# zenon manual

## Installation and updates

**v.7.10**

**COPADATA**
*do it your way*

# 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 feature from DVDs is deactivated, start the installation by executing `start.exe` in the root directory of your zenon DVD.

Notes for the installation:

▶ Before installing zenon:

- All current operating system updates must be installed
- No restart must be 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 7 (on page 14) chapter.

▶ zenon for Windows CE is installed using the normal installation routine. You can find details in chapter  Runtime for Windows CE (on page 31).

> ⚠ **Attention**
>
> *zenon 7.10 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.*
>
> 💡 **Info**
>
> *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 VERSIONS AFTER INSTALLATION OF VERSION 7.10**

If, on a 64-bit operating system, after installation of zenon7.10, a version of zenon with a lower version number is installed, the 64-bit services of version 7.10 must be registered manually afterwards using the command line. To do this:

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 DVD, 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 DVD, 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 card.

## 2.1 System requirements

zenon 7.10 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 Servicepacks and Hotfixes. So you can assume that usually zenon can be used with the newest Servicepacks 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.

## 2.1.1 Operating system

**SUPPORTED PC OPERATING SYSTEMS**

| Operating system | Required service pack | |
|---|---|---|
| | **Editor** | **Runtime** |
| ▸ Windows Embedded Standard 7<br>(if all necessary operating system components exist).<br>Note: zenon Editor not available. | - | - |
| ▸ Windows Vista<br>(Business, Enterprise and Ultimate version, x86 and x64 versions). | SP 2 | SP 2 |
| ▸ Windows 7<br>(Professional, Enterprise and Ultimate version, x86 and x64 versions). | SP 1 | - |
| ▸ Windows 8<br>(Standard, Professional, Enterprise version, x86 and x64 versions) | - | - |
| ▸ Windows Server 2008<br>(All editions) | SP 2 | SP 2 |
| ▸ Windows Server 2008 R2<br>(All editions) | SP 1 | |
| ▸ Windows Server 2012 | - | - |

**Hints:**

▸ All operating systems are supported in the multi-lingual version.

▸ Windows 8 RT is not supported for reasons relating 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, it is installed automatically under Windows Vista and Server 2008.

Under Windows 7 and Windows Server 2008 R2 the .NET framework is an operating system component and cannot be installed automatically. The setup displays an error message and terminates. The .NET framework must be activated manually for these operating systems: *Control panel - >Programs and functions - >Activate or deactivate Windows functions.*

### SUPPORTED WINDOWS CE-OPERATING SYSTEMS:

▸ Windows CE 5.0

▸ Windows CE 6.0

Processors supported in the different Windows CE operating systems are listed in chapter CE versions/supported processors (on page 32). You can find installation instruction for Runtime under Windows CE in chapter Runtime.

### OVERVIEW

| | Windows Embedded Standard 7 | Windows Vista/Windows 7/Windows 8/ Server 2008 (R2) | Windows CE |
| --- | --- | --- | --- |

| Editor | | X | |
|---|---|---|---|
| Runtime | X | X | |
| Runtime for Windows CE | | | X |
| Web server | X | X | X |
| Web client | X | X | |

### Info

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

## 2.1.2    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.

**PREREQUISITES FOR WINDOWS VISTA**

When installing zenon under Windows Vista, the following programs must be installed manually before starting it:

- ▶ `Microsoft Installer 4.5`
- ▶ `.NET 3.51`
- ▶ `Powershell 2.0`

Once these have been installed, the system must be restarted before zenon is installed.

The setup files for these programs can be found on your zenon DVD or on the Microsoft download page.

## 2.1.3    User authorization

For the installation you need Windows administrator rights.

For the running operation standard Windows user rights are necessary. The user account control (UAC) can be activated on the highest security level.

## 2.1.4    Virus scanner

Anti-virus software can slow the installation of zenon or even prevent zenon from being installed.

If the anti-virus software you use leads to problems during installation, deactivate the antivirus 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.

