Visu-IT! Tools

ADDS AutoCode Interface

January 29th 2008

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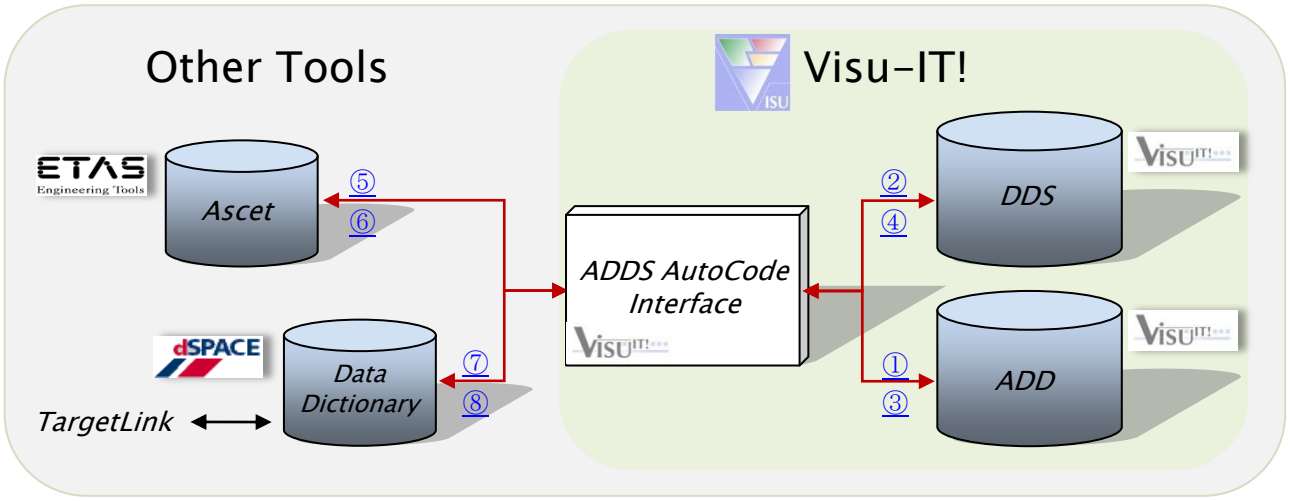
Contents

1 Abstract

The purpose of *"ADDS AutoCode Interface"* is to ease the communication and collaboration of Visu-IT! tools (Automotive Data Dictionary: ADD, Data Declaration System: DDS), dSpace Data Dictionary ("TargetLink") and ETAS "Ascet".
With the aid of a well arranged interface it is possible to transfuse ADD/DDS dataset to TL based on dSpace Data Dictionary and Ascet as well as vice versa.



① ADD to Ascet	② DDS to Ascet	③ ADD to TargetLink	④ DDS to TargetLink
⑤ Ascet to ADD	⑥ Ascet to DDS	⑦ TargetLink to ADD	⑧ TargetLink to DDS

2 Tool Requirements

Minimal: Visu-IT! Data Declaration System (DDS) v3.5.0
dSpace Data Dictionary v1.3 respectively ETAS Ascet MD v5.2.1

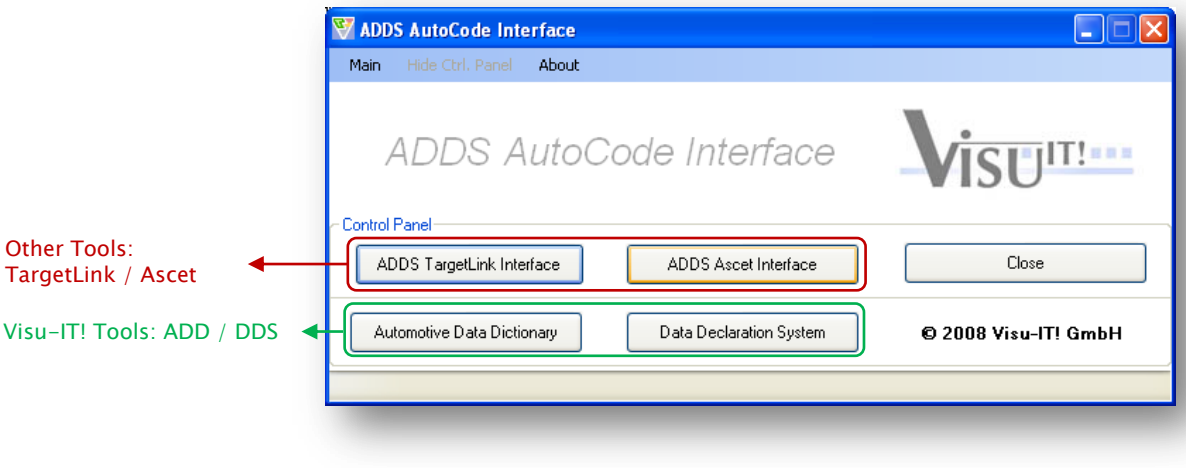
In order to use the full potential of "ADDS AutoCode Interface" the following tools are required:

