Release Information

COMBIVIS 6

Version 6.5.0

COMBIVIS studio 6

Version 6.5.0_3.5.12.60

Document status: Released

Change history:

Date:	Version:	Change	Author:
2013-05-21	6.2.0.0	Updated to new version	Dominik Follmann
2013-09-26	6.2.1.0	Updated to new version	Dominik Follmann
2014-02-24	6.2.2.0	Updated to new version	Dominik Follmann
2014-10-15	6.2.3.0	Updated to new version	Dominik Follmann
2015-07-13	6.3.0.0	Updated to new version	Dominik Follmann
2016-06-28	6.3.1.0	Updated to new version	Dominik Follmann
2017-07-13	6.4.0	Updated to new version	Dominik Follmann
2019-08-16	6.5.0	Updated to new version	Michael Heinze

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1 Introduction

This document gives information about the released software versions mentioned above. There are two different so-called "profiles" available.

COMBIVIS 6: Tool for parameterization and configuration of KEB devices

Registration for free
(Without registration no access to document data base)

COMBIVIS studio 6: All functionality of COMBIVIS 6 plus all features for IEC 61131-3 programming of KEB PLCs (COMBICONTROL C6), including fieldbus configuration etc.

Download demo version, for full access a license is required, which can be obtained from KEB.

Demo runs 1 hour (restart possible) and does not allow saving of boot projects.

2 Components

2.1 Packages

Packages contain plugins, libraries, devices and documentation for a certain set of features.

The following default packages are installed automatically during the first start of COMBIVIS studio 6:

Component	Functionality	Version
CODESYS Safety Extension **[only for test purposes]**	Safety editors for the handling of KEB SAFETY components	0.14.1
CONTROL PRO/ ADVANCED	Motion control libraries and devices for usage with the COMBICONTROL C6 PRO/ ADVANCED feature set.	4.5.0.0

2.2 Programming components

COMBIVIS studio 6 uses parts of the CODESYS V3 IDE of 3S – Smart Software Solutions to offer programming functionality for KEB PLCs. The underlying CODESYS Version is V3.5 SP12 Patch 6 (3.5.12.60).

2.3 KEB Device parameterization and configuration components

The following main components are included:

Component	Functionality	Version
KEB Base Plugin	Basic functionality for the parameterization of KEB devices (Device-Editor, Parameter lists etc.)	6.5.0.201
KEB COMBIVIS studio HMI Integration	Integration of the COMBIVIS studio HMI-Functionality	6.5.0.201
KEB Configurator	The KEB Configurator	6.5.0.201
KEB Customizer	KEB Framework Customization	6.5.0.201
KEB Document Database	Adds the functionality to install, open and search KEB documents with COMBIVIS.	6.5.0.201
KEB Drive file system	Access to the file system on KEB drives	6.5.0.1
KEB Energy Efficiency Declaration	Energy efficiency report generator for KEB drive controllers	6.5.0.1
KEB F5 Motor Configurator	PlugIn for configuration of F5-Inverters for certain motors	6.5.0.201
KEB Online Update	Online Update functionality	6.5.0.1
KEB Operation Mode wizard	Wizard for configuration of the operation mode of x6 devices	6.5.0.201
KEB Parameter list editor	Editor for user defined lists of parameters	6.5.0.1
KEB Parameter Model	Basic functionality to access the KEB parameter-descriptions ("Paras.xml")	6.5.0.201
KEB Parameter Search	Full text search for parameter lists and device parameters	6.5.0.1
KEB Property Editor	The Property-Editor that is used to edit parameter-values and to display parameter properties	6.5.0.201
KEB Protection wizard	Wizards for configuration of x6 protection/warning settings	6.5.0.201
KEB Safety integration	Plugin that manages the KEB-safety parameters (integration of SAFEGRID)	6.5.0.201
KEB Scope	Scope functionality	6.5.0.201
KEB Sequence Control wizards	Basic functionality that is used by wizards to realize a sequence-based operations	6.5.0.201
KEB Startup wizards (legacy)	Common frame for offline configuration wizards (pre-x6 generation)	6.5.0.201
KEB Startup wizards (x6 devices)	Common frame for configuration wizards for devices of the x6 generation	6.5.0.201
KEB Toolbox plugin	Collection of tools for other KEB plugins	6.5.0.201

