VECTOR

MCAL Integration Package

VECTOR

Document Information

History

Author	Date	Version	Remarks
	- -		
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	- -		-
	- -		- - -
	- -		-
	- -		-

Reference Documents

No.	Source	Title	

Caution

VECTOR

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MICROSAR MCAL Integration Package *3rd party MCAL*

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1. *Single configuration tool usage*
2. *Mixed configuration tool usage*
3. *Split configuration tool usage*

1.1 Responsibility

MCAL integration

1.2 Support requests

MCAL integration

-

1.3 Mix between AUTOSAR specification versions

-

-

MCAL Integration Package (mixed ASR)

2 First Steps

MCAL integration

2.1 Delivery structure

MCAL integration

- `BSW\<MCAL_µC>:`
- `BSWMD\<MCAL_µC>`
- `DaVinciConfigurator\Generator\<MCAL_µC>` -
  -
- `ThirdParty\<MCAL_µC>\Supply`
  - -
  -
  -
  -

Caution

`ThirdParty\<MCAL_µC>\Supply`

Note

Supply

ThirdParty\<MCAL_µC>\Supply
.\MC-ISAR_AS4XX_AURIX_TC27X_CA_PB_BASE_V100
.\MC-ISAR_AS4XX_AURIX_TC27X_CA_PB_MEM_V100
.\Tresos

