COPA-DATA
do it your way

zenon manual

Installation and updates

v.7.20

Contents

1. Welcome to COPA-DATA help

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 and during execution of Service Packs and upgrades, 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
  - 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 16) chapter.
- zenon for Windows CE is installed using the normal installation routine. You can find details in chapter Runtime for Windows CE (on page 32).
- 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 6.20 or an earlier version 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

64-BIT OPERATING SYSTEMS: INSTALLATION OF OLDER VERSION AFTER INSTALLATION OF A VERSION STARTING FROM 7.10

If, on a 64-bit operating system, after installation of zenon7.10 or higher, a version of zenon with a lower version number is installed, the 64-bit services of version 7.10 or higher 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: `...\Additional_Software\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 `C:\Program Files\Common Files\COPA-DATA\zenAdminSrv`
3. Start the service **zenAdminSrv.exe** with the parameter **-service**

4. navigate to folder `C:\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`**

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 that

1. Restart the system
2. For x64 systems:
   a) On the installation medium, open the path `Additional_Software\COPA-DATA Multiple Network Protocol Driver x64`
   b) Execute the file called **`Install.bat`**
3. For x86 systems:
   a) On the installation medium, open the path `Additional_Software\COPA-DATA Multiple Network Protocol Driver x86`
   b) Execute the file called **`Install.bat`**

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

3. System requirements

zenon 7.20 can be used on all current Microsoft operating systems. The hardware being used is not important. The operating system abstracts hardware functions so far that zenon can normally be used without restrictions on any hardware.

zenon is always tested with the most up-to-date version of the operating systems with the newest available Service Packs and Hotfixes. You can thus assume that zenon can usually be used with the most recent service packs and hotfixes.

Changes in Microsoft's Service Packs and hotfixes or patches can cause incompatibilities and affect the software's functionality. If this is the case, COPA-DATA will release an updated version as soon as possible. In this case, please contact our Support: support@copadata.com.

> **Attention**
>
> *For the optimum display of zenon in Runtime, the value `Less than - 100%` is recommended as a setting for the Windows **`display`**. Higher values can lead to graphic elements, symbols, texts, etc. not being displayed correctly.*

3.1 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.

Parameters	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:	`DirectX hardware` and `DirectX software` only works on operating systems that support `DirectX11.1`. If the system does not support `DirectX 11.1`, it automatically switches to `Windows Enhanced`. The current `DirectX-` Runtime must be installed. For zenon it is installed together with the setup. For the Web Client it must be installed manually.	

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`.

3.2 Operating system

Operating system	Required service pack					
	zenon Editor	**zenon Runtime**	**zenon Web Server**	**zenon Web Client**	**zenon Logic Runtime**	**zenon Analyzer Server**

Windows 7 (Professional, Enterprise and Ultimate version, x86 and x64 versions).	SP 1	SP 1	SP 1	SP 1	SP 1	SP 1 - x64
Windows Embedded Standard 7 (if all necessary operating system components exist).	Cannot run	SP 1	SP 1	SP 1	SP 1	Cannot run
Windows 8 and 8.1 (Standard, Professional, Enterprise version, x86 and x64 versions)	SP 0	SP 0	SP 0	SP 0	SP 0	SP 0 - x64
Windows Embedded 8 Standard (if all necessary operating system components exist).	Cannot run	SP 0	SP 0	SP 0	SP 0	Cannot run
Windows 10	SP 0	SP 0	SP 0	SP 0	SP 0	SP 0
Windows Server 2008 R2 (All editions with the exception of Core)	SP 1	SP 1	SP 1	SP 1	SP 1	SP 1 - x64
Windows Server 2012 and 2012 R2 (All editions with the exception of Core)	SP 0	SP 0	SP 0	SP 0	SP 0	SP 0 - x64
Windows CE 6.0 (ARM and x86)	Cannot run	zenon Operator only	Pro Light only	Cannot run	Running	Cannot run
Windows Embedded Compact 7 (ARM and x86)	Cannot run	zenon Operator only	Pro Light only	Cannot run	Running	Cannot run

- All operating systems are supported in the multi-lingual version.
- Windows RT 8 and Windows RT 8.1 are not supported due to the system.
- Itanium processors are not supported for any operating system.

> **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
>
> or
>
> - carry out the Windows update before starting the zenon installation

MICROSOFT .NET FRAMEWORK

zenon needs the Microsoft .NET Framework 3.5 or higher for VSTA and WPF. If the framework is not installed, an attempt is made to install it automatically. If the .NET Framework is an operating system component, it cannot be installed automatically. The setup then displays an error message and aborts.

The .NET framework must be activated manually for these operating systems: Control panel - >Programs and functions - >Activate or deactivate Windows functions.

OVERVIEW

	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 Client	X	X	X	-

Processors supported in the different Windows CE operating systems are listed in chapter CE versions/supported processors (on page 33). You can find installation instruction for Runtime under Windows CE in chapter Runtime.

Information

If you always use the latest version (Service Pack) of your operating system, you not only avoid compatibility issues but also security problems.

3.3 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

- Software required for dongle protection (Wibu-Key or CodeMeter) is automatically installed and updated.

3.4 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.

3.5 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.

3.6 Hardware requirements

PC version and CE version of zenon have different requirements concerning the needed hardware. In this chapter you find hardware requirements for the unique versions of Editor and Runtime as well as Web Server and 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 8) chapter in relation to this. The recommended configuration from this chapter is to be noted for the use of Multi-Touch.

3.6.1 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	Windows 7/8: from 1024 MB. Note: The more projects you have simultaneously available in memory, the more memory you need.	Windows 7/8: 4096 MB
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 1680 x 1050.
Graphics adapter	64 MB dedicated memory. Cards with shared memory can lead to performance loss. Note the System requirements when using DirectX (on page 8) chapter in relation to this.	
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.	100 MBit/s

3.6.2 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	Windows 7/8: from 512 MB. Note: Projects with big amounts of data, Network projects, multiple projects simultaneously and projects in redundance mode need more memory.	Windows 7/8: 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 dataorAlarm-/CEL-Data), you need sufficient harddisk 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 8) 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.	100 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	Please refer to chapter Message Control for the	

(optional):	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.	