- Visu-IT! Data Declaration System (DDS) v5.3.0
- Visu-IT! Automotive Data Dictionary (ADD) v3.5.0
- dSpace Data Dictionary v1.4, TargetLink v2.2
- ETAS Ascet MD v5.2.1

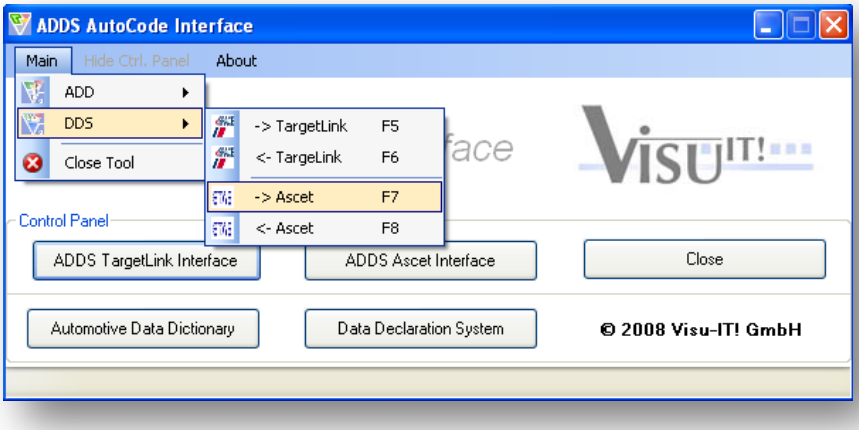
3 Start - up

On the first start of the interface it is necessary to choose the favoured tools. After choosing a tool combination, the interface memorises the last choice automatically by closing the window.

To choose a tool combination, press the appropriate tool button in the “Control Panel”:



or selecting the desired transfusion from the menu element “Main”:



It is also possible to select a transfusion by pressing an appointed key. (See [Shortcuts])