KEB Utilities	Common utilities with basic functionality for COMBIVIS [studio] 6 PlugIns + Implementation of the COMBIVIS communication layer	6.5.0.201
KEB Velocity Mode wizard	Wizard for configuration of the velocity-mode for x6 devices	6.5.0.201
KEB x6 Motor Configurator	Wizards for configuration of motor-settings in x6 devices	6.5.0.201
KEB x6 Online wizards	Collection of online operation wizards for x6 devices	6.5.0.201
KEB x6 PD-Mapping wizard	Wizard for configuration of x6 devices ProcessData-mapping	6.5.0.201

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3   System requirements

3.1   Hardware

- 2 GB RAM (4GB recommended)
- 2 GHz Processor
- 2.5 GB free space on hard disk
- Screen resolution 1024 x 768 or higher recommended
- Display zoom (DPI settings): 100 % or 125 %

3.2   Operating system

COMBIVIS 6 and COMBIVIS studio 6 have been tested and released for the following operating systems:

- Microsoft Windows 7 (32Bit / 64Bit)
- Microsoft Windows 8.1 (32Bit / 64Bit)
- Microsoft Windows 10 (32Bit / 64Bit)

If you encounter any problems associated with these or other operating system versions, please contact KEB.

⚠ CAUTION	Microsoft Windows XP is no longer supported in COMBIVIS Version 6.4.0 or later!

The integrated editor for the parameterization of KEB Safety modules has been released for the following operating systems:

- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows 10

(The current Service Pack should be installed)

3.3   Microsoft .NET Framework

Microsoft .NET Framework Version 4.7.2 or higher is required. If this software is not yet available on your system, the COMBIVIS studio 6 setup will install it automatically (internet access required).

You may also download the .NET Framework installation files directly from Microsoft:

https://dotnet.microsoft.com/download

4 Change Notes

4.1 IEC 61131-3 Libraries

4.1.1 List of shipped libraries
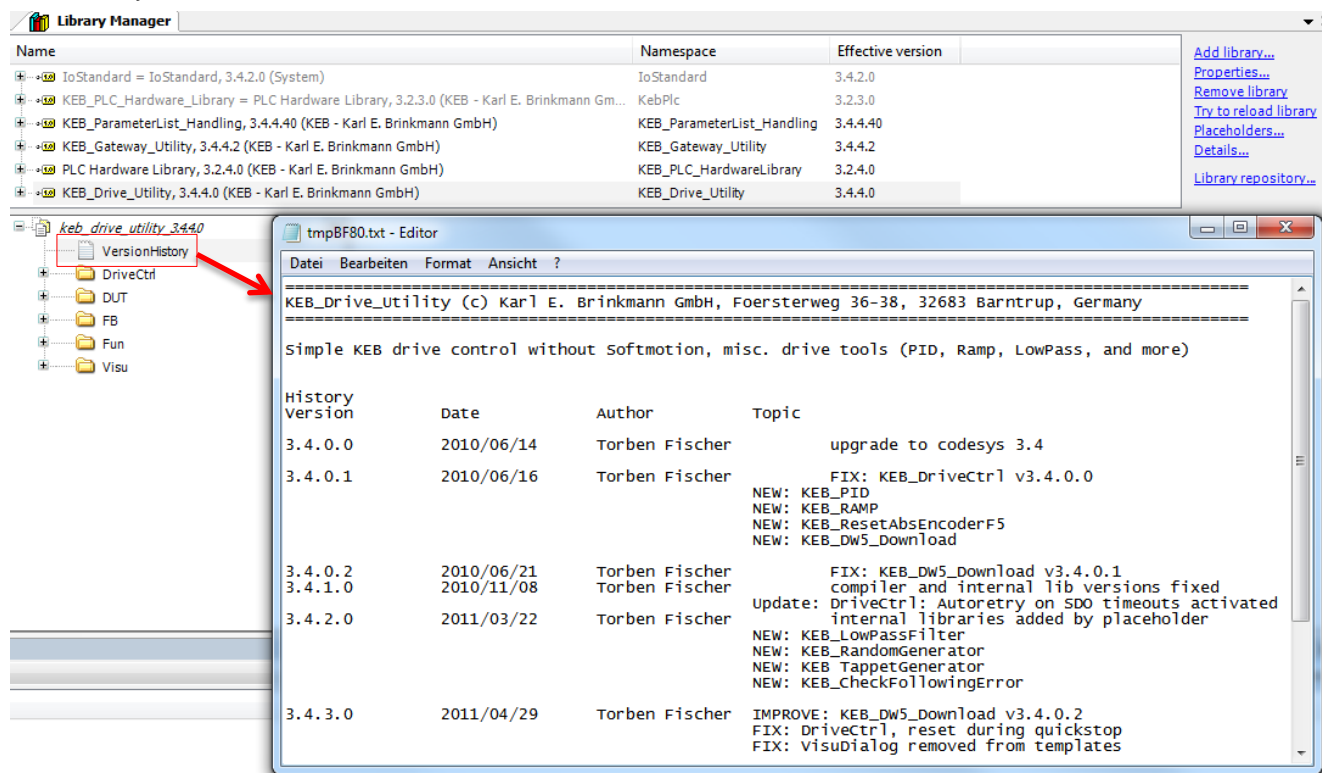
The following library-versions are delivered with this release:

Library Name	Version	Remarks
KEB_Base	3.5.12.62	Update
KEB_Base_FastStringTools	3.5.9.70	
KEB_Base_Logger	3.5.9.70	
KEB_Can_Master_Itf	3.5.9.60	
KEB_CanSlave	3.5.9.72	Update
KEB_ChannelHandler	3.5.12.60	Update
KEB_DataloggingDemo	3.5.9.70	
KEB_Din66019II	3.5.9.60	
KEB_Drive_Utility	3.5.12.60	Update
KEB_DS301_BaseItf	3.5.9.70	
KEB_Ecat_Master_Itf	3.5.12.60	Update
KEB_Email	3.5.9.70	
KEB_Fieldbus slaves	3.5.9.75	
KEB_File_Handling	3.5.12.63	Update
KEB_FTP	3.5.9.72	
KEB_Gateway_Utility	3.5.12.62	Update
KEB_HSP5_Master	3.5.12.60	Update
KEB_IEC_Slave	3.5.9.60	
KEB_License_Check	3.5.9.73	Update
KEB_List_Utility	3.5.12.43	New
KEB_Modbus	3.5.12.30	Update
KEB_ObjectDictionary	3.5.12.30	Update
KEB_P6_Hardware	3.5.9.70	
KEB_P6_Tools	3.5.9.70	
KEB_ParameterList_Handling	3.5.12.61	Update
KEB_PLC_Hardware	3.5.9.70	
KEB_RealtimeEthernet	3.5.9.70	
KEB_RioUtility	3.5.12.60	Update
KEB_SMC_Utility	3.5.9.60	
KEB_StatusCollectorH6	3.5.9.60	
KEB_WebServer	3.5.3.11	
KEB_T6_Tools	3.5.9.71	
SysTargetKeb	3.5.9.60	

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4.1.2 Library bugfixes / New features

Detailed information about changes in a library can be found in the "VersionHistory" text-document inside each library:

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4.2 Bugfixes / New features list

The following new features / bug fixes have been implemented in the Application/IDE, since the last release (Version 6.4.0):