3.6.3 Runtime under Windows Embedded Standard

The minimum requirements are valid for a Runtime installation adapted to the Windows Embedded Standard 7 SP1 operating system. 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 14) chapter.

Hardware	Minimum requirement	Recommended
RAM memory	▸ 512 MB. Note: Projects with big amounts of data, Network projects, multiple projects simultaneously and projects in redundance 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 dataorAlarm-/CEL-Data), you need sufficient harddisk space or you have to make sure during engineering that the historical data is evacuated or deleted.

3.6.4 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 harddisk space. Permanent recordable remanent storage medium for project data	256 MB free harddisk space or more.
Network connection	For standard Client/Server projects: 10 Mbit/s full duplex.	

3.6.5 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	Windows 7/8: from 1024 MB.	
Harddisk	256 MB free harddisk space.	1 GB free harddisk space.
Network connection	10 Mbit/s full duplex.	100 Mbit/s full duplex.
Remote connection (optional)	Minimum requirements: Dial-up modem with 9600 Bit/s.	1 Mbit/s full duplex.

3.6.6 Web Client

The minimum requirements are based on a complete installation of the 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	Windows 7/8: from 1024 MB.	
Harddisk	64 MB free space for the Web Client plus additional space for the projects.	80 GB free harddisk space.
Network connection	10 Mbit/s full duplex.	100 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 8) chapter in relation to this.	

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

3.8 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.

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: 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	Port	Transport log
stratonrt[k].exe	zenon Logic Runtime polling communication and zenon Logic Workbench.	1200-1210 (can be changed)	TCP
stratonrt[k].exe		4500-4510 (can be changed)	TCP
stratonrt[k].exe	zenon Logic redundancy.	7000-7010 (can be changed)	TCP
stratonrt[k].exe	zenon Logic Runtime spontaneous communication.	9000-9010 (can be changed)	TCP
zennetsrv.exe	zenon network service.	1100-1100 (fix)	TCP
zensyssrv.exe	zenon transport service	1101-1101 (fix)	TCP
zendbsrv.exe	zenon database service.	1103-1103 (fix)	TCP
zenAdminsrv.exe	zenon administration service.	50777-50777 (fix)	TCP
zenLogSrv.exe	zenon logging service.	50780	TCP
zenvnc.exe	zenon remote desktop service.	5600-5600 (fix) 5610-5610 (fix)	TCP
CodeMeter.exe	CodeMeter dongle service.	22350 (changeable but must not be changed)	TCP
WkSvW32.exe	WibuKey network service	22347 (fixed)	TCP

4. Paths for setup and operation

Paths for zenon:

- Setup
- 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.

SETUP

At setup paths are set for:

- Prerequisits
- 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 installtion 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 SQL-Server 2012 SP1 Express (from 7.10 on)	+	-	-	-
VSTA	+	+	-	-
OPC-Core Components (up to 6.22 SP1)	+	+	-	-
Wibu key Dongle Software 6.0 x86/x64	+	+	-	-
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 teh 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\<CD_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 teh 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

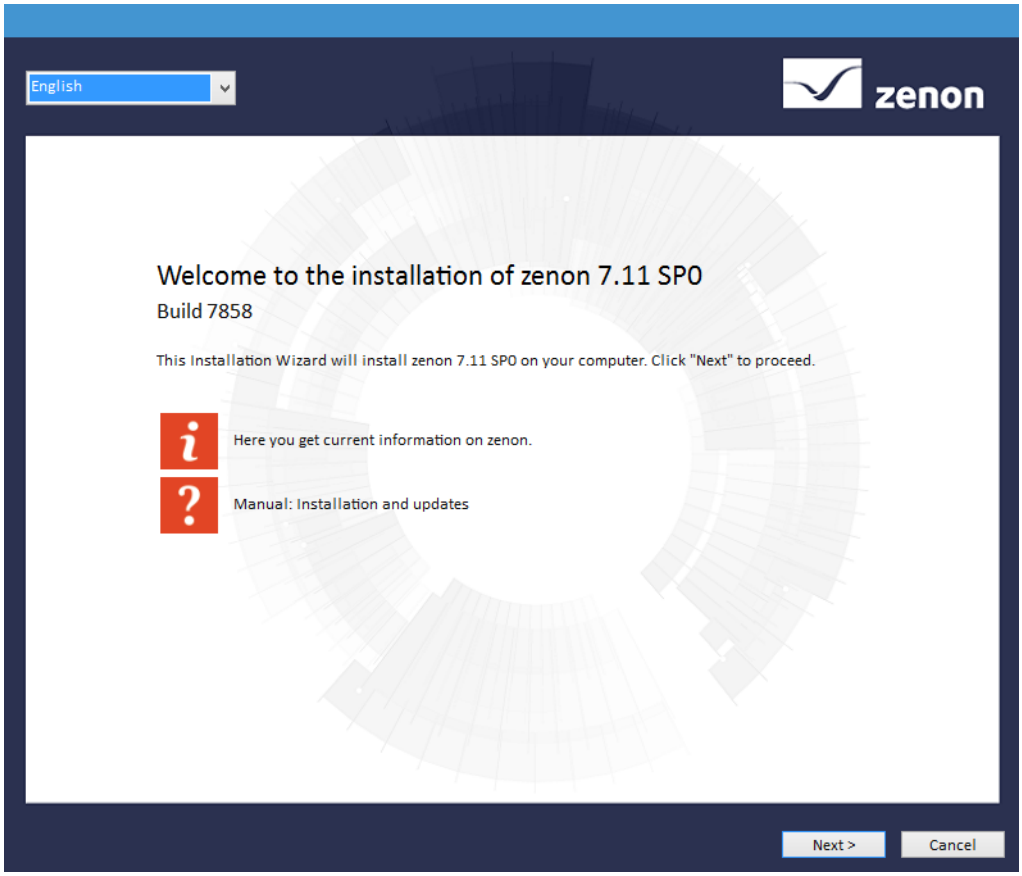
Paths for zenon Logic are created analogous to the zenon paths.

