



COPADATA
do it your way

zenon manual

Installation and updates

v.7.60





©2017 Ing. Punzenberger COPA-DATA GmbH

All rights reserved.

Distribution and/or reproduction of this document or parts thereof in any form are permitted solely with the written permission of the company COPA-DATA. Technical data is only used for product description and are not guaranteed qualities in the legal sense. Subject to change, technical or otherwise.

Contents

1. Welcome to COPA-DATA help	7
2. Installation and updates	7
3. zenon Standard installation	8
3.1 Start screen	9
3.2 zenon Standard installation	11
3.3 Selection of the edition - type of installation (user-defined installation)	12
3.4 Installation and finishing	17
4. Silent installation and uninstallation	19
5. Error treatment	23
6. Windows Updates	24
7. Virus scan.....	24
8. File Structure.....	24
9. Free ports.....	26
10. Installation of an older version after installation of zenon 7.60 (64-bit operating system).....	28
11. Installation of version 7.x and version 6.51 on the same computer	29
12. System requirements.....	29
12.1 Server and desktop operating systems	31
12.2 Server and desktop operating systems up to Windows 8.1	32
12.3 Windows CE and Windows Embedded	33
12.4 Windows 10	34
12.5 System requirements when using DirectX	34
12.6 Additional software	35
12.7 User authorization	36
12.8 Hardware requirements.....	36
12.8.1 Editor	37

12.8.2	Runtime	37
12.8.3	Runtime under Windows Embedded Standard	39
12.8.4	Runtime for Windows CE.....	39
12.8.5	Web Server	40
12.8.6	Web Client	41
13.	Paths for installation and operation	41
14.	zenon for Windows CE	45
14.1	CE - versions and supported processors	47
14.2	System files	47
14.3	Update of the Windows CE Runtime	48
14.4	Manual installation and Runtime-update	56
14.5	Pocket PCs (PDA - Handheld PC)	57
14.6	Error handling	57
15.	zenon Logic Runtime for Windows CE.....	58
16.	zenon Web Server	59
17.	zenon Web Client	60
18.	Updates (Build Setups)	61
19.	FAQ.....	63
20.	Technical support	64
21.	Open Source GPL/Mozilla Licenses	64
21.1	GNU GENERAL PUBLIC LICENSE (GPL)	65
21.1.1	TERMS AND CONDITIONS.....	66
21.2	MOZILLA PUBLIC LICENSE	75
21.2.1	Definitions	76
21.2.2	Source Code License.....	77
21.2.3	Distribution Obligations	78
21.2.4	Inability to Comply Due to Statute or Regulation	80
21.2.5	Application of this License.....	80
21.2.6	Versions of the License.....	81
21.2.7	Disclaimer of Warranty.....	81

21.2.8	Termination	82
21.2.9	Limitation of Liability	82
21.2.10	U.S. Government End Users	83
21.2.11	Miscellaneous.....	83
21.2.12	Responsibility for Claims	83
21.2.13	Multiple-Licensed Code	84
21.2.14	EXHIBIT A - Mozilla Public License	84
21.3	GNU LESSER GENERAL PUBLIC LICENSE	84
21.3.1	Additional Definitions.....	85
21.3.2	Exception to Section 3 of the GNU GPL.....	85
21.3.3	Conveying Modified Versions.....	85
21.3.4	Object Code Incorporating Material from Library Header Files	86
21.3.5	Combined Works	86
21.3.6	Combined Libraries.....	87
21.3.7	Revised Versions of the GNU Lesser General Public License.....	87
22.	Open Source licences for several features	88
22.1	OpenSSL	88
22.2	NetSNMP.....	91
22.2.1	CMU/UCD copyright notice: (BSD like).....	91
22.2.2	Networks Associates Technology, Inc copyright notice	91
22.2.3	Cambridge Broadband Ltd. copyright notice.....	92
22.2.4	Sun Microsystems, Inc. copyright notice	93
22.2.5	Sparta, Inc copyright notice (BSD).....	94
22.2.6	Cisco/BUTNIC copyright notice (BSD).....	95
22.2.7	Fabasoft R&D Software GmbH & Co KG copyright notice	96
22.2.8	Apple Inc. copyright notice (BSD).....	97
22.2.9	ScienceLogic, LLC copyright notice (BSD)	97
22.3	MIMEMail.....	98
22.4	ANTLRv3	99
22.5	Bootstrap, jQuery UI, jQuery, Newtonsoft.Json.....	100
22.6	Extended WPF Toolkit, WPF Application Framework (WAF)	100
22.7	Nlog, NLog.Windows.Forms.....	102
22.8	WebGrease, Owin	102
22.8.1	Definitions	103
22.8.2	Grant of Copyright License	104

22.8.3	Grant of Patent License	104
22.8.4	Redistribution	104
22.8.5	Submission of Contributions	105
22.8.6	Trademarks.....	105
22.8.7	Disclaimer of Warranty.....	105
22.8.8	Limitation of Liability	105
22.8.9	Accepting Warranty or Additional Liability	106
22.9	jQuery.SVG	106
22.10	QrCode.Net	106
22.11	libSRTP.....	107
22.12	Speex.....	108
22.13	PortAudio	109
22.14	Alaw/Ulaw Converter.....	109
22.15	GSM Codec 06.10.....	110
22.16	iLBC Codec.....	110
22.17	DWF Toolkit.....	111
22.18	Helix Toolkit	114
22.19	Open CASCADE Technology	115
22.20	SharpDX.....	125
22.21	GMap.NET	126
22.22	System.Data.SQLite Copyright	126
22.23	NLog 4.4.0 License.....	128
22.24	SharpDevelop 5.1.0	128
22.25	Mono.AddIns 1.3.....	129
22.26	Mono.Cecil 0.9.6.4	129
22.27	WPF Application Framework (WAF) 3.2.0.....	130

1. Welcome to COPA-DATA help

ZENON VIDEO-TUTORIALS

You can find practical examples for project configuration with zenon in our YouTube channel (https://www.copadata.com/tutorial_menu). The tutorials are grouped according to topics and give an initial insight into working with different zenon modules. All tutorials are available in English.

GENERAL HELP

If you cannot find any information you require in this help chapter or can think of anything that you would like added, please send an email to documentation@copadata.com (<mailto:documentation@copadata.com>).

PROJECT SUPPORT

You can receive support for any real project you may have from our Support Team, who you can contact via email at support@copadata.com (<mailto:support@copadata.com>).

LICENSES AND MODULES

If you find that you need other modules or licenses, our staff will be happy to help you. Email sales@copadata.com (<mailto:sales@copadata.com>).

2. Installation and updates

During the first installation of zenon, the installation routine automatically starts and leads you through the whole installation process. If the autostart from media feature has been deactivated, start the installation by executing **START.exe** in the root directory of your zenon installation medium.

Notes for the installation:

- ▶ Before installing zenon:
 - All current operating system updates must be installed
Note: If you always use the latest version (Service Pack) of your operating system, you not only avoid compatibility issues but also security problems.
 - There must not be a restart pending
- ▶ With Windows 7 Embedded Standard, zenon is installed using the normal installation routine. You can find the hardware requirements in the Runtime under Windows Embedded Standard (on page 39) chapter.
- ▶ zenon for Windows CE is installed using the normal installation routine. Version 7.20 of the files for Windows CE are installed. You can find details in chapter Runtime for Windows CE (on page 45).
- ▶ During the installation of zenon, the **COPA-DATA Multiple Network Protocol Driver (cdprotdrv.sys)** is installed. To start the driver, the operating system must be restarted after installation.

Attention

*From Version 7.10, zenon cannot be installed on systems on which the **Microsoft SQL Server Data Engine (MSDE)** is already installed. This affects all systems on which zenon 6.01 or 6.20 has been installed.*



Information

If you receive an error message during installation stating that a service cannot be started, then:

first reboot the computer

then start the zenon setup again

3. zenon Standard installation

zenon will automatically start its installation routine and guide you through the whole installation process when the zenon installation medium is connected. Alternatively, it is possible to start the installation by executing **START.exe** in the root directory of your zenon installation medium.

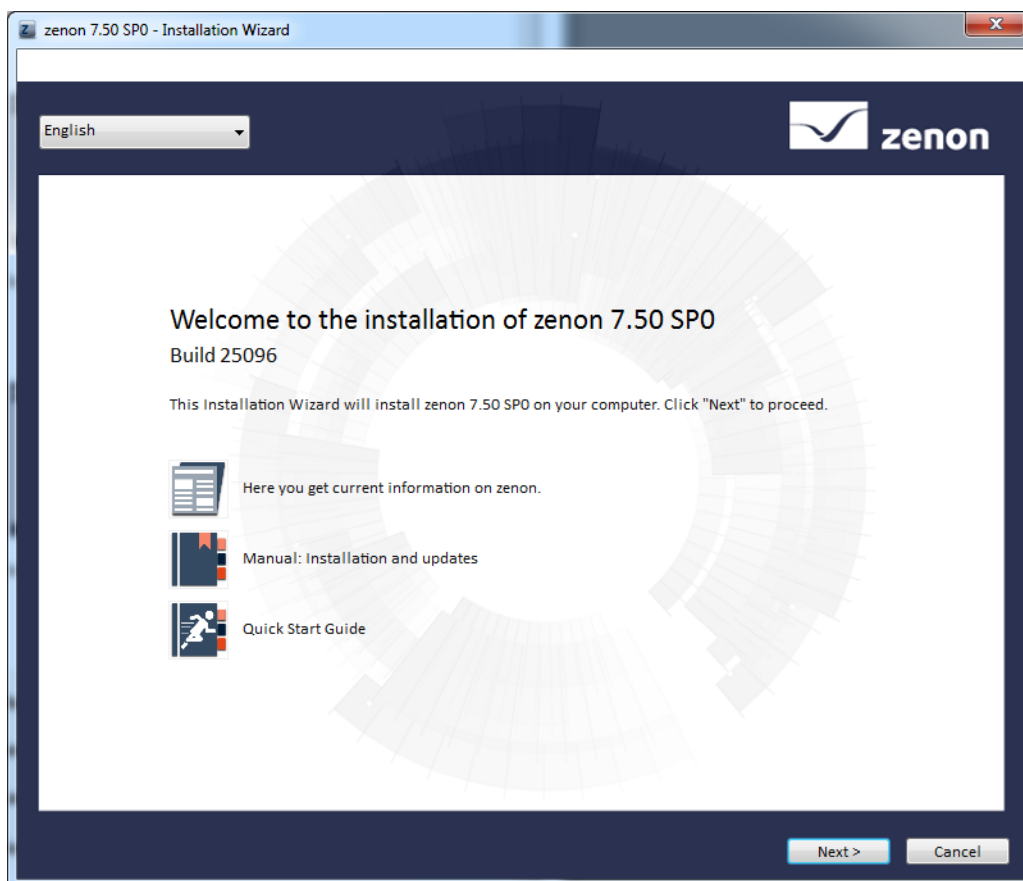
Administrator rights are required for the installation process on the computer!

Attention

The computer is automatically restarted during installation if necessary. Close all other programs before installation.

3.1 Start screen

You can see the version to be installed including the build number on the start screen.



1. From the drop-down list at the top left, select the desired language for the installation. The following languages are available for the installation:
 - German
 - English
 - French
 - Italian

- Spanish

2. You can find information on zenon by clicking on the desired button:



Opens an animation with current information on the zenon version.



Opens the zenon help for installation as a PDF.



Opens the quick-start guide in PDF format with tips for the first project configuration steps in zenon.

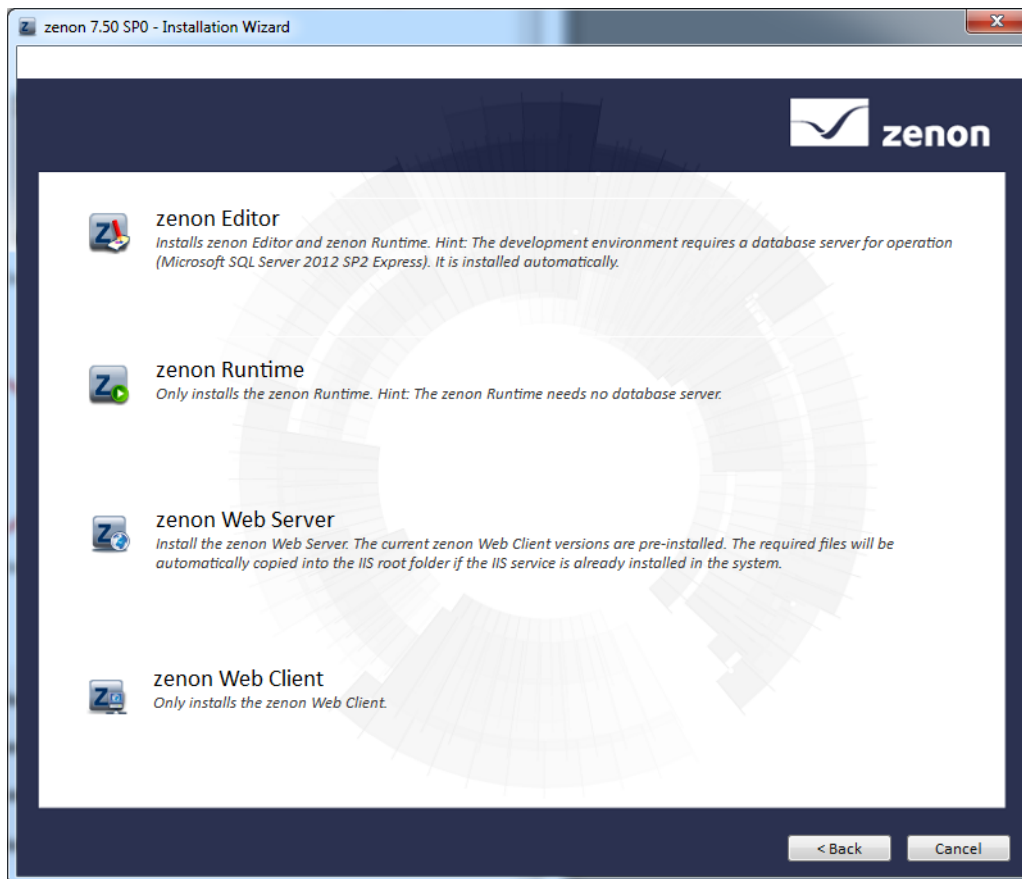
Attention: This page cannot be shown again later. If you need information on the current version or need the manual for installation, open it now.

3. Clicking on the **Next** button opens the window with the license conditions.
4. Confirm the license conditions by activating the corresponding checkbox.
5. You can also print the license conditions out by clicking on the **Print** button.
6. Clicking on the **Next** button opens the window to select the desired product.

Note: The Next button is only available if you have consented to the conditions of the license agreement by clicking on the option field.

3.2 zenon Standard installation

Select the desired product. It is only possible to select products that have not already been installed. If you want to reinstall something, you must first uninstall it using the control panel.



- **zenon Editor:**
Installs the zenon Editor and zenon Runtime. Other components required for the Editor are also installed together automatically.
- **zenon Runtime:**
Installs the zenon Runtime only.
- **zenon Web Server:**
Installs zenon Web Server and the respective current zenon Web Clients.
- **zenon Web Client:**
Installs the zenon Web Client only.