> ThirdParty\<MCAL_µC>\VectorIntegration

2.2 Starting up

2.2.1 MCAL delivered within Vector SIP

> Compiler_cfg.h MemMap.h

>
BSWMD\<MCAL_µC>

>

2.2.3 MCAL Update needed

Practical Procedure

Script_MCAL_Prepare.bat --undo

Script_MCAL_Prepare.bat --prepare

Caution

>

>

▶ Script_MCAL_Prepare.bat

▶

Script_MCAL_Prepare.bat --prepare

3 Workflow

-

Note

ReleaseNotes_3rdPartyMCAL_VectorIntegration.pdf

Multimedia Link

3.1 Single configuration tool usage

Prerequisite

Advantages	Disadvantages

-

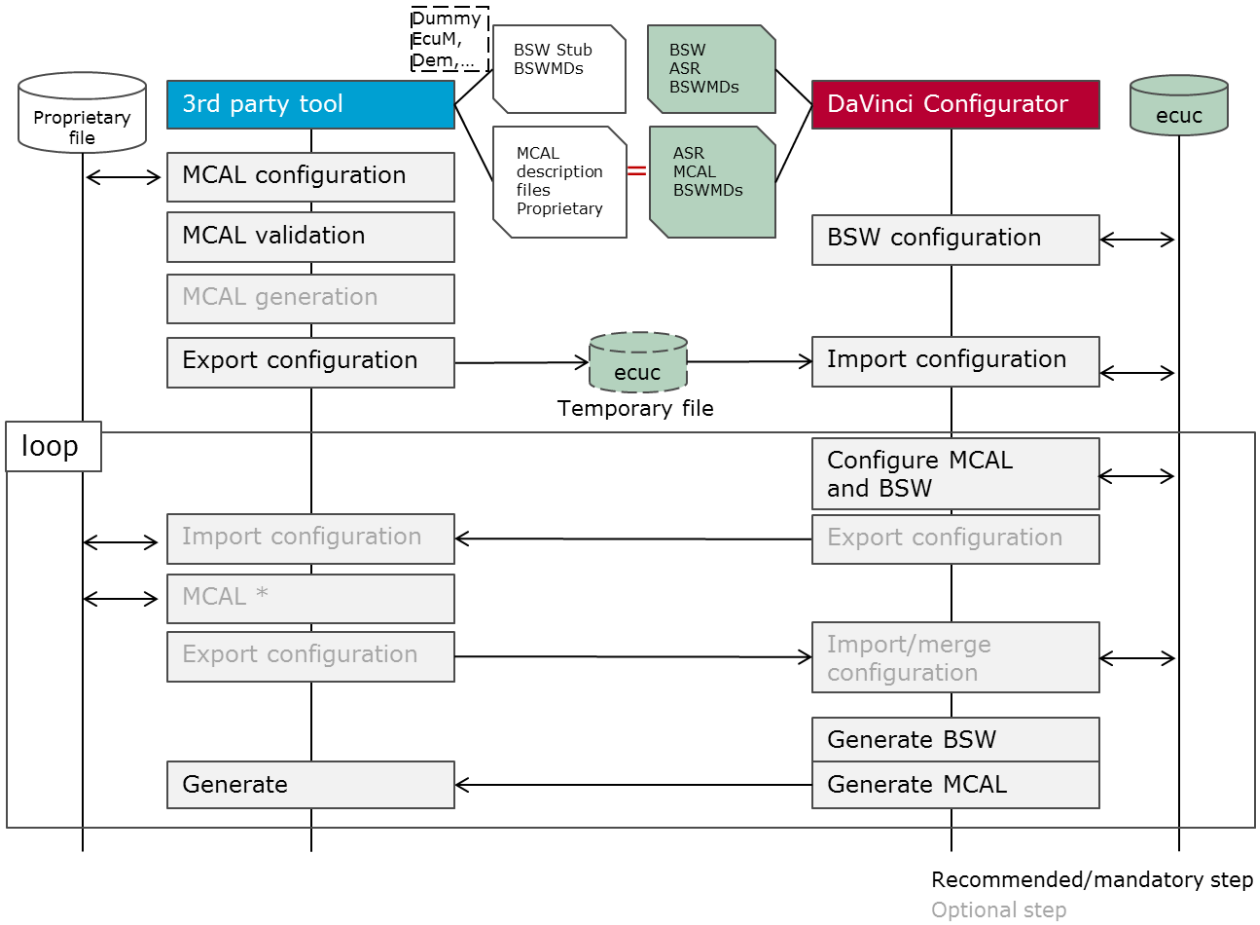
3.2 Mixed configuration tool usage

>

>

>

one tool solution


Dummy
EcuM,
Dem,...
BSW Stub
BSWMDs
BSW
ASR
BSWMDs
Proprietary
file
3rd party tool
DaVinci Configurator
ecuc
MCAL
description
files
Proprietary
ASR
MCAL
BSWMDs
MCAL configuration
MCAL validation
MCAL generation
BSW configuration
Export configuration
ecuc
Temporary file
Import configuration
loop
Configure MCAL
and BSW
Import configuration
Export configuration
MCAL *
Export configuration
Import/merge
configuration
Generate BSW
Generate
Generate MCAL
Recommended/mandatory step
Optional step

-

Prerequisite

Advantages	Disadvantages

-

Practical Procedure (startup)

1.
2.
3.
4.

5.

6.