5. 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.

Attention

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



1. You can see the version to be installed including the build number on the start screen.
2. Select the desired language for the installation from the drop-down list at the top left.
3. You can receive information on zenon with:
   - Click on button `i`: Opens the Flash player with information on the current zenon version.
   - Click on button `?` Opens the zenon help for installation as a PDF.

   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.
4. Clicking on the **`Next`** button opens the window with the license conditions.
5. Confirm the license conditions by activating the corresponding checkbox.

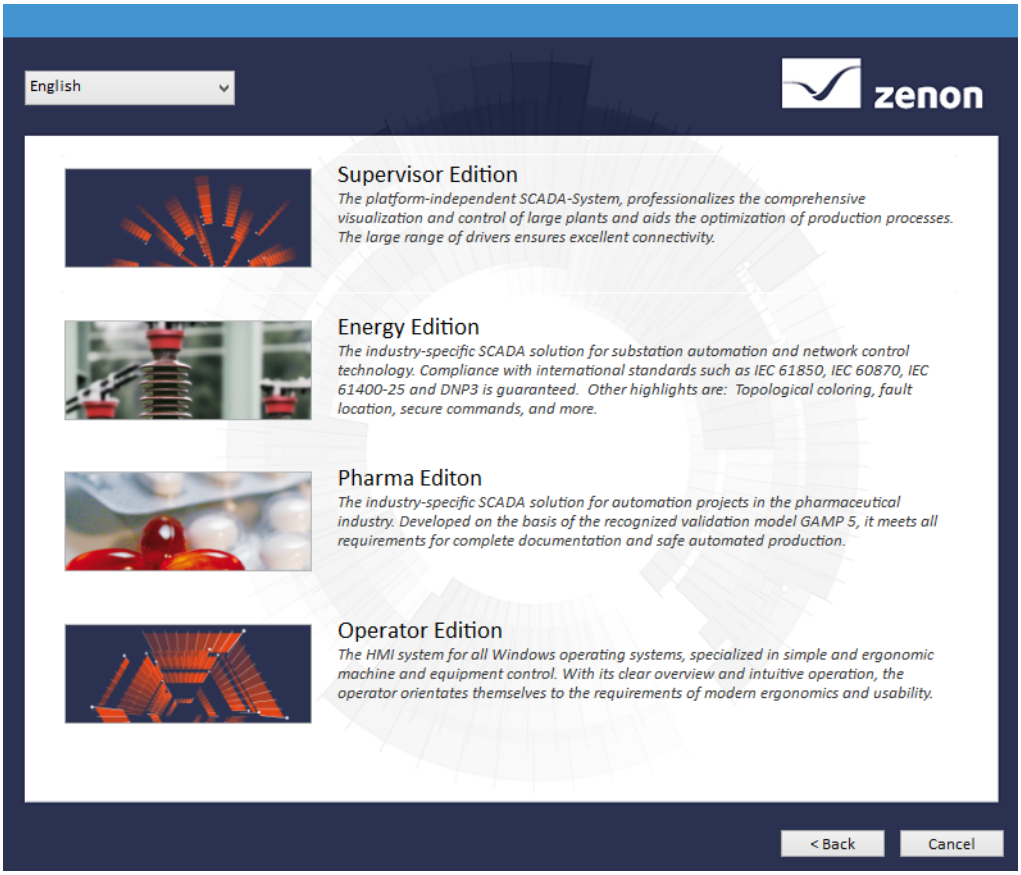
   You can also print the license conditions out by clicking on the **`Print`** button.
6. Clicking on the **`Next`** button opens the window to select the desired product.

7. 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.

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

8. By clicking on the desired product, you open the window to select the edition.
9. Select the licensed version:
   - zenon Supervisor Edition
   - zenon Energy Edition
   - zenon Pharma Edition

