

Software Tool guide for Instrument clusters

Daimler: PF3 + PF3 NG + VS30

Ford: S-Family B479


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1.14	2013-04-23	T.Gärtner	Python PySide patch
1.15	2013-05-07	T.Gärtner	USB2COM_Driver added for BR213 Target


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3 Introduction

This document gives an overview about the software tools used for instrument clusters of PF3 in the customer segment Daimler. Further information can be found in the specification of these tools, see the corresponding links. It does not cover any HMI related tools, like XCompiler, Brutus, etc.

The Conti Intranet provides information about software tools and licenses, see [4] SE Toolweb.

The software tools for the older platforms are described for PF1 in [1] and for PF2 in [2].


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4 Terms and abbreviations

Term / Abbreviation	Explanation
AC, GC	Automotive Controller, Graphics controller
AUTOSAR	AUT omotive O pen S ystem A rchitecture
CAN	Controller Area Network
GHS	Green Hills Software
IC	I nstrument C luster
IDE	Integrated Development Environment
MR-DB	Modification request database
MSVC	Microsoft Visual C
MS Visual Studio	Microsoft Visual Studio
NEC	Nippon Electric Company
OIL	OSEK implementation language
OSEK	O ffene S ysteme und deren Schnittstellen für die E lektronik im K raftfahrzeug“, Operation system used in PF3.
PF1	Platform 1, e.g. BR211, BR203Mopf, G463, R230Red, BR164
PF2	Platform 2, e.g. BR204Mopf, BR204EL, BR212
PF3	Platform 3, e.g. BR222, BR205
PF3_NG	Platform 3 next generation, e.g. BR213 EL + HL, BR222 Mopf
RENESAS Electronics	Successor of Renesas Technology und NEC Electronics since 2011-04-01
SLP10	Software license package, version 10
SMATE	SQE Metric and Analysis Tool Extensions. Defines which versions of the following tools are compatible to each other: Understand C, QAC / QAC++, CTC, IMAGIX, Stack Analysis Viewer
SQE	Software Quality Engineering

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5 Directory Structure

The Quality Engineering department (ID RD SW QE QM) proposes a generic directory structure that is recommended to be used for all local tool installations concerning project specific tools (see table 1 on the next page). It simplifies the exchange of PCs and reduces the amount of adaptations in configuration scripts for the user. Further details can be found in [4], S_Default_Tools, "Default Installation Tree on the local PC".

The directory structure organizes the top level directory (place holder <tool home>) using three hierarchy levels:

- platform level
- tool level
- version level

The first level separates the various software and hardware platforms, for example Fujitsu 32 (VGC) or V850 (JCP, the platform this document deals with). Platform independent tools are placed in the subdirectory "Common".


The second level provides one directory for each tool. If more than one version of one tool is required at the same time, the third level is used to provide a directory for each version. Otherwise, the version hierarchy level is not used.

There is one exception to this rule, if a software producer uses a special directory for his products. In this case, a directory for all tools of the software producer is created on the tool level. Inside this directory (level three) is a folder for each tool. If more than one version of one tool is required at the same time, the folder name consists of the tool name combined with the software version number of the tool (separated with a dash).

Table 2 shows a directory structure for a JCP tools installation that is conform to the directory structure recommended by the QE department.

It is recommended to place the tool directory on drive D:\Tool in order to avoid problems with 'local admin rights'.

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Table 1: Generic Directory Structure for Project specific Tools

<tool home>	Project specific tools
+---Common	Platform independent tools
+---<platform 1>	Tools for platform <platform 1>
+---<tool 1>	Tool <tool 1> for platform <platform 1> (only one version required at the same time on the PC)
+---<tool 2>	Tool <tool 2> for platform <platform 1> (more than one version required at the same time on the PC)
+---<version 1>	Software version <version 1> of tool <tool 2>
+---...	
\---<version i>	Software version <version i> of tool <tool 2>
+---...	
+---<tool j>	Tool <tool j> for platform <platform 1>
+---<producer 1>	Software producer <producer 1> that provides tools for platform <platform 1>
+---<tool 1>	Tool <tool 1> from software producer <producer 1> (only one version required at the same time on the PC)
+---<tool 2>-<version 1>	Software version <version 1> of tool <tool 2> from software producer <producer 1> (more than one version required at the same time on the PC)
+---...	
\---<tool 1>	Tool <tool 1> from software producer <producer 1>
+---<producer 2>	Software producer <producer 2> that provides tools for platform <platform 1>
+---<producer 3>	Software producer <producer 3> that provides tools for platform <platform 1>
+---...	
\---<producer m>	Software producer <producer m> that provides tools for platform <platform 1>
+---<platform 2>	Tools for Platform <platform 2>
+---...	
\---<platform n>	Tools for Platform <platform n>

Table 2: Directory Structure Example for JCP

D:	Local drive
\---TOOL	Project specific tools
+---Common	Platform independent tools
+---AIDA2	Diagnosis tool
+---Beyond Compare 3	File comparison tool
+---CANoe 7.x	CAN simulation tool
+---Cygnus	Software from Cygnus
\---cygwin-1.1.16 old	Windows port of the GNU development tools
+---msys	Collection of GNU utilities
\---msys-1.0.17 new	
+---Doors	Requirements management system
+---FhostSP	Flash Tool
+---Perl\v5.005 (old)	ActivePerl; interpreter for the programming language Perl
+---Perl\v5.12.4(new)	
+---PVCS	Version control system
+---QAC	Static code analysis
\---V850	Joint Controller Platform tools
\---GHS	MULTI Integrated Development Environment
+--- multi517c_ymmd	Version 5.1.7c of MULTI
\--- multi517d_101028	Version 5.1.7d of MULTI

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6 Version Selection

The software project manager defines the versions of the tools to be used.