#	Tracker	Subject
2846	Bug	Dialog buttons: Bad display on chinese systems
9324	Bug	Safe parameter editor: Wrong behaviour when more than 8 users are created
13260	Bug	HMI link which is added below a device is removed from project after "Update device"
14933	Bug	Error message during login: "Service is unknown"
16262	Bug	If the user presses F12 to view hexadecimal values in the safety editor, the values of the control board parameter are not converted
17803	Bug	Buttons on start page are not aligned when button text is too long
19924	Bug	Custom library repository for Studio lost after running basic Combivis 6
24131	Bug	Scope: Horizontal cursor snapping
24843	Bug	Scope: Missing Datapoints in Offline-Scope when using Service 21
26471	Bug	Precompiler error when passing arrays with global constant limit if attribute 'qualified_only' is set
28035	Bug	Incorrect display of brake status in the test run window
28314	Bug	CVXPL files cannot be opened directly from an email in outlook
28392	Bug	wrong option for encoder errors at the wizard
28469	Bug	[KEB SoftMotion package] "Add softmotion/light/soe axis" commands should be removed from context menu
28507	Bug	"Airspace" problem in cogging wizard
28518	Bug	EtherCAT ESI export for H6 double axis modules: Due to a missing <ChannelInfo> object only one NC Axis is added in TwinCAT
28528	Bug	When a value, that exceeds the range of the parameters data type, is entered in the property editor after confirmation of a warning an invalid value is transferred to the device
28887	Bug	Coe online value sometimes not shown + further coe online editor improvements [fixed in 3.5 sp10]
29041	Bug	Error when creating temp projects
29043	Bug	Document Database: Application crashes if database contains invalid regular expression
29113	Bug	wrong entry in library whitelist for p6
29184	Bug	Setup: "EnsureProgIsNotRunning" does not work (any more)
29187	Bug	Placeholder redirection dialog doesn't show any library
29380	Bug	Device description updates are available even after they are installed because of a wrong detection of the latest installed version
29688	Bug	EtherCAT ESI export: Handling of Array types not compliant
29744	Bug	EtherCat ESI Export: Handle Key 'ProfileNo' compliant to ETG's principles
29763	Bug	Motor wizard does not offer all available types of temperature sensors
29819	Bug	Error message when trying to preview motordata

| 29874	Bug	Data type in PD list (ESI / module) not correct ("Signed" flag is ignored)
29892	Bug	EtherCAT ESI export: Handling of attribute 'IdentificationAdo' is wrongly included in exported ESI's [6.5.0]
29938	Bug	Ethercat export: FSoE-ID in filename is not removed if a safety PDO was selected but then another type of ESI is exported [6.5.0]
29954	Bug	Configurator toolbox part no filter doesn't work if the modules part no contains ignored characters (. or -)
29969	Bug	Cogging Wizard is not usable if the drive is connected over a gateway
30084	Bug	COMBIVIS 6: License is checked regularly even if not required
30225	Bug	When selecting a pre-defined mapping while a device is online, no modifications should be made to the devices parameters until user confirmation
30306	Bug	Internal error when trying to clean the Recent Projects list while the list is empty
30575	Bug	F5 Motor wizard: overlapping UI controls if running with "125%" DPI settings
30634	Bug	Starting an identification on a device without encoder (e.g. T6 DCU) COMBIVIS becomes inoperable
31055	Bug	Parameter property editor shows wrong input range for the value slider
31278	Bug	Generating complete list does not observe exclusions for STRUCT sub parameters
31279	Bug	Generating complete list does not observe correct RO-flag
31441	Bug	DocScripting error [CDS-56294]
31583	Bug	ESI Export Safety: When Exporting an ESI with one or more Safety Modules, duplicated parameter definitions must be prevented
31586	Bug	ESI Export - MDP base device description: The slot for standard PD mapping modules is marked as mandatory but should be optional.
31645	Bug	CVsHMI integration: Creating a driver from the HMI Project reference leads to error message
31775	Bug	Installation cannot complete silent uninstallation when COMBIVIS instance is running
32154	Bug	Python scripting framework is not working any more
32165	Bug	KEB Motor Database shows message System.Collections.Generic.List1[System string]
32196	Bug	IoDrvEtherCAT: After slave disabled and master restarted, the digital IO module no longer generates outputs [CDS-62267] [SP12.60]
32251	Bug	Safety Module Wizard: In certain situations a new user is created with an invalid password
32530	Bug	EtherCAT ESI Export: Object length wrong, if set-programmable parameter is exported as simple VAR
32532	Bug	Parameters of type Unsigned Long/Word/Byte are not displayed correctly when value exceeds range of signed pendant
32625	Bug	EtherCAT ESI Export (F5 ESI file): Object length and BitOffsets wrong for STRUCT parameters 0x1C10/0x1C11/0x1C12/0x1C13/0x1018/0x1C00/0x1600/0x1A00
32804	Bug	Parameter search select wrong item in STRUCTs
32868	Bug	Identification wizard: Crash when user wants to save the motor data to the user database (using a device without brake handling)
33017	Bug	EtherCAT ESI export: Handling of Array types not compliant -> Part II
33347	Bug	cs12 (absolute torque limit) is written by the wizard upon activation to wrong values

