

zenon manual

Cross-reference list

v.7.10



© 2013 Ing. Punzenberger COPA-DATA GmbH

All rights reserved.

Distribution and/or reproduction of this document or parts thereof in any form are permitted solely with the written permission of the company COPA-DATA. The technical data contained herein has been provided solely for informational purposes and is not legally binding. Subject to change, technical or otherwise.



Contents

| 1. | Welc | ome to | COPA-DATA help | 4 |
|----|-------|----------|------------------|---|
| 2. | Cross | -refere | nce list | 4 |
| | 2.1 | Cross re | eference list | 5 |
| | | 2.1.1 | General | 5 |
| | | 2.1.2 | The context menu | 8 |
| | 2.2 | Project | analysis | |
| | | 2.2.1 | Result list | |



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. Cross-reference list

The cross-reference list gives an overview which modules and functions are linked how. zenon provides two instruments for this:

- ▶ Cross-reference list (on page 5): displays links in the project tabularly
- Project analysis (on page 11): analyzes the use of functions and variables and finds not used functions or variables



License information

Part of the standard license of the Editor and Runtime.

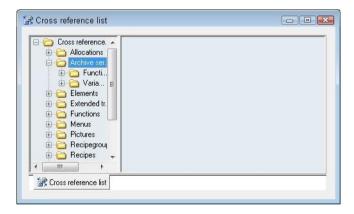
2.1 Cross reference list

The cross-reference list creates a tabular project overview.

All links between variables, functions, screens, recipes etc. are listed for documentation and traceability. E.g. in the Cross Reference List, one can see which variables are used in what screens.

2.1.1 General

In the zenon Editor the cross reference list can be opened in the menu Option with the entry Cross-reference list.



💡 Info

If the cross-reference list is not displayed in the Editor, you can open it with the command Cross reference list from the menu Options.

In order to get information about a certain module simply expand the corresponding topic.

The following topics are available:

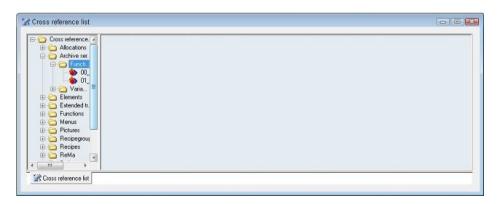


| Parameters | Description |
|---------------------|----------------------|
| Archive | Functions |
| | Variables |
| Screens | Elements |
| | Symbols |
| | Variables |
| Elements | Screens |
| | Variables |
| ETM | |
| Functions | Archive |
| | Autom. function call |
| | Screens |
| | Bitmap button |
| | PFS |
| | REMA |
| | Scripts |
| | Text button |
| | Invisible button |
| | Variable limits |
| | Time control |
| PFS | Functions |
| | Variables |
| REMA | Functions |
| | Variables |
| Recipes | Variables |
| Recipegroup Manager | Recipegroups |
| | Variables |



| Scripts | Functions |
|--------------|---------------------|
| Symbols | Screens |
| | Linked symbols |
| Variables | Archive |
| | Screens |
| | Elements |
| | ETM |
| | Mathematics |
| | PFS |
| | REMA |
| | Recipes |
| | Recipegroup Manager |
| | Allocations |
| Time control | Functions |
| Allocations | Variables |

After a click on one of the supported objects information about it is displayed in the list on the right part of the window.



Information about the selected topic is displayed in the list area. The list can be sorted (ascending or descending) by clicking on the column header.

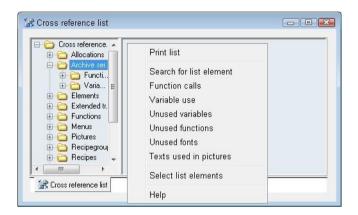
The list can also be filtered. Select the appropriate column and enter the filter criteria in the text-box below the column header (-> Enter text here). Now all elements corresponding the search criteria are



displayed. It is also possible to filter in different columns at the same time. Simply enter search criteria in different columns as explained above. If a filter is no longer needed delete the text in the filter box.

2.1.2 The context menu

In order to get access to the functionality of the Cross Reference List open a context menu by clicking into the list area.



