



**COPADATA**  
do it your way

# zenon manual

## Cross-reference list

v.7.11





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# 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) (<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) (<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) (<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 13): 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.*

## 3. Cross reference list

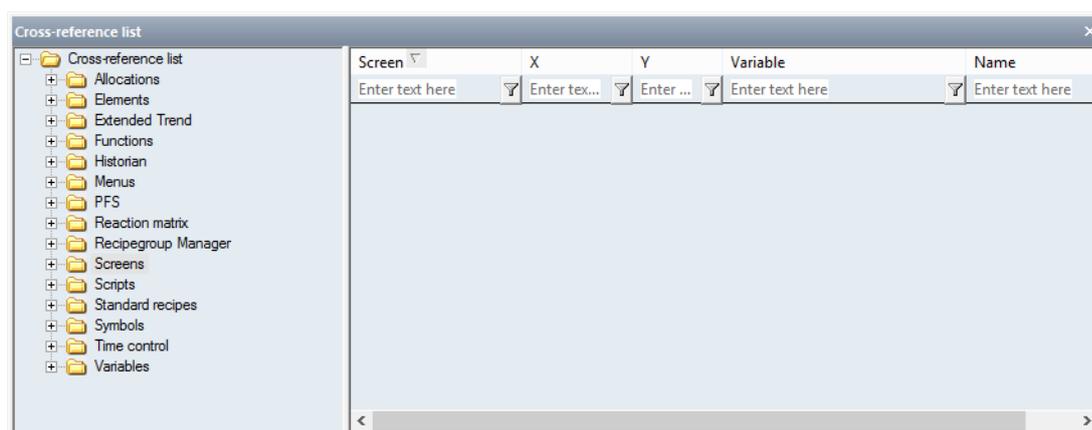
The cross-reference list creates a tabular project overview.

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.

### 3.1 General

To display the cross-reference list, click, in the **options** menu, on the entry **Cross-reference list**. The **cross-reference list** is opened.

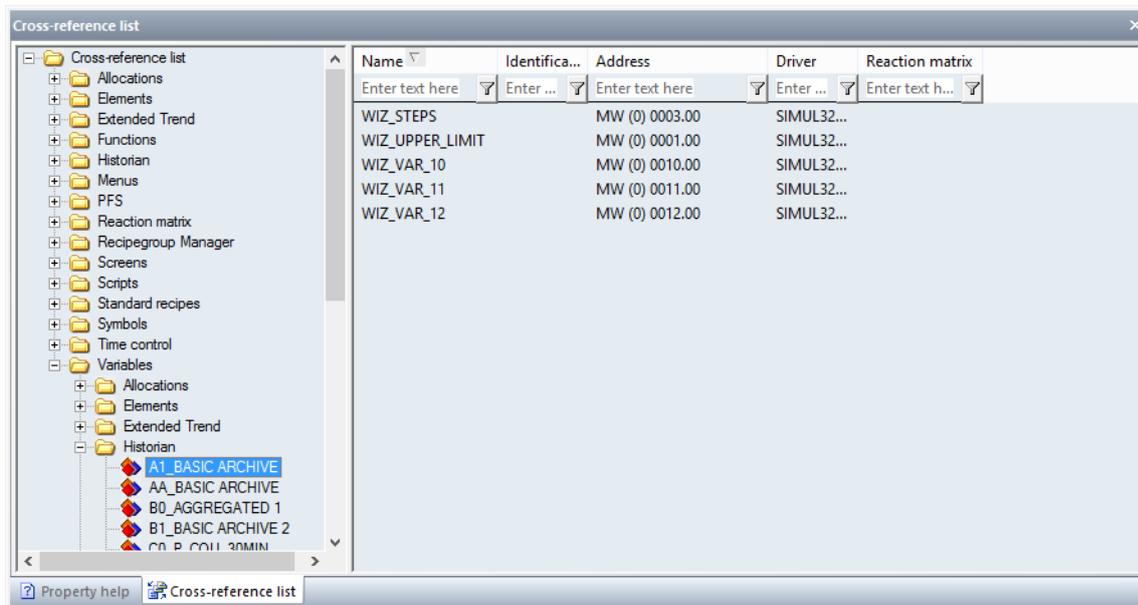


In order to get information about a certain module, simply expand the corresponding node. Available are:

Module	Elements that can be displayed
Historian	<ul style="list-style-type: none"> <li>▶ Functions</li> <li>▶ Variables</li> </ul>
Screens	<ul style="list-style-type: none"> <li>▶ Elements</li> <li>▶ Menus</li> <li>▶ Symbols</li> <li>▶ Variables</li> </ul>
Elements	<ul style="list-style-type: none"> <li>▶ Screens</li> <li>▶ Variables</li> </ul>
ETM	<ul style="list-style-type: none"> <li>▶ Functions</li> </ul>
Functions	<ul style="list-style-type: none"> <li>▶ Historian</li> <li>▶ Automatic function call</li> <li>▶ Screens</li> <li>▶ Bitmap button</li> <li>▶ Button</li> <li>▶ Menus</li> <li>▶ PFS</li> <li>▶ Reaction matrix</li> <li>▶ Scripts</li> <li>▶ Invisible button</li> <li>▶ Variable limits</li> <li>▶ Time control</li> </ul>
Menus	<ul style="list-style-type: none"> <li>▶ Screens</li> <li>▶ Functions</li> <li>▶ Variables</li> </ul>
PFS	<ul style="list-style-type: none"> <li>▶ Functions</li> </ul>

	<ul style="list-style-type: none"> <li>▶ Variables</li> </ul>
Reaction matrix	<ul style="list-style-type: none"> <li>▶ Functions</li> <li>▶ Variables</li> </ul>
Recipegroup Manager	<ul style="list-style-type: none"> <li>▶ Recipegroups</li> <li>▶ Variables</li> </ul>
Scripts	<ul style="list-style-type: none"> <li>▶ Functions</li> </ul>
Standard recipes	<ul style="list-style-type: none"> <li>▶ Variables</li> </ul>
Symbols	<ul style="list-style-type: none"> <li>▶ Screens</li> <li>▶ Linked symbols</li> </ul>
Variables	<ul style="list-style-type: none"> <li>▶ Historian</li> <li>▶ Screens</li> <li>▶ Elements</li> <li>▶ Extended Trend</li> <li>▶ Mathematics</li> <li>▶ Menus</li> <li>▶ PFS</li> <li>▶ Reaction matrix</li> <li>▶ Recipegroup Manager</li> <li>▶ Standard</li> <li>▶ allocations</li> </ul>
Time control	<ul style="list-style-type: none"> <li>▶ Functions</li> </ul>
Allocations	<ul style="list-style-type: none"> <li>▶ Variables</li> </ul>

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 contents can be sorted and filtered.

- ▶ **Sorting:** Clicking on the column header sorts the column; a second click reverses the sorting.
- ▶ **Filter:** Enter the search criteria in the filter box in the column header. Several filters can be linked into a chain.

To remove the filter: Delete the content of the filter box.

## 3.2 The context menu

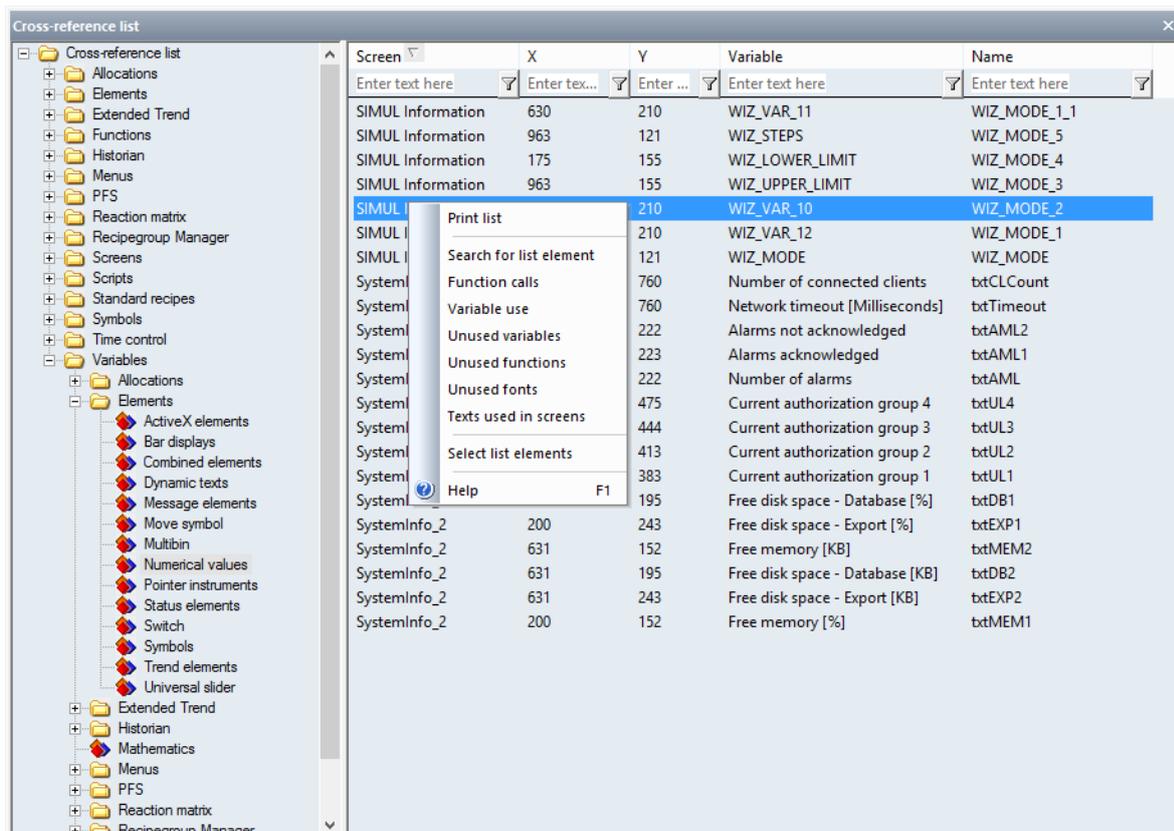
The cross-reference list provides a range of functionality:

- ▶ **Print list (on page 10):** Prints the list area of the Cross Reference List containing selected information.
- ▶ **Search for list element (on page 10):** Opens a dialog to search for a certain element.
- ▶ **Function calls (on page 11):** Opens a dialog with a list of the defined functions.
- ▶ **Variable use (on page 11):** Opens a dialog with a list of the defined variables.
- ▶ **Unused variables (on page 12):** Displays all unused variables in the list area.
- ▶ **Unused functions (on page 12):** Displays all unused functions in the list area.

- ▶ Unused fonts (on page 12): Displays all unused fonts in the list area.
- ▶ Texts used in screens: Searches for texts used in screens.
- ▶ Select list elements (on page 12): Opens a dialogbox for the selection of one or more listed elements.
- ▶ Help: Opens online help.
- ▶ Delete: Deletes unused elements (variables, functions and fonts).  
Is only displayed if there are deletable elements

To execute one of the functions:

1. Set the focus to the list window
2. carry out a right click
3. Select the desired function from the context menu

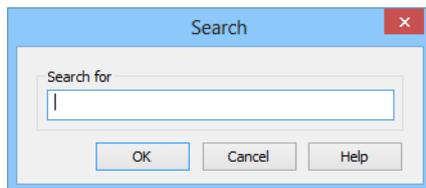


### 3.2.1 Print list

Selecting the **Print list** command from the context menu opens the standard dialog to select a printer and the options for print-out.

### 3.2.2 Search for list element

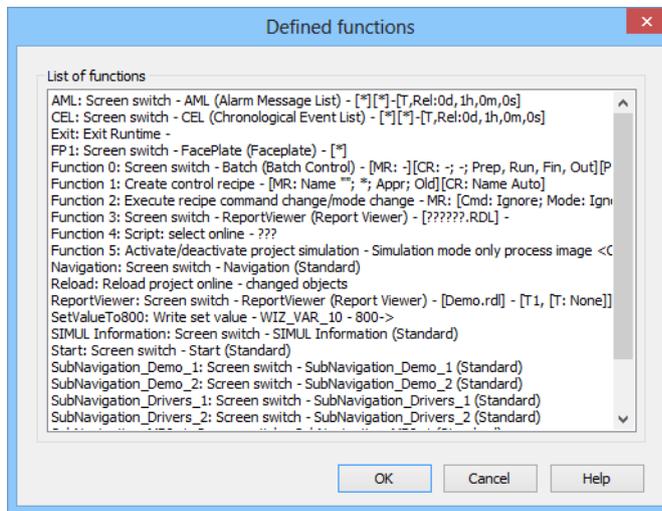
Selection of the **Search for list element** command from the context menu opens the following dialog:



Parameters	Description
Search for	Entry of a character sequence.
OK	Applies search parameters and closes the dialog. The first thing that is found in the list that corresponds to the search term is displayed. A match from the first character onwards is looked for.  Example: Element name: A search for <b>W</b> finds <b>Wizard_10</b> . A search for <b>Z</b> does not find the element.
Cancel	Discards all changes and closes the dialog.
Help	Opens online help.