The actual tool versions are specified in this document, see chap.7 Tool Overview.

The integrator takes over these definitions to the file <project\hex\tool_report_SYSBUILD.txt

The MSVC Scripts perform a 'Tool Version Check' according to the specifications of the project to assure a correct installation of the tools. This is done when the batch <project>\install.bat is executed. For further details see [9],

IDE>SQE-Toolbar>Help>MSVC Scripts IDE>Use Cases>Installation>'Tool version check'

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7 Tool Overview

7.1 Win7 (64Bit) hints


You have to install all the following tools for Win7 (64Bit) as administrator.

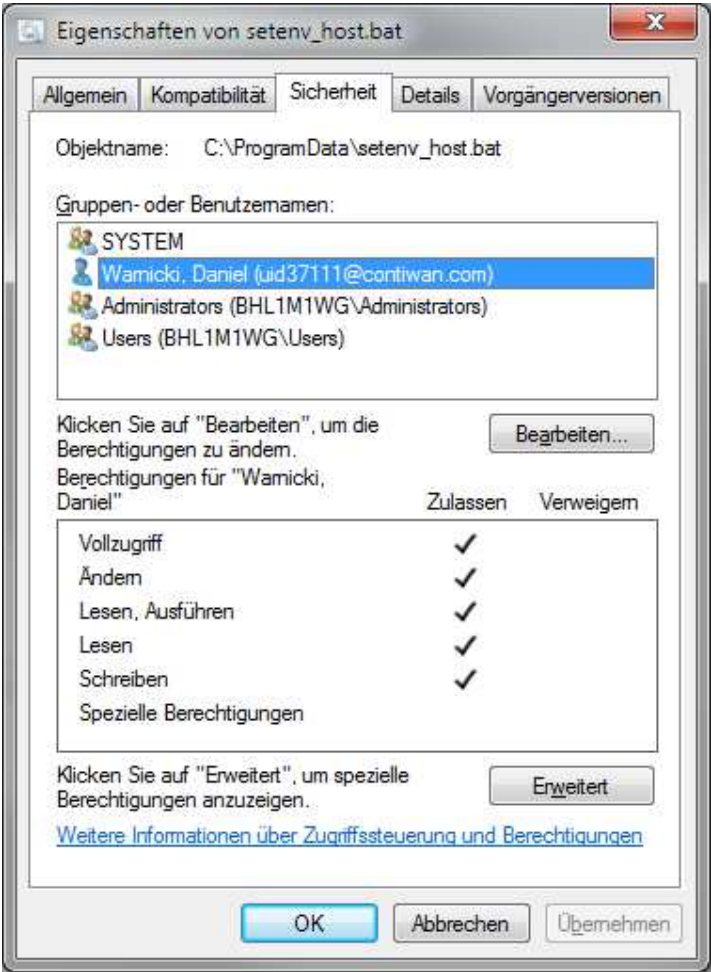
At first request administration rights for your computer.

You can use the following tool:

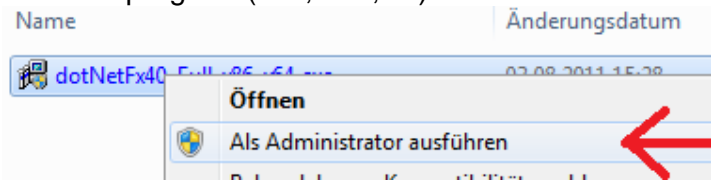
- 1) <https://ssp.auto.contiwan.com/ssp6>
>New requests>Windows & Linux>Automotive Local Admin Rights
old: [\\cw01\root\Loc\bbuv\DIID35555\div\AdminRights\AdminRights.exe](#)
- 2) After the information mail from IT regarding AdminRights, you have to restart your computer, to activate the admin rights.
- 3) For Win7 “setenv_host.bat” will be stored in folder “C:\ProgramData”
Important: You need write access to “C:\ProgramData setenv_host.bat”! Click the right mouse button on “C:\ProgramData setenv_host.bat “ select “properties” and add your name with full access in tab “safety”.

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- 4) Every following program you must install as Administrator. Press the right mouse button on install program (exe, bat , ...) and select “run as admin”



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7.2 Setenv.bat, setenv_host.bat

7.2.1 setenv.bat

is configured by the integrator and is delivered with a software frame.

<proj>\ide\adapt\ setenv.bat

7.2.2 setenv_host.bat

It lists what is installed at your PC and is read by all <VC-PROJECT>\..\setenv.bat.

It maps “logical paths” (represented by environment variable) to physical path.