33545	Bug	ESI Export: Add attribute ' WriteRestrictions="PreOP" ' for PDO assignment objects 'Access' element must be attached to object's datatype instead of object
33852	Bug	S-Curve Type property shows wrong/confusing values
34418	Bug	Device Scan: Lower port value ("ScanLowTcpPort") is not stored
34932	Bug	DevDesc: Incorrect German translation for "typename" and "typedescription" of EtherCAT master C6 SMART
35068	Bug	Online update: Size of removed documents is displayed without unit
35156	Bug	Invisible sub elements for STRUCT parameters are not excluded from EtherCAT ESI
35165	Bug	Datatype BOOL (BitSize 1) is missing in ESI file
35166	Bug	ESI Export: Set specific (non-KEB) datatypes and Bitsizes for well-known objects
286	Request	Online-Update: Display size of download-files
4308	Request	Parameter list: Time stamps for last upload / last download / last modification
5177	Request	There should be only one place to edit the device scan settings
8409	Request	Simplify search for parameterizable KEB devices by IP address
8685	Request	Parameter backup: Optionally save upload in separate list per each device
9107	Request	Parameter list conversion: Reduce amount of messages (use message details instead)
9326	Request	Safe parameter editor: Add safety module address to propose export file name
13411	Request	Implement KEB download server for device descriptions and libraries
16480	Request	New motor parameterization wizard should allow input of DL3 type plate values
16897	Request	Series-dependent display of password levels
17965	Request	SM: SM3_Drive_Etc remove timeout on startup (waiting for operational) [SM-32]
19355	Request	An imported parameter list should automatically be moved to the recommended position
19970	Request	Parameter list: "Export" commands for .dw5/.cvxpl/.wr5 in toolbar and/or context menu
21525	Request	KEB FTP should be easier to connect to the drive
22363	Request	Wizard "Basic settings": Add device system time display
22725	Request	Easy direct connection to F6 Ethernet Operator
24135	Request	Add parameter lists via Drag/Drop from the windows explorer
24840	Request	Can pd wizard: Add "install to device repository" button
24841	Request	Ethercat pd wizard: Devices should be installed to active repository
24855	Request	Testrun Wizard: Changing the Mode of Operation or toggling the display of the state machine should not set the wizards window to floating
25300	Request	AP: Create interface to allow plugins to override/replace the "Outdated Device Description" warning) [CDS-47338] [SP10]
25937	Request	When COMBIVIS is opened it should check if it is in visible area
28150	Request	Show *** instead of value, when entering a device password
28373	Request	New Option: Specify number of Log elements to collect during read out from the safety module
28424	Request	Pro/Advance (Softmotion) Drive-ESIs and drivers for use with Safetymodules
28467	Request	Remove unused topics from online help

