



**zenon**  
by COPA-DATA

# zenon manual

## Runtime help

v.8.20



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# 1 Welcome to COPA-DATA help

## ZENON VIDEO TUTORIALS

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

## GENERAL HELP

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

## PROJECT SUPPORT

You can receive support for any real project you may have from our customer service team, which 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 Runtime help

zenon offers the possibility to create a context-sensitive help for projects running in the Runtime. This Runtime-Help is based on HTML-Pages that have been compiled into CHM-format.

The Runtime-Help is available for:

Parameter	Description
Main menus	The help text can be accessed directly via the main menu.
Dynamic elements	For the context menu of each dynamic element a separate help page can be defined.

Parameter	Description
Function <b>Open help</b>	Function open help (on page 11)

The Runtime help enables the use of all major graphics formats (e.g. JPG, BMP, GIF, PNG, ...), text formats and forward and backward navigation.

## 3 Preparatory work

### INSTALLING HTML HELP WORKSHOP

The HTML Help Workshop compiles HTML-Files into CHM-format. The Runtime-Help is based on CHM-files. The HTML Help Workshop is available on the zenon installation medium and can be found in the following path: *\AdditionalSoftware\Microsoft HTML Help Workshop*.

### CREATING A HELP PROJECT:

There are many different tools to create HTML-files. It is also possible to save texts in a HTML-format in MS Word.

All necessary settings are already defined in this standard help project.

### PREPARATORY WORK IN THE HTML HELP WORKSHOP:

After starting the HTML Help Workshop the standard help project has to be loaded. With button **Add/Remove Topic Files** the HTM(L) files can be inserted into the help project.

Clicking the button **Save and Compile** or **Compile** creates a file *RT\_Help.chm* in the folder of the current help project. All HTM(L) files for this help project are included in this CHM file.

If there are changes in the HTM(L) files later on, the help project has to be compiled again.

### SEVERAL HELP FILES:

If the Runtime help should be distributed to several files, the files should be copied to a new folder for the next help file. Now the help project can be renamed and the HTM(L) files can be replaced by the new ones. A new compile of the new help project finishes the new help file.

### PREPARATORY WORK FOR LANGUAGE CHANGEABLE HELP:

After the help project has been created in one language, all files of the folder should be copied to the folder of the next language. Now the HTM(L) files can be replaced with those of the new language. After starting the HTML Help Workshop the Language under International Settings has to be changed to the new language. A new compile of the help project finishes the help for the new language.

The names of the help projects (\*.hpp, \*.chm) and the names of the HTM(L) files have to be identical in all languages!

## 4 Engineering in the Editor

In the context menu of **Files/Help** in the project-manager, CHM files can be inserted. The standard language is inserted directly into this folder. If no standard files are inserted, in the later projecting no files can be selected!

### 4.1 Language switch

For language changeable project a separate sub-folder for each language has to be created. The help files for each language are inserted into the appropriate sub-folder. Necessary steps:

- ▶ create in the context menu of **Files/Help** for each language an own sub-folder, e.g. *English* and *German*.
- ▶ translate the entries in the help file
- ▶ compile HTML-Help Workshop again
- ▶ create a *RT-Help.chm* in each language folder
  - ▶ select **Add file** in the context menu
- ▶ all help files must then be put in the local work version via the context menu

### 4.2 Updating help files

If during projecting the existing help files should be replaced by newer ones, this has to be done manually. The new CHM files have to be copied to the appropriate subdirectory of the project. In the Editor the commands **Enable changes** and **Accept changes** also enter the new files into the database of the project.

### 4.3 Configure help file and help chapter

The files and chapters that are accessed for help are established using properties in the Editor for:

- ▶ Menus
- ▶ Alarms
- ▶ Dynamic elements
- ▶ Function open help

## CONFIGURATION

All “Open Help” function calls can be configured:

- ▶ Combination of the name of CHM file and an included HTM file.
- ▶ Only name of the HTM file plus index of an included HTM file.