Setenv_host.bat has to be installed at the following locations to have any effect:

Win Xp: C:\Windows\setenv_host.bat

Win 7: C:\ProgramData\setenv_host.bat”

Win Xp definitions in your setenv_host.bat


```
set DIR_PERL_5_005=D:\Tool\Common\Perl\v5.005.522
set DIR_PERL_5_005_BIN=D:\Tool\Common\Perl\v5.005.522\bin
set DIR_PERL_5_12_4_1205_BIN=D:\Tool\Common\Perl\v5.12.4.1205\bin
set DIR_CYGWIN_1_1_16_BIN=D:\Tool\Common\cygnus\cygwin-1.1.16\bin
set DIR_MSYS_1_0_17_BIN=D:\Tool\Common\msys\msys-1.0.17\bin
set DIR_CMAKE_2_8_11_BIN=D:\Tool\Common\Cmake\2.8.11\bin
```

Win 7 definitions in your setenv_host.bat

```
set DIR_PERL_5_005=D:\Tool\Common\Perl\v5.12.4.1205
set DIR_PERL_5_005_BIN=D:\Tool\Common\Perl\v5.12.4.1205\bin
set DIR_PERL_5_12_4_1205_BIN=D:\Tool\Common\Perl\v5.12.4.1205\bin
set DIR_CYGWIN_1_1_16_BIN=D:\Tool\Common\msys\msys-1.0.17\bin
set DIR_MSYS_1_0_17_BIN=D:\Tool\Common\msys\msys-1.0.17\bin
set DIR_CMAKE_2_8_11_BIN=D:\Tool\Common\Cmake\2.8.11\bin
set DIR_CMAKE_2_8_12_BIN=D:\Tool\Common\Cmake\2.8.12\bin
```

Hint: For Win7 setenv_host.bat contains global redirections from CYGWIN to MSYS and from Perl 5.005 to 5.12.4.

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BR213 High-Line specific extensions in your setenv_host.bat

set MY_IPADDR=10.216.33.145 ← ip 14address of you local machine (PC)
set TARGET_IPADDR_IMX6=192.168.250.10 ← static (local) IP address
set TARGET_SERDEV_IMX6=COM1 ← Serial interface

rem Compiler for VMCARM

set DIR_MULTI_ARM_6_14_2012_54=D:\Tool\VMCARM\GHS\multi614_120504
set DIR_MULTI_ARM_6_14_2013_54_patch_2013_10_24=d:\Tool\VMCARM\GHS\multi614_130504_patch_2013_10_24
set DIR_MULTI_ARM_6_14_2013_54_patch_2014_03_03=d:\Tool\VMCARM\GHS\multi614_130504_patch_2014_03_03
set DIR_MULTI_ARM_6_14_2013_54_patch_2015_05_05=d:\Tool\VMCARM\GHS\multi614_130504_patch_2015_05_05


rem Python

set DIR_PYTHON_2_7_3=D:\TOOL\Common\python27

rem Putty

set DIR_PUTTY_0_61=D:\TOOL\Common\Putty\v0.61

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7.3 Compiler, Linker, Debugger

7.3.1 JCP2011 (BR222, BR205, BR447, BR213-AC, BR213-GC Entryline)

Toolname	Version	Comment
MULTI 2000 from Green Hills Software	5.3.0 Patch dates 2014-09-19 2012-08-16	<p>Compiler Update GHS Multi 5.3.0</p> <ol style="list-style-type: none"> 1. Install the version 5.3.0 from \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\Multi2000 into "D:\Tool\V850\GHS\multi530_140919" 2. Copy the directory patch_2014_09_19 from \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\Multi2000\PATCHES\Patch_Sets to your existing compiler version. Some older files will be replaced. 3. Insert the line "set DIR_MULTI_V850_5_30_patch_2014_09_19=D:\Tool\V850\GHS\multi530_140919" within the file setenv_host.bat.
IECUBE2	IEQB2V85.sys V1.10.1.0	<ul style="list-style-type: none"> • connect IECUBE2 to USB • New HW found window chose manual installation • select for driver path: <p>WinXp (32Bit) \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\USB_Driver_IECUBE2\2009_08_06</p> <p>Win7 (64Bit) \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\USB_Driver_x64_AllInOne</p>
MINICUBE QB-V850MINI-NEXUS	MQBV850.sys V1.10.1.0	<p>The Revision has to be "D", prior revisions will not function with JCP2011!</p> <ul style="list-style-type: none"> • connect MINICUBE to USB • New HW found window chose manual installation • select for driver path: <p>WinXp (32Bit) \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\USB_Driver_MINICUBE\2005_01_18</p> <p>Win7 (64Bit) \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\USB_Driver_x64_AllInOne</p>
Emulators		The usage of emulators together with the BR222 hardware is described in [3].

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7.3.2 JGP2014, iMX6 (BR213 GC Highline)

Toolname	Version	Comment
MULTI-ARM	Version: v6.1.4_2013.5.4 Patch: 2015_05_05 2014_03_03	GHS tool chain for BR213 Highline (E007-Pre30). Install first: \\cw01\root\Loc\bbuv\BID35005\PUBLIC\VMCARM\Tool\Multi2000\v6.1.4_2013.5.4\install.exe Install hints please see at: http://info5.conti.de/app6/passengercars/sw/tools/tools/P_ARM/Installation/install_MULTI_6x/Install_MULTI_6x.htm Then copy the patch: \\cw01\root\Loc\bbuv\BID35005\PUBLIC\VMCARM\Tool\Multi2000\PATCHES\Patch_Sets\v6.1.4_2013.5.4
USB 2 Serial driver	18.05.2011	Only for old BR213 E006 pre30 and old hardware ES.1 (replacement of direct serial cable) \\cw01\root\Loc\bbuv\BID35324\PF3\PF3_BasicTools\USB2COM_Driver\CDM20814_Setup.exe

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7.3.3 JCP2016 (VS30 + Ford B479)