## 2.1.5    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 Webserver 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**
>
> *We recommend graphics cards with dedicated graphics memory and support for DirectX. Shared memory graphics cards could use too much working memory and thus impede performance.*

**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.

| Hardware | Minimum requirement | Recommended |
|---|---|---|
| CPU | Pentium IV. | Dual Core. |
| RAM memory | Windows Vista/7/8: from 1024 MB.<br><br>Note: The more projects you have simultaneously available in memory, the more memory you need. | Windows Vista/7/8: 4096 MB. |
| Harddisk | At least 4 GB free space for a complete installation plus additional space for the projects. | |
| Screen 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. | |
| Input devices | Standard keyboard or standard mouse. | |
| DVD drive | Recommended for the installation. The installation is also possible via network. | |
| 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. |

**Runtime**

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

| Hardware | Minimum requirement | Recommended |
|---|---|---|
| CPU | Pentium system with 400 MHz | Dual Core. |
| RAM memory | Windows Vista/7/8: from 512 MB.<br><br>Note: Projects with big amounts of data, Network projects, multiple projects simultaneously and projects in redundance mode need more memory. | Windows Vista/7/8: 4096 MB. |
| Harddisk | 2 GB free space for the Runtime-installation plus additional space for the projects.<br><br>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. | 80 GB free harddisk space. |
| Screen resolution | VGA with 640 x 480 pixels. | |
| Graphics adapter | 64 MB dedicated memory. Cards with shared memory can lead to performance loss. | |
| Input devices | Keyboard and/or mouse. Operation via touchscreen is also possible. Many individual, customizable softkeyboards for the touchscreen are available for you. | |
| DVD drive (optional) | Recommended for the installation. Installation also possible via network or other storage media. | |
| Parallel or USB interface (optional) | Recommended for dongle. Network dongle also available. | |
| Network connection (optional) | 64 kBits/s for standard Client/Server projects.<br><br>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 (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. | |

## Runtime under Windows Embedded Standard 7

The minimum requirements are valid for a Runtime installation adapted to the Windows Embedded Standard 7 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 12) chapter.

| Hardware | Minimum requirement | Recommended |
|---|---|---|
| `RAM memory` | ▸  256 MB.<br><br>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<br>800 MB of free memory after the installation of the .NET Framework<br><br>▸  Plus memory space for the projects. | ▸  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.

## 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. | 256 MB for Windows CE 5.0. 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. | |

**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.

| Hardware | Minimum requirement | Recommended |
|---|---|---|
| CPU | Pentium IV. | |
| RAM memory | Windows Vista/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. |

**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.

| Hardware | Minimum requirement | Recommended |
|---|---|---|
| CPU | Pentium IV. | Dual core |
| RAM memory | Windows Vista/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. |

## 2.1.6    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 provide enough free space, because all current and future project data is stored there.

| Folder | Path |
|---|---|
| `Program folder` | `32-bit system:`<br>`C:\Program Files\COPA-`<br>`DATA\zenon7xxx`<br><br>`64-bit system:`<br><br>`C:\Program Files\COPA-`<br>`DATA\zenon7xxx`<br><br>`C:\Program Files (x86)\COPA-`<br>`DATA\zenon7xxx` |
| `Program data folder,`<br>`e.g. global symbols, print templates,`<br>`log files etc.` | `C:\ProgramData\COPA-`<br>`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\C`<br>`OPA-DATA\zenon\Editor` |
| `Settings Diagnosis Viewer` | `C:\Users\UserName\AppData\Local\C`<br>`OPA-DATA\zenon\DiagView` |

**DEFINITION RUNTIME FOLDER AND DATA FOLDER**

## RUNTIME FOLDER

The Editor creates Runtime files in the Runtime folder or they are transferd there with the help of the 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 per default a subfolder of the runtime folder. 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 best to record data locally and save them externally

**Attention:** If the defined path does not exist or cannot be reached, no more data are written from the Runtime. That means: 100% data loss. 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)` .

## 2.1.7    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.

You can check the port settings:

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. The zenon ports cannot be modified.

    The zenon ports can be freely defined.