### 3.2.3 Function calls

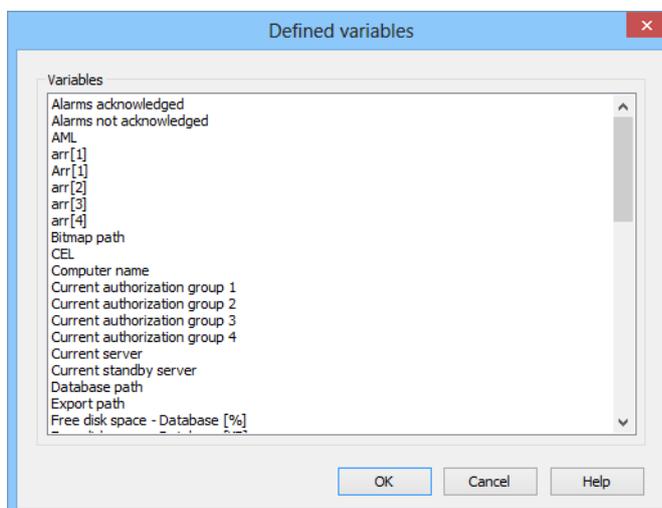
Selecting the command **Function calls** from the context menu opens the following dialogbox, in which all defined functions of the current project are listed:



An element can be selected. Clicking on **OK** displays the element with all its uses in the cross-reference list.

### 3.2.4 Variable use

Selection of the **variable use** command from the context menu opens the dialog that contains all used variables.



An element can be selected. Clicking on  $\otimes$  displays the element with all its uses in the cross-reference list.

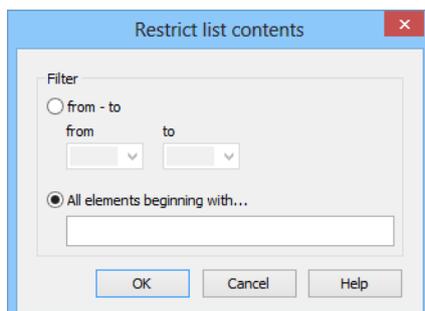
### 3.2.5 Unused variables / functions / fonts

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

This allows elements to be selected and deleted from the list.

### 3.2.6 Select list elements

Selection of the `select list elements` command from the context menu opens the dialog to search in the list.



Parameters	Description
<code>from - to</code>	<p>Active: A search for elements with certain letters at the start is carried out. Selection of the range of starting letter in the alphabet from drop-down lists:</p> <ul style="list-style-type: none"> <li>▶ <code>from</code>: first letter of the range</li> <li>▶ <code>to</code>: last letter of the range</li> </ul> <p>All elements that have their first letter in the defined range are found. The search direction is always A-&gt;Z.</p>
<code>All elements beginning with ...</code>	<p>Active: A search for elements that start with a certain character sequence is made.</p>
<b>OK</b>	Applies search rules, closes the dialog and highlights the elements found in the list.
<b>Cancel</b>	Discards all changes and closes the dialog.
<b>Help</b>	Opens online help.

## 4. 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

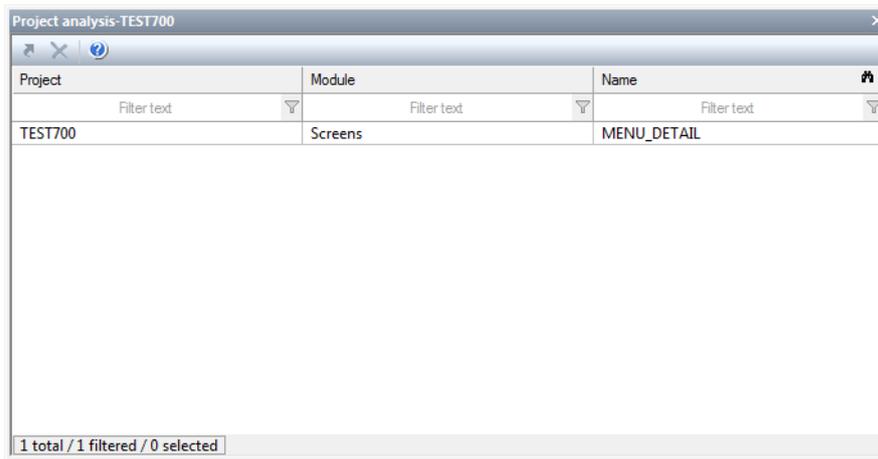
Currently the project analysis is available for:

- ▶ Functions
- ▶ Scripts
- ▶ 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 the **Variable use**, **Function use** Or **script use** command
3. the result list (on page 15) is displayed in an own window



Project	Module	Name
TEST700	Screens	MENU_DETAIL

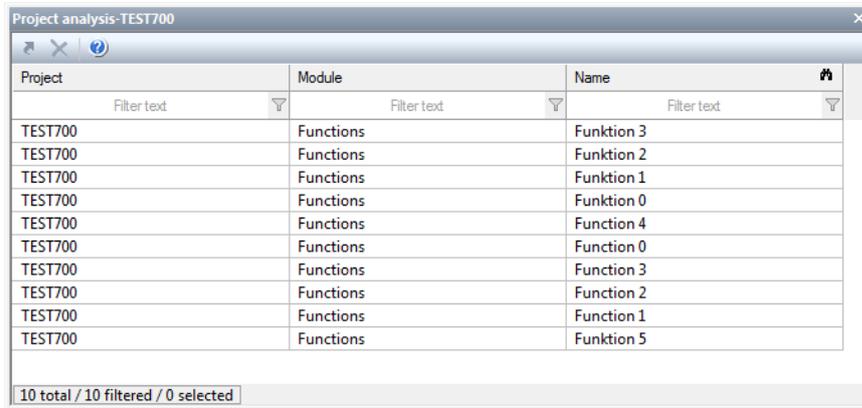
4. via the context menu you can jump to an element

## 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 the **Display unused functions**, **Display unused variables** Or **Display unused scripts** command

3. the result list (on page 15) is displayed in an own window



Project	Module	Name
Filter text	Filter text	Filter text
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

10 total / 10 filtered / 0 selected

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.*

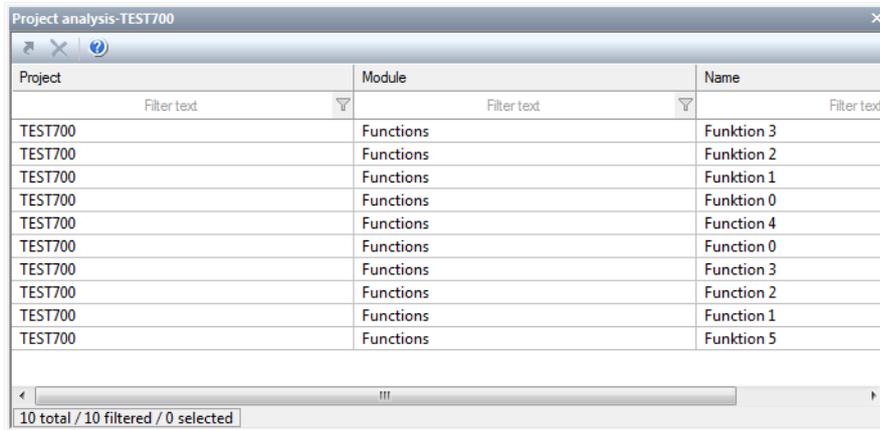
## 4.1 Result list

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	Filter text	Filter text
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

10 total / 10 filtered / 0 selected

It contains:

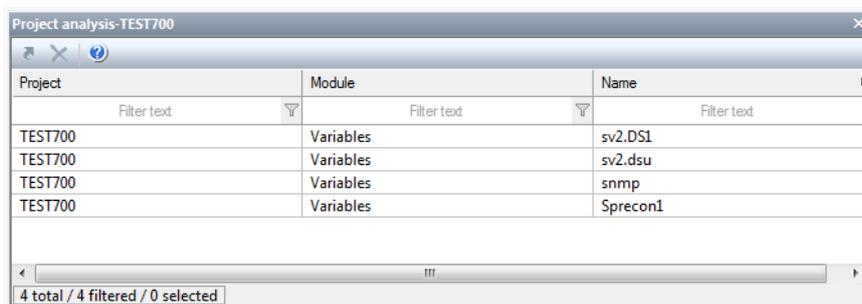
- ▶ The project name
- ▶ the module
- ▶ the name of the linked elements

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 NOT USED ELEMENTS

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



Project	Module	Name
Filter text	Filter text	Filter text
TEST700	Variables	sv2.DS1
TEST700	Variables	sv2.dsu
TEST700	Variables	snmp
TEST700	Variables	Sprecon1

4 total / 4 filtered / 0 selected

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