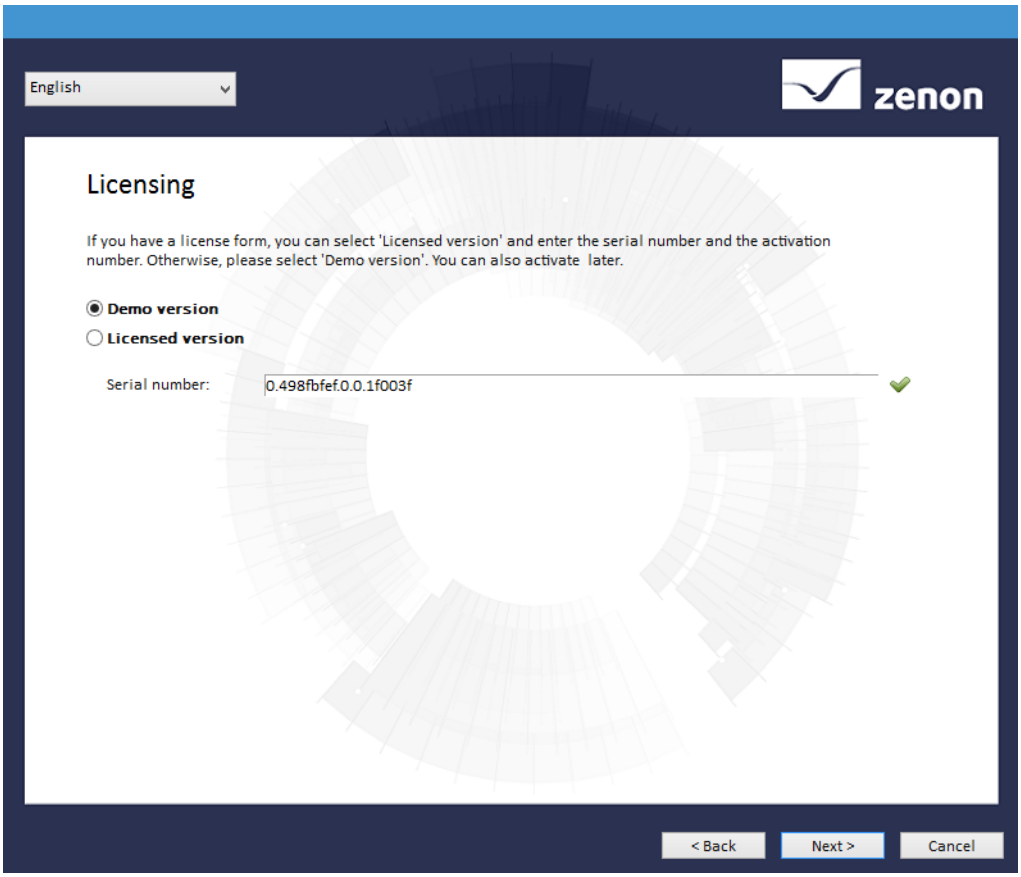
- zenon Operator Edition



10. 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.

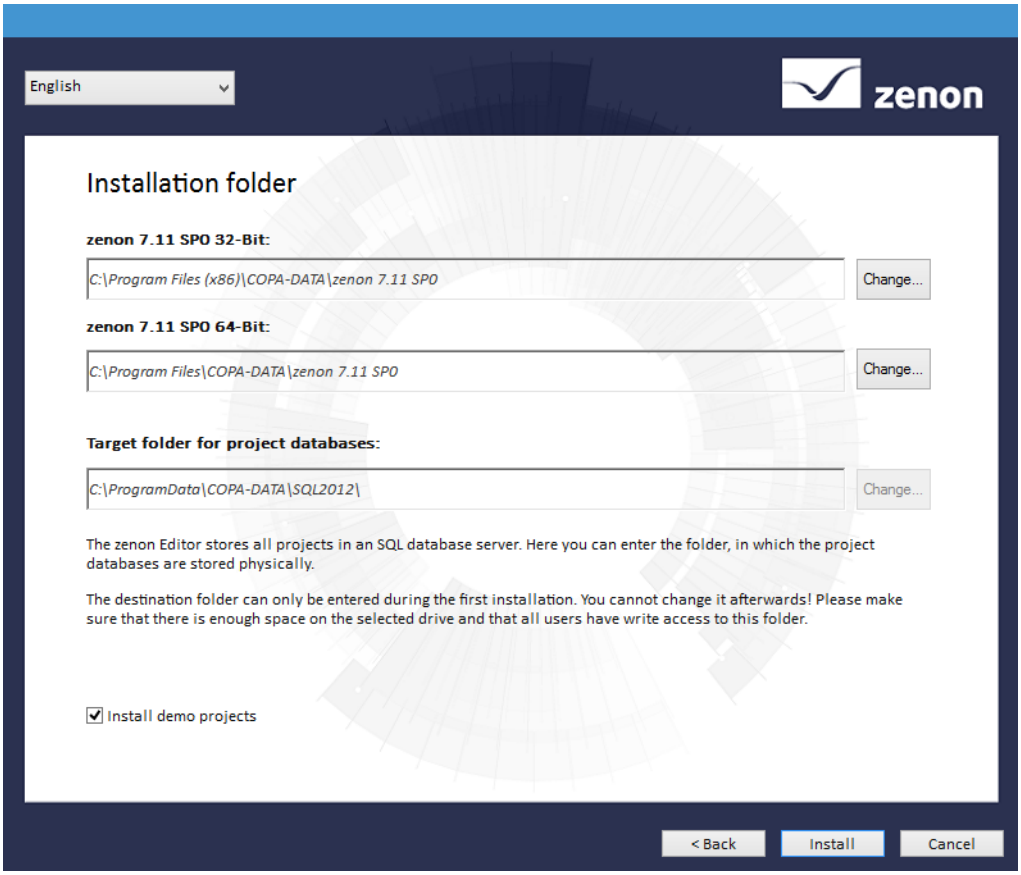
USER-DEFINED INSTALLATION

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



- Select **demo version** if you do not have a license.
- I you already have a license, enter the serial number and activation number.

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



- If necessary, define you individual folder for the 32-bit version and the 64-bit version of the program.
- 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. You can find details in the section Encryption zenon Demo-Project.

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

5.1 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 installtion because the scanner thinks it´s a virus. Solution: Seperate the system from the network, disable the virus scanner, execute the installation again.
- The firewall was not configured correctly. Solution: Seperate the system from the network, disable the firewall, execute the installation again.
- Erroneous SQL-installation on the system. Solution: Create project backups; if possible, deinstall SQL server, rename the SQL folder, and restart installation.

6. 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

PREREQUISITE FOR THE INSTALLATION OF THE RUNTIME ON REMOTE SYSTEMS

- PC version and CE version of zenon have to match (same version, same Service Pack). CE must already be installed on the PC.
- 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 42).
- 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 33)
- Update of the Windows CE Runtime (on page 34)

> **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* ***syssrvce.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* ***syssrvce, zenLogSrvCE*** *is also started.*

If ***zenonRCE*** *and* ***syssrvce*** *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.*

6.1 CE - versions and supported processors

In the current zenon version 7.20 the following Windows CE versions and processors are supported:

- CE 6.00 for x86
- CE 6.00 for ARMV4/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.