Information

*The installation starts immediately when **zenon Web Server** or **zenon Web Client** is selected.*

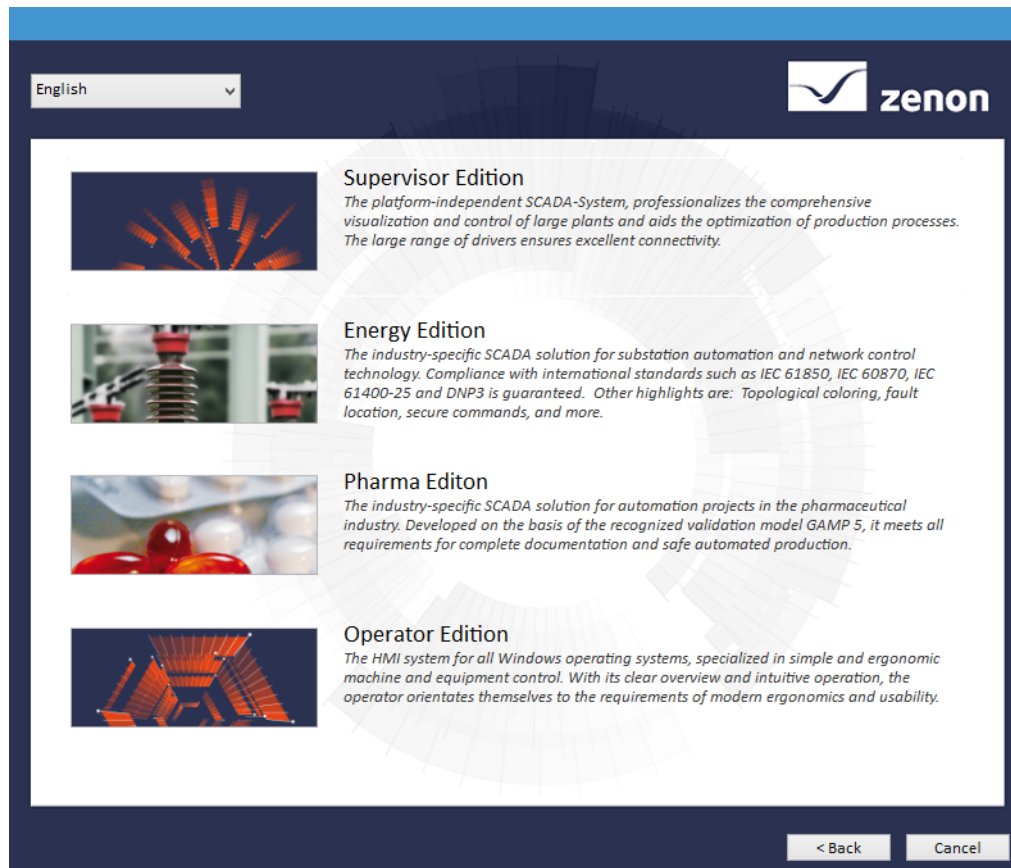
*The dialog to select the edition opens when **zenon Editor** or **zenon Runtime** is selected.*

3.3 Selection of the edition - type of installation (user-defined installation)

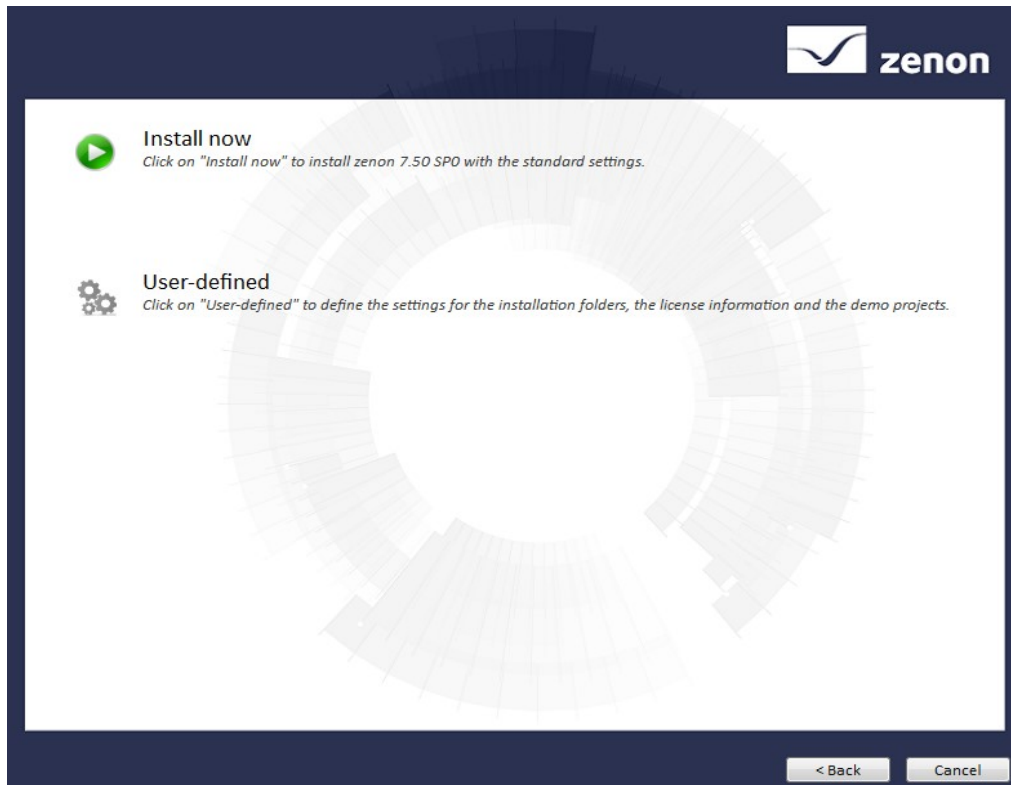
By clicking on the desired product, you open the window to select the edition.

1. Select the licensed version:
 - **zenon Supervisor Edition**
 - **zenon Energy Edition**
 - **zenon Pharma Edition**

- **zenon Operator Edition**



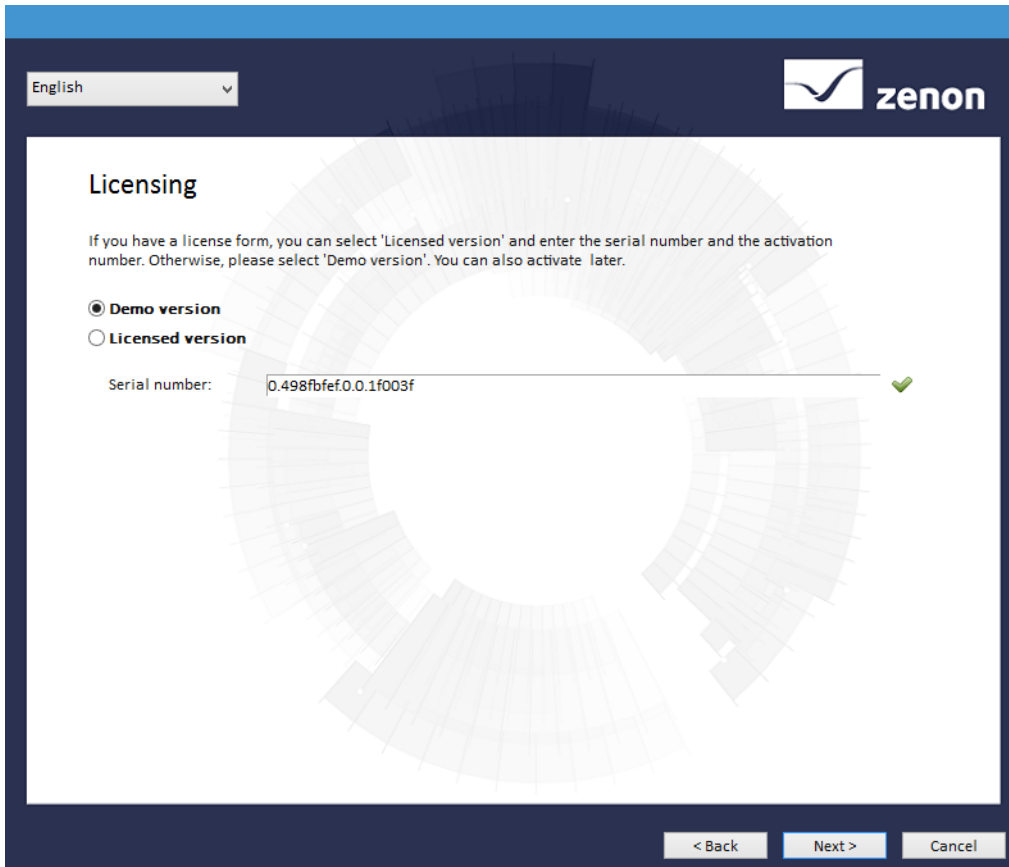
2. Click on the desired edition to open the window to select the type of installation:



- **Install now:**
Starts the installation of the selected edition.
The computer may be restarted automatically during installation. Follow the instructions of the wizard
- **User defined:**
Opens other windows for individual installation.
You can enter an existing serial number here and change the installation path.

USER-DEFINED INSTALLATION

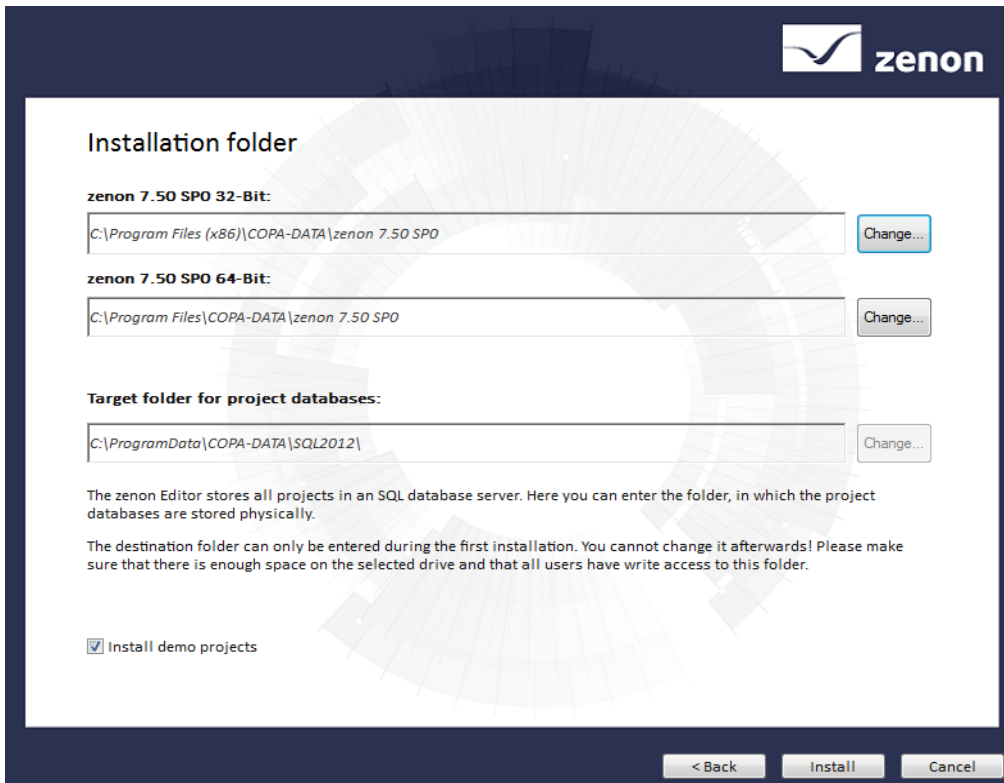
1. If you select **user-defined** during installation, the window to enter the serial number is opened:



The screenshot shows the 'Licensing' window of the Zenon software. At the top left, there is a language dropdown menu set to 'English'. The Zenon logo is in the top right corner. The main content area has the title 'Licensing' and a paragraph: 'If you have a license form, you can select 'Licensed version' and enter the serial number and the activation number. Otherwise, please select 'Demo version'. You can also activate later.' Below this, there are two radio buttons: 'Demo version' (which is selected) and 'Licensed version'. Under the 'Licensed version' option, there is a text field labeled 'Serial number:' containing the value '0.498fbfef.0.0.1f003f'. A green checkmark is visible to the right of the text field. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- Select **demo version** if you do not have a license.
- If you already have a license, enter the serial number and activation number.
Note: The validity of the serial number is checked. If the license is valid, a grüner Haken is shown next to the input field.

2. Clicking on the **Next** button opens the window to amend the installation folders.



Installation folder

zenon 7.50 SPO 32-Bit:
 C:\Program Files (x86)\COPA-DATA\zenon 7.50 SPO Change...

zenon 7.50 SPO 64-Bit:
 C:\Program Files\COPA-DATA\zenon 7.50 SPO Change...

Target folder for project databases:
 C:\ProgramData\COPA-DATA\SQL2012\ Change...

The zenon Editor stores all projects in an SQL database server. Here you can enter the folder, in which the project databases are stored physically.

The destination folder can only be entered during the first installation. You cannot change it afterwards! Please make sure that there is enough space on the selected drive and that all users have write access to this folder.

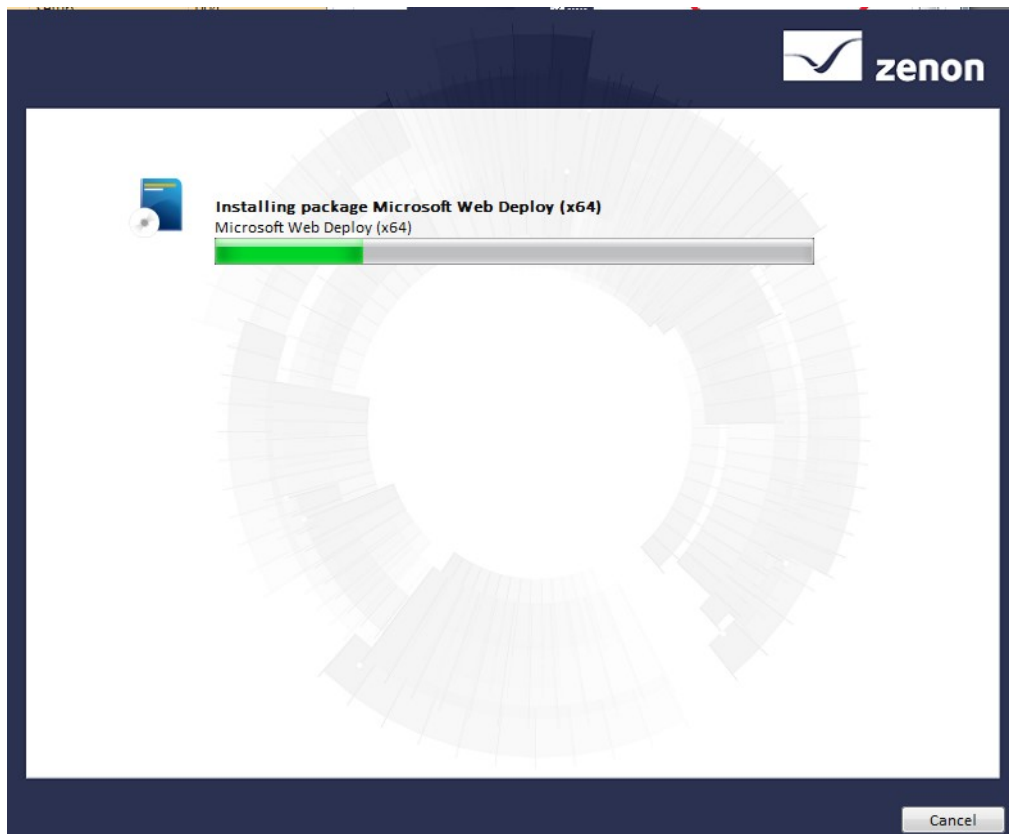
☒ Install demo projects

< Back Install Cancel

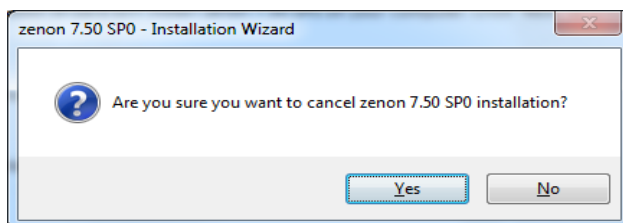
- If necessary, define your individual folder for the 32-bit version and the 64-bit version of the program.
To do this, click on the **Change...** button
 - Define the target folder for the project database.
Note: This folder cannot be changed afterwards. The save location selected here must have sufficient memory space. All users need write authorization.
 - If you would also like to install the demo project, activate the corresponding checkbox.
The demo project provides examples of possible usage scenarios in different industries.
3. Click on the **Install** button.
Installation of the selected edition is started.
The computer may be restarted automatically during installation. Follow the instructions of the wizard

3.4 Installation and finishing

You are informed of the respective installation progress and the current installation stage in the progress bar.

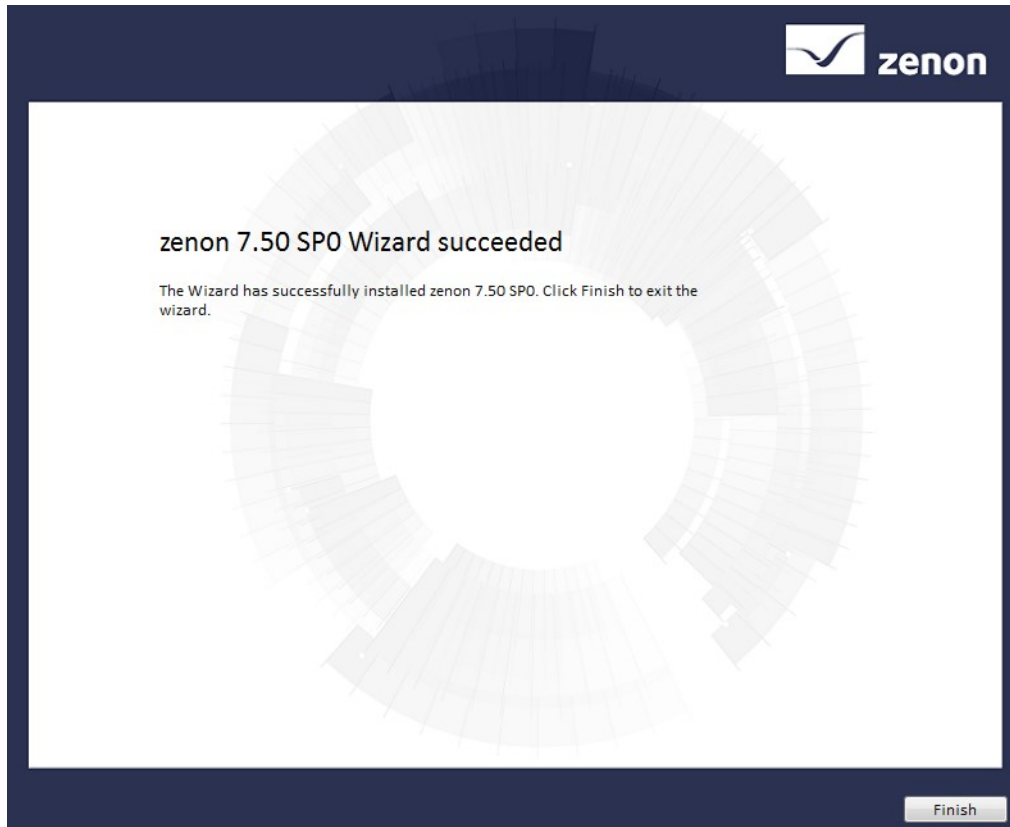


- You can cancel the installation by clicking on the **Abbrechen** button. You are requested to confirm this before canceling the installation.