Toolname	Version	Comment
MULTI 2000 from Green Hills Software	6.1.4 Patch dates 2016_04_08 2015_09_09 2015_04_30 2014_11_17	<p>Compiler Update GHS Multi 6.1.4</p> <ol style="list-style-type: none"> 1. Install the version 6.1.4 from \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\Multi2000 into "D:\Tool\V850\GHS\multi_614_2013.5.5" 2. Make a copy of the multi_614_2013.5.5 and rename it to multi_614_2013.5.5_patch_2016_04_08 3. Copy the directory patch_2016_04_08 from \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\Multi2000\PATCHES\Patch_Sets\v6.1.4_2013.5.5 to your newly created folder. Some older files will be replaced. 4. Set the variable DIR_MULTI_V850_6_14_2013_55_patch_2016_04_08 to point to the above multi compiler within the file setenv_host.bat.
RENESAS E1 Emulator	Renesas E-Series USB Driver v3.0.0.0	<p>Connect RENESAS E1 to USB Port.</p> <p>Select to manually install driver.</p> <p>Select driver:</p> <p>Win XP 32-bit:</p> <p>\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\USB_Driver_E1\v3.0.0.000\32bit</p> <p>Win7 64-bit:</p> <p>\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\USB_Driver_E1\v3.0.0.000\64bit</p>
RENESAS IECUBE2	RH850 1.10.1.2 05/18/2009	<p>IECUBE2:</p> <p>\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\USB_Driver_IECUBE2</p> <p>Firmware:</p> <p>\\cw01\Root\Loc\bbuv\DIR35005\PUBLIC\V850\Tool\NEC\FPGA_Update_IECUBE2</p>

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7.3.4 License server for GHS tool chain

Set Windows System Environment variables to license server, dependant on the site.


Site	Environment variables
BBU	GHS_LMHOST=@ls_bh_ghs_v6 @bhs01za
RBG	GHS_LMHOST=@rbvs126a
TSR	GHS_LMHOST=@tmas100a
SGP	GHS_LMHOST=@igls001a
GDL	GHS_LMHOST=@tqas393a
All	GHS_LMWHICH=ghs

Note: Please check [this link](#) for the appropriate license server for all sites [4].

7.4 Editors, 7zip, .Net

Toolname	Version	Comment
.NET Framework		Precondition for Brutus Tool an GC. \\cw01\root\Loc\bbuv\did35639\14_SW\zz_Tools\.NET\dotNetFx40_Full_x86_x64.exe
EasyCASE(C++)	6.5	Source code editor http://info5.conti.de/app6/passengerCars/SW/tools/tools/E_Easycase/start.htm
Notepad ++	n.a.	Alternative source code editor, optional http://notepad-plus-plus.org \\cw01\root\Loc\bbuv\did35639\03_PROD_DEV\50_Tools\Notepad++
7zip	9.20	File archiver with a high compression ratio (http://www.7-zip.org/) 7-zip is part of DS client installation within Conti, see C:\Program Files\7-Zip WinXP (32Bit): \\cw01\root\Loc\bbuv\did35324\Proj_222KI\03_PROD_DEV\50_Tools\7-Zip\WinXp_32Bit\Version_9-2-0\7z920.exe Win7 (64Bit): \\cw01\root\Loc\bbuv\did35324\Proj_222KI\03_PROD_DEV\50_Tools\7-Zip\Win7_64Bit\7z920-x64.msi

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7.5 Visual Studio

7.5.1 Visual Studio 2005

Used for Daimler BR222, BR205, BR213, BR222-Mopf

Toolname	Version	Comment
WinXP MS Visual Studio 2005	V8.0 Patch SP1	IDE
Win7 (64Bit) MS Visual Studio 2005	1. MS Visual Studio 2005 2. V8.0 Patch a) SP1 b) KB932232 c) KB947315	1. You can find here: \\cw01\root\Loc\bbuv\did35005\public_bbu\Tool\Visual_Studio\Installation\MSVC_2005\CD1+CD2\setup.exe please read: http://info5.conti.de/app6/passengercars/sw/tools/tools/E_MSVC/History/Win7/win7_install_vs2005.pdf 2. You can find here: http://info5.conti.de/app6/passengercars/sw/tools/tools/E_MSVC/History/History.htm 3. See chapter Visual Studio 2005 for Win7 (64Bit)
MSVC Scripts	V04.01.00.rel	Scripts for MS Visual Studio 2005 Delivered together with software frame
SQE Extensions	V02.08.00	Addin for SQE Toolbar for VS 2005  \\cw01\root\loc\bbuv\did35005\public\Tool\Visual_Studio\SQE_Extensions\VS2005_AddIn

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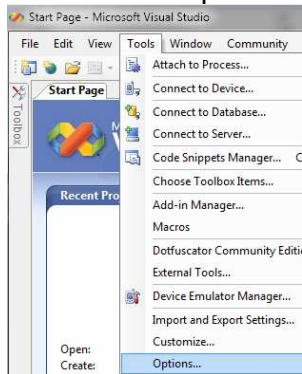
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To prepare Microsoft Visual Studio 2005 for Win7 (64Bit) please follow the next steps:

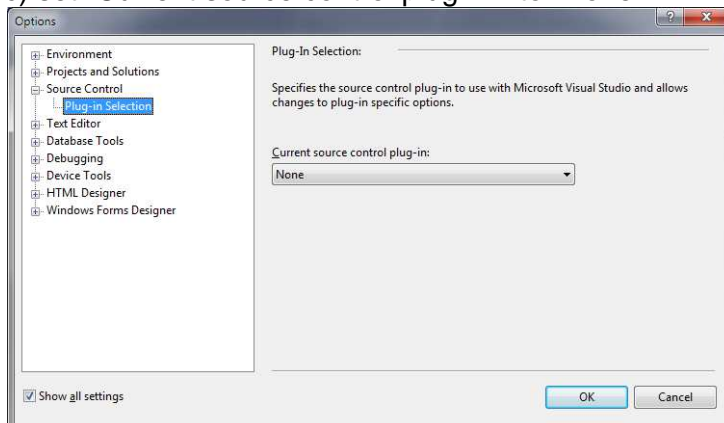
1. Open Microsoft Visual Studio 2005 without any project. Press Start/Program/Microsoft Visual Studio 2005/ Microsoft Visual Studio 2005