Note

3.3 Split configuration tool usage

Prerequisite	
Advantages	**Disadvantages**

-

4 Configuration tools

Note

4.1 Vector DaVinci Configurator

4.2 EB tresos™

ThirdParty\<MCAL_µC>\Supply\

tresos_gui.exe

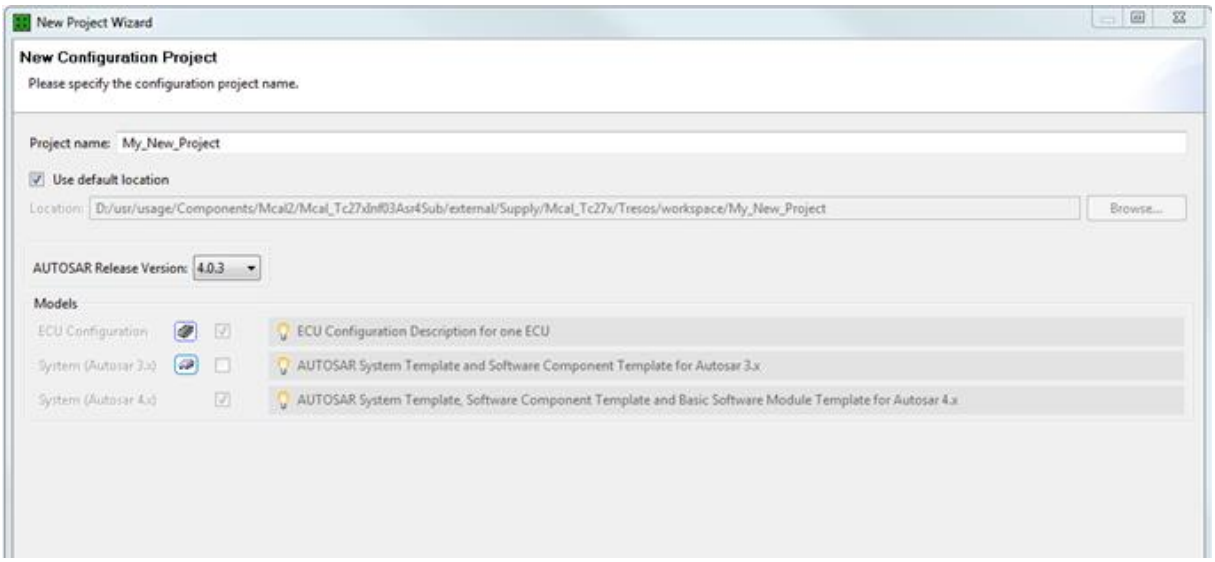
Tresos\bin

Studio_documentation_users_guide

4.2.1 Setting up a new Configuration Project

>

>



-

>

4.2.2 Project Details

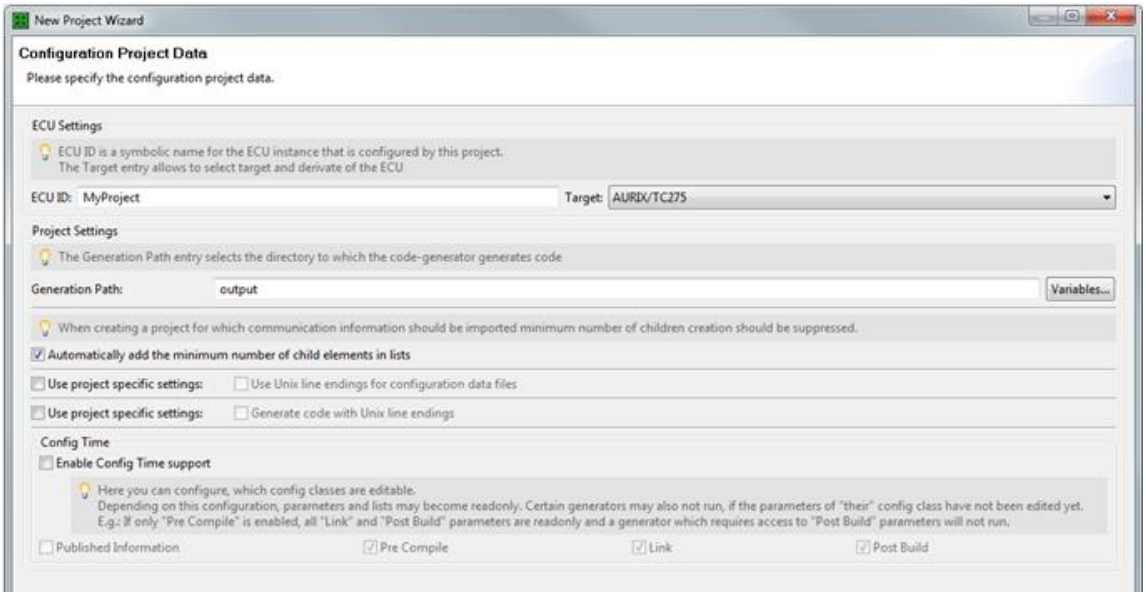
>

>

>

>

>



-

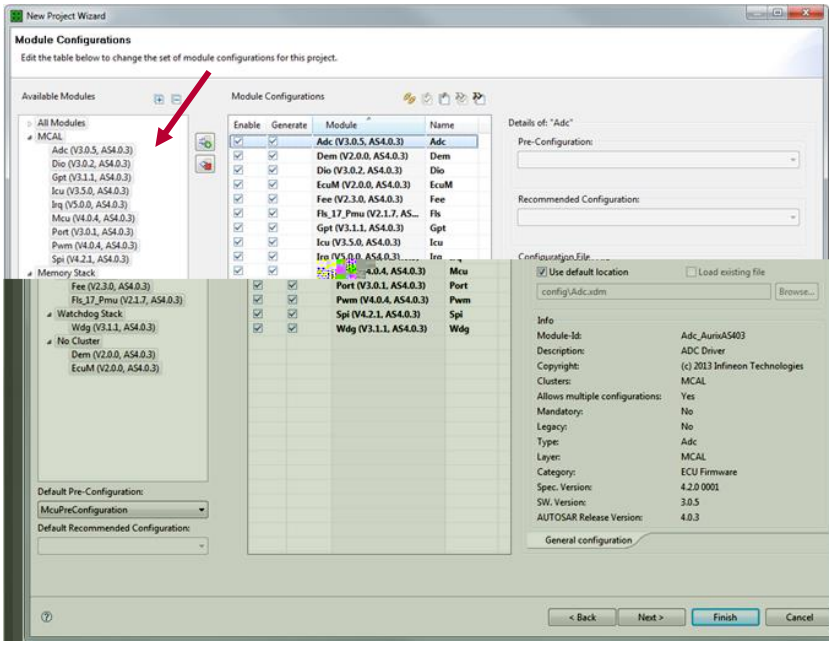
>

preferences.xdm

```
<d:var name="GenerationPath" value="output"/>
```

4.2.3 Selection of components

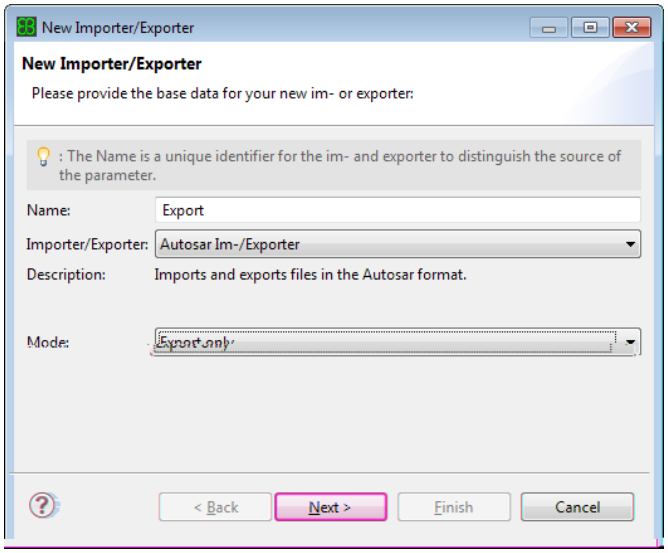
Dem Events *EcuM run modes*

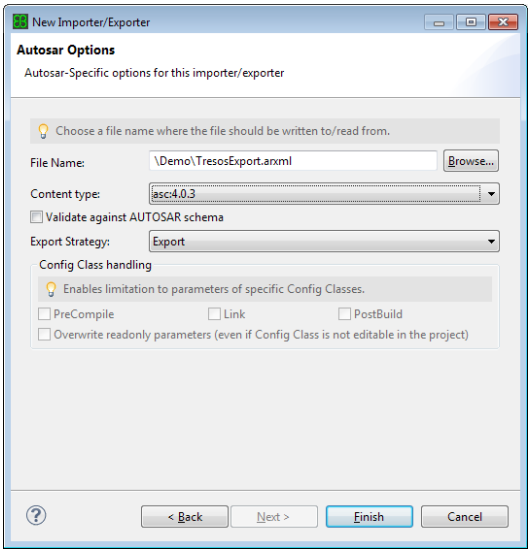


-

4.2.4 Creation of importers and exporters

-





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4.2.5 Configure the MCAL components

4.2.6 Generation of the 3rd party MCAL

-

4.3 Configuration hints for parallel usage of DaVinci Configurator and EB tresos™

Dem/DemConfigSet/DemEventParameter