## CHM FILE

To show help files in Runtime, a CHM file must be entered. Chapters that are called up are defined for this file. Configuration is carried out in the different areas and follows a scheme:

1. Select **help file**:  
Selection of a CHM file from which a chapter is to be displayed. This file must be present in the project tree in the **File/help** node.
2. **Help chapter** indication:  
Indication of the chapter from the CHM file that is to be shown. The name of the chapter is entered manually and supplemented with the file ending **htm**.

## MENUS

A help entry can be configured for each entry in the main menu and context menu. The help pages of the linked elements are normally displayed. If a linked element does not have a help page, the page defined here is displayed.

These are configured using the properties of the **Help** group.

- ▶ **File**: Selection of the CHM file from which a chapter is to be displayed.
- ▶ **Chapter**: Name of the help chapter that is to be displayed.  
Syntax: *chapter name.htm*  
**Attention**: This entry is case sensitive.

Further notes: **Help in the menu** (on page 8) chapter.

## ALARMS

Help entries for alarms are configured via the properties of the respective limit value of the variable. In the **Limit Values** group, there are corresponding entries available in the **Help** subgroup for each defined limit value:

- ▶ **Help file:** Selection of the CHM file from which a help chapter for this alarm is to be displayed in the Alarm Information List.  
**Note:** A page from **EPLAN** (on page 13) can also be called up.
- ▶ **Help chapter:** Indication of the help chapter that is to be displayed for this alarm in the Alarm Message List.  
Syntax: *chapter name.htm*  
**Attention:** This entry is case sensitive.

Further notes: **Help for alarms** (on page 9) chapter.

## DYNAMIC ELEMENTS IN SCREENS

Each dynamic element in a screen can get a help entry. You define this in the **Runtime** group in the corresponding properties in the **Help** subgroup:

- ▶ **Help file:** Selection of the CHM file from which a chapter is to be displayed.
- ▶ **Help chapter:** Name of the help chapter that is to be displayed.  
Syntax: *chapter name.htm*  
**Attention:** This entry is case sensitive.

If no help page is linked for a dynamic element, the help linked in the **Menus** area is linked, if present.

Further notes: **Help for dynamic elements** (on page 9) chapter.

## FUNCTION OPEN HELP

A certain chapter from a CHM file can be called up using the **Open help** function.

Further notes: **Open help function** (on page 11) chapter.

### 4.3.1 Help in the menu

After selecting the desired main menu, a new entry for the help is created. If this entry is selected, the properties can be set in the property-window:

Parameters	Description
<b>Context menu:</b> Action type	The action type has to be set to <b>Help</b> , otherwise the further settings are not available.



Parameters	Description
<b>Dynamic element: Help file</b>	<p>Here the appropriate help file (*.chm) from the standard language is selected.</p> <p>This entry serves as a default used, if there is no separate help file for the dynamic element.</p>
<b>Dynamic element: Help chapter</b>	<p>Here the appropriate help chapter from the selected help file is selected. The help chapters always have the name of the HTM(L) file, they are based on.</p> <p>This entry serves as a default used, if there is no separate help chapter for the dynamic element.</p>

### 4.3.2 Help for alarms

For each alarm a context-sensitive help page can be offered. The appropriate settings are done directly in the alarm. This help is called in the alarm screen (screen of type Alarm Message List) After selecting an entry in the Alarm Message List and clicking the button **Help**, the corresponding help page is displayed.

The following settings in the properties of the **Limit Values** of a variable are necessary:

Parameters	Description
<b>In Alarm Message List</b>	This property has to be activated, otherwise the further properties are not available.
<b>Help file</b>	Here the appropriate help file (*.chm) from the standard language is selected.
<b>Help chapter</b>	Here the appropriate help chapter from the selected help file is selected. The help chapters always have the name of the HTM(L) file, they are based on.

### 4.3.3 Help for dynamic elements

For each dynamic element a context menu can be selected. If the context menu has an entry with the action type **Help**, a context-sensitive help for the dynamic element is displayed.