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28547	Request	Automatically select the correct value for ec28 revolution range
28573	Request	control pro/advanced package: Create S6A pro/advanced devdesc
28574	Request	Create generic DevDesc for S6-A
28582	Request	Delay the check for online update until a possible package installation is completed
28722	Request	Ethercat pd wizard: Successful installation to Device repository should not be confirmed with "File saved successfully"
29046	Request	Create a new template for EtherCAT exports for x6-P devices
29085	Request	Drop CODESYS Converter
29114	Request	Setup: Redistributables should be installed with passive UI instead of no UI
29120	Request	Disable web-based online help
29122	Request	Disable Notification Center
29169	Request	Online Update: Last update check date should be updated if user confirms "Display available updates now?" with "No"
29747	Request	PropertyEditor: Keep display settings as selected when changing selected parameter
29760	Request	Parameter list: Export in file format for TwinCAT CoE StartUp command list
29934	Request	Ethercat export: Put the module ID of the safety module ident to the exported Revision Number [6.5.0]
29945	Request	Hotfixes should be implemented and distributed as Packages [6.5.0]
29997	Request	Fieldbus wizard: Mappable parameters should be displayed next to the mapping panel
30081	Request	Sampleproject "Sample_C6C2_PowerlinkSlave": Missleading configuration of the setcom etc master in side the gateway programm - conflict in nodeadresses
30185	Request	Review identification mode setting of the wizard
30198	Request	EtherCAT ESI Export: Description with FSoE mapping should lead to a warning when exporting as external file
30227	Request	ESI Export: Exporting MDP modules into external file option should create a file with multiple modules
30249	Request	Homing wizard: Display parameter "co02: velocity shift factor"
30394	Request	Rework H6 PRO driver to handle axis B PDO correctly
31189	Request	Document Database: Include "TechInfo" documents
31206	Request	New feature: "Energy efficiency declaration generator"
31344	Request	Setup: AP Package Manager should be replaced by selfmade package uninstaller
31395	Request	Remove unreleased compiler versions from list
31509	Request	Add new template devdesc for h6 DAM with new productcode 0x101000
31559	Request	Document Database: Replace "PDF X-Change Viewer" by selfmade "KEB PDF-Viewer"
32143	Request	Label "Username:" should be changed to "Company name:" in registration dialog and on KEB homepage
32225	Request	Display new KEB states in Testrun Wizard
32283	Request	Identification wizard should display the selected motor type (ASM/SM)
32328	Request	Proxy settings configured in "KEB Online Update" options should also apply to Library / Devices download
32544	Request	PD Mapping Wizard: If Profinet is selected there must a hint that a Power-On Reset is

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|		required to activate changed PD mapping
32621	Request	EtherCAT ESI Export: Rework template for x6-K Slave: Enlarge Mailbox size to 256 Bytes
32887	Request	ESI export: Ensure unique names for sub parameters
32930	Request	FTP: Split the FTP and the recipe management
33021	Request	Add sample for cmp trace
33161	Request	Enable the KEB FTP related commands in the default menus of COMBIVIS
33352	Request	pro advanced package: remove product id check for h6 DAM
33357	Request	Add appropriate icons for the recipe related codesys commands
33404	Request	Integrate softmotion package 4.5.0.0
33435	Request	Focus dialog inputs for passwords / logins automatically
33437	Request	Option to change the default DC-Sync in the Esi Export
33797	Request	Update .NET Framework version to 4.7.2
33934	Request	Make online update ready for devices with "revision code"
34382	Request	FTP: When sending a local file to the remote file system set the date to the files modified date instead of UTCnow
34424	Request	Hide SoftMotion Slots for EtherCAT Slaves, which are placed under a non-SoftMotion Control
34429	Request	FTP: Prevent changing the name of a file to the same name
34433	Request	FTP: Prevent rereading the file system after each file if more than one file is transmitted
34434	Request	FTP: Add user interaction before overwriting a file both local and remote
34539	Request	Automatic installation of FTDI USB/Serial converter
34725	Request	FTP: Determine the ID of a recipe from the file or object name instead of defaulting to the next free one (Download as a recipe command)
31652	Main Job	Integrate CODESYS Safety package V0.14.1
32304	Main Job	Integrate CODESYS Automation Platform V3.5 SP12 Patch6