**PORT SETTINGS BY ZENON AND ZENON LOGIC**

| Application | Description | Port |
|---|---|---|
| stratonrt[k].exe | zenon Logic Runtime | 1200-1210 (changeable)<br>4500-4510 (changeable)<br>7000-7010 (changeable)<br>9000-9010 (changeable) |
| zennetsrv.exe | Network service | 1100-1100 (fix) |
| zensyssrv.exe | Transport service | 1101-1101 (fix) |
| zendbsrv.exe | Database service | 1103-1103 (fix) |
| zenAdminsrv.exe | Administration service | 50777-50777 (fix) |
| zenLogSrv.exe | Logging service | 50780 |
| zenvnc.exe | Remote Desktop service | 5600-5600 (fix)<br>5610-5610 (fix) |
| CodeMeter.exe | Code Meter dongel service | 22350 (changeable but must not be changed) |
| WkSvW32.exe | WibuKey network service | 22347 (fixed) |

## 2.2    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.

**PREREQUISITS**

The installation paths of the Prerequisits match the standard paths of the respective manufacturer and cannot be changed at the setup.

Which Prerequisits are installed depends on the type of installation:

▸ zenon Editor

▸ zenon Runtime

▸ zenon Web client

▸ zenon Logic Runtime

| Prerequisit | 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%\COPA-DATA\zenon [Version]
  - 64 bit systems: %ProgramFiles(x86)%\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%`<br><br>For example: `C:\Users\Public\Documents\zenon_Projects` |
| Projects | `%CD_USERDATA%`<br><br>For example: `C:\Users\Public\Documents\<CD_zenon_Projects`<br><br>**Hint for short cuts:** highlight the project -> `Ctrl+Alt+D` |
| SQL folder of the project | `%ProgramData%\COPA-DATA\[SQL-Ordner]\[UID]\FILES`<br><br>**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`<br><br>For example: `C:\ProgramData\COPA-DATA\System` |
| Backup | `%ProgramData%\COPA-DATA\[SQL-folder]\UID]\BACKUP`<br><br>`%ProgramData%\COPA-DATA\[SQL-Ordner\UID]\FILES\[Projekte]` |
| Compiled files | `%CD_USERDATA%\[Workspace]\[Project]\RT` |
| External files | `%CD_USERDATA%\[Workspace]\[Project]\RT\FILES\...`<br><br>Note: In the project adjustable via property `File storage`. |
| 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` <br><br> 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.
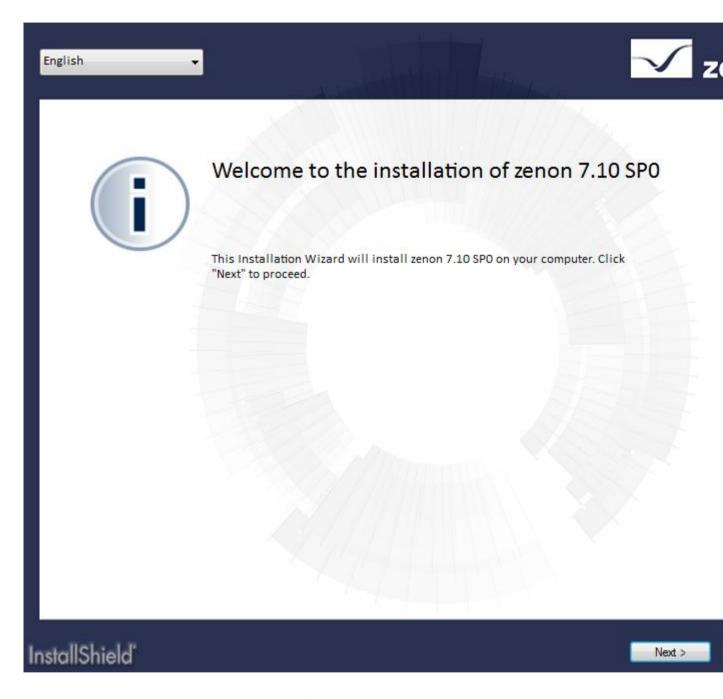
## 2.3 zenon Standard installation

zenon will automatically start the installation and carry out the whole installation process when the zenon DVD is inserted. Alternatively it is possible to start the installation by executing `start.exe` in the root directory of your zenon DVD.