### 4.3.3.1 Defining the context menu

After selecting the desired context menu, a new entry for the help is created. The following settings in the properties are necessary:

Parameters	Description
<b>Context menu:</b> <b>Action type</b>	The action type has to be set to <b>Help</b> , otherwise the further settings are not available.
<b>Dynamic element: Help file</b>	Here the appropriate help file (*.chm) from the standard language is selected.  This entry serves as a default used, if there is no separate help file for the dynamic element.
<b>Dynamic element: Help chapter</b>	Here the appropriate help chapter from the selected help file is selected. The help chapters always have the name of the HTM(L) file, they are based on.  This entry serves as a default used, if there is no separate help chapter for the dynamic element.

This context menu now can be used with different dynamic elements.

### 4.3.3.2 Defining dynamic elements

The following settings in the properties of the dynamic element are necessary:

Parameters	Description
<b>Context Menu</b>	Here the appropriate context menu is selected from the list.
<b>Help file</b>	Here the appropriate help file (*.chm) from the standard language is selected. If no separate help file is defined for the dynamic element, the settings in the context menu are used.
<b>Help chapter</b>	Here the appropriate help chapter from the selected help file is selected. The help chapters always have the name of the HTM(L) file, they are based on. If no separate help chapter is defined for the dynamic element, the settings in the context menu are used.

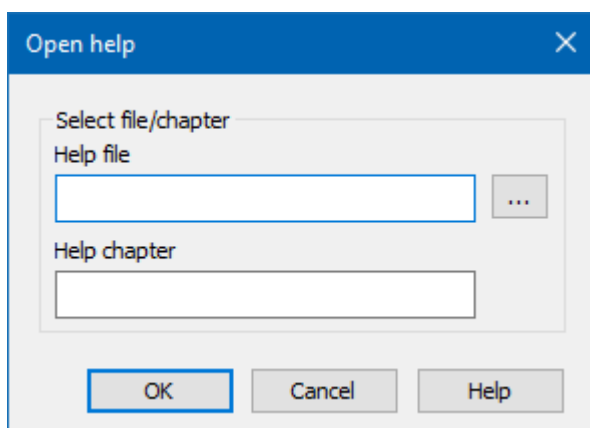
### 4.3.4 Function open help

With this function a Help Site can be opened, e.g. for menus, limit values, dynamic elements:

1. In the context menu of node **Function** select command **New function**
2. Navigate to node **Application**
3. Select **Open help**.

The configuration dialog is opened

#### OPEN DIALOG HELP



Parameters	Description
<b>Help file</b>	<p>Help file (*.CHM), from which a page should be displayed. Click on button ... in order to open the Explorer for selecting a CHM file.</p> <p>This file must be present in the project tree in the <b>File/help</b> node.</p>
<b>Help chapter</b>	<p>Help page which should be displayed.</p> <p>Manual entry of the file name of the chapter before compiling it with the file name extension <b>htm</b>.</p> <p>Format: <b>File name.htm</b></p>

All "Open Help" function calls can be configured:

- ▶ Combination of the name of CHM file and an included HTM file.
- ▶ Only name of the HTM file plus index of an included HTM file.



#### Information

At the structure of an HTML presentation each HTM site should have a convincing title as this is displayed in Windows CE.

## 5 Displaying Help

The display of the help can be done in two different ways:

1. External: via the HTML Help of the operation system (on page 12).  
Consider the restrictions for the language switch!
2. Intern: via the Help in the HTML screen (on page 12)

### 5.1 HTML Help of the operating system

This type of display is used as a default. No further projecting is necessary.

#### Attention

In general, language switching is not possible with the HTML help on Microsoft operating systems. Help in which the language can be switched must be configured via a HTML screen (on page 12).

Exception: Help under Windows CE (on page 13).

### 5.2 Help in HTML screen

If a screen of the window class HTML and the name **HTML-Help** exists, it is used instead of the HTML Help of the operating system. The name of the screen is case-sensitive.

The help is displayed in the control element **Navigate**.

#### Information

Language switch: If the language is changed after the CHM Viewer is closed, the new language is displayed when the help is called up again.

## 6 Runtime help in CE

In Windows CE the CHM file is unpacked and the HTM(L) file is displayed in the Internet Explorer or in the screen of type HTML.