Parameters	Description
Yes	The installation is canceled. The dialog for an invalid installation is shown.
No	The installation is continued.

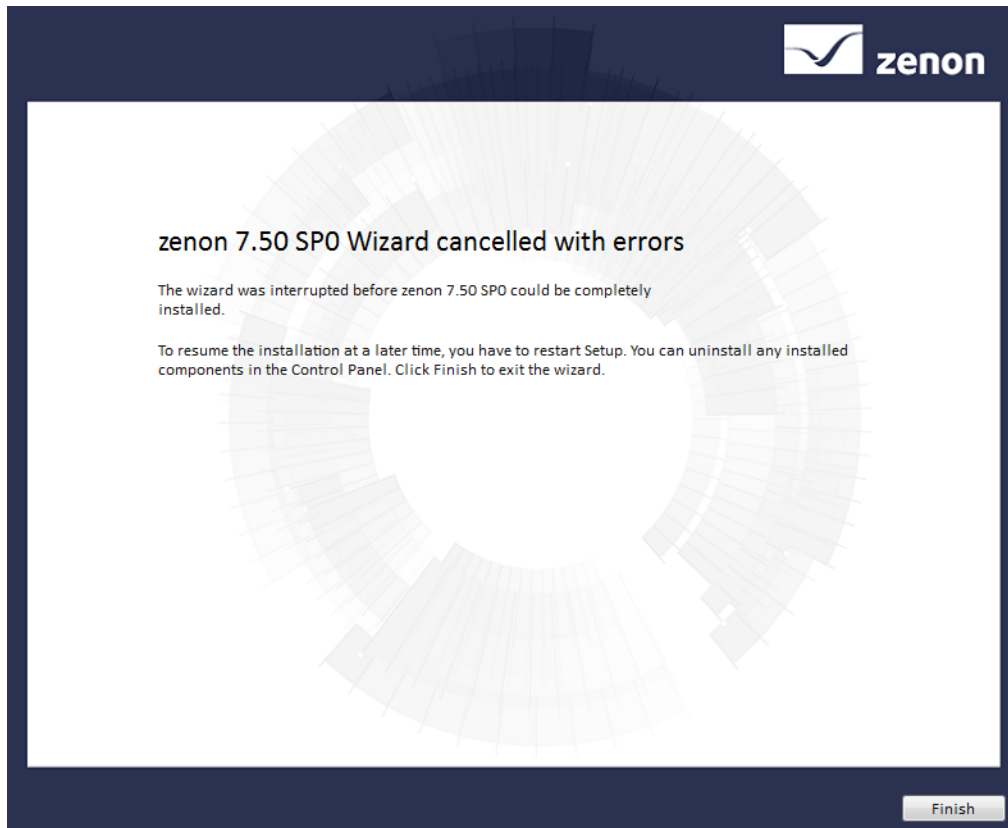
The installation process may take some time. Do not turn your computer off in this time. Please also ensure that your computer is not automatically put into sleep mode.

FINISHED

You are informed of successful installation with a dialog.

- ▶ Click on the **Fertig stellen** button to complete installation.
- ▶ Restart the setup to install further products, such as the **zenon Web Server**.

Canceled or incorrect installation



If an error occurs during installation or the installation was canceled, this is shown in a dialog.

Click on the **Finish** button to exit setup.

4. Silent installation and uninstallation

zenon can also be installed and uninstalled silently (Silent Installation) and (Silent Remove).



Information

Silent installation and uninstallation is possible for all zenon versions from 7.10.

SILENT INSTALLATION FROM ZENON 7.20

Syntax: **scada.exe /silent /language:[number] CDPROP_EDITION=[edition] CDPROP_TYPE=[type] ISFeatureInstall=[features]**

Parameters	Arguments	Description
scada.exe		Call-up of the installation.
/silent		Silent installation.
/language:	1031: German 1033: English 1034: Spanish 1036: French 1040: Italian	Selection of the language. Example: English: language:1033
CDPROP_EDITION=	ENERGY SUPERVISOR OPERATOR PHARMA SCIENCE	Selection of the edition. Example: Energy Edition: CDPROP_EDITION=ENERGY Is not needed for zenon Web Server and zenon Web Client.
CDPROP_TYPE=	ED: Editor and Runtime RT: Runtime	Selection of Editor or Runtime. Example: Runtime: CDPROP_TYPE=RT Is not needed for zenon Web Server and zenon Web Client.
ISFeatureInstall=	PREREQUISITES_EDITOR,SCADA: Editor PREREQUISITES_RUNTIME,SCADA: Runtime PREREQUISITES_WEBSERVER,WEBSERVER: Web Server PREREQUISITES_WEBCLIENT,WEBCLIENT: Web Client	Selection of features to be installed. Example: zenon Editor: ISFeatureInstall=PREREQUISITES_EDITOR,SCADA

Examples:

- ▶ Installation of Editor, German, Energy Edition:
scada.exe /silent /language:1031 CDPROP_EDITION=ENERGY CDPROP_TYPE=ED ISFeatureInstall=PREREQUISITES_EDITOR,SCADA
- ▶ Installation of Runtime, English, Supervisor Edition:
scada.exe /silent /language:1033 CDPROP_EDITION=SUPERVISOR CDPROP_TYPE=RT ISFeatureInstall=PREREQUISITES_RUNTIME,SCADA
- ▶ Installation of zenon Web Server, German:
scada.exe /silent /language:1031 ISFeatureInstall=PREREQUISITES_WEBSERVER,WEBSERVER

- Installation of zenon Web Client, German:

scada.exe /silent /language:1031 ISFeatureInstall=PREREQUISITES_WEBCLIENT,WEBCLIENT

SILENT UNINSTALLATION FROM ZENON 7.20

WITHOUT LOG FILE

Path: **C:\Program Files (x86)\InstallShield Installation Information\{9BE6EDFE-3465-486F-87EE-1C439DE5EA9A}**

Syntax: **SCADA.exe /remove /silent**

WITH LOG FILE

Path: **C:\Program Files (x86)\InstallShield Installation Information\{9BE6EDFE-3465-486F-87EE-1C439DE5EA9A}**

Syntax: **SCADA.exe /remove /silent /log"%TEMP%"**

SILENT INSTALLATION OF ZENON 7.10 AND 7.11

Syntax: **scada.exe /silent /language:[number] CDPROP_EDITION=[edition] CDPROP_TYPE=[type] ISFeatureInstall=[features]**

Parameters	Arguments	Description
scada.exe		Call-up of the installation.
/silent		Silent installation.
/language:	1031 : German 1033 : English 1034 : Spanish 1036 : French 1040 : Italian	Selection of the language. Example: English: language:1033
CDPROP_EDITION=	ENERGY SUPERVISOR OPERATOR PHARMA	Selection of the edition. Example: Energy Edition: CDPROP_EDITION=ENERGY Is not needed for zenon Web Server.
CDPROP_TYPE=	ED : Editor and Runtime RT : Runtime	Selection of Editor or Runtime. Example: Runtime:

		CDPROP_TYPE=RT Is not needed for zenon Web Server.
ISFeatureInstall=	WIBU,SCADA,MS,MSALL,SQL,COMMON: Editor WIBU,SCADA,MS,MSALL,COMMON: Runtime WIBU,WS,MSALL,COMMON: Web Server	Selection of features to be installed. Example: zenon Editor: ISFeatureInstall=WIBU,SCADA,MS,MSALL,SQL,COMMON

Examples:

- ▶ Installation of Editor, German, Energy Edition:
scada.exe /silent /language:1031 CDPROP_EDITION=ENERGY CDPROP_TYPE=ED ISFeatureInstall=WIBU,SCADA,MS,MSALL,SQL,COMMON
- ▶ Installation of Runtime, English, Supervisor Edition:
scada.exe /silent /language:1033 CDPROP_EDITION=SUPERVISOR CDPROP_TYPE=RT ISFeatureInstall=WIBU,SCADA,MS,MSALL,COMMON
- ▶ Installation of zenon Web Server, German:
scada.exe /silent /language:1031 ISFeatureInstall=WIBU,WS,MSALL,COMMON

SILENT UNINSTALLATION OF VERSION 7.10 AND ZENON 7.11

ZENON 7.10

Path: **C:\Program Files (x86)\InstallShield Installation Information\{860C41F0-6034-4822-BCF1-88D4849AE897}**

Syntax: **SCADA.exe /remove /silent**

ZENON 7.11

Path: **C:\Program Files (x86)\InstallShield Installation Information\{ED00D319-77B8-4C58-8D67-2DA2D48E90DB}**

Syntax: **SCADA.exe /remove /silent**

5. Error treatment

CHECK BEFORE INSTALLATION:

The system requirements are checked before installation. If the requirements are not met, you are shown these on a separate page with notices on how to rectify this.

ERROR DURING INSTALLATION

You will receive an error message if there are errors during installation.

If you need help from the Technical Consulting department of COPA-DATA:

1. If possible, create a screenshot of the error message
2. Navigate to the folder called %Temp%/SCADALOG.
3. Here you can find the log files of the installation.
4. Create a ZIP file with the content of the folder.
5. Forward the file and the screenshot to support@copadata.com

If you have already closed the error message window, you can find the log files with all the installation information for the SQL server in the following folder:

C:\Program Files\Microsoft SQL Server\110\Setup Bootstrap\LOG

Hint: The file **summary.txt** provides information for troubleshooting.



Information

***Firewalls:** zenon automatically configures the firewall installed with Windows during installation. Firewalls from other providers must be properly configured by the user*

FREQUENT SOURCES OF ERROR DURING INSTALLATION:

- ▶ The virus scanner is active and blocks the installation because the scanner thinks it's a virus. Solution: Separate the system from the network, disable the virus scanner, execute the installation again.
- ▶ The firewall was not configured correctly. Solution: Separate the system from the network, disable the firewall, execute the installation again.
- ▶ Erroneous SQL-installation on the system. Solution: Create project backups; if possible, uninstall SQL server, rename the SQL folder, and restart installation.

6. Windows Updates

Attention: Automatic Windows updates influence the installation

If an update of the Windows operating system is carried out while the zenon setup is running, it can cause problems during the zenon installation.

To prevent this:

- ▶ Deactivate the automatic Windows update during the time of installation.
- ▶ carry out the Windows update before starting the zenon installation

7. Virus scan

Anti-virus software can slow down or even prevent the installation of zenon.

Note: If the anti-virus software you use leads to problems during installation, deactivate the anti-virus software for the duration of the installation. Note that the computer in question is subject to higher risks in this period. Activate your anti-virus software immediately after the installation of zenon.

8. File Structure

The special file structure is created or extended during the installation.

The zenon program files are copied to a folder which can be defined during the installation.

Additionally the installation asks for a folder for the SQL databases of the projects. The storage medium for project archiving (SQL, screens etc.) must have enough free space, because all current and future project data is stored there.

Folder	Path
Program folder	32-bit system: %Program Files%\COPA-DATA\zenon7xxx 64-bit system: %Program Files%\COPA-DATA\zenon7xxx %Program Files (x86)%\COPA-DATA\zenon7xxx
Program data folder, e.g. global symbols, print templates, log files etc.	%ProgramData%\COPA-DATA\zenon7xxx
Database folder (SQL)	%ProgramData%\COPA-DATA\SQL
System folder	%ProgramData%\COPA-DATA\System
Settings Editor and profiles	%Users%\UserName\AppData\Local\COPA-DATA\zenon\Editor
Settings Diagnosis Viewer	%Users%\UserName\AppData\Local\COPA-DATA\zenon\DiagView

DEFINITION RUNTIME FOLDER AND DATA FOLDER

RUNTIME FOLDER

The Editor creates Runtime files in the Runtime folder, or they are transferred to this folder with the help of Remote Transport. When creating a project, you must define the Runtime folder. Later it can be changed in the project properties. With Remote Transport, the Runtime folder is defined in Remote Transport settings.

DATA FOLDER

The Runtime saves all data files that were created at runtime like alarm files, archive files etc. in the data folder. The data folder is created as a subfolder of the Runtime folder by default. The folder is automatically assigned the name of the computer the Runtime is running on. You can change this save location in the project properties (**General/Data folder**).

Hint: Never set the data folder to a removable device such as an USB stick or a network device. It is recommended that the data is recorded locally and backed up externally.

Attention

If the defined path does not exist or is not available, no more data is written from the Runtime. This means a complete loss of data. The Runtime can still be operated but must be restarted as soon as the path is available again. The availability of the folder can be checked via system driver variable **Runtime folder not available (SYSDRV.chm::/25965.htm)** .

9. Free ports

zenon and zenon Logic need certain communication ports for the communication in the network. If these ports are occupied by other programs like e.g. an already installed SQL server, the communication of zenon can be disturbed. Many ports in zenon can be changed using the **Startup Tool** or properties in the Editor.

This is how you check the port assignments:

1. Enter `netstat -a -n -o` in the command line.

You can reach the command line in Windows:

- by pressing the Windows-key and R
- Enter `cmd` and confirm with **OK**.
- A DOS-window pops up
- enter the command `netstat`

2. A list of all currently used TCP and UDP ports will pop up.
3. Check the listening ports (status: `ABHÖREN LISTEN`) if the process-ID (PID) of the ports needed by zenon and zenon Logic corresponds with the processes of zenon and zenon Logic.

These PIDs can be found in the window **Processes** of the **Windows Task Manager**; for this purpose activate the column **PID** in the menu **Select view/columns**.

4. If other software uses these ports, reconfigure this software.
You can see the ports that zenon and zenon Logic use in the **Port assignment by zenon and zenon Logic** table. Here you can also see if these ports can be amended in these programs.

PORT SETTINGS BY ZENON AND ZENON LOGIC

Application	Description	Ports	Transport log
stratonrt[k].exe	zenon Logic Runtime polling communication and zenon Logic Workbench.	1200–1210	TCP
stratonrt[k].exe		4500–4510	TCP
stratonrt[k].exe	zenon Logic redundancy.	7000–7010	TCP
stratonrt[k].exe	zenon Logic Runtime spontaneous communication.	9000–9010	TCP
zennetsrv.exe	zenon network service.	1100–1100	TCP
zensysrv.exe	zenon transport service.	1101	TCP
zendbsrv.exe	zenon database service.	1103	TCP
zenAdminsrv.exe	zenon administration service.	50777	TCP
zenLogSrv.exe	zenon logging service.	50780	TCP
zenvnc.exe	zenon Remote Desktop service	5600 (fixed) 5610 (fixed)	TCP
CodeMeter.exe	Code Meter dongle service.	22350 (changeable but must not be changed)	TCP
WkSvW32.exe	WibuKey Network service	22347 (fixed)	TCP
Zenrt32.exe	Message Control with Voice over IP.	5060: SIP 4000: RTP 4001: RTCP (fixed) SIP and RTP can be configured using the Editor. RTCP is	UDP

		automatically set by the system.	
--	--	----------------------------------	--

10. Installation of an older version after installation of zenon 7.60 (64-bit operating system)

If, on a 64-bit operating system, after installation of zenon 7.60, a version of zenon with version number lower than 7.10 is installed, the 64-bit services of version 7.10 must be re-registered afterwards using the command line. Registration can be carried out using a batch file or manually.

Registration with a batch file:

1. Copy the file named **Register.bat** from the zenon installation medium.
2. You can find this in the following folder: `... \AdditionalSoftware\Register Admin Service and Log Service (x64) \`
3. Execute the file on the respective computer as an administrator.

manual registration:

1. Run the command line with administrative rights
2. Navigate to the folder `%Program Files%\Common Files\COPA-DATA\zenAdminSrv`
3. Start the service **zenAdminSrv.exe** with the parameter **-service**
4. navigate to folder `%Program Files%\Common Files\COPA-DATA\zenLogSrv`
5. Start the service **zenLogSrv.exe** with the parameter **-service**



Example

zenAdminSrv:

Folder: `C:\Program Files\Common Files\COPA-DATA\zenAdminSrv`

Command: **zenAdminSrv.exe -service**

zenLogSrv:

Folder: `C:\Program Files\Common Files\COPA-DATA\zenLogSrv`

Command: **zenLogSrv.exe -service**

11. Installation of version 7.x and version 6.51 on the same computer

If a version 7.x is installed on a system that already has zenon 6.51 installed, the **Multiple Network Protocol Driver** must be reinstalled after a reboot.

FOR X64 SYSTEMS

For new installation:

1. Restart the system.
2. On the installation medium, open the following path: `AdditionalSoftware\COPA-DATA Multiple Network Protocol Driver`.
3. Execute the file called **MNDPx64Setup.bat**.

This means that the driver is reinstalled and properly linked to the network adapters.