> ⚠ **Attention**
>
> *The computer is automatically restarted during installation if necessary. Close all other programs before installation.*
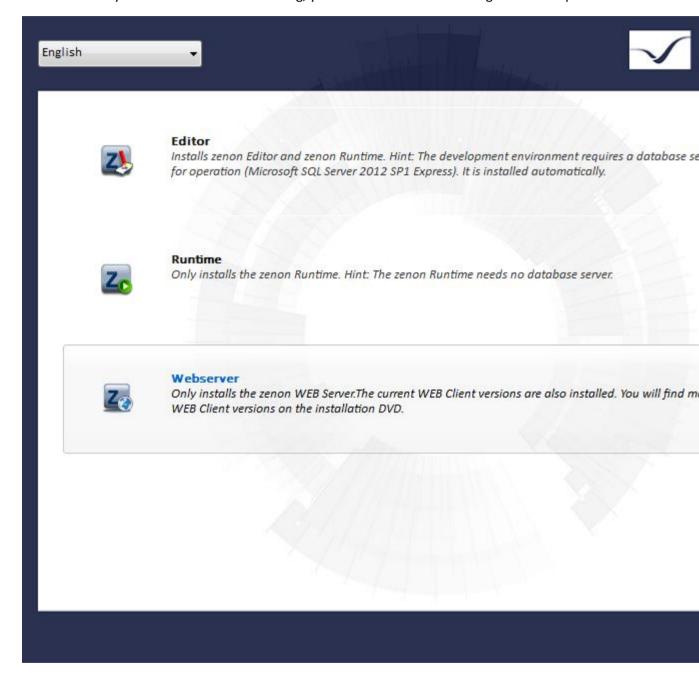
1. Select the desired installation language from the drop-down list.

2. Clicking on the **Next** button opens the window with the license conditions.

3. Confirm the license conditions by activating the corresponding checkbox.

 You can also print the license conditions out by clicking on the **Print** button.

4. Clicking on the **Next** button opens the window to select the desired product.
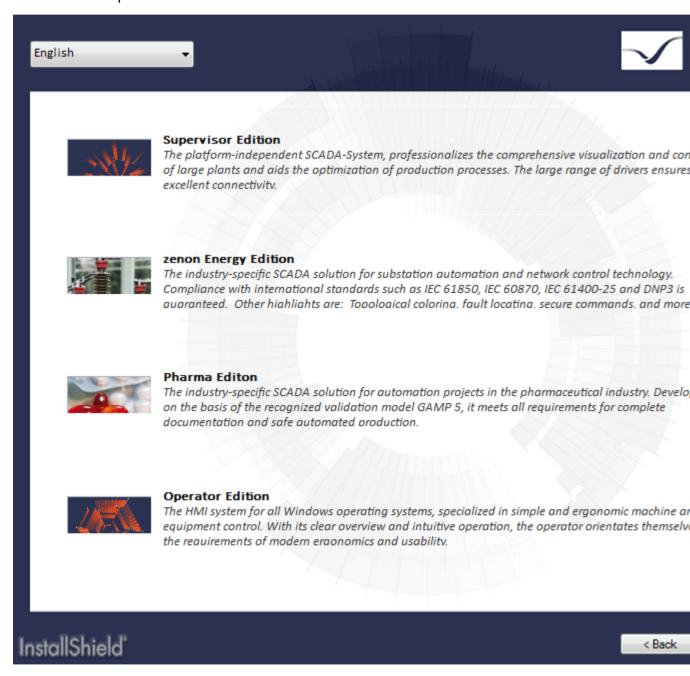
5.  Select the desired product. It is only possible to select products that have not already been installed. If you want to reinstall something, you must first uninstall it using the control panel.



- 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.
- Webserver: Installs zenon web server and the respective current zenon web clients.

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

7. Select the licensed version:

- zenon Supervisor Edition
- zenon Energy Edition
- zenon Pharma Edition
- zenon Operator Edition