2. Select Tools/Options...



3. a) select "show all settings"
b) select "Source Control / Plug-in Selection"
c) set "Current source control plug-in:" to "None"




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7.5.2 Visual Studio 2013

Used for Daimler VS30 + Ford S-Family (B479)

Toolname	Version	Comment
MS Visual Studio Professional 2013	V12.0.31101.0 Update 4	IDE Conti internal installation via SSP6 https://ssp.auto.contiwan.com/SSP6/
Visual Studio 2013 SDK		SDK \\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Visual_Studio\Installation\PATC HES\VS2013\VS2013_SDK\
Visual Studio 2013 Patches	VS2013.4 VS2013.5	Patch 4: \\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Visual_Studio\Installation\PATC HES\VS2013\VS2013.4 Patch 5: \\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Visual_Studio\Installation\PATC HES\VS2013\VS2013.5
SQE Extensions	v3.3.0	Addin for SQE Toolbar for VS 2013  \\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Visual_Studio\SQE_Extensions\VS2013_AddIn
		Add the following environment variables to setenv_host.bat : DIR_DEVSTUDIO_NET_12=C:\LegacyApp\VisualStudio2013\Common7\IDE DIR_MSBUILD_12_0_BIN=C:\Program Files (x86)\MSBuild\12.0\Bin

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7.6 Scripting Language, Shell

7.6.1 PF3 + PF3 NG

http://info5.conti.de/app6/passengerCars/SW/tools/tools/S_DefaultTools/start.htm

In the last years the following versions of the **SQE Basic Tools** (provided via SE Toolweb) were used:

cygwin-1.1.16 (only Win XP 32-bit)

Perl v5.005.522 (only Win XP 32-bit)

All Daimler PF3 IC projects were switched for MY14 in Nov/Dec 2012 to the new tools:

msys-1.0.17 (replaces cygwin)

Perl v5.12.4.1205 (**32-bit** variant is **mandatory** now)

It is recommended to install old and new SQE Basic Tools on the PC's with Win XP in order to support old and new projects for a certain time. Each Perl version has to be installed within a separate directory of the TOOL folder, otherwise it will not work.

...\Perl\v5.005

...\Perl\v5.12.4

...\Cygnum\cygwini-1.1.16


...\msys\msys-1.0.17

PATH

The system environment should refer only to the new Perl version, e.g.

D:\Tool\Common\perl\v5.12.4\site\bin;D:\Tool\Common\perl\v5.12.4\bin;

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Installation steps

Toolname	Version	Comment
3) ActivePerl	V5.12.4.1205 (32-Bit)	a) //cw01/root/Loc/bbuw/DID35005/PUBLIC/Tool/Perl/v5.12.4.1205/Install/ActivePerl-5.12.4.1205-MSWin32-x86-294981.msi b) Reboot PC afterwards
4) Perl/Tk	V5.12.4.1205 (32-Bit)	a) //cw01/root/loc/bbuw/did35005/PUBLIC/Tool/Perl/v5.12.4.1205/Install/Modules/Tk/x86/Install_Tk.bat
6) MSYS	1.017	a) \\cw01\root\loc\bbuw\did35005\PUBLIC\Tool\Msys\msys-1.0.17\msys-1.0.17.exe MSYS replaces CYGWIN.
7) Python Inkl. AddOns: - Python/QT - PySide - lxml	2.7.3	\\cw01\root\Loc\bbuw\DID35005\PUBLIC\Tool\Python\ Copy installation files to local drive and follow Readme.txt. Start installation from local drive using InstallPythonConti_Drive_D.bat or InstallPythonConti_Drive_C.bat.
8) Putty	0.61	Serial console \\cw01\root\Loc\bbuw\DID35005\PUBLIC\Tool\Putty\v0.61\putty.exe (no installer, only copy to local drive)
9) CMAKE	2.8.11	\\cw01\root\Loc\bbuw\DID35005\PUBLIC\Tool\CMAKE\ setenv_host.bat DIR_CMAKE_2_8_11_BIN=D:\Tool\Common\cmake\2.8.11\bin

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7.6.2 JCP2016 (VS30 + Ford B479)