FOR X86 SYSTEMS

For new installation:

1. Restart the system.
2. On the installation medium, open the following path: `AdditionalSoftware\COPA-DATA Multiple Network Protocol Driver`.
3. Execute the file called **MNDPx86Setup.bat**.

This means that the driver is reinstalled and properly linked to the network adapters.

12. System requirements

zenon 7.60 can be used on all current Microsoft operating systems. zenon is always tested with the most up-to-date version of the operating systems with the newest available Service Packs and Hotfixes.

Changes due to Service Packs, Hotfixes or Patches from Microsoft can cause incompatibilities and affect the functionality of the software. In this case, COPA-DATA will provide an updated version of zenon as soon as possible. In this case you can get more information from COPA-DATA support: support@copadata.com.

 **Attention**

Note when configuring the project:

- ▶ For the optimal display of zenon in Runtime, the standard setting (corresponds to 100%) is recommended for the Windows **display**. Higher values can lead to graphic elements, symbols, texts, etc. not being displayed correctly.
- ▶ Windows themes can overlay elements in Runtime. Ensure, when configuring a project, that there is an appropriate distance from the elements to the screen edge.

12.1 Server and desktop operating systems

Supported operating systems and required service packs:

[illegible]

12.2 Server and desktop operating systems up to Windows 8.1

Overview of supported servers and desktop operating systems up to Windows 8.1

	Windows Embedded 7/8 Standard	Windows Embedded 8.1 Pro/Industry	Windows 7 SP1/Windows 8 and 8.1/Server 2008 (R2) SP1, 2012 and 2012 R2	Windows CE
Editor	--	X	X	--
Runtime	X	X	X	--
Runtime for Windows CE	--	--	--	X
Web Server	X	X	X	X (Web Server Pro Light)
Web Client	X	X	X	--
HTML Web Engine	X	X	X	--

Key:

- ▶ **X**: supported
- ▶ --: not supported

Attention

Windows CE is no longer supported from version 7.50. zenon CE version 7.20 is installed. To use this, the Runtime files for version 7.20 must be created.

12.3 Windows CE and Windows Embedded

Operating system	zenon Editor	zenon Runtime	zenon Web Server	zenon Web Client	zenon HTML Web Engine	zenon Logic Runtime	zenon Analyzer Server
Windows CE 6.0 (ARM and x86) Attention: Is only supported up to version 7.20. From version 7.50, Runtime files for 7.20 must be created.	Cannot run	zenon Operator only	Pro Light only	Cannot run	Cannot run	executable	Cannot run
Windows Embedded Compact 7 (ARM and x86) Attention: Is only supported up to version 7.20. From version 7.50, Runtime files for 7.20 must be created.	Cannot run	zenon Operator only	Pro Light only	Cannot run	Cannot run	executable	Cannot run

12.4 Windows 10

Overview of supported desktop operating systems for Windows 10

Windows version	zenon Supervisor / Operator	Everywhere by zenon	zenon Logic Runtime
Windows 10 Home	X	X (PC)	X
Windows 10 Mobile	--	X (Mobile)	--
Windows 10 Pro	X	X (PC)	X
Windows 10 Enterprise	X	X (PC)	X
Windows 10 Education	X	X (PC)	X
Windows 10 Mobile Enterprise	--	X (Mobile)	--
Windows 10 IoT Core	--	--	X
Windows 10 IoT Enterprise (Windows 10 Enterprise LTSC)	X	X (PC)	X

Key:

- ▶ **X**: available
- ▶ --: Cannot run

12.5 System requirements when using DirectX

The following minimum requirements must be met when using DirectX hardware or DirectX software:

Note: For extensive projects or several projects loaded at the same time you will need accordingly faster/stronger hardware. The minimum requirements can increase as a result of this.

Parameter	Minimum requirements	Recommended
CPU:	Single core with SSE2 support.	Quad Core or more cores
Graphics card: (DirectX hardware only)	DirectX 11 mainstream graphics card. Note: When an integrated graphics chip is used in particular, it is possible, depending on the driver used, that there are impairments to the display quality.	Dedicated DirectX 11 AMD or nVidia high-end graphics card
Graphics memory: (DirectX hardware only)	1 GB VRAM Note: The size that is actually needed depends on the number of screens called up and the elements displayed.	2 GB VRAM
Driver graphics card: (DirectX hardware only)	The graphics card manufacturer's most recent driver.	
Operating system:	<p>DirectX hardware and DirectX software only works on operating systems that support DirectX11.1.</p> <p>If the system does not support DirectX 11.1, it automatically switches to Windows Enhanced.</p> <p>The current DirectX- Runtime must be installed. For zenon it is installed together with the setup. For the zenon Web Client it must be installed manually.</p>	

You can check the DirectX hardware compatibility of the graphics card and the driver with the Windows operating system tool **dxdiag.exe**.

Up to Windows 7: Check the **DDI version** value under **Display**. The value 11 for example means DirectX 11.

From Windows 8: All supported versions of DirectX are displayed in the **Display** tab under **Feature Levels**. For example, DirectX 11 is displayed as 11.0.

12.6 Additional software

SQL SERVER

zenon Editor works with an SQL database. This is also installed when zenon is installed.

- ▶ Up to version 6.20 SP4: SQL-Server 2000 (MSDE)
- ▶ From version 6.21 SP0 on: SQL Server 2005 Express
- ▶ From version 7.00 SP0 on: SQL Server 2008R2 SP1 Express
- ▶ From version 7.10 SP0: SQL Server 2012 SP1 Express

 **Attention**

Regard when changing the version of the SQL Server: Projects must be backed up and exported in the original version and then imported back in the new version.

DONGLE

- ▶ The CodeMeter software required for dongle protection is always installed automatically too.
- ▶ If WibuKey is required, this can be installed from the installation medium.
Path: \AdditionalSoftware\WIBU-SYSTEMS WibuKey

12.7 User authorization

Windows administrator rights are required for installation.

Standard Windows user rights are required for ongoing operation. The user account control (UAC) can be activated at the highest security level.

12.8 Hardware requirements

PC version and CE version of zenon have different requirements concerning the needed hardware. In this chapter, you can find hardware requirements for the individual versions of Editor and Runtime, as well as zenon Web Server and zenon Web Client.

The Editor uses a Microsoft SQL Server as SQL Server and has higher hardware requirements than the Runtime. If Editor and Runtime shall be running on a system simultaneously, the requirements add up.

 **Attention**

Graphics cards with their own graphics memory and DirectX support are recommended. Shared-memory graphics cards may require too much working memory and may thus lead to performance impairments. Note the system requirements when using DirectX (on page 34) chapter. The recommended configuration from this chapter is to be noted for the use of Multi-Touch.

12.8.1 Editor

The minimum requirements are based on a complete installation of the Editor. For extensive projects or several projects loaded at the same time you will need accordingly faster/stronger hardware. The minimum requirements can increase as a result of this.

Hardware	Minimum requirements	Recommended
CPU	Single core with SSE2 support.	Quad Core
RAM memory	From 4 GB Note: The more projects you have simultaneously available in memory, the more memory you need.	8 GB
Harddisk	At least 4 GB free space for a complete installation plus additional space for the projects.	
Monitor resolution	Extended VGA with 1024 x 768 pixels.	Double monitor setup: 2 times 1920 x 1080
Graphics adapter	64 MB dedicated memory. Cards with shared memory can lead to performance loss. Note the System requirements when using DirectX (on page 34) chapter.	
Input devices	Standard keyboard or standard mouse.	
USB interface or DVD drive	For the installation, regardless of installation medium. The installation is also possible via network. Installation files can also be downloaded from the customer area of the COPA-DATA website.	
Parallel or USB interface	In case of dongle licensing required for dongle. For network dongle only required for the dongle server.	
Network connection (optional)	Recommended 10 Mbit/s with TCP/IP protocol for Remote Transport, network dongle, project backups on central file server, multi-user capable Editor, etc.	1000 MBit/s

Note: When using comprehensive multi-user projects, note the information in the hardware requirements chapter.

12.8.2 Runtime

The minimum requirements are based on a complete installation of Runtime. For extensive projects or several projects loaded at the same time you will need accordingly faster/stronger hardware. The minimum requirements can increase as a result of this.

Hardware	Minimum requirements	Recommended
CPU	Single core with SSE2 support.	Quad Core
RAM memory	From 512 MB. Note: Projects with big amounts of data, Network projects, multiple projects simultaneously and projects in redundance mode need more memory.	4096 MB
Harddisk	2 GB free space for the Runtime-installation plus additional space for the projects. Attention: If you log historical data (e.g. Archive data or Alarm-/CEL-Data), you need sufficient harddrive space or you have to make sure during engineering that the historical data is evacuated or deleted.	
Monitor resolution	VGA with 640 x 480 pixels.	
Graphics adapter	64 MB dedicated memory. Cards with shared memory can lead to performance loss. Note the System requirements when using DirectX (on page 34) chapter in relation to this.	
Input devices	Keyboard and/or mouse. Operation via touchscreen is also possible. Many individual, customizable softkeyboards for the touchscreen are available for you. In addition, there is the possibility of Multi-Touch operation.	
USB interface (optional)	For installation. Installation also possible via network or other storage media. For dongle. Network dongle also available.	
Network connection (optional)	64 kBits/s for standard Client/Server projects. 100 Mbit/s full duplex for redundant operation.	1000 kBits/s full duplex for standard Client/Server projects.
Remote connection (optional)	Minimum requirements: Dial-up modem with 9600 Bit/s.	1 Mbit/s full duplex.
WAN connection (optional)	Any desired connection via router, e.g. per ISDN or DSL Data transfer is slower in a WAN than in a local network for technical reasons. Be sure to check the possible data transfer rates of your WAN technology already at the time when you create the project.	
Message Control (optional):	Please refer to chapter Message Control for the requirements.	

Interfaces (optional)	The necessary interfaces depend on the requirements of the PLC and/or the bus connection, for example serial RS232 or RS422/485 interfaces, ISA/PCI slots, etc.	
------------------------------	---	--

12.8.3 Runtime under Windows Embedded Standard

The minimum requirements relate to an installation of Runtime adapted to the Windows Embedded Standard 7 SP1 operating system with platform update. The hardware must be accordingly more powerful for extensive projects.

This table only states the figures that are different to the standard installation. The other parameters correspond to the figures described in the Hardware requirements for Runtime (on page 37) chapter.

Hardware	Minimum requirement	Recommended
RAM memory	512 MB. Note: Projects with big amounts of data, Network projects, multiple projects simultaneously and projects in redundancy mode need more memory.	2048 MB
Storage medium	2 GB of free memory on C:\ drive before the installation of .NET Framework 3.5 and 4.5 800 MB of free memory after the installation of the .NET Framework Plus memory space for the projects, archives, etc.	80 GB

Attention: If you log historical data (e.g. Archive data or Alarm-/CEL-Data), you need sufficient harddrive space or you have to make sure during engineering that the historical data is evacuated or deleted.

12.8.4 Runtime for Windows CE

The minimum requirements are based on a complete installation of the Runtime for Windows CE. The hardware must be accordingly more powerful for extensive projects.

Hardware	Minimum requirement	Recommended
CPU	At least 400 MHz	1 GHz
RAM memory	64 MB	1024 MB for Windows CE 6.0.
Storage medium	64 MB free harddrive space. Permanent recordable remanent storage medium for project data	256 MB free harddrive space or more.
Network connection	For standard Client/Server projects: 10 Mbit/s full duplex.	

**Attention**

*Windows CE is no longer supported from version 7.50. zenon CE version 7.20 is installed.
To use this, the Runtime files for version 7.20 must be created.*

12.8.5 Web Server

The minimum requirements are based on a complete installation of the Web Server. For extensive projects or several projects loaded at the same time you will need accordingly faster/stronger hardware. The minimum requirements can increase as a result of this.

Hardware	Minimum requirements	Recommended
CPU	Single core with SSE2 support.	
RAM memory	From 1024 MB	
Harddisk	256 MB free harddrive space.	1 GB free harddrive space.
Network connection	10 Mbit/s full duplex.	1000 Mbit/s full duplex.
Remote connection (optional)	Minimum requirements: Dial-up modem with 9600 Bit/s.	1 Mbit/s full duplex.

12.8.6 Web Client

The minimum requirements are based on a complete installation of the zenon Web Client. For extensive projects or several projects loaded at the same time you will need accordingly faster/stronger hardware. The minimum requirements can increase as a result of this.

Hardware	Minimum requirements	Recommended
CPU	Single core with SSE2 support.	Quad Core
RAM memory	From 1024 MB	
Harddisk	64 MB free space for zenon Web Client plus additional space for the projects.	80 GB free harddrive space.
Network connection	10 Mbit/s full duplex.	1000 Mbit/s full duplex.
Remote connection (optional)	Minimum requirements: Dial-up modem with 9600 Bit/s.	1 Mbit/s full duplex.
Graphics adapter	64 MB dedicated memory. Cards with shared memory can lead to performance loss. Note the System requirements when using DirectX (on page 34) chapter in relation to this.	

13. Paths for installation and operation

Paths for zenon:

- ▶ Installation
- ▶ Editor
- ▶ Runtime

 **Info**

You can display many default paths with the help of the **set** command:

start the command line (enter **cmd** in the Windows start area)

enter command **set**

with click in button **Enter** standard folders for Windows and zenon are displayed

Note: As absolute paths differ in different operating system, the paths are displayed as Windows environment variable in this chapter. For example %ProgramData% instead of C:\ProgramData.

INSTALLATION

During installation, paths are set for:

- ▶ zenon Editor
- ▶ zenon SQL folder

Only the paths for zenon Editor and zenon SQL folder can be customized.

The setup needs administrator rights. This is also true for changing the installation paths.

REQUIREMENTS

The installation paths of the required third-party software match the standard paths of the respective manufacturer and cannot be changed during setup.

The additional software packages that need to be installed depend on the type of installation:

- ▶ zenon Editor
- ▶ zenon Runtime
- ▶ zenon Web Client
- ▶ zenon Logic Runtime

Requirement	Editor	Runtime	Web Client	zenon Logic Runtime
Microsoft .NET Framework 3.5 SP1	+	+	-	-
Microsoft .NET Framework 4.0	+	+	-	-
Microsoft Visual C++ 2005 Redistributables	+	+	-	+
Microsoft Visual C++ 2010 Redistributables	+	+	+	+
Microsoft Visual C++ 2012 Redistributables	+	+	+	+
Microsoft Visual C++ 2015 Redistributables	+	+	+	-
Microsoft SQL-Server 2012 SP1 Express (from 7.10 on)	+	-	-	-
VSTA	+	+	-	-
COPA-DATA Multiple Network Protocol Driver x86/x64	+	+	-	+
CodeMeter dongle software x86/x64	+	+	-	-
Report Viewer 10.0 (from 7.00 on)	+	+	+	-
VBA 7.1	+	+	+	-

ZENON

The installation of zenon Editor requires two paths:

- ▶ zenon Editor:
 - 32 bit systems: %ProgramFiles(x86)%\COPA-DATA\zenon [Version]
 - 64 bit systems: %ProgramFiles%\COPA-DATA\zenon [Version]

These paths can be customized during the installation.

- ▶ zenon SQL folder:
 - From version 7.10 on: %ProgramData%\COPA-DATA\SQL2012\

These paths can be customized manually via zenDB.ini.

ZENON EDITOR

In the zenon Editor the following paths are used as default:

Object	Path
Workspace	%CD_USERDATA% For example: C:\Users\Public\Documents\zenon_Projects
Projects	%CD_USERDATA% For example: C:\Users\Public\Documents\zenon_Projects Hint for short cuts: highlight the project -> Ctrl+Alt+D
SQL folder of the project	%ProgramData%\COPA-DATA\[SQL-Ordner]\[UID]\FILES Hint for short cuts: highlight the project -> Ctrl+Alt+E
project.ini	%ProgramData%\COPA-DATA\[SQL-Ordner]\[UID]\FILES\zenon\system
zenon6.ini	%ProgramData%\COPA-DATA\System For example: C:\ProgramData\COPA-DATA\System
Backup	%ProgramData%\COPA-DATA\[SQL-folder]\[UID]\BACKUP %ProgramData%\COPA-DATA\[SQL-Ordner\UID]\FILES\[Projekte]
Compiled files	%CD_USERDATA%\[Workspace]\[Project]\RT
External files	%CD_USERDATA%\[Workspace]\[Project]\RT\FILES\... Note: Can be set in the project using the file storage property.
System files	Windows system folder.

ZENON RUNTIME

In the zenon Editor the following paths are used as default:

Object	Path
Projects	%CD_USERDATA%\ [Workspace] \ [Project] \RT
External files	%CD_USERDATA%\ [Workspace] \ [Project] \RT\FILES\...
Exported archives, Chronological Event List and Alarm Message List	%CD_USERDATA%\ [Workspace] \ [Project] \Export Note: Is created at the first export.
System files	Windows system folder.

ZENON LOGIC

Paths for zenon Logic are created analogous to the zenon paths.