6.2 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; TCP/IP driver connections will not work.
IMGDECMP.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.h 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.*

6.3 Update of the Windows CE Runtime

To perform an update of Windows CE Runtime:

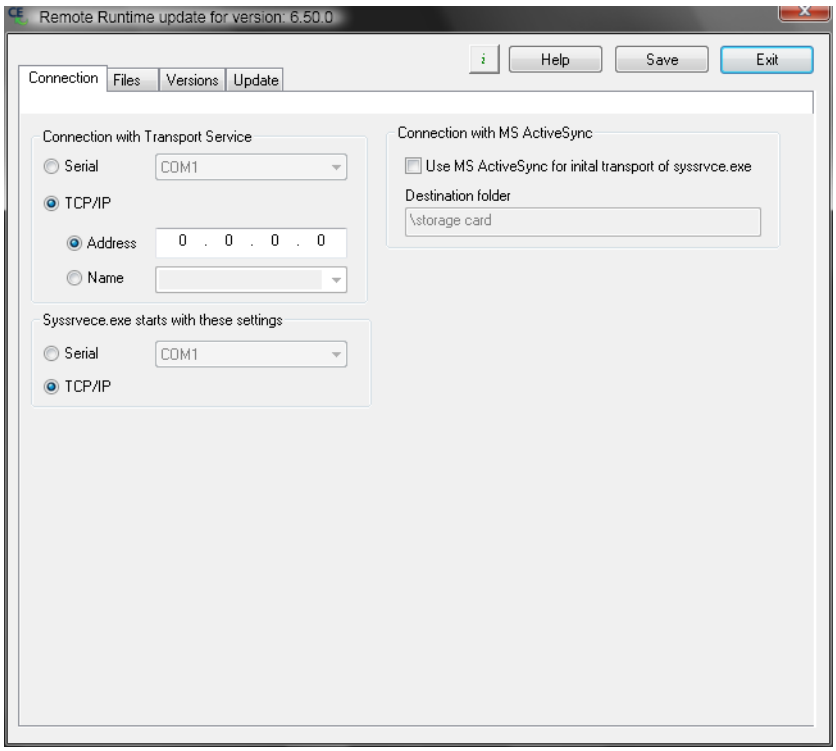
- make sure that the zenon Transport Service (**SysSrvCE.exe**) runs in the CE device
- make sure that you do not have established a remote connection via the zenon Editor to the device
- In the zenon Menu, select **Options** and then **Update Windows CE Runtime**.
- The dialog for transfer of Runtime files opens
- configure the link

- define the data you want to transfer
- choose 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 42) chapter. (on page 42)

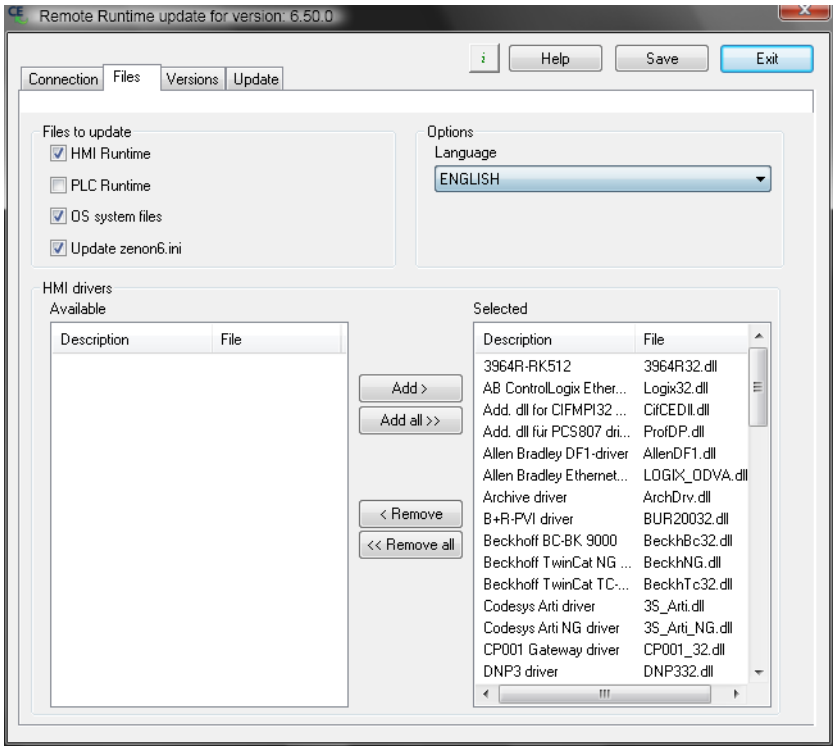
CONFIGURE CONNECTION

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.