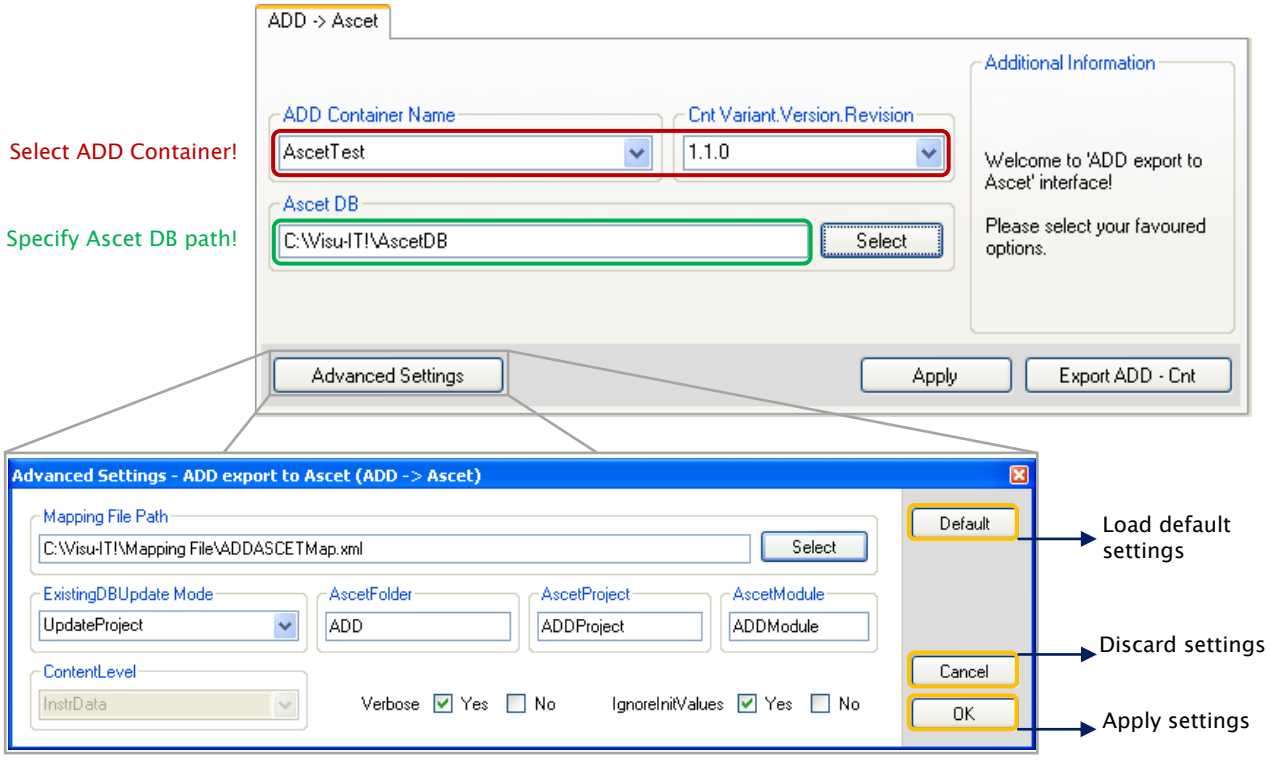
4 Data Transmission

The interface is designed to relieve the complexity of data transmission between several tools. Therefore the styles of each transmission direction are akin. All around there will be an “Advanced Settings”, an “Apply” and a process run - button. The “Advanced Settings”-button opens a process calibration window. However the “Apply”-button validates and saves the selected process options.
By pressing the menu item “Hide Ctrl. Panel” respectively “Show Ctrl. Panel” the “Control Panel” will be replaced with a “Quick-Change strip” and vice versa.

“Quick-Change strip”: Tools and data transfer direction will be change by clicking on the appropriate symbol in the “Quick-Change area”.

4.1 ADD to Ascet

Export a selected ADD Container into a specified Ascet database.



"*Mapping File Path*": Path of the mandatory xml – file which specifies export options!

"*ExistingDBUpdateMode*": Behaviour control on existing Ascet DB.

- **Overwrite:** Existing database definitions will be overwritten
- **KeepExisting:** Existing database definitions will be kept
- **UpdateOnly:** Only existing database definitions will be updated
- **UpdateProject:** Only existing database conversions will be overwritten and definitions will be updated

"*ContentLevel*": Behaviour control on DDX content.

- **InstrData:** Instrumentation Data (online, parameter, map, axis) with there corresponding attributes will be transferred
- **AttributesOnly:** All 'data types', 'conversions' and 'physical units' will be transfered

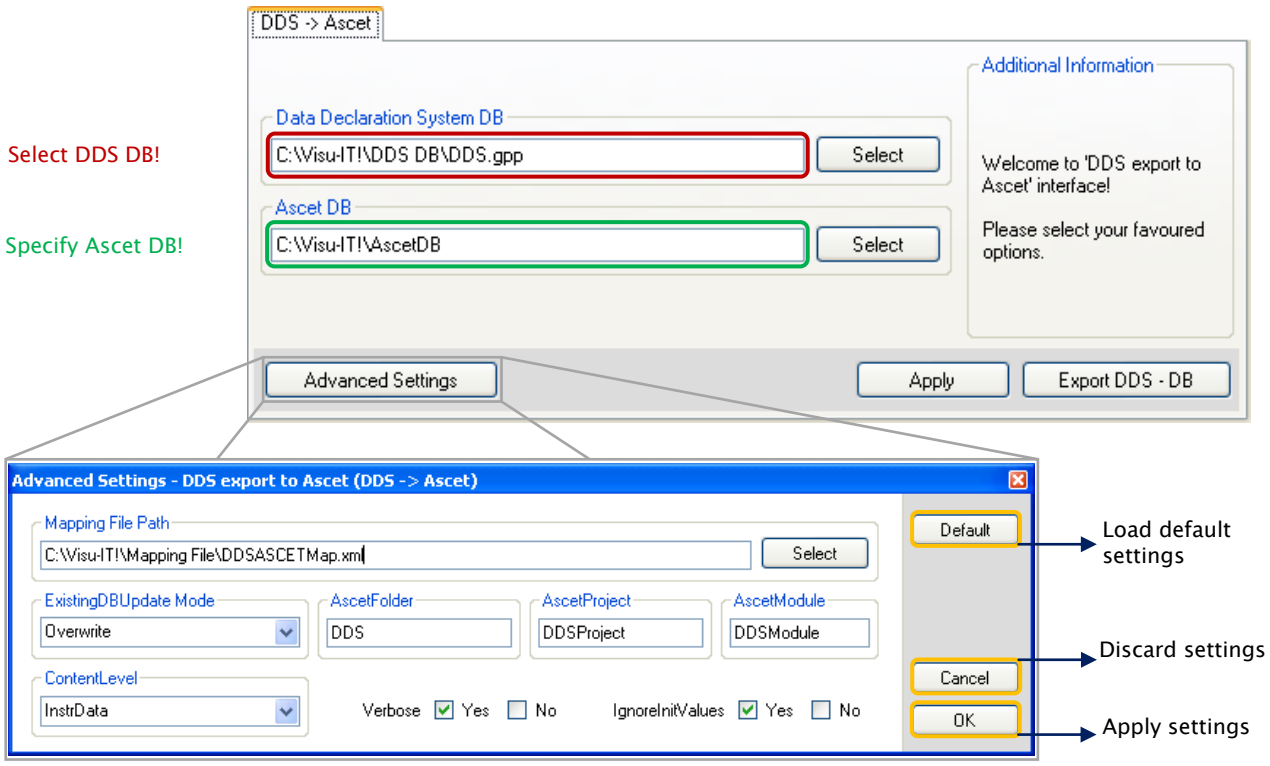
"*Verbose*": Start export in verbose mode.
"*IgnoreInitValues*": Physical values will not be exported.