8. 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
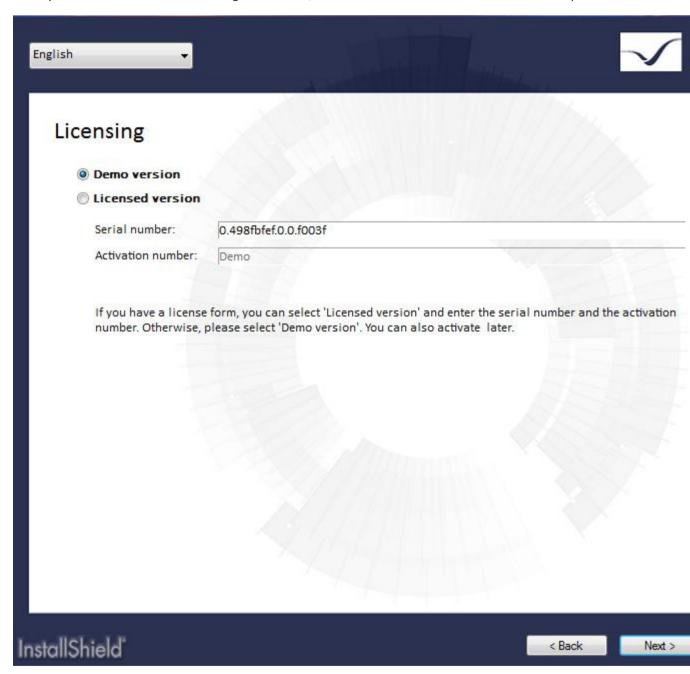
- **User defined**: Opens other windows for individual installation.
  You can enter an existing serial number here and change the installation path.

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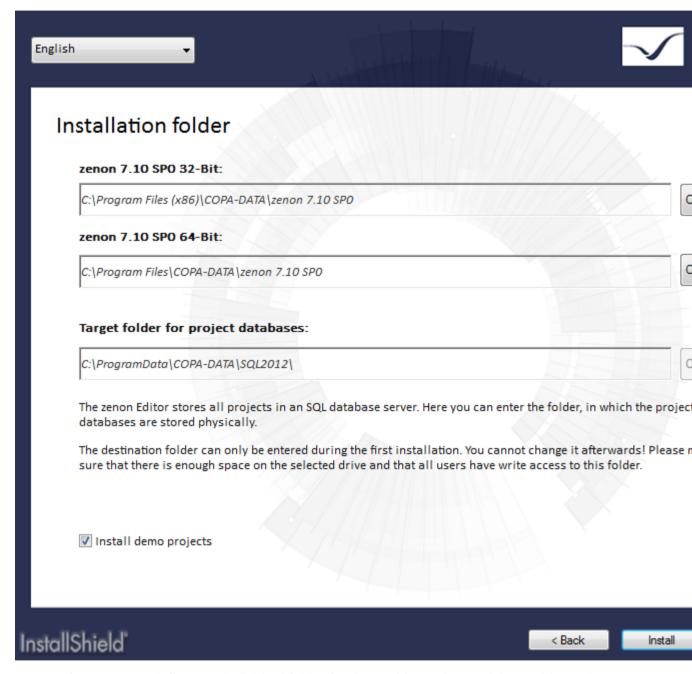
1. If you select `user-defined` during installation, the window to enter the serial number is opened:



- 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

## 2.3.1 Error treatment

If the installation doesn´t proceed properly, you´ll get an error message. For help by COPA-DATA Technical Consulting:

▸ You can find the log files in the folder %Temp%/SCADALOG

▸ Create a ZIP file with the content of the folder

▸ if possible, create a screenshot of the error message

▸ and 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:
**Vista/Windows 7/Windows 8:** C:\Program Files\Microsoft SQL Server\110\Setup Bootstrap\LOG

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

> Info
>
> *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.

## 2.4    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 41).

▶ 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:

> 💡 **Info**
>
> *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**
>
> *When starting `zenonrce.exe`, the file `syssrvce.exe` is also executed. Thus it is guaranteed that a TCP-connection can always be established. Long delays are avoided and only one file is necessary for the autostart functionality.*

## 2.4.1   CE - versions and supported processors

In the current zenon version 7.10 the following Windows CE versions and processors are supported:

▶   CE 5.00 for x86

▶   CE 5.00 for ARMV4/V5

▶   CE 6.00 for x86

▶   CE 6.00 for ARMV4/V5

> 💡 **Info**
>
> *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.*

## 2.4.2 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.*
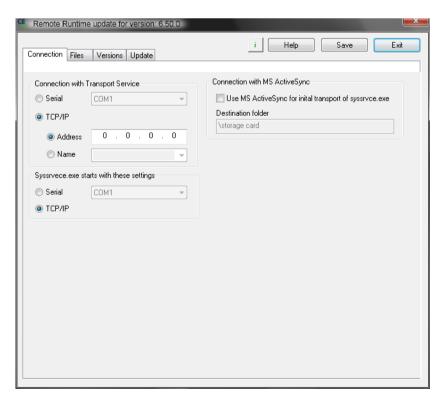
## 2.4.3 Update of the Windows CE Runtime