4.3   Installation of clean device / library repository

With version 6.4.0 the device and library repositories shipped with COMBIVIS studio 6 have been reworked and cleaned. Several obsolete or unsupported components have been removed from the installation to increase clarity and usability. If a previous installation of COMBIVIS studio 6 has been present on the computer, the old repository contents will remain in the repository directory anyway, to ensure backwards compatibility. To take advantage of the reduced and simplified repositories, even if a previous installation has been installed before, the user can advise the COMBIVIS studio 6 installer to automatically clean up the existing repositories:
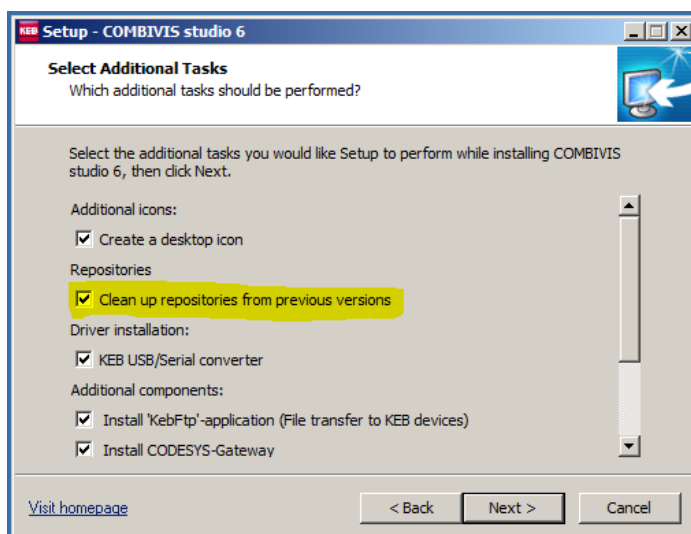
If this option is selected, the old contents are not deleted form the disk, but only moved to a backup directory. If required (e.g. because a certain 3rd party component or a special, user-defined EtherCAT process data mapping was included in the old repository), it is possible to recover the old contents by adding this backup directory as an additional repository location.

(Menu: "Tools" → "Device repository" or "Library repository" → "Edit locations" → "Add"):
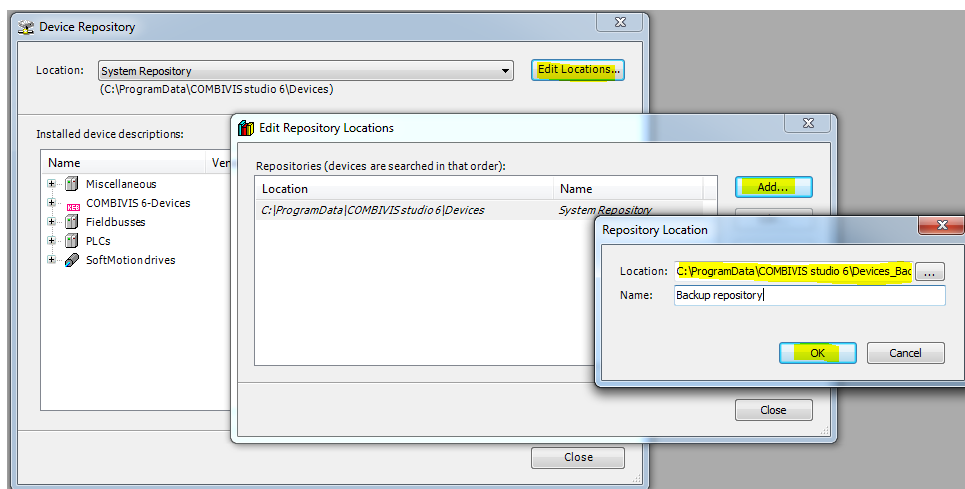
Default repository backup locations:

- Device repository: *C:\ProgramData\COMBIVIS studio 6\Devices_Backup*
- Library repository: *C:\ProgramData\COMBIVIS studio 6\Managed Libraries_Backup*

Note: The recommended procedure to ensure compatibility of projects also for newer IDE versions is always to generate a *project archive*. This archive file automatically contains all components (especially devices and libraries) used in the project and is therefore the best way to migrate a project to a new version of COMBIVIS studio.

5   Known restrictions

5.1   HSP5

KEB High speed serial protocol for F5 (HSP5) is not supported by COMBIVIS 6! Users who need to connect to a device via HSP5 are recommended to use the KEB USB Serial Converter (part-no.: *00.58.060-0040*), which converts HSP5 to the protocol DIN66019II (serial) which is supported by COMBIVIS 6.