14. zenon for Windows CE

COMPONENTS

The CE version of zenon consists of the following components:

- ▶ zenon CE Runtime
- ▶ Language DLLs
- ▶ Network DLL
- ▶ Driver DLLs
- ▶ zenon6.ini
- ▶ Transport service

Attention

*Windows CE is no longer supported from version 7.50. zenon CE version 7.20 is installed.
To use this, the project for version 7.20 must be compiled.*

PREREQUISITE FOR THE INSTALLATION OF THE RUNTIME ON REMOTE SYSTEMS

- ▶ The versions of zenon for PC and Windows CE must, up to and including zenon 7.20, have the same version number and the same service pack.
From version 7.50, zenon CE version 7.20 is installed.
- ▶ Either the transport service (**SysSrvCE.exe**) of zenon must be installed and started on the CE terminal or an ActiveSync-connection is needed. Tips for the manual installation via storage media can be found in chapter Manual Installation and Runtime-Update (on page 56).
- ▶ The CE terminal to which the data shall be transported has to have at least 8 megabytes free "Program Memory", so that we can guarantee correct transport. This parameter can be adapted via the Control Panel **System properties**.

COURSE OF ACTIONS

Details about compatibility, installation and update can be found in chapters:

- ▶ CE versions / supported processors (on page 47)
- ▶ Update of the Windows CE Runtime (on page 48)



Information

*The Runtime for Windows CE can be licensed with the Remote Transport. When you establish the connection to the target system, you can enter the serial number and the license number for the CE version. The serial number is saved on the CE device in the **zenon6.ini** file. The activation number is saved in the registry.*



Info

*If, when starting **zenonrce.exe**, the **sysrvce.exe** file is also executed, then it can be ensured that a TCP connection can always be established. Thus only one file is necessary for the autostart functionality. However a time delay between both starts must be configured.*

***Reason:** When starting **zenonRCE**, **zenLogSrvCE** also starts automatically. However when starting **sysrvce**, **zenLogSrvCE** is also started.*

*If **zenonRCE** and **sysrvce** are started within a very short period of time, both attempt to start **zenLogSrvCE**. This leads to an error message.*

***Solution:** To avoid this, configure a time delay between the start of **zenonRCE** and **zenLogSrvCE**. To do this, you can set the **STARTDELAY=** entry in **zenon6.ini**. Runtime (**zenLogSrvCE**) is thus started later. A check is then made to see whether **zenLogSrvCE** is already running and this does not start again.*

14.1 CE - versions and supported processors

In the current zenon version 7.60 the following Windows CE versions and processors are supported:

- ▶ CE 6.00 for x86
- ▶ CE 6.00 for ARM V4/V5



Information

You can find information about the supported CE versions and processors for earlier zenon versions in the corresponding documentation or you can contact the COPA-DATA support.

14.2 System files

The Windows CE Runtime requires the existence of certain system files. In case one of these files is missing, the operating system sends an error message during Runtime start, that one or various components have not been found. The following system files are required:

File	Description
mfc90u.dll	Necessary for the Runtime. On startup, an error message pops up if this file does not exist.
msvcr90.dll	Necessary for the Runtime. On startup, an error message pops up if this file does not exist.
atl90.dll	Not necessary for starting the Runtime but for the use of drivers with network connections or the use of zenon in a network. If this file does not exist, the device will not work as a client or TCP/IP driver connections will not work.
IMGDECOMP.dll	Not necessary for starting the Runtime but necessary for displaying Transparency if Alpha Blending is not integrated in the operating system. Animation of GIF files is not possible with Windows CE.
VBSCRIPT.dll + JSCRIPT.dll	Not necessary for starting the Runtime. This file is needed for the PCE (Process Control Engine).

Some of these system files are installed together with the installation of zenon for CE and can be transferred to the CE device using the **UpdateCE** Tool. All these system files should be integrated in the operating system image of the CE device by the manufacturer.

 **Attention**

For manufactures of Windows CE OS-images:

*CE versions older than 6.0 need the file **toolhelp.dll**. Activate the following option in **Platform Manager** in order that the file is available on the CE device and Toolhelp is available in SDK.*

Core OS -> Display Based Device -> Core OS Services -> Debugging Tools -> Toolhelp API. Thus the Toolhelp.dll is part of the image.

***Hint:** Always use the most up-to-date Servicepack of the **Platform Builder**.*

***Note:** File **toolhelp.dll** is not used for Windows CE 6 and should not be used with CE 6.*

14.3 Update of the Windows CE Runtime

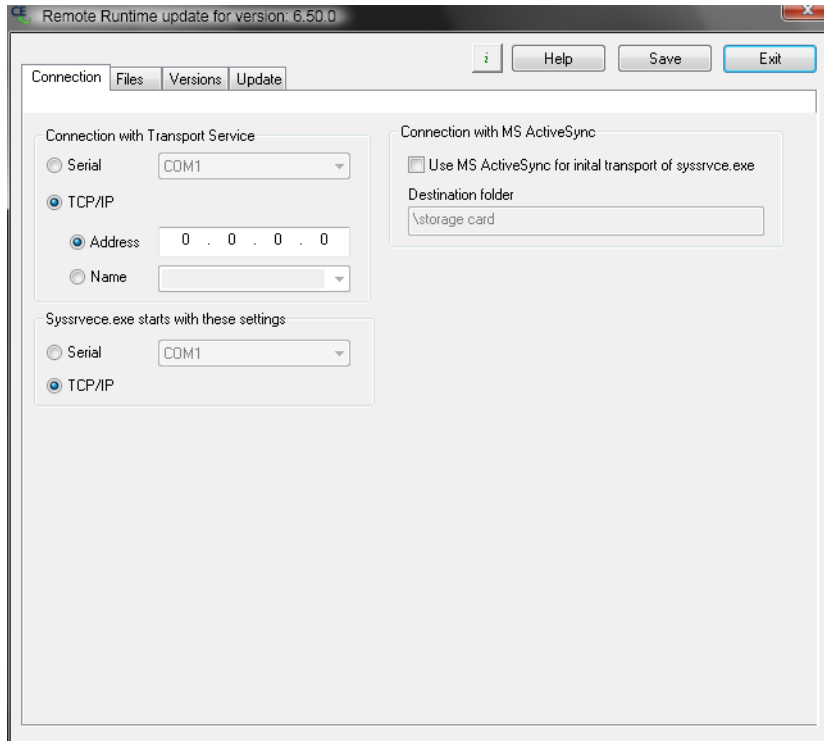
To perform an update of Windows CE Runtime:

- ▶ Make sure that the zenon Transport Service (**SysSrvCE.exe**) runs in the CE device
- ▶ Make sure that you do not have established a remote connection via the zenon Editor to the device
- ▶ In the zenon **Extras** menu, select the **Update Windows CE Runtime** command.
The dialog for transfer of Runtime files opens.
- ▶ Configure the connection.
- ▶ Define the data you want to transfer.
- ▶ Select the appropriate version.
- ▶ Start the update.

Note: If you are transferring/installing Runtime for the first time, note the information in the **Manual installation and Runtime update** (on page 56) chapter. (on page 56)

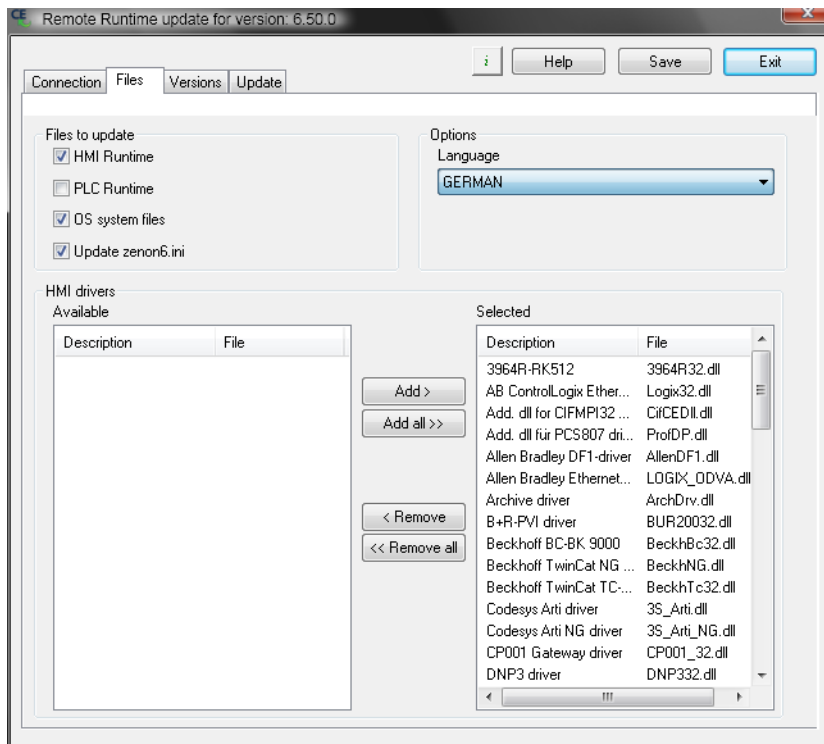
CONFIGURE CONNECTION

You can configure the connections to the Windows CE device in the tab **Connection**.



Parameters	Description
Serial	Settings for serial connection with Windows CE device, you have to select a port.
TCP/IP	Settings for TCP/IP-connection to the Windows CE device.
Adress	IP address.
Name	Computer name
Syssrvce.exe starts with these settings	Settings for starting syssrvce.exe .
Serial	Active:: serial connection selected, port must be selected.
TCP/IP	Active: TCP/IP-connection selected.
Connection with MS ActiveSync	Settings for connection via MS ActiveSync
Use MS ActiveSync for initial transport of syssrvce.exe	Active: syssrvce.exe is transferred during the first transport via MS ActiveSync.
Destination folder	Target folder.
Help	Opens online-help
Save	Saves all changes.
Exit	Closes the update CE-tool and reminds you before to save unsaved changes.

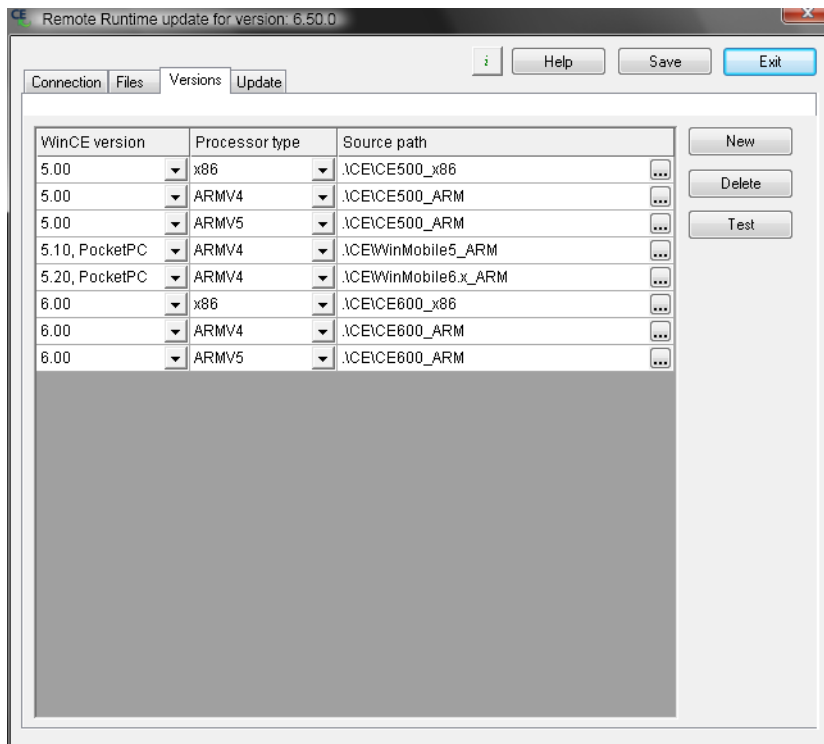
DEFINE FILES YOU WANT TO TRANSFER



Parameters	Description
Files to update	Files to be transferred.
HMI Runtime	Active: Transfers zenon files to the target device. Default: active
PLC Runtime	Active: Transfers zenon Logic files to the target device. Default: Inactive
OS system files	Active: Transfers necessary files for the OS. Default: active
Update zenon6.ini	Transfers zenon6.ini to the target device. This way, the license information of the target device is also changed.
Options	
Language	Desired target system language. Default: English
HMI drivers	Selection of HMI drivers for transfer.
Available	List of available drivers.
Selected	List of selected drivers.
Add	Adds chosen drivers to the list of selected drivers.
Add all	Adds all drivers to the list of selected drivers.
Remove	Removes chosen drivers from the list of selected drivers.
Remove all	Removes all drivers from the list of selected drivers.
Help	Opens online-help
Save	Saves all changes.
Exit	Closes the update CE-tool and reminds you before to save unsaved changes.

SELECT VERSION

Select the correct version in the tab **Versions** if it wasn't automatically recognized.

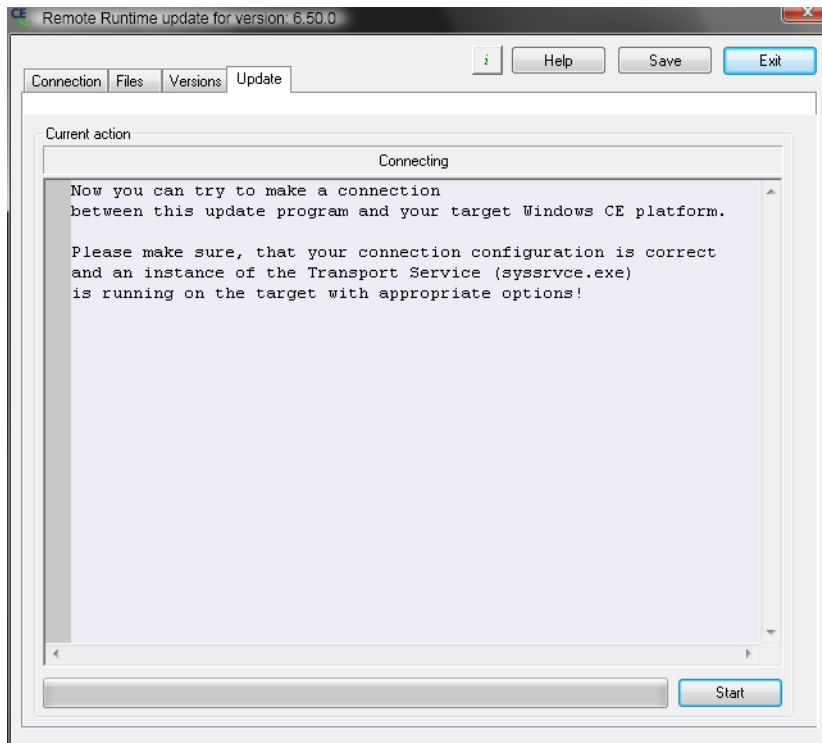


Parameters	Description
WinCE version	Version of the target device Windows CE OS. Click the button to open a drop-down list for selection.
Processor type	Processor of the device.
Source path	Path to the folder that contains the files. Click the button ... and a dialog opens to select a folder.
New	Inserts a new, empty entry in the list.
Delete	Deletes the selected entry from the list
Test	Verifies settings.
Help	Opens online-help
Save	Saves all changes.
Exit	Closes the update CE-tool and reminds you before to save unsaved changes.

START UPDATE

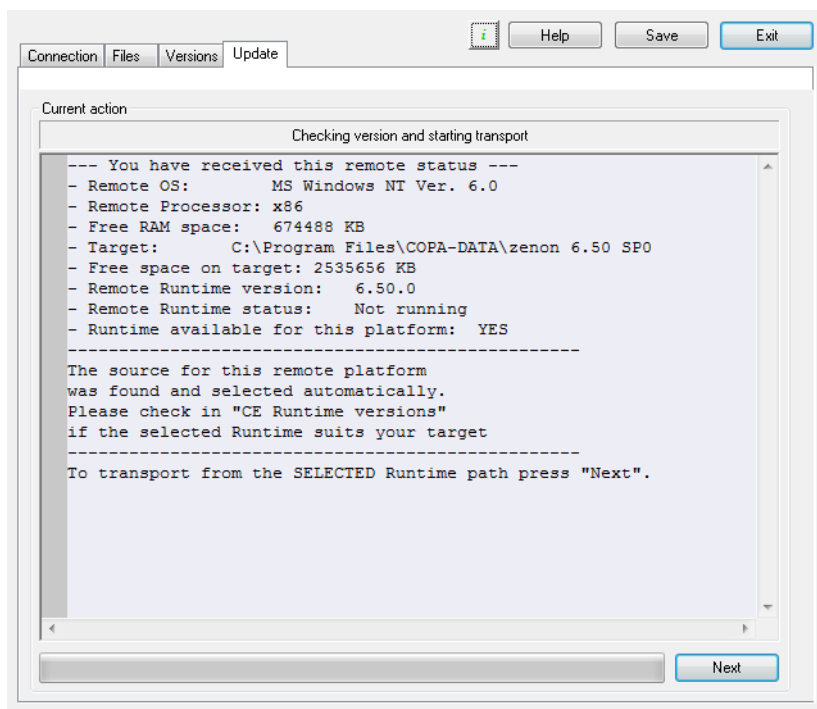
To establish a connection:

1. Click on the button **Start** on the tab **Update**.

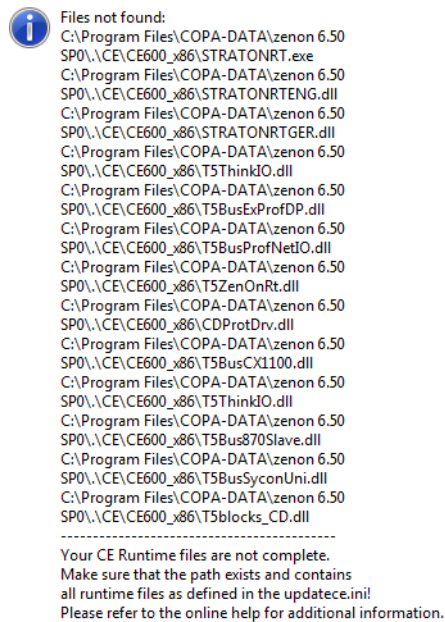


The data that shall be transferred is verified and displayed in a window.