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

### CONFIGURE CONNECTION

You can configure the connections to the Windows CE device in the tab `Connection`.
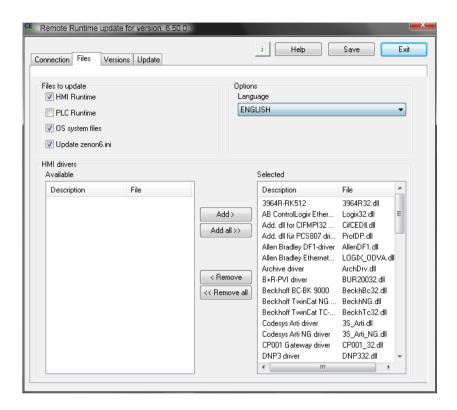
| Parameter | Description |
|---|---|
| Serial | Settings for serial connection with Windows CE device, you have to select a port. |
| **TCP/IP** | Settings for TCP/IP-connection to the Windows CE device. |
| Adress | IP adress. |
| Name | Name. |
| **Syssrvce.exe starts with these settings** | Settings 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**

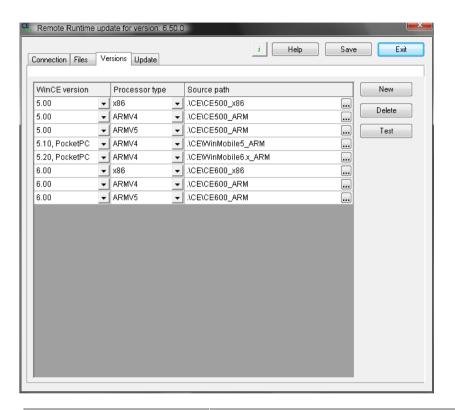| Parameter | Description |
|---|---|
| **Files to update** | Files to be transferred. |
| HMI Runtime | Active: Transfers zenon files to the target device.<br><br>Default: active |
| PLC Runtime | Active: Transfers zenon Logic files to the target device.<br><br>Default: inactive |
| OS system files | Active: Transfers necessary files for the OS.<br><br>Default: active |
| Update zenon6.ini | Transfers zenon 6.ini to the target device. This way, the license information of the target device is also changed. |
| **Options** | |
| Language | Desired target system language.<br><br>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.
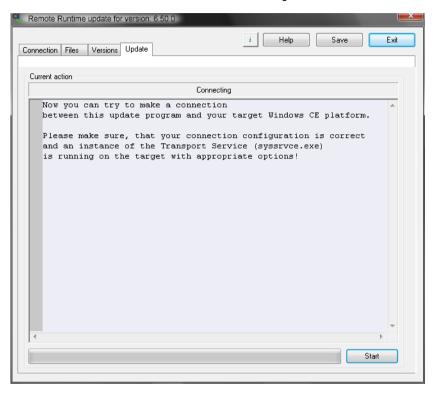
| Parameter | Description |
|---|---|
| WinCE version | Version of the target device Windows CE OS. Click the button to open a drop-down list for selection. |
| Processor type | Processor of the device. |
| Source path | Path to the folder that contains the files. Click the button ... and a dialog opens 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**
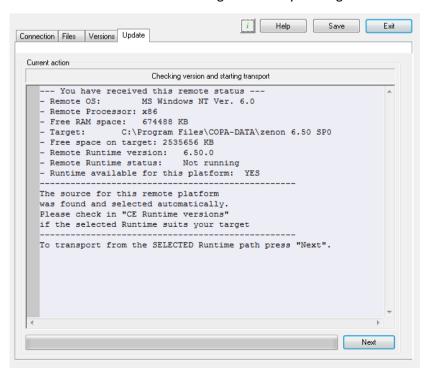
To establish a connection:

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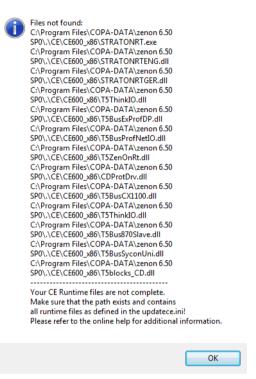


▶ The data that shall be transferred is verified and displayed in a window.