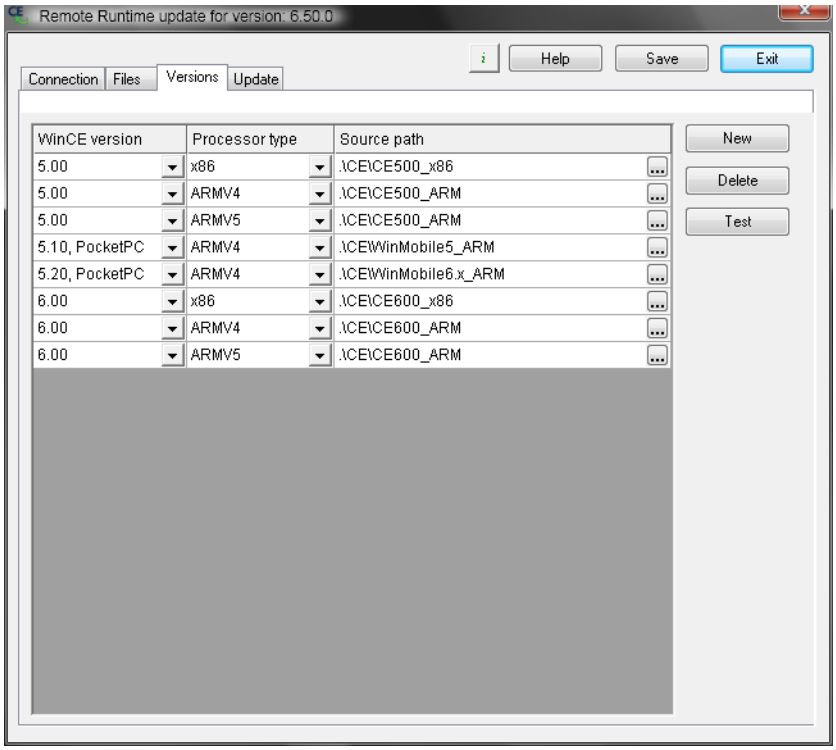
DEFINE FILES YOU WANT TO TRANSFER


Remote Runtime update for version: 6.50.0
Help
Save
Exit
Connection
Files
Versions
Update
Files to update
HMI Runtime
PLC Runtime
OS system files
Update zenon6.ini
Options
Language
ENGLISH
HMI drivers
Available
Description
File
Add >
Add all >>
< Remove
<< Remove all
Selected
Description
File
3964R-RK512
3964R32.dll
AB ControlLogix Ether...
Logix32.dll
Add. dll for CIFMPI32 ...
CifCEDll.dll
Add. dll für PCS807 dri...
ProfDP.dll
Allen Bradley DF1-driver
AllenDF1.dll
Allen Bradley Ethernet...
LOGIX_ODVA.dll
Archive driver
ArchDrv.dll
B+R-PVI driver
BUR20032.dll
Beckhoff BC-BK 9000
BeckhBc32.dll
Beckhoff TwinCat NG ...
BeckhNG.dll
Beckhoff TwinCat TC-...
BeckhTc32.dll
Codesys Arti driver
3S_Arti.dll
Codesys Arti NG driver
3S_Arti_NG.dll
CP001 Gateway driver
CP001_32.dll
DNP3 driver
DNP332.dll

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 dirves.
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.

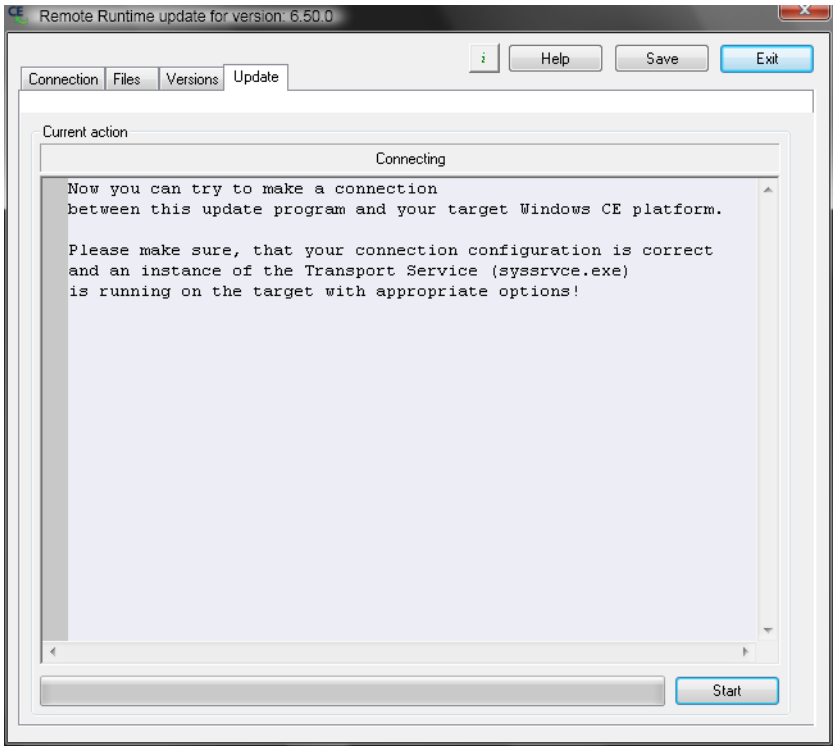

Remote Runtime update for version: 6.50.0
Help
Save
Exit
Connection
Files
Versions
Update
WinCE version
Processor type
Source path
New
Delete
Test
5.00 x86 .\CE\CE500_x86
5.00 ARMV4 .\CE\CE500_ARM
5.00 ARMV5 .\CE\CE500_ARM
5.10, PocketPC ARMV4 .\CEWinMobile5_ARM
5.20, PocketPC ARMV4 .\CEWinMobile6.x_ARM
6.00 x86 .\CE\CE600_x86
6.00 ARMV4 .\CE\CE600_ARM
6.00 ARMV5 .\CE\CE600_ARM

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.

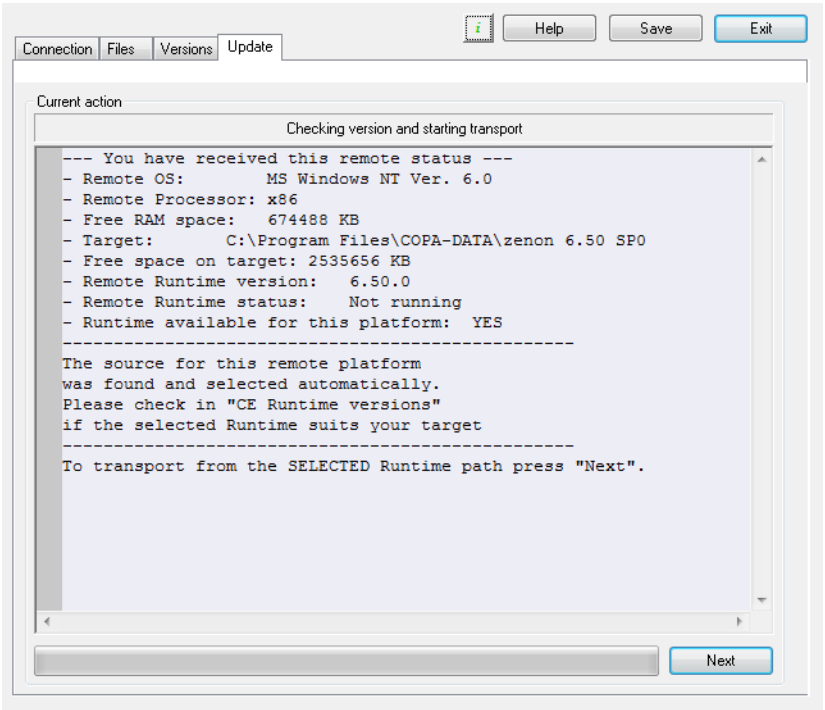
START UPDATE

To establish a connection:

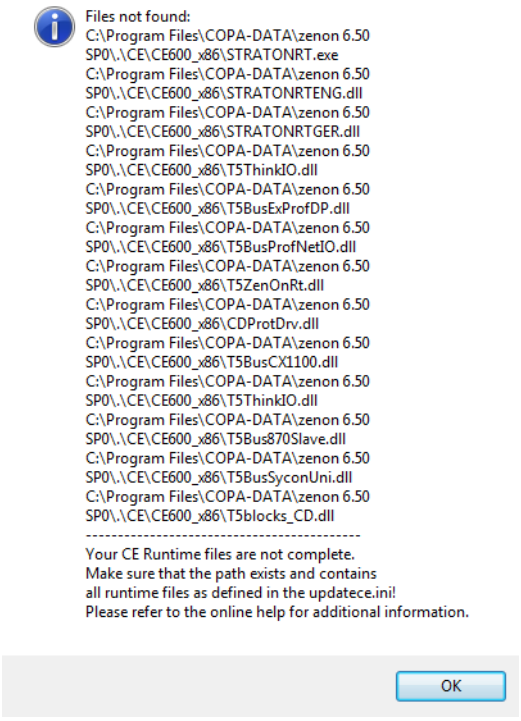
- click on the button **Start** on the tab **Update**.



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



- 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 zenVNCServer.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

6.4 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** (Diagnosis DLL)
- **zenon6.ini** (Configuration file)
- **Cd_tooCE.dll** (Help DLL)
- **ZenNetSrvCE.dll** (Network)
- **CDHelper.dll** (Help DLL)
- One of the following language DLLs: **RChineCE.dll, RCzechCE.dll, REngliCE.dll, RFrancCE.dll, RGermaCE.dll, RItaliCE.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.

6.5 Pocket PCs (PDA - Handheld PC)

Pocket PCs are no longer supported from version 7 on.

6.6 Error treatment

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.

7. 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 32).

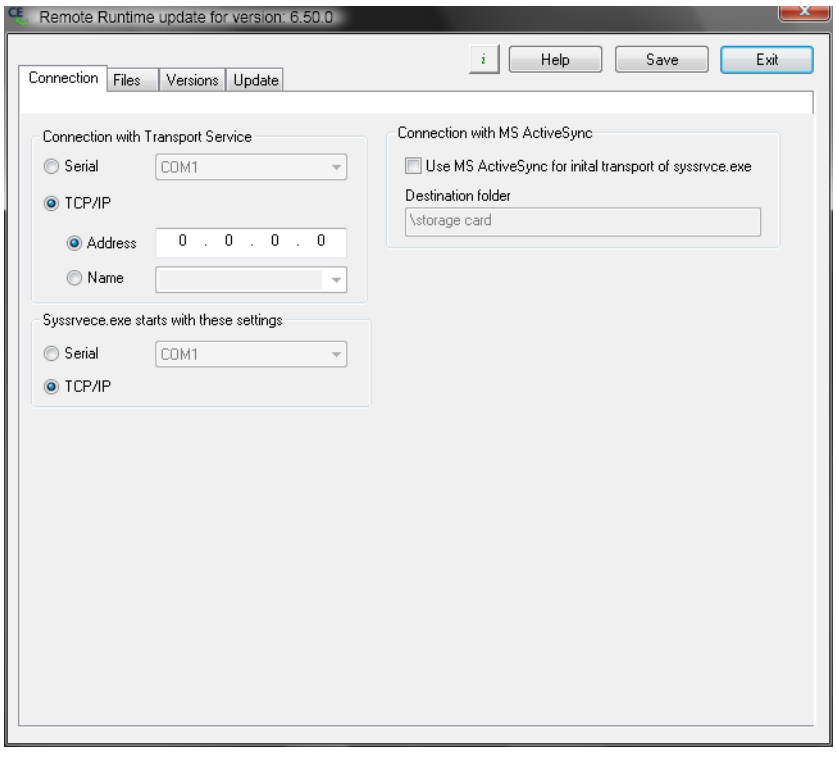
Requirement: Executable transport service under CE

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 Options/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 34).

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.

8. zenon Web Server

To install **zenon Web Server** or **zenon Web Server Pro**:

1. Activate the WWW services on the computer.

   Folder `C:\inetpub\wwwroot` must exist.

2. Start the zenon installation medium. The start screen is displayed

   If you have deactivated the autostart feature, execute **start.exe** from the installation medium.

3. Select the zenon Web Server.
   Depending on the version of the operating system (32-bit or 64-bit), the corresponding version of the zenon Web Server will be installed.

4. Follow the installation routine.

5. Restart the computer.

After installation, You can find the setup files for the web client in subfolders of the zenon Web Server installation path (xxx stands for the respective version of zenon), for example: `C:/Program Files (x86)/COPA-DATA/zenonWebserver/zenon/controlversions/Versionxxx/zenon_Webclient_Setup_ENGLISH.EXE`
or

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

The website examples (index*.html and init*.html) are also installed. These can be found in the subfolder zenon of the zenon Web Server installation path, for example:
`C:/Programs/zenonWebserver/zenon/index.htm`
or
`C:/Inetpub/wwwroot/zenon/index.html`

> **Information**
>
> *The **zenon Web Server** service is started automatically only in the licensed version. In demo mode, you have to start the zenon Web Server manually via zenon Web Server console in the Control Panel.*

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.