"*AscetFolder*": Ascet folder name which will be exported.
"*AscetProject*": Ascet project name which will be exported.
"*AscetModule*": Ascet module name which will be exported.

Export will be started by pressing the "Export ADD – Cnt".

4.2 DDS to Ascet

Export a selected DDS database into a specified Ascet database.



"*Mapping File Path*": Path of the mandatory xml – file which specifies export options!

"*ExistingDBUpdateMode*": Behaviour control on existing Ascet DB.

- **Overwrite:** Existing database definitions will be overwritten
- **KeepExisting:** Existing database definitions will be kept
- **UpdateOnly:** Only existing database definitions will be updated
- **UpdateProject:** Only existing database conversions will be overwritten and definitions will be updated

"*ContentLevel*": Behaviour control on DDX content.

- **InstrData:** Instrumentation Data (online, parameter, map, axis) with there corresponding attributes will be transferred
- **AttributesOnly:** All 'data types', 'conversions' and 'physical units' will be transfered

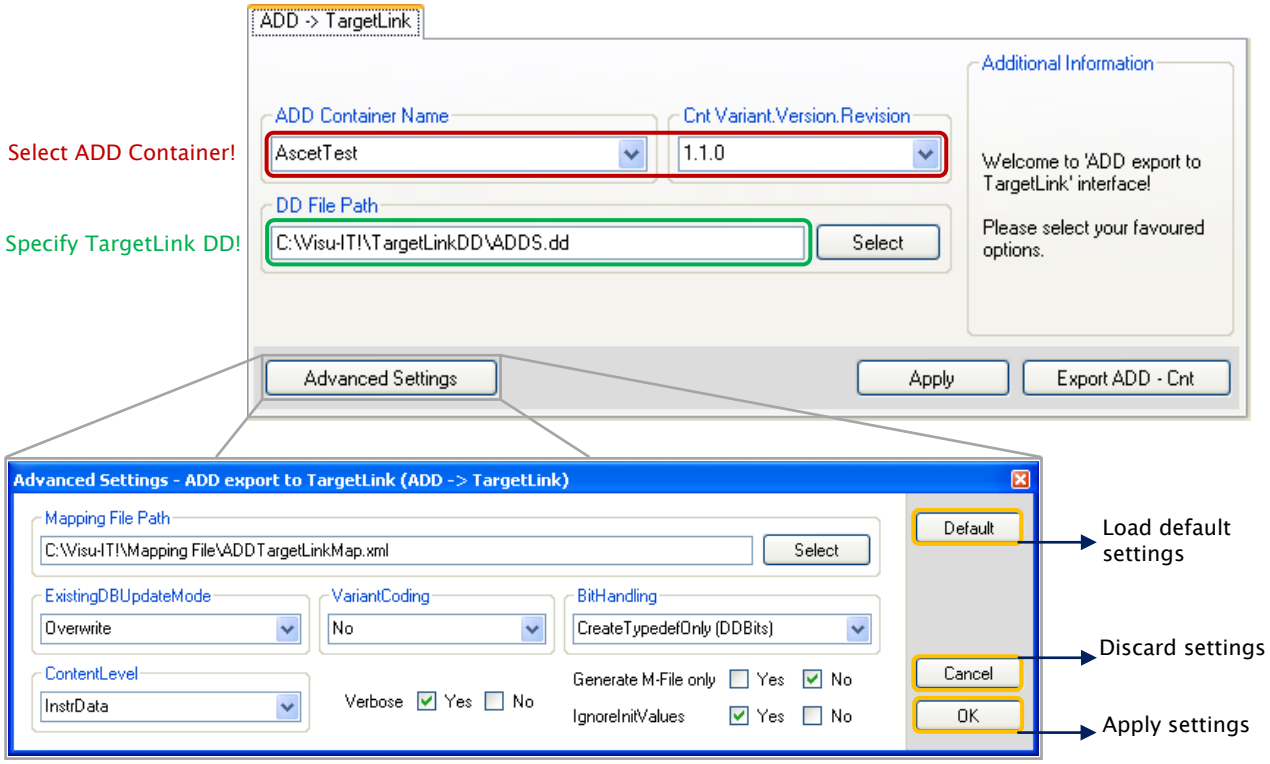
"*Verbose*": Start export in verbose mode.
"*IngoreInitValues*": Physical values will not be exported.