▶ Start the transfer to the target device by clicking on the button **Next** .
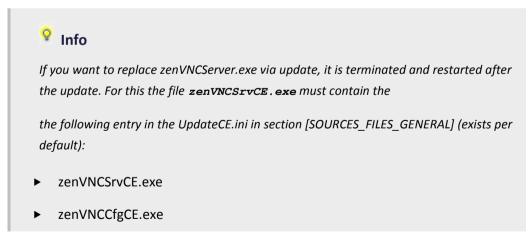
If the transfer cannot be initiated because files are missing, an error message with a list of missing files pops up:



```
Files not found:
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\STRATONRT.exe
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\STRATONRTENG.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\STRATONRTGER.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5ThinkIO.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5BusExProfDP.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5BusProfNetIO.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5ZenOnRt.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\CDProtDrv.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5BusCX1100.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5ThinkIO.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5Bus870Slave.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5BusSyconUni.dll
C:\Program Files\COPA-DATA\zenon 6.50
SP0\.\CE\CE600_x86\T5blocks_CD.dll
-------------------------------------------
Your CE Runtime files are not complete.
Make sure that the path exists and contains
all runtime files as defined in the updatece.ini!
Please refer to the online help for additional information.
```

OK

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

> 💡 **Info**
>
> *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

## 2.4.4    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)

- ▶ 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 stored in the file zenon6.ini.)

- ▶ `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 like for example the drivers or the remote desktop software (`zenVNCCfgCE.exe` and `zenVNCSrvCE.exe`) are optional.

## 2.4.5    Pocket PCs (PDA - Handheld PC)

Pocket PCs are no longer supported from version 7 on.

## 2.4.6   Troubleshooting

**Possible errors:**

| Error | Possible solution |
|---|---|
| Connection error during update via COM. | Open Windows Explorer delays access time. The problem is solved by closing the Explorer. |
| Transport service doesn´t work. | Check transport service version. Minimum: Version 5.21 SP3 or higher or version 5.50 SP1 or higher. |
| Runtime update program not able to establish a connection. | Terminate open connections of the Editor to the CE transport service. |

# 2.5   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 31).

Requirement: Executable transport service under CE

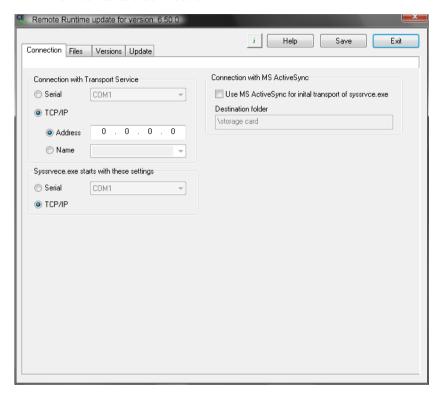The CE version of the zenon Logic Runtime consists of the following components:

► 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" !

🔆 **Info**

*The MFC files are always transferred using Windows CE 6.0.*

## 2.6     zenon Webserver

To install the `zenon Webserver` or `Webserver Pro`:

1.    Activate the WWW services on the computer.

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

2.    Insert the zenon DVD in the drive, the splash screen is displayed.

If you have deactivated the autostart-feature from CD/DVD, execute start.exe from the CD.

3.    Select the zenon web server.

4.    Follow the installation routine.

5.    Restart the computer.

The setup files for the web client can be found after installation in subdirectories of the webserver installation path (xxx stands for the version of zenon), e.g.: `C:/Program Files/COPA-DATA/zenonWebServer/zenon/controlversions/Versionxxx/zenon_WEB_Client_Setup_GERMAN.EXE`
 or

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

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

> 💡 **Info**
>
> *The `zenon webserver` service is started automatically only in the licensed version. In demo mode, you have to start the webserver manually via webserver console in the Control Panel.*

**ADDITIONAL INFORMATION**

You can find details about the web server in manual Web server and web server pro, about the licensing in manual Licensing.

