

# Data Declaration System

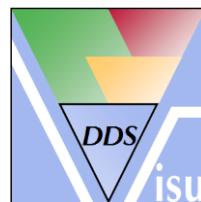
What's new in Version 8.1.R1?

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## 1 Purpose and scope

This document describes the improvements and changes of DDS V8.1.R1 compared to V7.3.R3.

## 2 What's new in Version V8.1.R0?

Improvements and changes of DDS V8.1.R0 compared to V7.3.R3.

### 2.1 New Features

#### 2.1.1 Extension of “SelStruct” variant coding

The “SelStruct” mode has been extended in order to generate a more modular code.  
Except the ImpADD filter, also the source export filter has been extended with further features and new filter options -> see section “Export Source: Miscellaneous improvements”

#### 2.1.2 Variant coding: Support of axes

Since ADDS 8.1, also (global/common) axes can be variant coded. This works both in the “SelStruct” and in the “DOStruct” mode.

#### 2.1.3 ADD-DDS harmonization

The special ADD online extension types “Diag\_Idx”, “WriteOnly”, “WriteOnly\_ETK” and “NVData” are now also available in DDS.

#### 2.1.4 New A2L Parser

DDS now uses the new ASAM MCD 2MC Parser (A2L Parser) supporting the standard version 1.6.

## 2.2 Minor Improvements / Correction of Bugs

### 2.2.1 Import ADD: Miscellaneous improvements

#### Improvements:

- Support of new filter options for “SelStruct” variant coding:
  1. DefFile4SelStructDataVariant  
Definition file (c-file) of variant coded data objects. Hint: Use a pattern with wildcard, e.g. “\*\_data.c” to create/use a c-file whose name is linked to the corresponding variant selector (default = ‘Name of Variant Selector’)
  2. DeclFile4SelStructDataVariant  
Declaration file (h-file) of variant coded data objects. Hint: Use a pattern with wildcard, e.g. “\*\_data.h” to create/use a h-file whose name is linked to the corresponding variant selector (default = ‘Name of Variant Selector’)
- Support of new filter option “ImportToDDSDescription” in order to control whether to import the ADD Long-Name or the ADD description into the DDS description
- Performance improvement: Parallel import of ADD containers into DDS

## 2.2.2 Import ASAP2: Miscellaneous improvements

### Improvements:

- Usage of new A2L Parser supporting standard version V1.6

## 2.2.3 Import ELF: Miscellaneous improvements

### Improvements:

- Toleration of special "offset" of "+1" for compilation units in ELF files generated with GNU compiler.

## 2.2.4 Import CVX: Miscellaneous improvements

### Improvements:

- Check if all definitions imported from ADD got a (init-) value after importing the CVX file.  
-> Check will be only done in "verbose" mode (can be activated via filter option)

## 2.2.5 ExpSrc: Miscellaneous improvements

### Improvements:

- Support of new filter options for "SelStruct" variant coding:
  1. SourceSection4VarPtr  
SourceSection for variant pointer (in case of "DataVariantHandling=SelStruct")
  2. SourceSection4VarSelCode  
SourceSection for variant selection code (in case of "DataVariantHandling=SelStruct")
  3. SelectSuffix  
Suffix for variant coding select function (in case of "DataVariantHandling=SelStruct")
- Further new filter options:
  1. SourceSection4WriteOnlyETK  
SourceSection for 'writeOnly\_ETK' online variables
  2. GenerateArrayDefines  
Generate special defines for arrays (for usage within Ascet)
  3. WriteCDefineComment  
Write comment for cDefines (with contents of description field)
  4. DefaultInclude4AllDeclFiles  
Default include file used for all declaration files (.h)
  5. DefaultInclude4AllDefFiles  
Default include file used for all definition files (.c)
- Extended support of SystemConstants (cDefines) for arrays:
  - o in Software-Interface (ImpADD Filter Option "GenerateSoftwareInterface")
  - o for mappingScheme attributes "multiplied" and "reversed"

## 2.2.6 ExpDDX: Miscellaneous improvements

### Improvements:

- Supporting the DDX schema changes (see below)

## 2.2.7 DDX schema changes

### Improvements:

- Volatile (C keyword) moved from SW-tree to DD-tree
- NVData moved from MO-tree to DD-tree

- Diag\_Idx moved from MO-tree to DD-tree
- New extended type for online variables (Normal, Diag\_Idx, NVData, WriteOnly, WriteOnly\_ETK)
- Deletion of obsolete entities (e.g. Security-Description, Reset-Ref)
- VALUES-CODED can now contain formula's -> because of new feature „dependent SystemConstants)
- MO\_SYSTEMCONST can now have a category of the type SC-CATEGORY
- The type of version attributes (VER; REV; VAR) was changed from string to int
- New containerspecific attributes: WriteOnly, „Use-in-ETK-Ram“
- New Container attribute: “ENABLE-ETK-RAM”

## 2.2.8 DServer: Miscellaneous improvements

Improvements:

- Support of ‘single’ data type

Use case: Write values (of type single) from Matlab to DDS

## 2.2.9 ExpDR: Support of ELF files

The ExpDR filter now supports:

- Extracting data record from ELF files
- Updating data record within ELF files

## 2.2.10 Export to ASCET: Miscellaneous improvements

Improvements:

- Support of string-conversions

## 2.2.11 Export to TL: Miscellaneous improvements

Improvements:

- Append postfix „\_data“ to dd-Object Attribute “Module” for all ADD Data-Objects of classification “LOCAL” & “OUTPUT” (optional)
- Write Logical-Bit information name (“BitMaskValues”) and description (“BitMaskDescription”) to appropriate TL BitCarrier Object.
- Omit creation of dd-Object Attribute “Module” via MappingFile (<TLMODULE>none</TLMODULE>)
- Default value change! Value of “VariableClass” option „InitAtDefinition“ changed from “off” to “on”; value of “VariableClass” option “Alias” changed from “on” to “off”.

# 3 What's new in Version V8.1.R1?

Improvements and changes of DDS V8.1.R1 compared to V8.1.R0.

## 3.1 Minor Improvements / Correction of Bugs

### 3.1.1 Import ADD: Miscellaneous improvements

Improvements:

- Bugfix regarding variant coded axes (data variant) in “DO-Struct” mode
- Set ‘volatile’ flag at all “Sel-Struct” structure instances

### 3.1.2 ExpSrc: Miscellaneous improvements

#### Improvements:

- Support of inactive code variants within “SelStruct” variant coded structures.
- Support of inactive code variants within “SelStruct” variant coded Init-Code

## 4 No longer supported filters/components

## 5 Questions?

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