EcuM/EcuMConfiguration/EcuMCommonConfiguration/EcuMWakeupSource

Dio Ports Mcu ConfigSets Mcu ClockReferences Fee Blocks

4.3.1 Vector DaVinci Configurator 5

-

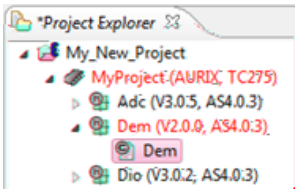
-

4.3.2 EB tresos™

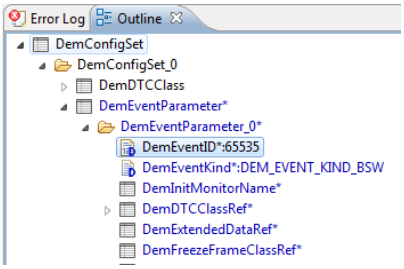
>

> -

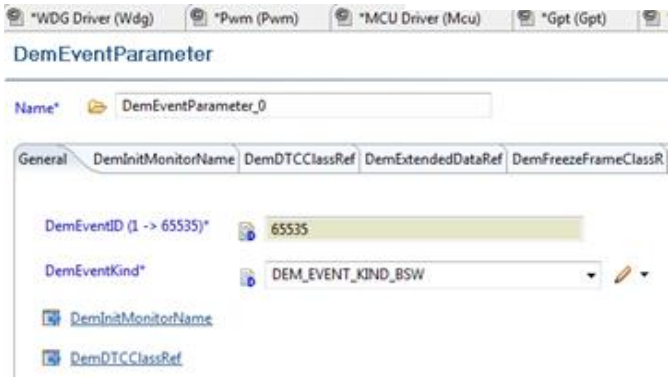
> DemEventParameter_0 Event ID Event Kind



- -



- -



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5 Known Issues

5.1 MCAL and SIP storage location using Vector Makesupport

D:\ -

5.2 Long path names

Caution

- D:\<ECU-Acronym>
D:\BCM

5.3 Missing configuration items within imported configuration

Note

5.4 Configuration Export with EB tresos™ Version 13.0.0

5.5 Error messages regarding CommonPublishedInformation with EB tresos™

```
Invalid value for node "/AUTOSAR/TOP-LEVEL-
PACKAGES/Wdg/ELEMENTS/Wdg/CommonPublishedInformation/VendorId
": Value "" is no number
```

6 Glossary and Abbreviations

6.1 Glossary

Term	Description

6.2 Abbreviations

Abbreviation	Description

7 Contact

www.vector.com