9. zenon Web Client

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

The setup files for the Web Client can be found after installation in subdirectories of the Web Server installation path (xxx stands for the respective version of zenon), for example: `C:/Program Files/COPA-DATA/zenonWeb Server/zenon/controlversions/Versionxxx/zenon_Webclient_Setup_GERMAN.EXE`
or

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

All Web Client Setups are digitally signed and can be provided for download via internet, too, without any problems. You can find further Web Client setups on the **zenon Web Server** CD in folder `Web Client Versions`. There are according language versions for each version.

> **Info**
>
> *The Web Client sends error files and LOG files. With the installation of the Web Client, the diagnosis server is also installed.*

10. Updates (Build Setups), Service Packs and Upgrades

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 for Web Client: To install an update for the zenon Web Client, the Web Client must be uninstalled beforehand.

SERVICE PACKS

Service Packs always contain a complete version of zenon. The installation routine doesn´t replace some files. Instead, it removes the old version and installs the new one. If you install a Service Pack, all your projects and individual settings remain intact. 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.

A service pack always contains all bug fixes of previous builds.

UPGRADE

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 upgrade involves changing the SQL server (for example, an update from zenon 7.00 to zenon 7.10 or higher), you must back up all projects or the workspace 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 (Service Pack, Upgrade) 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 provided with the Service Pack/Update on the installation medium under `Information`*. It is also available 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 upgrade involves changing the SQL server (e.g. update from zenon 6.51 to zenon 7.20), 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.

11. 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.
Roll back after OPCenum.exe - error.	It is possible that parts of the OPC server which already exist on the system cannot be overwritten. ▸ Delete the following files: - C:\Windows\System32\OPC*.dll - C:\Windows\System32\OPCenum.exe ▸ Delete folder: C:\Program Files\Common Files\OPC Foundation ▸ Delete all registry entries which contain **`opcenum`**.
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
Error message that a service cannot be started.	▸ 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.

SQL SERVER 2008

Problem	Solution
The zenDBSrv cannot establish a connection to the data base.	Possible reasons: ▸ Instance of the SQL Server is not correct or does not run. ▸ Entries in the **`zenDB.ini`** are not correct.

	▸ Wrong password. ▸ zenDBCli.dll or zenDBSrv were not registered correctly.
Log entry: **`Invalid Connection Configuration: No SQL Server Instance!`**	In the **`zenDB.ini`** no SQL Server instance is configured for the database connection. Without an instance the zenDBSrv cannot connect and therefore closes itself.

SQL SERVER 2005

Problem	Solution
SQL server cannot be installed.	At the installation of the SQL server the following components are also installed: ▸ Microsoft SQL Server 2005 ▸ Microsoft SQL Server Native Client ▸ Microsoft SQL Server VSS Writer ▸ Microsoft SQL Server Setup Suport Files (English) ▸ MSXML 6.0 Parser If one of these components already exists on the system, the installation can fail. Check whether the components to be installed already exist on the system and uninstall them. The log file of the SQL server may help you when searching for the cause of errors: You can find it as **`summary.txt`** in folder`C:\Program Files\Microsoft SQL Server\90\Setup Bootstrap\LOG`.
Error message: **`The sa password must meet SQL Server password policy requirements. For strong password guidelines, see Authentication Mode, in SQL Server Books Online.`**	Deactivate the HP ProtectTool **`Credential Manager`**.
Error message: **`The installation of the Microsoft SQL-Servers 2005 Express Edition + .NET Framework 2.0 has failed. The setup is terminated.`**	Check the requirements for the SQL server: ▸ Memory ▸ Processor

Web client 6.22 IPA cannot find the XSL files.	Create the following entries in the registry. HKLM\SOFTWARE\COPA-DATA\DataDir ▸ UserData ▸ System ▸ ProgramData_6220 ▸ ProgramDir_6220 Note: Fix as of 6.22 SP1
SQL server cannot be installed.	If zenon was uninstalled, a new installation may fail if the uninstall folder is not deleted. Solution: Deleting or renaming subfolders ▸ `Data` ▸ `Template Data` in folder `%program files%\Microsoft SQL Server\MSSQL.x\MSSQL.`

SQL SERVER 2005 ON TOSHIBA COMPUTERS

Problem	Solution
In the SQL log file (e.g. SQLSetup0006_AUTOTRONIC031_SQL.log) which was created during the installation, the following errors can be found: ▸ **`Error Code: 1067 MSI (s) (48!3C) [09:25:30:515]: Product: Microsoft SQL Server 2005 Express Edition --`** ▸ **`Error 29503. The SQL Server service failed to start. For more information, see the SQL Server Books Online topics, "How to: View SQL Server 2005 Setup Log Files" and "Starting SQL Server Manually." The error is (1067) The process terminated unexpectedly.`** ▸ **`Error 29503. The SQL Server service failed to start. For more information, see the SQL Server Books Online topics, "How to: View SQL Server 2005 Setup Log Files" and "Starting SQL Server Manually." The error is (1067) The process terminated unexpectedly.`**	Reason for this error is mostly a missing key in the Windows registry. In this case: ▸ Deinstall all SQL-relevant software such as Microsoft SQL Server 2005, Microsoft SQL Server Native Client, Microsoft SQL Server Setup Support Files, Microsoft SQL Server Server VSS Writer, ... ▸ open **`regedit`** ▸ go to key : `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Servi ces\Tcpip\Parameters` ▸ right click on **`Parameters`** ▸ select new New -> Character string ▸ type **`Domain`** as new value ▸ press key `Return` and close **`regedit`** ▸ Carry out the separate installation of SQL Server 2005 on zenon Installation Medium -> Additional_Software\SQL Server 2005 Express Edition Note: Only included on the installation medium up to version 6.51.

	▸ for this execute file **`Install.bat`** ▸ after SQL Server 2005 was installed correctly, install zenon again

12. 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.