2. Start the transfer to the target device by clicking on the button **Next**.



If the transfer cannot be initiated because files are missing, an error message with a list of missing files pops up:



OK

If you get the error message **The current update was not completed**, the update was interrupted or not executed properly.



Information

*If you want to replace zenVNCSrv.exe via update, it is terminated and restarted after the update. For this the file **zenVNCSrvCE.exe** must contain the*

the following entry in the UpdateCE.ini in section [SOURCES_FILES_GENERAL] (exists per default):

- ▶ zenVNCSrvCE.exe
- ▶ zenVNCCfgCE.exe

14.4 Manual installation and Runtime-update

Installation and update are also possible without remote transport and ActiveSync. You have to copy the needed files manually on a storage card for the CE device. You have to know CE version and processor type.

It is mandatory to copy the following files from the according folder for the correct platform to a storage card for the CE device:

- ▶ **zenonRCE.exe** (Runtime)
- ▶ **LogCliLibCE.dll** (Diagnose-DLL)
- ▶ **zenon6.ini** (Configuration file)
- ▶ **Cd_tooCE.dll** (Help DLL)
- ▶ **ZenNetSrvCE.dll** (Network)
- ▶ **CDHelper.dll** (Help DLL)
- ▶ One of the following language dlls: **RGChinaCE.dll**, **RGzechCE.dll**, **REngliCE.dll**, **RFrancCE.dll**, **RGermaCE.dll**, **RIталиCE.dll**, **RRussiCE.dll**, **RSpaniCE.dll** (the selected language is stipulated in the **zenon6.ini** file.)
- ▶ **syssrvce.exe** (Transport service and Diagnosis Server)
- ▶ **atl90.dll** (System file, possibly part of the operating system)
- ▶ **mfc90u.dll** (System file, possibly part of the operating system)
- ▶ **msvcr90.dll** (System file, possibly part of the operating system)

Further files, for example the driver or the remote desktop software (**zenVNCCfgCE.exe** and **zenVNCSrvCE.exe**), are optional.

14.5 Pocket PCs (PDA - Handheld PC)

Pocket PCs are no longer supported from version 7 on.

14.6 Error handling

Possible errors:

Error	Possible solution
Connection error when updating via COM.	Windows Explorer being open delays the access time. Closing Explorer rectifies the problem.
Transport service does not work.	Check the version of the transport service. At least: Version 5.21 SP3 or higher or version 5.50 SP1 or higher.
Runtime update program cannot establish a connection.	Close open connections of the Editor to the CE transport service.

15. zenon Logic Runtime for Windows CE

The installation of the zenon Logic Runtime (PLC Runtime) on a CE system is similar to the installation of the Runtime for Windows CE (on page 45).

Requirement: Executable transport service under CE

The CE version of the zenon Logic Runtime consists of the following components:

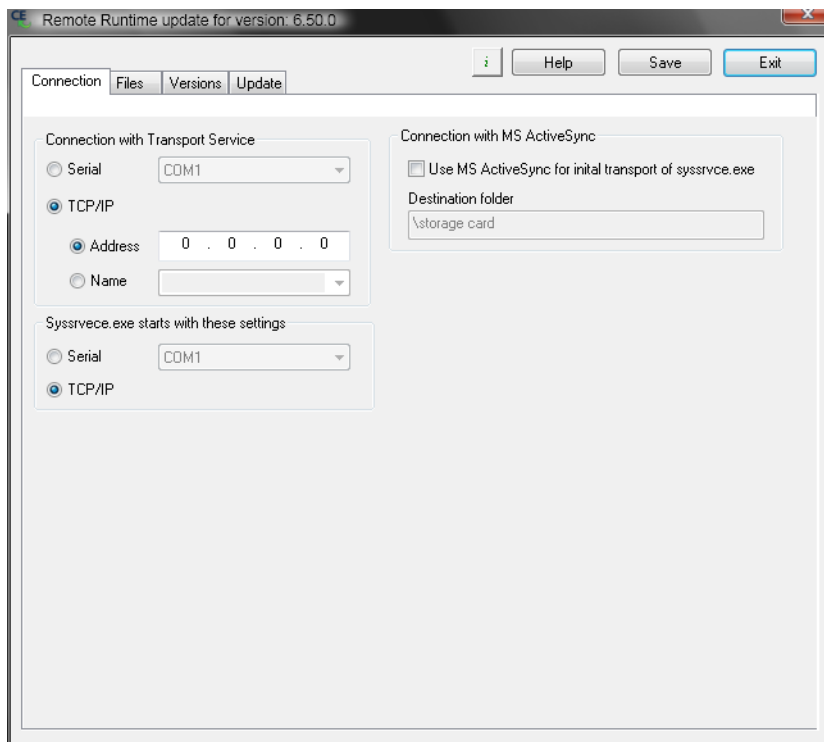
- ▶ zenon Logic Runtime
- ▶ Language DLLs
- ▶ zenon Logic IO driver
- ▶ zenon6.ini

INSTALLATION

- ▶ In the zenon Menu, select **Extras/Update Windows CE Runtime**.

The dialog for transfer of Runtime files opens.

- ▶ Activate the Checkbox PLC Runtime in the Files window to copy the files zenon Logic needs to the CE execution directory.
- ▶ Switch to tab Connection.



- ▶ Define the connection to the Windows CE device. Enter the IP-address or the serial port.
- ▶ If zenon6.ini shall also be transferred, select update zenon6.ini. This way, the license information of the target device is also changed.
- ▶ Select the proper version in the window CE Runtime versions, if it wasn't automatically recognized.

UPDATE

Works as described in chapter Update of Windows CE Runtime (on page 48).

Attention: You have to activate the option PLC Runtime in the tab "Files" !



Information

The MFC files are always transferred using Windows CE 6.0.

16. zenon Web Server

Um den **zenon Web Server** oder **zenon Web Server Pro** zu installieren:

1. Aktivieren Sie die WWW-Dienste auf dem Rechner.
Der Ordner `C:\inetpub\wwwroot` muss existieren.
2. Starten Sie das zenon Installationsmedium. Der Startbildschirm wird angezeigt.
Falls Sie Autostart von Medien deaktiviert haben, führen Sie die Datei **start.exe** auf dem Installationsmedium aus.
3. Wählen Sie zenon Web Server aus.
Entsprechend der Version des Betriebssystems wird automatisch die 32-Bit oder 64-Bit Version des zenon Web Servers installiert.
4. Folgen Sie der Installationsroutine.
5. Starten Sie den Computer neu.

Die Setup-Dateien für den Web Client finden Sie nach der Installation in Unterverzeichnissen des zenon Web Server-Installationspfades (xxx steht für die jeweilige Version von zenon), z. B.: `C:\Programme (x86)\COPA-DATA\zenonWebserver\zenon\controlversions\Versionxxx\zenon_Webclient_Setup_GERMAN.EXE`
oder

```
C:/Inetpub/wwwroot/zenon/controlversions/Versionxxx/zenon_Webclient_Setup_GERMAN.EXE
```

Es werden auch die Beispiel-Webseiten (index*.html und init*.html) mitinstalliert. Diese sind im Unterverzeichnis zenon des zenon Web Server-Installationspfades zu finden, z. B.:

```
C:/Programme/zenonWebserver/zenon/index.htm
```

oder

```
C:/Inetpub/wwwroot/zenon/index.html
```



Information

*Der Dienst für den **zenon Web Server** wird nur in der lizenzierten Version automatisch gestartet. Im Demo-Modus muss der zenon Web Server manuell über die zenon Web Server-Konsole in den Systemeigenschaften gestartet werden.*

ADDITIONAL INFORMATION

You can find details about the zenon Web Server in the manual zenon Web Server and Web Server Pro, about the licensing in manual Licensing.

17. zenon Web Client

The **zenon Web Client** is mainly an ActiveX control displaying the information in a browser. The display is the same as on a normal **zenon Runtime Client**. The connection to the **Runtime server** is implemented via the **zenon Web Server** using TCP/IP communication.

After installation, You can find the setup files for zenon Web Client in subfolders of the zenon Web Server installation path (xxx stands for the respective version of zenon), for example:

```
%Programfiles%/COPA-DATA/zenon Web
```

```
Server/zenon/controlversions/Versionxxx/zenon_Webclient_Setup_GERMAN.EXE
```

or

```
C:/Inetpub/wwwroot/zenon/controlversions/Versionxxx/zenon_Webclient_Setup_ENGLISH.EXE
```

All zenon Logic Web Client setups are digitally signed and can also be provided for download from the Internet without any problems.



Info

The zenon Web Client sends error files and log files. The necessary Diagnosis Server is also installed when zenon Web Client is installed.

18. Updates (Build Setups)

UPDATE (BUILD SETUP)

An update is installed over the existing installation; it replaces only changed files with the new version. All projects and individual settings will remain unchanged. Note that Build Setups are never 100% quality-assured. Only the bug fixes are tested. If unwanted side effects should occur because of a bug fix, it might be possible that these side effects will not be noticed during testing. COPA-DATA therefore always recommends using Service Packs. They always have to pass the whole quality-assurance process.

Note:

- ▶ Build setups can only be installed locally. Installation on network paths (UNC) is not possible.
- ▶ zenon Web Client: To install an update for the zenon Web Client, zenon Web Client must be uninstalled beforehand.

SWITCH TO A NEW VERSION

If you want to install a new version of zenon, start the installation routine. The new version is being installed parallel to the old one. All projects and individual settings will remain unchanged. Projects aren't converted to the new version during installation. The respective project is converted when it's being opened for the first time in the Editor. A dialog box notifies you about this procedure. The old version is automatically backed up. If you want to use only the most up-to-date version, use the Windows control panel software deinstallation routine to remove the old version.

Attention

*If an installation involves changing the SQL server (for example, from zenon 7.00 to zenon 7.10 or higher), you must back up all projects or the workspace must be backed up before the installation. This backup is read back after the installation. For details see also section **Multi-user projects/Update with change of SQL servers**.*

If you want to use multiple versions of zenon simultaneously, you have to manage them using the **Startup Tool**. You can start only one version at a time. You can select which version you want to run using the **Startup Tool** that automatically adjusts all necessary settings. You can find details in chapter **Startup Tool**.



Information

New versions always bring about structural changes. Projects and settings remain untouched during installation. If you open the Editor for the first time, projects are converted to the new version. Simultaneously, an automatic backup of the old version is created.

Converted projects cannot be edited in legacy versions. From version 6.2 on, the Editor is able to create projects for different Runtime versions.

Important tips for converting projects can be found in the revision text. This is supplied on the installation medium and is available to you online.

MULTI-USER PROJECTS

To ensure a change to a new zenon version in multi-user projects without data loss:

1. Check in all checked out elements on all Clients -> Accept changes.
Nothing must be checked out. This is true for all projects.
2. Install the new zenon version on the Server.
3. Convert all Server projects to the new version: For this load all projects in the Editor on the Server computer.
4. Install the new zenon version on the Client computers.
5. Load projects on the Clients and check them out again.

UPDATE WITH CHANGE OF THE SQL SERVER

If an installation involves changing the SQL server (e.g. from zenon 7.00 to zenon 7.60), additional steps are needed. These steps are carried out:

- ▶ after all projects are checked in
- ▶ before the new version is installed

Procedure when changing the SQL Server:

1. check in all checked out elements on all Clients -> Accept changes.
2. at the multi-user Server open the Editor in the starting version
3. create backups of all projects which you want to edit or open with the new version
 - either as single project backups
 - or as backup of the complete workspace
4. install the new version on the Server
5. convert all Server projects to the new version by loading the project backups which you have created before once in the Editor

6. install the update on every Client
7. transfer the projects from the multi-user Server to the Clients
(regard the new name of the SQL instance)
8. the projects are converted, synchronized and ready for action

Attention: Make sure that the settings of the firewall allows the data traffic between the multi-user Server and the Clients.

19. FAQ

Errors during the installation mostly occur when the replacement or creation of files is prevented by a virus scanner or by existing installations. Here you can find the most frequent reasons for installation errors and their solution.

ZENON

Problem	Solution
Installation is terminated. Typical error message: Error 1304. Error writing to file...	Deactivate the virus scanner. Close unnecessary programs.
Demo projects were installed but are not displayed. New projects cannot be created.	Check the computer name. The computer: must not consist of more than 15 characters must be in accordance with the convention of the NetBIOS computer name
<i>Error message that a service cannot be started.</i>	first reboot the computer then start the zenon setup again

SQL SERVER

GENERAL

Problem	Solution
The installation is unsuccessful because the password does not meet the requirements.	If the minimum password length is changed from a default 8 to a value greater than 10 via the local Windows security guideline, then the installation of the SQL Server will be unsuccessful because the zenon SQL password consists of 10 characters.

20. Technical support

BASIC SUPPORT

If you need support for the installation, our employees in Technical Consulting would be happy to help you.

User with basic support can reach the hotline at the following e-mail address: support@copadata.com.

ADVANCED AND PREMIUM SUPPORT

If you have an Advanced or Premium service agreement, please use the telephone number or email address provided in that. Our sales employees (sales@copadata.com) will gladly assist you, if you want to upgrade your free basic service agreement to an Advanced or Premium service agreement.

21. Open Source GPL/Mozilla Licenses

These licenses are applicable only for the listed software components:

- ▶ For zenVNCSrv.exe, zenVNCSrvCE.exe and zenVNCCli.exe:
GNU GENERAL PUBLIC LICENSE Version 3 applies
- ▶ For MsgCtrlVoip.dll:
GNU LESSER GENERAL PUBLIC LICENSE Version 3 applies

- ▶ For Ude.dll:
MOZILLA PUBLIC LICENSE Version 1.1 applies
- ▶ For TestOCCReader.dll
GNU LESSER GENERAL PUBLIC LICENSE (LGPL) Version 2.1 with additional exception

The source code for the above mentioned software components can always be requested, free of charge, at this contact address:

Ing. Punzenberger COPA-DATA GmbH
Karolingerstrasse 7b
A-5020 Salzburg
Austria
Tel: +43 / 662 / 43 10 02 - 0
Fax: +43 / 662 / 43 10 02 - 33
Email: sales@copadata.com
Internet: www.copadata.com

21.1 GNU GENERAL PUBLIC LICENSE (GPL)

PREAMBLE

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

21.1.1 TERMS AND CONDITIONS

Definitions

“This License” refers to version 3 of the GNU General Public License.

“Copyright” also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

“The Program” refers to any copyrightable work licensed under this License. Each licensee is addressed as “you”. “Licensees” and “recipients” may be individuals or organizations.

To “modify” a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a “modified version” of the earlier work or a work “based on” the earlier work.

A “covered work” means either the unmodified Program or a work based on the Program.

To “propagate” a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To “convey” a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays “Appropriate Legal Notices” to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

Source Code

The “source code” for a work means the preferred form of the work for making modifications to it. “Object code” means any non-source form of a work.

A “Standard Interface” means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The “System Libraries” of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A “Major Component”, in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The “Corresponding Source” for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work’s System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

Basic Permissions

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

Protecting Users' Legal Rights From Anti-Circumvention Law

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

Conveying Verbatim Copies

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

Conveying Modified Source Versions

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

1. The work must carry prominent notices stating that you modified it, and giving a relevant date.

2. The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to “keep intact all notices”.
3. You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
4. If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an “aggregate” if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

Conveying Non-Source Forms

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

1. Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
2. Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
3. Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
4. Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with

the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

5. Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A “User Product” is either (1) a “consumer product”, which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, “normally used” refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

“Installation Information” for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

Additional Terms

“Additional permissions” are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

1. Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
2. Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
3. Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
4. Limiting the use for publicity purposes of names of licensors or authors of the material; or
5. Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
6. Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered “further restrictions” within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

Termination

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

Acceptance Not Required for Having Copies

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

Automatic Licensing of Downstream Recipients

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An “entity transaction” is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in

a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

Patents

A “contributor” is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's “contributor version”.