For CE devices no special characters such as umlauts, accents, etc. are allowed. All references for Windows CE help objects must be within the following characters:

- ▶ A-Z
- ▶ a-z
- ▶ 0-9



### Information

Language switching: In contrast (on page 12) to other Microsoft Windows operating systems, the language switch in Runtime in Windows CE also works with the HTML help of the operating system.

Note: Every help call in Windows CE closes all other open Internet Explorer windows of a user.

## 7 Call up EPLAN From help

An **EPLAN** document can also be called up in the event of an alarm (limit value violation).

### Attention

The **EPLAN** connection must be licensed in zenon. You can obtain licenses from your zenon contact or at [sales@copadata.com](mailto:sales@copadata.com).

To call up **EPLAN** documents from zenon in Runtime:

1. Enter the path to the **EPLAN** program in the **zenon6.ini**.
2. In the zenon Editor, in the property of the corresponding variable, go to the **Help** subgroup in the **Limit Values** group.
3. In the field of the **Help file** property, enter the **\$PRG:xxxxxx** character sequence. (xxxxxx stands for the parameter to call up the correct document; for details, see the **Parameters for calling up the EPLAN documents** section).
4. Enter a desired character into the field of the **Help chapter** property. This property is ignored by **EPLAN**, but must not be empty.

The configured **EPLAN** document is activated when help is called up in Runtime.



## Information

This functionality can in principle be used for other type of documents such as PDF.

## CONFIGURATION OF ZENON6.INI

In **zenOn6.ini**, enter the path to **W3u.exe**. **W3u.exe** is the executable file of the **EPLAN** viewer. Version 1.7.11 or later is required.

To do this:

1. Navigate to the **[PATH]** section or create it.
2. Enter **EDOC\_PATH=[Path]**.

For example: **EDOC\_PATH=C:\Programme\EPLAN\View\1.7.11\BIN\W3u.exe**



## Information

You can find **zenon6.ini** in the following path:  
`%ProgramData%\COPA-DATA\System\`

## PARAMETERS FOR CALLING UP THE EPLAN DOCUMENTS

A jump target with parameters must be provided for calling up an **EPLAN** document from Runtime help.

Syntax: **edit /[path of the EPLAN project]/[DEVICENAME:=name of the view/page in project]**

Parameter	Description
<b>PROJECTNAME</b>	<p>Project name with complete path.</p> <ul style="list-style-type: none"> <li>▶ Calling it up from the command line: <b>PROJECTNAME</b> specification is mandatory. Alternatively: <b>ProjectAction</b> is used previously. Otherwise the exceptional error <b>System.Argument Exception</b> is triggered.</li> <li>▶ Call via the user interface: it need not be given when calling up via a script or the toolbar, for example. The selected project is used without it being stated.</li> </ul>
<b>PAGENAME</b>	<p>Name of page to be checked (optional).</p> <p>Mandatory if X and Y are used as parameters for cursor placement.</p>
<b>DEVICENAME</b>	<p>Name of a component (optional).</p>

Examples:

- ▶ Open project:  
**edit /PROJECTNAME:***C:\Projects\EPLAN\PLAN100.elk*
- ▶ Open page:  
**edit /PROJECTNAME:***C:\Projects\EPLAN\PLAN100.elk /PAGENAME:=AP+ST1/7*
- ▶ Open page and set the cursor to the X, Y position:  
**edit /PROJECTNAME:***C:\Projects\EPLAN\PLAN100.elk /PAGENAME:=AP+ST1/7/X:200/Y:100*
- ▶ Open page with BMK:  
**edit /PROJECTNAME:***C:\Projects\EPLAN\PLAN100.elk /DEVICENAME:=AP+PT1-G1*

Example of calling up from zenon help page:

**edit /PROJECTNAME:***"D:\##Projekte\EPLAN\EPLAN\_Alarmanbindung\P8\_DEMO.elk"*  
*/DEVICENAME:=UNIT+PP-B1*

You can find further information on the configuration in **EPLAN** in the **EPLAN** documentation.