"*AscetFolder*": Ascet folder name which will be exported.
"*AscetProject*": Ascet project name which will be exported.
"*AscetModule*": Ascet module name which will be exported.

Import will be started by pressing the "Export DDS – DB".

4.3 ADD to TargetLink

Export a selected ADD Container into specified dSpace data dictionary.



"*Mapping File Path*": Path of the mandatory xml – file which specifies export options!

"*ExistingDBUpdateMode*": Behaviour control on existing dSpace DD.

- **Overwrite:** Existing database definitions will be overwritten
- **KeepExisting:** Existing database definitions will be kept
- **UpdateOnly:** Only existing database definitions will be updated

"*ContentLevel*": Behaviour control on DDX content.

- **InstrData:** Instrumentation Data (online, parameter, map, axis) with there corresponding attributes will be transferred
- **AttributesOnly:** All 'data types', 'conversions' and 'physical units' will be transferred

"VariantCoding": Behaviour control on "Variant" elements.

- **No:** Variant coding will not be used
- **ViaArrayOfStruct:** Variant coding will be applied via arrays of structures! The array dimension will be defined by the amount of variant criterias. Every array element corresponds to one variant criteria

"*BitHandling*": Behaviour control on element type.

- **CreateTypedefOnly (DDBits):** Map DDBits to 'bits'! Depending on the target system, a 'bit' is declared as 'bool', 'logical' etc...