A contributor's “essential patent claims” are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, “control” includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a “patent license” is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To “grant” such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. “Knowingly relying” means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is “discriminatory” if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent

license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

No Surrender of Others' Freedom

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

Use with the GNU Affero General Public License

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

Revised Versions of this License

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License “or any later version” applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

Disclaimer of Warranty

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

Limitation of Liability

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Interpretation of Sections 15 and 16

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

21.2 MOZILLA PUBLIC LICENSE

Version 1.1

21.2.1 Definitions

1. "Commercial Use" means distribution or otherwise making the Covered Code available to a third party.
2. "Contributor" means each entity that creates or contributes to the creation of Modifications.
3. "Contributor Version" means the combination of the Original Code, prior Modifications used by a Contributor, and the Modifications made by that particular Contributor.
4. "Covered Code" means the Original Code or Modifications or the combination of the Original Code and Modifications, in each case including portions thereof.
5. "Electronic Distribution Mechanism" means a mechanism generally accepted in the software development community for the electronic transfer of data.
6. "Executable" means Covered Code in any form other than Source Code.
7. "Initial Developer" means the individual or entity identified as the Initial Developer in the Source Code notice required by Exhibit A.
8. "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.
9. "License" means this document.
 - a) "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.
10. "Modifications" means any addition to or deletion from the substance or structure of either the Original Code or any previous Modifications. When Covered Code is released as a series of files, a Modification is:
 - a) Any addition to or deletion from the contents of a file containing Original Code or previous Modifications.
 - b) Any new file that contains any part of the Original Code or previous Modifications.
11. "Original Code" means Source Code of computer software code which is described in the Source Code notice required by Exhibit A as Original Code, and which, at the time of its release under this License is not already Covered Code governed by this License.
 - a) "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.
12. "Source Code" means the preferred form of the Covered Code for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an Executable, or source code differential comparisons against either the Original Code or another well known, available Covered Code of the Contributor's choice. The Source Code can be in a compressed or archival form, provided the appropriate decompression or de-archiving software is widely available for no charge.

13. "You" (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License or a future version of this License issued under Section 6.1. For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

21.2.2 Source Code License

The Initial Developer Grant

The Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license, subject to third party intellectual property claims:

1. under intellectual property rights (other than patent or trademark) Licensable by Initial Developer to use, reproduce, modify, display, perform, sublicense and distribute the Original Code (or portions thereof) with or without Modifications, and/or as part of a Larger Work; and
2. under Patents Claims infringed by the making, using or selling of Original Code, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Code (or portions thereof).
3. the licenses granted in this Section 2.1(a) and (b) are effective on the date Initial Developer first distributes Original Code under the terms of this License.
4. Notwithstanding Section 2.1(b) above, no patent license is granted:
 - a) for code that You delete from the Original Code;
 - b) separate from the Original Code; or
 - c) for infringements caused by:
 - i) the modification of the Original Code or
 - ii) the combination of the Original Code with other software or devices

Contributor Grant

Subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license

1. under intellectual property rights (other than patent or trademark) Licensable by Contributor, to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof) either on an unmodified basis, with other Modifications, as Covered Code and/or as part of a Larger Work; and
2. under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: 1) Modifications made by that Contributor (or portions thereof); and 2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).
3. the licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first makes Commercial Use of the Covered Code.
4. Notwithstanding Section 2.2(b) above, no patent license is granted: 1) for any code that Contributor has deleted from the Contributor Version; 2) separate from the Contributor Version; 3) for infringements caused by: i) third party modifications of Contributor Version or ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or 4) under Patent Claims infringed by Covered Code in the absence of Modifications made by that Contributor.

21.2.3 Distribution Obligations

Application of License

The Modifications which You create or to which You contribute are governed by the terms of this License, including without limitation Section 2.2. The Source Code version of Covered Code may be distributed only under the terms of this License or a future version of this License released under Section 6.1, and You must include a copy of this License with every copy of the Source Code You distribute. You may not offer or impose any terms on any Source Code version that alters or restricts the applicable version of this License or the recipients' rights hereunder. However, You may include an additional document offering the additional rights described in Section 3.5.

Availability of Source Code

Any Modification which You create or to which You contribute must be made available in Source Code form under the terms of this License either on the same media as an Executable version or via an accepted Electronic Distribution Mechanism to anyone to whom you made an Executable version available; and if made available via Electronic Distribution Mechanism, must remain available for at least twelve (12) months after the date it initially became available, or at least six (6) months after a subsequent version of that particular Modification has been made available to such recipients. You are

responsible for ensuring that the Source Code version remains available even if the Electronic Distribution Mechanism is maintained by a third party.

Description of Modifications

You must cause all Covered Code to which You contribute to contain a file documenting the changes You made to create that Covered Code and the date of any change. You must include a prominent statement that the Modification is derived, directly or indirectly, from Original Code provided by the Initial Developer and including the name of the Initial Developer in (a) the Source Code, and (b) in any notice in an Executable version or related documentation in which You describe the origin or ownership of the Covered Code.

Intellectual Property Matters

1. **Third Party Claims.** If Contributor has knowledge that a license under a third party's intellectual property rights is required to exercise the rights granted by such Contributor under Sections 2.1 or 2.2, Contributor must include a text file with the Source Code distribution titled "LEGAL" which describes the claim and the party making the claim in sufficient detail that a recipient will know whom to contact. If Contributor obtains such knowledge after the Modification is made available as described in Section 3.2, Contributor shall promptly modify the LEGAL file in all copies Contributor makes available thereafter and shall take other steps (such as notifying appropriate mailing lists or newsgroups) reasonably calculated to inform those who received the Covered Code that new knowledge has been obtained.
2. **Contributor APIs.** If Contributor's Modifications include an application programming interface and Contributor has knowledge of patent licenses which are reasonably necessary to implement that API, Contributor must also include this information in the LEGAL file.
3. **Representations.** Contributor represents that, except as disclosed pursuant to Section 3.4(a) above, Contributor believes that Contributor's Modifications are Contributor's original creation(s) and/or Contributor has sufficient rights to grant the rights conveyed by this License.

Required Notices

You must duplicate the notice in Exhibit A in each file of the Source Code. If it is not possible to put such notice in a particular Source Code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more Modification(s) You may add your name as a Contributor to the notice described in Exhibit A. You must also duplicate this License in any documentation for the Source Code where You describe recipients' rights or ownership rights relating to Covered Code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Code. However, You may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear than any such warranty, support,

indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

Distribution of Executable Versions

You may distribute Covered Code in Executable form only if the requirements of Section 3.1-3.5 have been met for that Covered Code, and if You include a notice stating that the Source Code version of the Covered Code is available under the terms of this License, including a description of how and where You have fulfilled the obligations of Section 3.2. The notice must be conspicuously included in any notice in an Executable version, related documentation or collateral in which You describe recipients' rights relating to the Covered Code. You may distribute the Executable version of Covered Code or ownership rights under a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable version does not attempt to limit or alter the recipient's rights in the Source Code version from the rights set forth in this License. If You distribute the Executable version under a different license You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or any Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

Larger Works

You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Code.

21.2.4 Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Code due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be included in the LEGAL file described in Section 3.4 and must be included with all distributions of the Source Code. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

21.2.5 Application of this License

This License applies to code to which the Initial Developer has attached the notice in Exhibit A and to related Covered Code.

21.2.6 Versions of the License

New Versions

Netscape Communications Corporation ("Netscape") may publish revised and/or new versions of the License from time to time. Each version will be given a distinguishing version number.

Effect of New Versions

Once Covered Code has been published under a particular version of the License, You may always continue to use it under the terms of that version. You may also choose to use such Covered Code under the terms of any subsequent version of the License published by Netscape. No one other than Netscape has the right to modify the terms applicable to Covered Code created under this License.

Derivative Works

If You create or use a modified version of this License (which you may only do in order to apply it to code which is not already Covered Code governed by this License), You must (a) rename Your license so that the phrases "Mozilla", "MOZILLAPL", "MOZPL", "Netscape", "MPL", "NPL" or any confusingly similar phrase do not appear in your license (except to note that your license differs from this License) and (b) otherwise make it clear that Your version of the license contains terms which differ from the Mozilla Public License and Netscape Public License. (Filling in the name of the Initial Developer, Original Code or Contributor in the notice described in Exhibit A shall not of themselves be deemed to be modifications of this License.)

21.2.7 Disclaimer of Warranty

COVERED CODE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED CODE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED CODE IS WITH YOU. SHOULD ANY COVERED CODE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED CODE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

21.2.8 Termination

1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses to the Covered Code which are properly granted shall survive any termination of this License. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.
2. If You initiate litigation by asserting a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You file such action is referred to as "Participant") alleging that:
 - a) such Participant's Contributor Version directly or indirectly infringes any patent, then any and all rights granted by such Participant to You under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively, unless if within 60 days after receipt of notice You either: (i) agree in writing to pay Participant a mutually agreeable reasonable royalty for Your past and future use of Modifications made by such Participant, or (ii) withdraw Your litigation claim with respect to the Contributor Version against such Participant. If within 60 days of notice, a reasonable royalty and payment arrangement are not mutually agreed upon in writing by the parties or the litigation claim is not withdrawn, the rights granted by Participant to You under Sections 2.1 and/or 2.2 automatically terminate at the expiration of the 60 day notice period specified above.
 - b) any software, hardware, or device, other than such Participant's Contributor Version, directly or indirectly infringes any patent, then any rights granted to You by such Participant under Sections 2.1(b) and 2.2(b) are revoked effective as of the date You first made, used, sold, distributed, or had made, Modifications made by that Participant
3. If You assert a patent infringement claim against Participant alleging that such Participant's Contributor Version directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.
4. In the event of termination under Sections 8.1 or 8.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or any distributor hereunder prior to termination shall survive termination.

21.2.9 Limitation of Liability

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED CODE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF GOODWILL, WORK

STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

21.2.10 U.S. Government End Users

The Covered Code is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Code with only those rights set forth herein.

21.2.11 Miscellaneous

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by California law provisions (except to the extent applicable law, if any, provides otherwise), excluding its conflict-of-law provisions. With respect to disputes in which at least one party is a citizen of, or an entity chartered or registered to do business in the United States of America, any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California, with venue lying in Santa Clara County, California, with the losing party responsible for costs, including without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License.

21.2.12 Responsibility for Claims

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

21.2.13 Multiple-Licensed Code

Initial Developer may designate portions of the Covered Code as "Multiple-Licensed". "Multiple-Licensed" means that the Initial Developer permits you to utilize portions of the Covered Code under Your choice of the NPL or the alternative licenses, if any, specified by the Initial Developer in the file described in Exhibit A.

21.2.14 EXHIBIT A - Mozilla Public License

`UDE.dll`The contents of this file are subject to the Mozilla Public License Version 1.1 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.mozilla.org/MPL/>

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Original Code can be found here: <https://github.com/errepi/ude> .

The Initial Developer of the Original Code is Rudi Pettazzi.

All Rights Reserved.

Contributor(s): -.

[NOTE: The text of this Exhibit A may differ slightly from the text of the notices in the Source Code files of the Original Code. You should use the text of this Exhibit A rather than the text found in the Original Code Source Code for Your Modifications.]

21.3 GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <http://fsf.org/> Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

21.3.1 Additional Definitions

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library.

Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

21.3.2 Exception to Section 3 of the GNU GPL

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

21.3.3 Conveying Modified Versions

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

1. under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
2. under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

21.3.4 Object Code Incorporating Material from Library Header Files

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

1. Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
2. Accompany the object code with a copy of the GNU GPL and this license document.

21.3.5 Combined Works

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

1. Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
2. Accompany the Combined Work with a copy of the GNU GPL and this license document.
3. For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.
4. Do one of the following:
 - a) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.
 - b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer

system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

5. Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

21.3.6 Combined Libraries

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

1. Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
2. Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

21.3.7 Revised Versions of the GNU Lesser General Public License

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

22. Open Source licences for several features

- ▶ The SNMP driver (SNMPNG32.exe) uses OpenSSL and NetSNMP.
- ▶ The OPC UA Process Gateway (AccessOPCUA.dll) and the OPC UA driver (OPCUA32.exe) use OpenSSL
- ▶ The Message Control uses MIMEMail and OpenSSL (zenon32.dll)
- ▶ The HTML Web Engine –Web Application uses ANTLRv3, Bootstrap, jQuery UI, jQuery, Json.NET, NLog, Owin, jQuery.SVG, WebGrease
- ▶ The HTML Web Engine – Deployment Tool uses Extended WPF Toolkit, Newtonsoft.Json, NLog, WPF Application Framework (WAF)
- ▶ The HTML Web Engine – Compiler uses Newtonsoft.Json, Nlog.Windows.Forms, NLog
- ▶ The Everywhere Essentials QR Code Generator Wizard uses QrCode.Net
- ▶ The Message Control VoiceOverIP Extension (MsgCtrlVoip.dll) uses libSRTP, Speex, PortAudio, Alaw/Ulaw Converter, GSM Codec 06.10 and iLBC Codec
- ▶ The 3D Configuration Tool uses DWF Toolkit License, the MIT License (MIT), the SharpDX - Alexandre Mutel License
- ▶ The GIS-Control uses the Gmap-Control with the MIT License (MIT)
- ▶ The System.Data.SQLite uses the Microsoft Public License (MS-PL)
- ▶ The NLog 4.4.0 uses the NLog / License
- ▶ The Add-In Framework uses the SharpDevelop 5.1.0 with the MIT License, the Mono.AddIns 1.3 with the MIT License, the Mono.Cecil 0.9.6.4 with the MIT/X11 License, the WPF Application Framework (WAF) 3.2.0 with the Microsoft Public License (MS-PL)

You have to accept the according license agreements as well as the standard end user license agreement (EULA)

22.1 OpenSSL

LICENSE ISSUES

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit.

See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL License

Copyright (c) 1998-2011 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"
4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:
 "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)

All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
 "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

22.2 NetSNMP

Various copyrights apply to this package, listed in various separate parts below. Please make sure that you read all the parts.

22.2.1 CMU/UCD copyright notice: (BSD like)

Copyright 1989, 1991, 1992 by Carnegie Mellon University

Derivative Work - 1996, 1998-2000

Copyright 1996, 1998-2000 The Regents of the University of California

All Rights Reserved

Permission to use, copy, modify and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of CMU and The Regents of the University of California not be used in advertising or publicity pertaining to distribution of the software without specific written permission.

CMU AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA DISCLAIM ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL CMU OR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM THE LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

22.2.2 Networks Associates Technology, Inc copyright notice

Copyright (c) 2001-2003, Networks Associates Technology, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of the Networks Associates Technology, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR

PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.2.3 Cambridge Broadband Ltd. copyright notice

Portions of this code are copyright (c) 2001-2003, Cambridge Broadband Ltd.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ The name of Cambridge Broadband Ltd. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.2.4 Sun Microsystems, Inc. copyright notice

Copyright © 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Use is subject to license terms below.

This distribution may include materials developed by third parties

Sun, Sun Microsystems, the Sun logo and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of the Sun Microsystems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR

OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.2.5 Sparta, Inc copyright notice (BSD)

Copyright (c) 2003-2009, Sparta, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

- ▶ Neither the name of Sparta, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR

OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.2.6 Cisco/BUTNIC copyright notice (BSD)

Copyright (c) 2004, Cisco, Inc and Information Network

Center of Beijing University of Posts and Telecommunications.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of Cisco, Inc, Beijing University of Posts and Telecommunications, nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR

CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.2.7 Fabasoft R&D Software GmbH & Co KG copyright notice

Copyright (c) Fabasoft R&D Software GmbH & Co KG, 2003

oss@fabasoft.com

Author: Bernhard Penz

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ The name of Fabasoft R&D Software GmbH & Co KG or any of its subsidiaries, brand or product names may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.2.8 Apple Inc. copyright notice (BSD)

Copyright (c) 2007 Apple Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of Apple Inc. ("Apple") nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY APPLE AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL APPLE OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.2.9 ScienceLogic, LLC copyright notice (BSD)

Copyright (c) 2009, ScienceLogic, LLC

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of ScienceLogic, LLC nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.3 MIMEMail

Copyright (c) 2013, tike <timflex@gmx.de>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment:
This product includes software developed by the tike.
4. Neither the name of the tike nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY <COPYRIGHT HOLDER> "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL <COPYRIGHT HOLDER> BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.4 ANTLRv3

[The BSD License]

Copyright (c) 2010 Terence Parr

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of the author nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.5 Bootstrap, jQuery UI, jQuery, Newtonsoft.Json

The MIT License (MIT)_

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

-

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.6 Extended WPF Toolkit, WPF Application Framework (WAF)

Microsoft Public License (Ms-PL)

This license governs use of the accompanying software. If you use the software, you accept this license. If you do not accept the license, do not use the software.

1. Definitions

- ▶ The terms "reproduce," "reproduction," "derivative works," and "distribution" have the same meaning here as under U.S. copyright law.
- ▶ A "contribution" is the original software, or any additions or changes to the software.
- ▶ A "contributor" is any person that distributes its contribution under this license.
- ▶ "Licensed patents" are a contributor's patent claims that read directly on its contribution.

2. Grant of Rights

- ▶ (A) Copyright Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free copyright license to reproduce its contribution, prepare derivative works of its contribution, and distribute its contribution or any derivative works that you create.
- ▶ (B) Patent Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free license under its licensed patents to make, have made, use, sell, offer for sale, import, and/or otherwise dispose of its contribution in the software or derivative works of the contribution in the software.