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6 Registration / Licensing

6.1 COMBIVIS 6 customer registration

Note: This chapter explains the non-mandatory registration procedure for the base-version COMBIVIS 6. Licensing of COMBIVIS studio 6 is described in the next chapter.

The registration of COMBIVIS 6 is optional and free of charge. It replaces the string "unregistered demo" in the applications title bar with your company name and activates some additional functionality in COMBIVIS (e.g. KEB document database).

To register your COMBIVIS 6 version, please use the menu command "Help" → "Free customer registration" or click "Free customer registration" on the COMBIVIS start page.

As soon as your data has been verified, you will receive the data to activate your personal registration.

6.2 COMBIVIS studio 6 licensing

A license for COMBIVIS studio 6 must be purchased from KEB and is **required** to use the full functionality of COMBIVIS studio 6.

The COMBIVIS studio 6 licenses are bound to the target computer. The easiest way to collect the information required for a license request is via the COMBIVIS studio 6 menu

("Help" → "License information"):
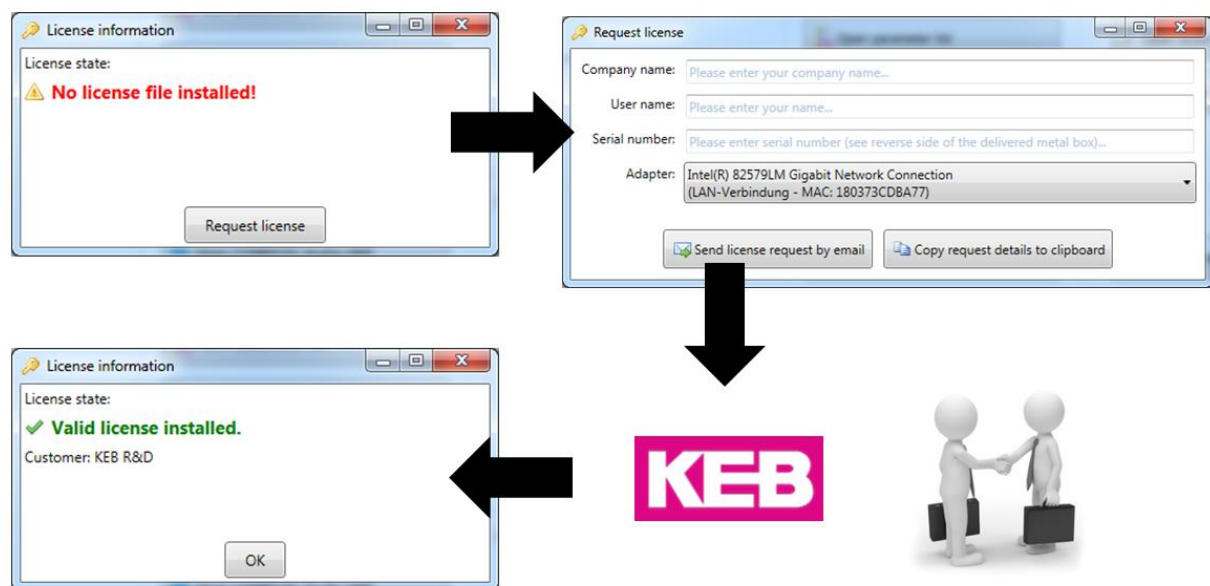
To request a license, please fill in the required fields in the generated mail and send it to licence@keb.de .

KEB will send you the relevant information to activate the full functionality of your KEB COMBIVIS studio 6 installation.

7   Legal terms

By using COMBIVIS 6 and/or COMBIVIS studio 6 you agree to KEB's GENERAL TERMS OF CONTRACT
FOR THE CESSION OF SOFTWARE LICENSE PRODUCTS, which can be found on the KEB website
(www.keb.de) and in your local COMBIVIS 6 installation directory.

COMBIVIS 6 / COMBIVIS studio 6 incorporates 3rd party software components, which bring their own license
terms. Information about these components and the corresponding license terms can be found in the file
`ThirdPartyLicenses\EndUserInformation_OpenSource_CVs6.pdf` located in your COMBIVIS 6
installation directory.

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