ADD into the DDS model. They are only filtered out by the ExpSrc during the code generation process. However, they are exported like any other arbitrary entity by ExpA2 and therefore are preserved in the resulting *.a2l file.

ADDS-18026	**ExpA2**
	
	The SYSTEM_CONSTANT elements in an *.a2l are now sorted. The sorting is done case-insensitive (not by ASCII-Value), which means uppercase and lowercase letters are treated as equal.
	
	Example: unsorted
	
	<pre>SYSTEM_CONSTANT "Co" "9"
	SYSTEM_CONSTANT "Ax" "2"
	SYSTEM_CONSTANT "ar" "3"
	SYSTEM_CONSTANT "Gl" "2"
	SYSTEM_CONSTANT "si" "3"</pre>

sorted

```
SYSTEM_CONSTANT "ar" "3"
SYSTEM_CONSTANT "Ax" "2"
SYSTEM_CONSTANT "Co" "9"
SYSTEM_CONSTANT "Gl" "2"
SYSTEM_CONSTANT "si" "3"
```

Therfore the order of the SYSTEM_CONSTANT elements of the output follow a lexicographical order and therefore the output is deterministic.

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2.2 Minor Improvements, Correction of Bugs

Key	What's New In Dds
ADDS-19810	**Installer** Fix PrettyPrint tool für x64.
ADDS-19709	**ExpSrc** New Option "**-GenerateTypedefs4Structs**" to generate typedefs for structs instead of plain struct type declaration when AUTOSAR code is generated e.g. with option set to no (default):

```
struct MyType {
    // ...
};
```

with the option set to yes:

```
typedef struct MyType_ {
    // ...
} MyType;
```

Key	What's New In Dds
ADDS-19596	**ExpA2** Fix missing REF_CHARACTERISTIC and REF_MEASUREMENTS entries in FUNCTION elements during *.a2l file generation.
ADDS-19538	**Installer** Fix installation of LAA Version of CmpMrg and ImpELF filter of AudiAddOn.
ADDS-19509	**ExpA2 / A2MemSegGen**

Fixed a crash on 64-Bit when ExpA2 is using A2MemSegGen features.

ADDS-19488   **ExpSrc**

In case of multiple unrelated variant coded dataspaces within the same container, the "VarCod.c" file was incomplete when the "optimize" option was set to "yes". Codegeneration without the option "optimize" set to "yes" was unaffected.

ADDS-19400   **ImpMDX**

Improve stability of import filter while importing *.mdx files with certain element-structure.

ADDS-19222   **ExpSrc**

Fixed misplaced source section containing pragma directives, which led to pragma sections in the output that included type definitions which were meant to reside outside of the pragma section. The bug occurred sporadically, but more likely on Windows 10, due to indeterministic behavior within the code logic.

ADDS-19061   **ExpMDX**

For "SW-SYSTEMCONST" that represents TEXT (cDefine of type "String"), the export did   write both "SW-VALUES-PHYS" and "SW-VALUES-CODED", like

```
<SW-VALUES-PHYS><VT>some text</VT></SW-VALUES-PHYS>
<SW-VALUES-CODED><VT>some text</VT></SW-VALUES-CODED>
```

which was invalid, because according to the MDX Specification "SW-VALUES-CODED" does not support a sub-element of type "VT", only "V" and "VF".
Therefore only "SW-VALUES-PHYS" is now written in that case, like

```
<SW-VALUES-PHYS><VT>some text</VT></SW-VALUES-PHYS>
```

For numbers and formulas "SW-VALUES-CODED" is still written as those can have a conversion between physical and coded values.

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3 DDS - What's new in 21.3 Appendix

3.1 No longer supported features

Key	What's New In Dds
ADDS-12311	**ADDS Interface x64/ASCET Export** DDS AddOn component ADDS AutoCode Interface does no longer support "ASCET Export". ADDS AutoCode Interface is functional in DDS x64 installations.

1 issue

3.2 Questions?

If you have any questions about this release, please contact the Visu-IT! Hotline:

DDS Hotline	**DDS Product Page**
Tel.: +49 941 - 49082-16	Internet: visu-it.de/products/dds/
email: hotline@visu-it.com	