3. Conditions and Limitations

- ▶ (A) No Trademark License- This license does not grant you rights to use any contributors' name, logo, or trademarks.
- ▶ (B) If you bring a patent claim against any contributor over patents that you claim are infringed by the software, your patent license from such contributor to the software ends automatically.
- ▶ (C) If you distribute any portion of the software, you must retain all copyright, patent, trademark, and attribution notices that are present in the software.
- ▶ (D) If you distribute any portion of the software in source code form, you may do so only under this license by including a complete copy of this license with your distribution. If you distribute any portion of the software in compiled or object code form, you may only do so under a license that complies with this license.
- ▶ (E) The software is licensed "as-is." You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

22.7 Nlog, NLog.Windows.Forms

Copyright (c) 2004-2011 Jaroslaw Kowalski <jaak@jkowalski.net>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of Jaroslaw Kowalski nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.8 WebGrease, Owin

Apache License 2.0 (Apache)

Version 2.0, January 2004

<http://www.apache.org/licenses/>

22.8.1 Definitions

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

22.8.2 Grant of Copyright License

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

22.8.3 Grant of Patent License

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

22.8.4 Redistribution

You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

1. You must give any other recipients of the Work or Derivative Works a copy of this License; and
2. You must cause any modified files to carry prominent notices stating that You changed the files; and
3. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
4. If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

22.8.5 Submission of Contributions

Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

22.8.6 Trademarks

This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

22.8.7 Disclaimer of Warranty

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

22.8.8 Limitation of Liability

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

22.8.9 Accepting Warranty or Additional Liability

While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

22.9 jQuery.SVG

Copyright 2007 - 2015 Keith Wood

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.10 QrCode.Net

[The MIT License (MIT)]

Copyright (c) 2011 George Mamaladze

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.11 libSRTP

Copyright (c) 2001-2006 Cisco Systems, Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of the Cisco Systems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF

MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.12 Speex

Copyright 2002-2005

Xiph.org Foundation

Jean-Marc Valin

David Rowe

EpicGames

Analog Devices

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of the Xiph.org Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF

SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.13 PortAudio

Based on the Open Source API proposed by Ross Bencina

Copyright (c) 1999-2000 Phil Burk

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

22.14 Alaw/Ulaw Converter

This source code is a product of Sun Microsystems, Inc. and is provided for unrestricted use. Users may copy or modify this source code without charge.

SUN SOURCE CODE IS PROVIDED AS IS WITH NO WARRANTIES OF ANY KIND INCLUDING THE WARRANTIES OF DESIGN, MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE.

Sun source code is provided with no support and without any obligation on the part of Sun Microsystems, Inc. to assist in its use, correction, modification or enhancement.

SUN MICROSYSTEMS, INC. SHALL HAVE NO LIABILITY WITH RESPECT TO THE INFRINGEMENT OF COPYRIGHTS, TRADE SECRETS OR ANY PATENTS BY THIS SOFTWARE OR ANY PART THEREOF.

In no event will Sun Microsystems, Inc. be liable for any lost revenue or profits or other special, indirect and consequential damages, even if Sun has been advised of the possibility of such damages.

Sun Microsystems, Inc.

2550 Garcia Avenue

Mountain View, California 94043

22.15 GSM Codec 06.10

Copyright 1992, 1993, 1994 by Jutta Degener and Carsten Bormann, Technische Universitaet Berlin

Any use of this software is permitted provided that this notice is not removed and that neither the authors nor the Technische Universitaet Berlin are deemed to have made any representations as to the suitability of this software for any purpose nor are held responsible for any defects of this software. THERE IS ABSOLUTELY NO WARRANTY FOR THIS SOFTWARE.

As a matter of courtesy, the authors request to be informed about uses this software has found, about bugs in this software, and about any improvements that may be of general interest.

Berlin, 28.11.1994

Jutta Degener

Carsten Bormann

22.16 iLBC Codec

Copyright 2011 The WebRTC project authors

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of Google nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.17 DWF Toolkit

NOTICE TO USER: THIS LICENSE AGREEMENT ("AGREEMENT") IS A LEGAL AGREEMENT BETWEEN YOU (EITHER AN INDIVIDUAL OR A SINGLE ENTITY) AND AUTODESK, INC. FOR THE RELEASE CANDIDATE VERSION OF THE DWF TOOLKIT, WHICH INCLUDES COMPUTER SOFTWARE AND MAY INCLUDE ASSOCIATED MEDIA, PRINTED MATERIALS AND ONLINE OR ELECTRONIC DOCUMENTATION ("LICENSED SOFTWARE"). BY INSTALLING THE LICENSED SOFTWARE YOU ACCEPT ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT, DO NOT INSTALL OR USE THE LICENSED SOFTWARE.

1. LICENSE GRANT

1.1 Autodesk grants to you ("Licensee") a perpetual, nontransferable, nonexclusive, royalty-free, limited license to:

- 1.1.1 (a) Use the Licensed Software for development, testing, research, internal, educational, or commercial purposes.; (b) Modify the Licensed Software to create derivative works and applications, including ports; and (c) Compile the Licensed Software, derivative works and applications prepared in accordance with subsection 1.1.1(b) into binary code.

You acknowledge that the Licensed Software is being provided by Autodesk as a courtesy during a "release candidate" period during which Autodesk may perform testing and modifications to the Licensed Software. As such, Autodesk makes no representation or promise that future versions or releases of the Licensed Software will contain identical or substantially similar elements and functions as the version licensed hereunder. Though Autodesk does not currently believe there will be substantial changes to the Licensed Software, Autodesk reserves the right to make any change in accordance with its requirements.

1.1.2 Reproduce, distribute and sublicense free of charge or for a fee the Licensed Software in binary code form in conjunction with derivative works or applications created by Licensee or licensed from third parties by Licensee, provided, that: (a) Licensee makes no use of Autodesk's trademarks, trade names, or trade dress; (b) In the event Licensee makes any modification to the Licensed Software, Licensee must publish the specification for such modifications for use by third party developers and provide Autodesk with a copy thereof; and (c) The Licensee must sublicense the Licensed Software "as is", without warranty of any kind.

1.1.3 Reproduce, distribute and sublicense free of charge to sublicensees the source code of the unmodified Licensed Software, provided that (a) Licensee must state in its sublicenses that the Licensed Software is being distributed pursuant to a license granted by Autodesk, Inc.; (b) The terms of sublicenses granted by Licensee must (i) contain all applicable terms of this Agreement, and (ii) not be broader than the terms of the license granted by this Agreement; (c) Licensee must exactly reproduce Autodesk's copyright and other proprietary rights notices which accompany the copy of the Licensed Software licensed by Autodesk to Licensee; and (d) Licensee shall conspicuously state in its sublicenses that the Licensed Software is offered "as is", without warranty of any kind.

1.1.4 Reproduce, distribute and sublicense the source code of the Licensed Software as modified by Licensee, provided that (a) Licensee must state in its sublicense that the Licensed Software has been modified by Licensee; (b) Licensee must exactly reproduce Autodesk's copyright and other proprietary rights notices which accompany the copy of the Licensed Software licensed by Autodesk to Licensee; (c) As to the unmodified portions of the Licensed Software, the terms of the sublicenses granted by Licensee must (i) contain all applicable terms of this Agreement, and (ii) not be broader than the terms of the license granted by this Agreement; (d) Licensee must conspicuously state in its sublicenses that the original, unmodified portions of the Licensed Software are offered "as is", without warranty of any kind; and (e) Licensee must (i) publish the modified Licensed Software to the Worldwide Web, (ii) make available with the modified Licensed Software documentation which describes in detail the modifications which Licensee has made to the Licensed Software, and (iii) provide to Autodesk a copy of the modified Licensed Software and the documentation.

1.2 Licensee acquires no right, title, or interest in or to the Licensed Software.

1.3 Licensee shall retain all rights to any independently developed software, such as applications, developed by or for Licensee.

1.4 Autodesk is under no obligation to provide maintenance, support, or upgrades for the Licensed Software.

2. COPYRIGHTS AND TRADEMARKS

Licensee shall reproduce and apply any copyright or other proprietary rights notices included on or embedded in the Licensed Software to any copies of the Licensed Software or to applications created using the Licensed Software, in any form. Licensee shall have no right to use any Autodesk trademarks, trade names or trade dress absent a separate written agreement between Autodesk and Licensee. Licensee hereby understands and agrees that Autodesk is not granting any rights to Autodesk patents, copyrights, trademarks or trade secret information to Licensee by this Agreement.

3. FEES

Use of the Licensed Software in accordance with the terms of this Agreement shall not require payment of a license fee to Autodesk.

4. TERM AND TERMINATION

The grant of a perpetual license notwithstanding, Autodesk may immediately terminate this Agreement and revoke the license granted to Licensee upon written notice to Licensee if Licensee fails to comply with any of the terms or conditions of this Agreement. Upon termination of this Agreement, Licensee shall immediately cease using, reproducing and distributing the Licensed Software, the license and rights granted hereunder shall expire, and Licensee shall immediately destroy or return to Autodesk the Licensed Software and all related documentation, materials or copies thereof.

5. DISCLAIMER OF WARRANTY

5.1 The Licensed Software is provided "AS IS" and without any warranty of any kind. Autodesk reserves the right to update and make modifications to the Licensed Software in any future release in its sole discretion.

5.2 AUTODESK DOES NOT MAKE AND HEREBY DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

6. LIMITATION OF LIABILITY

6.1 In no event will Autodesk be liable for any lost revenues, data, or profits, or special, indirect, or consequential damages, even if Autodesk has been advised of the possibility or probability of such damages. Autodesk's maximum liability for damages shall be limited to the fees, if any, required under Section 3 for the particular Licensed Software which caused the damages.

6.2 The Licensed Software is not fault-tolerant and is not designed, manufactured, or intended for use or resale as online control equipment in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, direct life support machines, or weapons systems, in which the failure of the Licensed Software or derived binaries could lead directly to death, personal injury, or severe physical or environmental damage ("High Risk Activities"). Autodesk specifically disclaims any express or implied warranty of fitness for High Risk Activities. Licensee will not knowingly use, distribute, or sublicense the Licensed Software or derived binaries for High Risk Activities

and will ensure that its customers and end-users of Licensee's products are provided with a copy of the notice specified in the first sentence of this Section 6.2.

7. PROPRIETARY INFORMATION

The Licensed Software is the proprietary information of Autodesk, Inc. ("Confidential Information"). Except as permitted by this Agreement, Licensee shall not disclose Confidential Information and shall use it only for purposes specifically contemplated by this Agreement. This Agreement will not affect any non-disclosure agreement between the parties.

8. EXPORT

Unless properly authorized by the U.S. Government, Licensee shall not export, re-export or transfer, whether directly or indirectly, the Licensed Software or binary derivative or direct products thereof, to any person or company who is (a) present in or controlled by a legal resident of any proscribed country listed in the U.S. Export Administration Regulations (or any equivalent thereof), or (b) a person or entity named in the entity lists, denied persons lists or specially designated nationals lists maintained by the U.S. Government.

9. U.S. GOVERNMENT RESTRICTED RIGHTS

This Licensed Software is provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software Clause as DFARS 252.227-7013 and FAR 52.227-19 as applicable. Manufacturer is Autodesk, Inc., 111 McInnis Parkway, San Rafael, California 94903.

10. GOVERNING LAW

Any action related to this Agreement will be governed by California law, excluding choice of law rules.

22.18 Helix Toolkit

Copyright (c) 2012 Helix Toolkit contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to

permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.19 Open CASCADE Technology

Licensing

Open CASCADE Technology version 6.7.0 and later are governed by GNU Lesser General Public License (LGPL) version 2.1 with additional exception.

Note: A specific license is applied to Open CASCADE Technology version 6.6.0 and earlier.

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA. Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

PREAMBULE

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages—typically libraries—of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library. To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who

have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

Open CASCADE Exception (version 1.0) to GNU LGPL version 2.1.

The object code (i.e. not a source) form of a "work that uses the Library" can incorporate material from a header file that is part of the Library. As a special exception to the GNU Lesser General Public License version 2.1, you may distribute such object code incorporating material from header files provided with the Open CASCADE Technology libraries (including code of CDL generic classes) under terms of your choice, provided that you give prominent notice in supporting documentation to this code that it makes use of or is based on facilities provided by the Open CASCADE Technology software.

22.20 SharpDX

Copyright (c) 2010-2015 SharpDX - Alexandre Mutel

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE

AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.21 GMap.NET

The MIT License (MIT)

Copyright (c) FLAT EARTH. This software can access some map providers and may violate their Terms of Service, you use it at your own risk, nothing is forcing you to accept this ;} Source itself is legal!

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.22 System.Data.SQLite Copyright

All files in the "System.Data.SQLite.Linq/SQL Generation" directory (within the source tree) are covered by the Microsoft Public License (MS-PL). These files end up being compiled into both the "System.Data.SQLite.Linq" and "System.Data.SQLite.EF6" assemblies.

All other code and documentation in System.Data.SQLite has been dedicated to the public domain by the authors. All code authors, and representatives of the companies they work for, have signed affidavits dedicating their contributions to the public domain and originals of those signed affidavits are stored in a firesafe at the main offices of Hwaci. Anyone is free to copy, modify, publish, use, compile,

sell, or distribute the original System.Data.SQLite code, either in source code form or as a compiled binary, for any purpose, commercial or non-commercial, and by any means.

Obtaining An Explicit License To Use System.Data.SQLite

Even though System.Data.SQLite is in the public domain and does not require a license, some users want to obtain a license anyway. Some reasons for obtaining a license include:

- ▶ You are using System.Data.SQLite in a jurisdiction that does not recognize the public domain.
- ▶ You are using System.Data.SQLite in a jurisdiction that does not recognize the right of an author to dedicate their work to the public domain.
- ▶ You want to hold a tangible legal document as evidence that you have the legal right to use and distribute System.Data.SQLite.
- ▶ Your legal department tells you that you have to purchase a license.

If you feel like you really have to purchase a license for System.Data.SQLite, Hwaci, the company that employs the architect and principal developers of System.Data.SQLite, will sell you one.

CONTRIBUTED CODE

In order to keep System.Data.SQLite completely free and unencumbered by copyright, all new contributors to the System.Data.SQLite code base are asked to dedicate their contributions to the public domain. If you want to send a patch or enhancement for possible inclusion in the System.Data.SQLite source tree, please accompany the patch with the following statement:

The author or authors of this code dedicate any and all copyright interest in this code to the public domain. We make this dedication for the benefit of the public at large and to the detriment of our heirs and successors. We intend this dedication to be an overt act of relinquishment in perpetuity of all present and future rights to this code under copyright law.

We are not able to accept patches or changes to System.Data.SQLite that are not accompanied by a statement such as the above. In addition, if you make changes or enhancements as an employee, then a simple statement such as the above is insufficient. You must also send by surface mail a copyright release signed by a company officer. A signed original of the copyright release should be mailed to:

Hwaci
6200 Maple Cove Lane
Charlotte, NC 28269
USA

A template copyright release is available in PDF or HTML. You can use this release to make future changes.

22.23 NLog 4.4.0 License

Copyright (c) 2004-2016 Jaroslaw Kowalski <jaak@jkowalski.net>, Kim Christensen, Julian Verdurmen All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- ▶ Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- ▶ Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- ▶ Neither the name of Jaroslaw Kowalski nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

22.24 SharpDevelop 5.1.0

The MIT License

SPDX short identifier: MIT

Copyright <YEAR> <COPYRIGHT HOLDER>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR

PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.25 Mono.AddIns 1.3

The MIT License

Copyright (C) 2007 Novell, Inc (<http://www.novell.com>)

Copyright (C) 2012 Xamarin Inc

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

22.26 Mono.Cecil 0.9.6.4

Mono.Cecil is licensed under the MIT/X11:

Copyright (c) 2008 - 2011, Jb Evain

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell

copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The MIT/X11 is a permissive license, which is GPL compatible, and allows usage within proprietary software as long as this license is distributed along with the software.

22.27 WPF Application Framework (WAF) 3.2.0

Microsoft Public License (Ms-PL)

This license governs use of the accompanying software. If you use the software, you accept this license. If you do not accept the license, do not use the software.

1. Definitions

The terms "reproduce," "reproduction," "derivative works," and "distribution" have the same meaning here as under U.S. copyright law.

A "contribution" is the original software, or any additions or changes to the software.

A "contributor" is any person that distributes its contribution under this license.

"Licensed patents" are a contributor's patent claims that read directly on its contribution.

2. Grant of Rights

(A) Copyright Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free copyright license to reproduce its contribution, prepare derivative works of its contribution, and distribute its contribution or any derivative works that you create.

(B) Patent Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free license under its licensed patents to make, have made, use, sell, offer for sale, import, and/or otherwise dispose of its contribution in the software or derivative works of the contribution in the software.

3. Conditions and Limitations

(A) No Trademark License- This license does not grant you rights to use any contributors' name, logo, or trademarks.

(B) If you bring a patent claim against any contributor over patents that you claim are infringed by the software, your patent license from such contributor to the software ends automatically.

(C) If you distribute any portion of the software, you must retain all copyright, patent, trademark, and attribution notices that are present in the software.

(D) If you distribute any portion of the software in source code form, you may do so only under this license by including a complete copy of this license with your distribution. If you distribute any portion of the software in compiled or object code form, you may only do so under a license that complies with this license.

(E) The software is licensed "as-is." You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.