The following commands are available:

| Parameters | Description |
|--|--|
| Print list/search result (on page 11) | Prints the list area of the Cross Reference List containing selected |
| Search for list element (on page 9) | Opens a dialogbox to search for a certain element |
| Function calls (on page 9) | Opens a dialogbox containing a list of the defined functions |
| Variable use(on page 9) | Opens a dialogbox containing a list of the defined variables |
| Unused variables / functions / fonts(on page 10) | Displays all unused variables/functions/fonts in the list area |
| Texts used in screens | Searches for texts used in screens |
| Select list elements (on page 10) | Opens a dialogbox for the selection of one or more listed element |
| Help | Opens Online-Help |
| Delete | Delets unused elements (variables, functions and fonts) |



Search for list element

The selection of the command search for list element from the context menu opens the following dialogbox:

| Search for | | |
|------------|--------|------|
| | | |
| | | |
| | | |
| - | Cancel | Help |

After giving one or more initial letters the first corresponding object in the list is selected.

Function calls

Selecting the command Function calls from the context menu opens the following dialogbox, in which all defined functions of the current project are listed:

| fct Show ALARM: Picture switch - | MOT ALADM [#][#][T] | |
|------------------------------------|--------------------------------------|---|
| Function 0: Picture switch - MDI / | | - |
| Function 1: Picture switch - MDI / | | |
| Function_10: Picture switch - MDI | | |
| Function 100: Window to foregrou | | |
| Function 101: Play sound-file - ?? | | |
| Function_102: Sound beep finish - | | |
| Function 103: Sound beep - BEEP | | |
| Function 104: Start programEX | | |
| Function 105: Picture switch - STA | | |
| Function 106: Picture switch - MD | I ALARM - [*][*][T] | |
| Function 107: Picture switch - MD | I ARCHIV - 00-[] | |
| Function_108: Picture switch - MD | I_CEL - [*][*][T] | |
| Function_109: Picture switch - MD | I_ETM - NEW[ARV] | |
| Function_11: Picture switch - MDI | _WELTBILDTemplate_0 | |
| | I_RGM - ST [Default_0->Default_0] | |
| | I_REZEPT - ST [Default_1->Default_0] | |
| Function_112: Picture switch - MD | | |
| Function_113: Picture switch - MD | | |
| Function_114: Picture switch - MD | I_LOGIN | - |

Variable use

The selection of the command Function calls from the context menu opens the following dialog box, in which all defined functions of the current project are listed:



| \$Alarme nicht quittiert\$ | |
|----------------------------|--|
| Internal_BOOL_000 | |
| Internal_BOOL_001 | |
| Internal_BOOL_002 | |
| Internal_BOOL_003 | |
| Internal_BOOL_004 | |
| Internal_BOOL_005 | |
| Internal_BOOL_006 | |
| Internal_BOOL_007 | |
| Internal_BOOL_008 | |
| Internal_BOOL_009 | |
| Internal_BOOL_010 | |
| Internal_STRING_000 | |
| Internal_STRING_001 | |
| Internal_UINT_000 | |
| Internal_UINT_001 | |
| Internal UINT 002 | |
| Internal_UINT_003 | |
| Internal_UINT_004 | |
| Internal_UINT_006 | |

Unused variables / functions / fonts

In the list of unused elements (variables, functions and fonts) the context menu gets an additional menu entry delete.

So elements can be selected in the list and be directly deleted there.

Select list elements

The selection of the command select list elements from the context menu opens the following dialogbox:

| Filter | |
|--------------|------------------|
| 🗇 from - to | |
| from | to |
| | |
| | |
| All elements | s beginning with |
| | |
| | |

The following options are available:



| Parameters | Description |
|-----------------------------|--|
| from - to | Selection of the elements from a stated initial letter to another stated initial letter. |
| All elements beginning with | Selection of the elements by stating an initial letter or string. |

Print list/search result

The selection of the command **Print** list Or **Print** search result from the context menu opens the following dialogbox:

The following options are available:

| Parameters | Description |
|--------------------|--|
| All | All elements of the list are printed |
| Marked elements | All selected elements of the list are printed |
| to file | By activating this control box the output is rerouted to a file. A dialogbox opens asking for the path and the name of the file. Confirming with OK saves the file. This file has the CSV format and can be loaded in EXCEL and be formated as desired. Loading this file in EXCEL opens a dialogbox asking for a seperator. Activate the control box "Semicolon" and deactivate all others. |

2.2 Project analysis

The project analysis analyzes the use of elements in a project.