Toolname	Version	Comment
Perl	V5.12.4.1205 (32-Bit)	<p>Perl Win 32 bit (x86)</p> <p>\\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Perl\v5.12.4.1205\Install\ActivePerl-5.12.4.1205-MSWin32-x86-294981.msi</p> <p>For Perl Tk lib, install the appropriate version as described in the Readme.txt from the installation folder.</p> <p>Perl Tk</p> <p>\\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Perl\v5.12.4.1205\Install\Modules\Tk\x86\Install_Tk.bat</p>
Msys	1.017	<p>Installation:</p> <p>\\cw01\root\loc\bbuv\did35005\PUBLIC\Tool\Msys\msys-1.0.17\msys-1.0.17.exe</p> <p>Info: Msys replaces CYGWIN.</p>
Cygwin (new)	1.7.32	<p>Instructions for installation of Cygwin:</p> <p>http://info5.conti.de/app6/passengerCars/SW/tools/tools/S_DefaultTools/install_cygwin_1.7.32/Install_Cygwin.htm</p> <p>Installation:</p> <p>\\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Cygwin\cygwin-1.7.32</p> <p>Patches: Replace files installed in previous step by this patches</p> <p>\\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Cygwin\PATCHES\cygwin-1.7.32\patch_2015_11_13</p> <p>Add the following environment variable containing the bin folder of Cygwin, e.g.:</p> <p>set DIR_CYGWIN_1_7_32_BIN=D:\Tool\Common\cygwin\v1.7.32\bin</p>
Python Incl. AddOns: - Python/QT - PySide - lxml	2.7.3	<p>\\cw01\root\Loc\bbuv\DID35005\PUBLIC\Tool\Python\</p> <p>Map the install path to random drive. Ex: Z: Start installation from using one of the following scripts.</p> <p>InstallPythonConti_Drive_D.bat or InstallPythonConti_Drive_C.bat.</p> <p>These scripts will install Python and all it's AddOns.</p>

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Toolname	Version	Comment
CMAKE	2.8.12	\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\CMAKE\ Do not forget to set the environment variable DIR_CMAKE_2_8_12_BIN.
Java	1.7.0_75 portable	Java Runtime Environment, JRE \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\java\java_portable Extract the zip file e.g. to D:\Tool\Common\java\ Add the environment variable in setenv_host.bat, e.g.: DIR_JAVA_1_7_0_75_BIN=D:\Tool\common\java\v1.7.0_75\bin DIR_JAVA_1_6_0_BIN Also add the path to /bin to Windows Environment Variables Path.
TDM GCC (new)	4.9.2	1. Extract TDM GCC .zip file from \\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\tdm-gcc\V4.9.2_tdm-gcc to your local tool folder, e.g. C:\tool\common\tdmgcc\TDM_GCC\v4.9.2_64 2. Add the environment variable in setenv_host.bat, e.g.: set DIR_GCC_TDM_4_9_2=C:\tool\common\tdmgcc\4.9.2

For further information regarding the installation procedure or tips, please consult the document stored in MKS at the following link:

<http://ims-id:7001/si/viewrevision?projectName=%23/id/dag PF3/ prj%23ICVS30/ prjdoc/~dag PF3. prj.ICVS30.prjdoc/03 Prod Dev/50 Tools/025 SW Toolchain guideline&selection=TOOL GUIDE VS30IC.docx>

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7.7 Operating System Configuration for AROS

Toolname	Version	Comment
OIL Configurator	n.a.	Part of AROS package used CDS.SW.SUB.AROS_V850E2M_Var


7.8 Product Metrics

Toolname	Version	Comment
Understand C/C++	V3.1 Build 760	\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\UnderstandC\Installation\
Understand C/C++ Scripts	V02.05	CDS.SW.TOL.UnderstandIt.V02.05.rel to found in: file:\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\UnderstandC\SQE_Extensions\PROJ

7.9 Code Analysis

Toolname	Version	Comment
QA C	7.1	QA C Source code analyzer http://info5.conti.de/app6/passengerCars/SW/tools/tools/A_QAC/QAC.htm file:\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\QA_C\Installations
QA C Extensions	V01.09	CDS.SW.TOL.QAC_V71.V01.09.rel to found in: file:\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\QA_CPP\SQE_Extensions
QA C++	2.5	file:\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\QA_CPP\Installations
QA C++ Extensions	V1.00	CDS.SW.TOL.QACPP_V2_5.V01.00.rel to found in: file:\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\QA_CPP\SQE_Extensions
IMAGIX 4D	7.3.0	file:\\cw01\root\Loc\bbuv\DIR35005\PUBLIC\Tool\Imagix

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7.10 Coverage Analysis

Toolname	Version	Comment
CTC	V6.5.5	CTC Coverage Analyses: \\cw01\root\Loc\bbuv\BID35005\PUBLIC\Tool\CTC\Installation
CTC Extensions	V04.04 rel	CDS.SW.TOL.CTC_V655.V04.04.rel \\cw01\root\Loc\bbuv\BID35005\PUBLIC\Tool\CTC\SQE_Extensions

7.11 Flash Programming

7.11.1 FHostSp

FHostSP is a Windows tool used for programming instrument clusters during the development or production phases.


It supports flashing via CAN, LVDS and SPI and requires additional hardware and appropriate software drivers. More detailed information can be obtained by the product integrators and the responsible for the bootloader.

For external use (e.g. Daimler, Residents) the dongle protected variant has to be used.

~~Actually different versions of FHostSp are used for the projects.~~
2014-07-17: FHostSP 6.xx is also able to handle PF3 projects.