## 2.7 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 webserver installation path (xxx stands for the version of zenon), e.g.: `C:/Programme/COPA-DATA/zenonWebServer/zenon/controlversions/Versionxxx/zenon_WEB_Client_Setup_GERMAN.EXE`
or

`C:/Inetpub/wwwroot/zenon/controlversions/Versionxxx/zenon_WEB_Client_Setup_GERMAN.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 directory `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.*

## 2.8 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.

**Webclient note:** To install an update for the zenon webclient, 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 (e.g. update from zenon 6.51 to zenon7.10), you must backup 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.

## Info

*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. The revision text is provided with the Service Pack/Update on the installation DVD under item* `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 7.10), 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.


## 2.9    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.<br><br>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.<br><br>▸ Delete the following files:<br>- C:\Windows\System32\OPC*.dll<br>- C:\Windows\System32\OPCenum.exe<br><br>▸ Delete folder:<br>C:\Program Files\Common Files\OPC Foundation<br><br>▸ 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:<br><br>▸ must not consist of more than 15 characters<br><br>▸ must be in accordance with the convention of the NetBIOS computer name |
| *Error message that a service cannot be started.* | ▸ first reboot the computer<br><br>▸ then start the zenon setup again |

## SQL SERVER 2008

| Problem | Solution |
|---------|----------|
| The zenDBSrv cannot establish a connection to the data base. | Possible reasons:<br><br>▸ Instance of the SQL Server is not correct or does not run.<br><br>▸ Entries in the **zenDB.ini** are not correct.<br><br>▸ Wrong password.<br><br>▸ zenDBCli.dll or zenDBSrv were not registered correctly. |
| Log entry:<br><br>**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:<br><br>▸ Microsoft SQL Server 2005<br><br>▸ Microsoft SQL Server Native Client<br><br>▸ Microsoft SQL Server VSS Writer<br><br>▸ Microsoft SQL Server Setup Suport Files (English)<br><br>▸ MSXML 6.0 Parser<br><br>If one of these components already exists on the system, the installation can fail.<br><br>Check whether the components to be installed already exist on the system and uninstall them.<br><br>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:<br>**The sa password must meet SQL Server password policy requirements. For strong password guidelines, see** | Deactivate the HP ProtectTool **Credential Manager**. |

| | |
|---|---|
| **Authentication Mode, in SQL Server Books Online.** | |
| Error message:<br>**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:<br><br>▸ Memory<br><br>▸ Processor |
| Web client 6.22<br>IPA cannot find the XSL files. | Create the following entries in the registry.<br><br>HKLM\SOFTWARE\COPA-DATA\DataDir<br><br>▸ UserData<br><br>▸ System<br><br>▸ ProgramData_6220<br><br>▸ ProgramDir_6220<br><br>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.<br><br>Solution: Deleting or renaming subfolders<br><br>▸ `Data`<br><br>▸ `Template Data`<br><br>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:<br><br>▸ **Error Code: 1067**<br>**MSI (s) (48!3C) [09:25:30:515]: Product: Microsoft SQL Server 2005 Express Edition --**<br><br>▸ **Error 29503. The SQL Server** | Reason for this error is mostly a missing key in the Windows registry.<br>In this case:<br><br>▸ 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, ...<br><br>▸ open **regedit** |

| | |
|---|---|
| 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." <br> The error is (1067) The process terminated unexpectedly. <br><br> ▸ **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."** <br> **The error is (1067) The process terminated unexpectedly.** | ▸ go to key : `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Servi ces\Tcpip\Parameters` <br><br> ▸ right click on **Parameters** <br><br> ▸ select new *New -> Character string* <br><br> ▸ type **Domain** as new value <br><br> ▸ press key `Return` and close **regedit** <br><br> ▸ execute the separate installation of the SQL Servers 2005 on zenon DVD ->  Additional_Software\SQL Server 2005 Express Edition <br><br> ▸ for this execute file **Install.bat** <br><br> ▸ after SQL Server 2005 was installed correctly, install zenon again |

## 2.10    Technical Support

**BASIC SUPPORT**

If you need assistance during the installation, our Technical Consulting department is 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 there. 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.