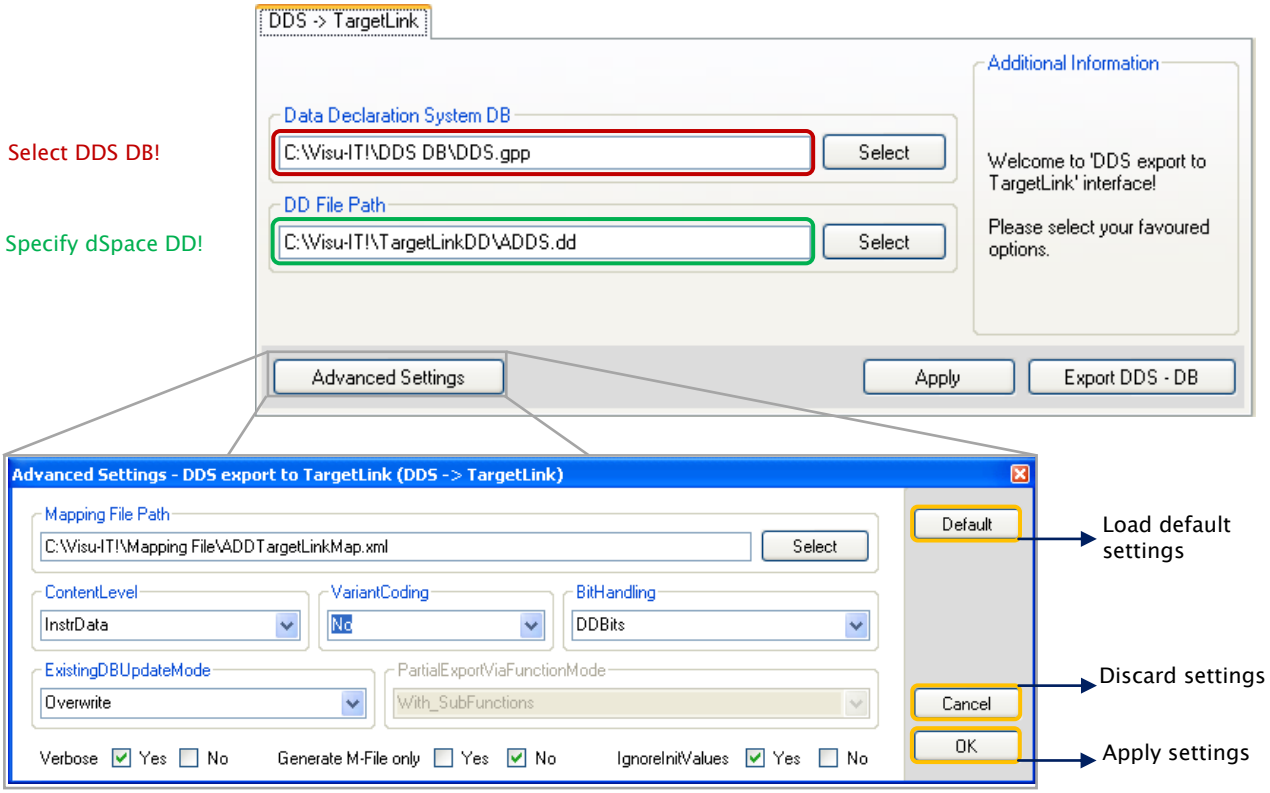
- **AddToBitfield (DDBits_BF):** Add ADD bits with the attribute 'packedBit' to bitfields. The bits (and bitfields) will be grouped according to their 'accessFrequency'
- **AddToBitfield_1Byte(DDBits_BF):** As 'AddToBitfield' except: add only 8 bits into a bitfield

"*Verbose*":	Start export in verbose mode.
"*IngoreInitValues*":	Physical values will not be exported.
"*Generate M-File only*":	Omit creating dd – file, MATLAB m-files will be created instead!

Import will be started by pressing the "Export ADD – Cnt".

4.4 DDS to TargetLink

Export a selected DDS database to a specified dSpace data dictionary.



"*Mapping File Path*": Path of the mandatory xml – file which specifies export options!

"*ExistingDBUpdateMode*": Behaviour control on existing dSpace DD.

- **Overwrite:** Existing database definitions will be overwritten
- **KeepExisting:** Existing database definitions will be kept
- **UpdateOnly:** Only existing database definitions will be updated

"*ContentLevel*": Behaviour control on DDX content.

- **InstrData:** Instrumentation Data (online, parameter, map, axis) with there corresponding attributes will be transferred
- **AttributesOnly:** All 'data types', 'conversions' and 'physical units' will be transferred

"VariantCoding": Behaviour control on "Variant" elements.

- **No:** Variant coding will not be used
- **ViaArrayOfStruct:** Variant coding will be applied via arrays of structures! The array dimension will be defined by the amount of variant criterias. Every array element corresponds to one variant criteria

"*BitHandling*": Behaviour control on element type.

- **DDBits:** Map DDBits to 'bits'! Depending on the target system, a 'bit' is declared as 'bool', 'logical' etc...

- **DBits_BF:** Map DDBits to 'bits' but additionally remap bitfield-menbers which are 'DDBits' into global definitions on target systems
- **LegacyBooleans:** When the elemType of a definition contains the token 'BOOL' it will be mapped into target system 'bit'

"*Verbose*": Start export in verbose mode.
"*IngoreInitValues*": Physical values will not be exported.
"*Generate M-File only*": Omit creating dd – file, MATLAB m-files will be created instead!

Import will be started by pressing the "Export DDS – DB".

4.5 Ascet to ADD

Coming soon!

4.6 Ascet to DDS

Coming soon!

4.7 TargetLink to ADD

Coming soon!

4.8 TargetLink to DDS

Coming soon!

5 Questions?

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