FHostSP	Platform	Projects
5.08 .. 5.12	PF3	BR222, BR205, BR447
06.0x.xx	PF3_NG	BR213 EL+HL, BR222, BR205, BR447


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Project	Comment
BR222	<p>\\cw01\root\Loc\bbuv\did35639\03_PROD_DEV\50_Tools\FHostSP</p> <p>LVDS flashing for GC: requires Continental Image source box, Digitus USB-DVI graphical card</p> <p>Drivers for Digitus graphics adapter:</p> <p>WinXp: \\cw01\root\Loc\bbuv\did35639\03_PROD_DEV\50_Tools\FHostSP\Digitus_Driver\DA-70832-Version_6.10.10.1004</p> <p>Win7 (64Bit) \\cw01\root\Loc\bbuv\did35639\03_PROD_DEV\50_Tools\FHostSP\Digitus_Driver\DA-70832-Win7_64Bit</p>
BR205, BR447	<p>\\cw01\root\Loc\bbuv\did35608\03_Prod_Dev\50_Tools\FHostSP</p> <p>FastSPI flashing for GC: Requires USB to SPI adapter (small grey box)</p> <p>Driver: \\Cw01\root\Loc\bbuv\did35608\03_Prod_Dev\50_Tools\SPI_flashing\USB_Driver\CDM20814_Setup.exe</p> <p>Hints: Do not install from network drive. Make a local copy for installing.</p>
BR213	<p>\\cw01\root\Loc\bbuv\did35794\03_Prod_Dev\50_Tools\FHostSP</p> <p>LVDS flashing for GC: Requires Continental Image source box (for BR213), Digitus USB-DVI graphical card.</p> <p>User Manual: "How to Program the W213 Instrument Cluster over HSVL" \\cw01.contiwan.com\root\Loc\bbuv\did35324\PF3\integration\Documentation\BR213\Flashen\HSV_L_UserManual_BR213.pdf</p>

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7.11.2 NEC PG-FP5

Toolname	Version	Comment
NEC PG-FP5	V2.13	<p>Install:</p> <p>file://cw01/root/Loc/bbuV/DID35005/PUBLIC/V850/Tool/NEC/FlashProgrammer_PG-FP5</p> <ul style="list-style-type: none"> - don't connect PG-FP5 - select install path to "D:\Tool\NECTools32" and mark all options - connect Power to PG-FP5 - connect USB - switch PG-FP5 to On by pressing POWER key - New HW found window chose manual installation - select D:\Tool\NECTools32\PG-FP5\V2.0x\driver for driver path

7.12 CANoe Simulation

Toolname	Version	Comment
CANoe Simulation		<p>The so called 'Restbussimulation' is used to test the instrument clusters without a car during development.</p> <p>It uses the ECU-Extract (which contains the K-Matrix) delivered by Daimler.</p> <p>Additional diagnostic features are included by a CDD-file which is available via the 'Diagnose Panel'.</p> <p>See also the documentation in the directory:</p> <p>'CANoe simulation for <project>.doc'</p>
BR222, BR205		\\cw01\root\Loc\bbuV\did35639\03_PROD_DEV\50_Tools\Simulation\Continental
BR447		\\cw01\root\Loc\bbuV\did35901\03_Prod_Dev\50_Tools\Simulation
BR213		\\cw01\root\Loc\bbuV\did35794\03_Prod_Dev\50_Tools\019_CAN_Restbussimulation
Ford B479		\\cw01\root\Loc\bbuV\did35969\03_Prod_Dev\50_Tools\Simulation
		Vector Software + Hardware
CANoe	7.2 ... 8.x	<p>Application from Vector which runs the CANoe simulation above.</p> <p>Important: It is recommended to use version 7.2 or newer with the latest Service pack.</p> <p>file://cw01/root/Loc/bbuV/did35170/CanOe/CANoe%20ServicePacks</p>
CANcase XL		<p>CAN Hardware which is connected via USB-Port to a PC.</p> <p>Hint: For Win7 (64bit) use the 64 bit driver version!</p>
CAN Card XL		<p>CAN Hardware which is connected via PC-Card (PCMCIA) to a PC. Additional a CAN-CAB is required.</p> <p>Hint: For Win7 (64bit) use the 64 bit driver version!</p>

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7.13 Diagnostics

Toolname	Version	Comment
CANoe Simulation	n.a.	The standard diagnostic tool for PF3 + PF3 NG IC is included within the CANoe simulation See above for further description.
Candela	n.a.	Database with diagnostic definitions in cdd format which is delivered by Daimler. The FR diagnostics adds CONTI internal data+commands as SRSC_Diagnostics.
BSKD7	n.a.	Windows 7 64-bit based environment for diagnostic service from Schleissheimer, CANEasy License Key required

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7.14 MRDB, Change management system

Toolname	Version	Comment
MR-DB Daimler Ford	4.52	<p>Modification request database, see [8]</p> <p>1. Start -> All Programs (Programme) -> Accessories -> Remote Desktop Connection</p> <p>2. Server name: bhss2mra (Daimler) bhss202a (Ford) (check your UID => CW01\<your UID>)</p> <p>3. Write your password (password of your windows account)</p> <p>Configuration of Outlook, Access and if necessary a local printer Please follow the instructions: Outlook => file:///\\bhss2mra\\D\$\\S2_DAG\\MRDB\\Docu\\1st step Outlook.docx Access => file:///\\bhss2mra\\D\$\\S2_DAG\\MRDB\\Docu\\2nd step Access.docx Printer => file:///\\bhss2mra\\D\$\\S2_DAG\\MRDB\\Docu\\3rd step Printer.docx</p>

7.15 MKS, git/SourceTree, PVCS (Configuration management)

Toolname	Version	Comment
PVCS	7.5.1.5	\\bbuv0dta\\DID35599\\PVCS\\Setup\\Setup.htm
MKS Integrity		http://info5.conti.de/app6/passengerCars/SW/tools/tools/C_MKS/start.htm MKS Migration BR222-GC for E007: \\cw01\\root\\Loc\\bbuv\\did35639\\14_SW\\31_SW_MKS_Migration
git/SE Toolweb		git, Conti intranet http://info5.conti.de/app6/passengerCars/SW/tools/tools/C_Git/start.htm
git/SourceTree		HowTo, FAQ, git-training for BR213 \\cw01.contiwan.com\\root\\Loc\\bbuv\\did35324\\PF3\\integration\\Documentation\\GIT
SourceTree	1.6.14	Installation from Conti Intranet \\cw01\\root\\Loc\\bbuv\\DID35005\\PUBLIC\\Tool\\GIT\\Software\\SourceTree

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7.16 Optimization of Compile Time

With the introduction of continuous integration we provide more often new software frames to our big team. The compilation and the execution of the tool chain needs more and more time.