At this:

- the link with other elements can be analyzed
- you can search for unused elements

Currently the project analysis is available for:



- Functions
- Variables

ANALYZE THE USE OF AN ELEMENT

To analyze an element:

- 1. highlight the desired variable or function in the detail view
- 2. in the context menu select menu item Variable use Or Function use
- 3. the result list (on page 13) is displayed in an own window

| Project analysis-TE | ST700 | | | | × |
|---------------------|--------------|---------------|---|-------------|---|
| 8 X 🕘 – | | | | | |
| Project | | Module | | Name | ň |
| Filt | er text | 7 Filter text | T | Filter text | Y |
| TEST700 | | Screens | | MENU_DETAIL | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | / 0 selected | | | | |

4. via the context menu you can jump to an element

FIND NOT USED ELEMENTS

To find the not used elements:

- 1. highlight the node variable or function in the project tree
- 2. in the context menu select menu item Display not used functions Of Display not used variables



| ₹ X Ø | | | | | | | |
|-------------|--------|-------------|-----------|-------------|---|--|--|
| Project | Module | • | | Name | ň | | |
| Filter text | T | Filter text | \forall | Filter text | Y | | |
| TEST700 | Functi | ons | | Funktion 3 | | | |
| TEST700 | Functi | ons | | Funktion 2 | | | |
| TEST700 | Functi | ons | | Funktion 1 | | | |
| TEST700 | Functi | ons | | Funktion 0 | | | |
| TEST700 | Functi | ons | | Function 4 | | | |
| TEST700 | Functi | ons | | Function 0 | | | |
| TEST700 | Functi | ons | | Function 3 | | | |
| TEST700 | Functi | ons | | Function 2 | | | |
| TEST700 | Functi | ons | | Function 1 | | | |
| TEST700 | Functi | ons | | Funktion 5 | | | |

3. the result list (on page 13) is displayed in an own window

4. via the context menu you can jump to an element or delete it

Attention

The following elements cannot be found by the project analysis:

- Variables which are only used in VBA or VSTA
- Variables which are used in screens of type Report Generator (report function)

Before you delete elements you must check whether variables which should be deleted are used in VBA/VSTA or in report functions.

2.2.1 Result list

The results of the single analysis processes are displayed in a list in an own window in the project analysis. This window opens - if it is not active yet - automatically after the analysis process. The results can be used in two ways:

- Analyse use in the project: jump to linked element
- ▶ find not used elements: jump to displayed element or delete displayed element



ANALYSIS ELEMENT USE

The project analysis displays its result in a list.

| Project | | Module | | Name | | | | |
|-------------|---|-------------|---|------------|------------|--|--|--|
| Filter text | 7 | Filter text | Y | | Filter tex | | | |
| TEST700 | | Functions | | Funktion 3 | | | | |
| TEST700 | | Functions | | Funktion 2 | | | | |
| TEST700 | | Functions | | Funktion 1 | | | | |
| TEST700 | | Functions | | Funktion 0 | | | | |
| TEST700 | | Functions | | Function 4 | | | | |
| TEST700 | | Functions | | Function 0 | | | | |
| TEST700 | | Functions | | Function 3 | | | | |
| TEST700 | | Functions | | Function 2 | | | | |
| TEST700 | | Functions | | Function 1 | | | | |
| TEST700 | | Functions | | Funktion 5 | | | | |
| | | | | | | | | |
| • | | | | | • | | | |

It contains:

- ► The project name
- ▶ the module
- ▶ the name of the linked elements

To jump to a displayed element:

- 1. highlight the element
- 2. select menu item Jump to linked element from the context menu
- 3. the linked element is highlighted in the detail view of its module node

FIND UNUSED ELEMENTS

The search for unused elements returns its results in a list.

| Project | | | Module | | Name | |
|---------|-------------|---|-------------|---|-------------|--|
| | Filter text | 7 | Filter text | Y | Filter text | |
| TEST700 | | | Variables | | sv2.DS1 | |
| TEST700 | | 1 | Variables | | sv2.dsu | |
| TEST700 | | | Variables | | snmp | |
| TEST700 | | | Variables | | Sprecon1 | |



It contains:

- The project name
- the module
- ▶ the name of the unused elements

JUMP TO ELEMENT

To jump to a displayed element:

- 1. highlight the element
- 2. select menu item Jump to linked element from the context menu
- 3. the linked element is highlighted in the detail view of its module node

DELETE ELEMENTS

To delete one or more elements:

- 1. highlight the desired elements (multiple selection is possible)
- 2. in the context menu select the command Delete selected elements
- 3. the elements are deleted from the project after a confirmation message