In order to speed up the build time it is recommended to put the tool chain and the source files beyond

c:\casdev or d:\casdev

Hardware requirements:


CPU, Quad Core recommended

RAM, min. 8 GB

Hard disk, min. 700 GB and fast transfer rates

SSD, min. 128 GB for tool chain and source files

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8 References

8.1 Internal references (Conti Intranet, did shares, Sharepoint)

[1] PF1, Installation der Entwicklungsumgebung für die VGC Plattform (PF1), R.Hirschgänger

\\cw01\root\Loc\bbuv\did35270\TOOL\Anleitungen\DevEnv_1.72.doc

[2] PF2, Developer's Guide to JCP Tools, Jörg Hahne, 1.0

PVCS: /Software/Tools/DC/PF1-2/JCP_Tool_Guide/_Releases/
DC.SW.TOL.JCP_Tool_Guide /DC.SW.TOL.JCP_Tool_Guide.V01.00.rel/doc

[3] Toolguide for Daimler PF3 + PF3 NG + VS30, Ford S-Family B479

Integrity/MKS: #/id/dag_PF3/sw#tool/Toolguide/~dag_PF3.sw.tool.Toolguide

\\bhd22ygg\S2Portal_Daimler_20_Documentation\00_Common\40_Development_Environment

\\bhd22ygg\S2Portal_Ford_20_Documentation

Usage of emulators (IE-Cube, Mini-Cube) with the BR222 hardware,
Ronald Siebke, W222-SW-Tools.docx

\\cw01\root\Loc\bbuv\did35639\14_SW\30_SW_System\05_SW_Tools

[4] SE Toolweb, Intranet page from Software engineering group, K. Kiehlmann

<http://info5.conti.de/app6/passengerCars/SW/tools/start.htm>

http://info5.conti.de/app6/passengerCars/SW/tools/tools/S_DefaultTools/start.htm

http://info5.conti.de/app6/passengerCars/SW/tools/tools/S_LicenseServer/start.htm

http://info5.conti.de/app6/passengerCars/SW/tools/Tools/A_SMATE/SMATE.htm

[5] Tools CDS public drive, K. Kiehlmann


<\\bbuv020a\did35005\PUBLIC>

[6] Links to network drives for Daimler projects, R.Hirschgänger

<file:\\cw01\root\Loc\bbuv\did35270\DOKU\Links>

[7] Software Project Plan BR222, PVCS

Chap. 5.1 contains the roles in the project, the responsible and their representatives.

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/Software/Systems/DC/222IC/Series/Management/_Work#DC.SW.SYS.MAN_222IC_Series_A1/PRP

[8] EHB Kundenbereich Bereich Daimler – Leitfaden für das Modification Request Verfahren, Ralf Ziegner, ENG_ehbr03.doc,

PVCS: /Software/Common/DC/SMK/EHB/_Work#DC.SW.COM.SMK_EHB_ENG_COMMON_VarV

[9] MSVC IDE, SQE-Toolbar Help

IDE>SQE-Toolbar> Help> (MSVC Scripts IDE, QAC, CTC, Stack analysis, Multi debugging)

[10] Entwickler PC's Kundenbereich Daimler, Ausstattung mit Hard- und Software

<\\cw01\\root\\Loc\\bbuv\\did35270\\TOOL\\PC-Ausstattung-Entwickler>

[11] S2 Integration Portals:


S2 Daimler Portal

http://bhd22ygg/10_Daimler/10_Portal/

S2 Ford Portal

http://bhd22ygg/15_Ford/10_Portal/

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8.2 Wiki (PF3, BR222, BR205, Software, Hardware, JCP2011)

[50] Wiki BR222 SW Project, Daniel Warnicki

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[51] Wiki BR205 IC, Daniel Warnicki

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[51] LUPO, see Projekte KI, BR222, BR205, BR213 Entry+High, BR222 Mopf, A.Koch

<http://bhd1e69g/lupo/tiki-index.php>

[52] WIKEE, for Microcontrollers, JCP 2011, JGP2014, JCP2016;
Matthias Werner, Holger Kunst

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8.3 External references (Internet)

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DOORS, IBM rational Doors, <http://www-01.ibm.com/software/awdtools/doors/>

EasyCase/EasyCode, BKR Softwareberatung und –entwicklung GmbH. <http://www.bkr.de/>

EDL, Schleißheimer GmbH. <http://www.schleissheimer.com/>

EDL, Software + Systeme Erfurt GmbH, <http://www.sse-erfurt.info>

Freescale, i-MX, <http://www.freescale.com>

Green Hills Software Incorporated. <http://www.ghs.com/>

IMAGIX, www.imagix.com

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Perl, ActiveState, <http://www.activestate.com/>


http://www.perlmonks.org/?node_id=882541

PVCS VM, Serena Software, Incorporated, <http://www.serena.com/>

QA C, QA C++, <http://www.programmingresearch.com>

V850 uController, Renesas (formerly known as NEC), <http://www.renesas.com>

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