zenon Tutorial

Internationalization

v.7.11

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. Internationalization

In daily life global acting and thinking is decisive.

Efficient, ergonomic, international ... these are only three keywords that represent the zenon philosophy and meet this challenge.

This tutorial will show you using specific problems how in your familiar environment you can adapt your project to international business domains with a minimum effort. From the language or unit adaptation to the visual appearance. This tutorial is enhanced with practical tips and references to possible sources of error.

EXAMPLE OF USE:

- Delivering a project in different languages
- Multilingual operation of a facility
- Adapting measuring units to the local environment
- Different display options of the user interface
- Adapting to specific conditions
- Accessibility

3. Requirements

A little zenon basic knowledge is required for this tutorial. Therefore it is recommended for beginners and inexperienced users to first work through the   Basic tutorial. Some important project settings of this tutorial are explained step by step, but they aren't described in detail.

3.1 Preparations for this tutorial

If you already have some basic knowledge of the zenon Editor you can skip this chapter.

A neutral project and a neutral screen are created.

Parameters	Description
Name of the workspace	Tutorials_Workspace
Project name	INTERNATIONAL
Project type	Standard project
Screen name	Main
Variable name 1	Filling level
Variable name 2	Temperature
Variable driver	Internal - Driver for intern variables
Variable type	INT

3.1.1 Creating a new workspace

In this step you will carry out preparations for the configuration of the individual tutorial steps. You will

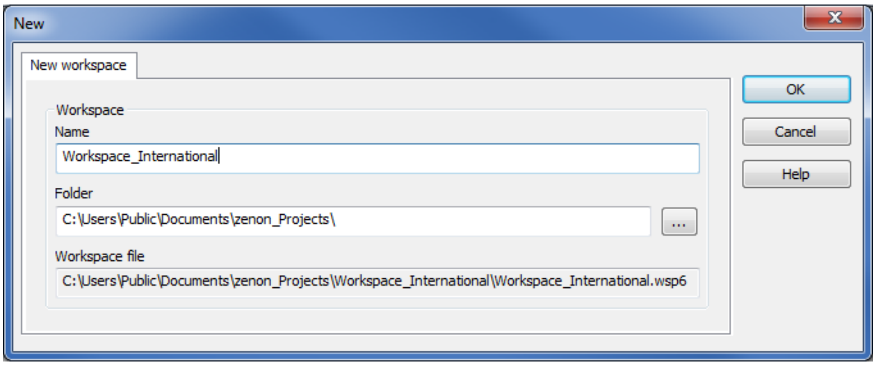
- create a workspace
- create a project
- create drivers
- Create variables

First, create a neutral environment by creating a new workspace with a new project.

To create a new workspace proceed as follows:

1. In the menu **`File`** select the command **`New workspace...`**

2. Name the workspace Workspace_International



Workspace

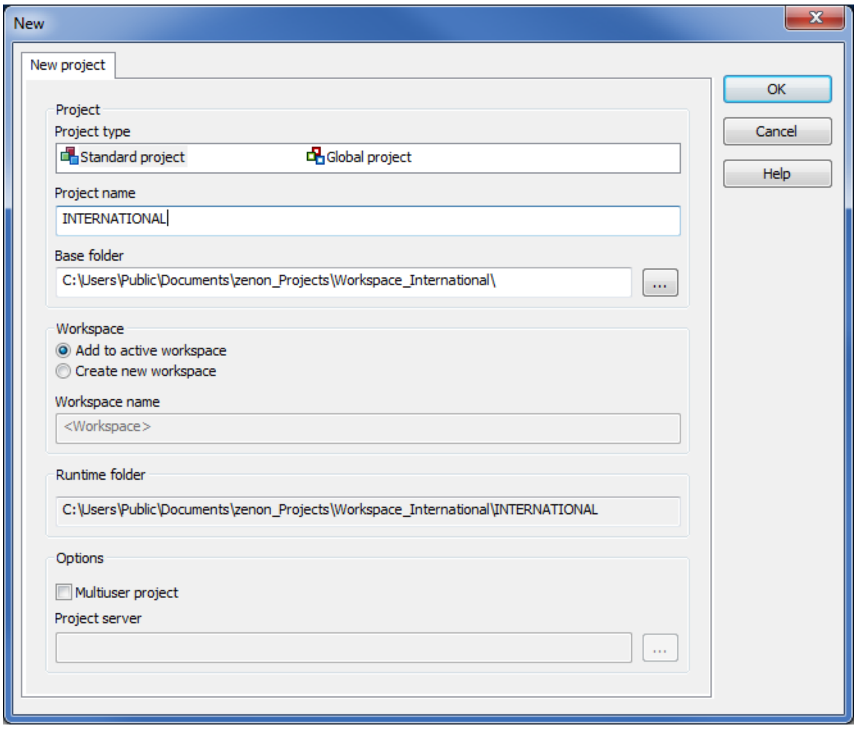
Name: Workspace_International

Folder: C:\Users\Public\Documents\zenon_Projects\

Workspace file: C:\Users\Public\Documents\zenon_Projects\Workspace_International\Workspace_International.wsp6

3.1.2 Creating a new project

To create a new project proceed as follows:



Project

Project type: Standard project | Global project

Project name: INTERNATIONAL

Base folder: C:\Users\Public\Documents\zenon_Projects\Workspace_International\

Workspace

● Add to active workspace

○ Create new workspace

Workspace name: <Workspace>

Runtime folder

C:\Users\Public\Documents\zenon_Projects\Workspace_International\INTERNATIONAL

Options

☐ Multiuser project

Project server:

1. In the menu **`File`**select the command **`Project new. .`**
2. Select the project type `Standard project`
3. Name your project *INTERNATIONAL*

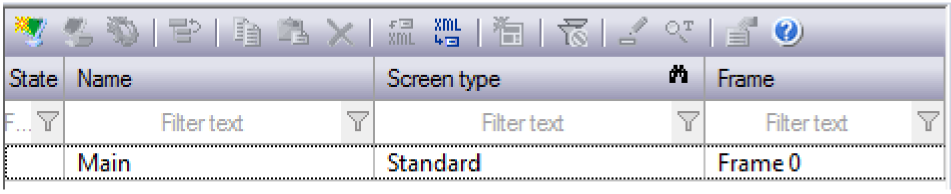
4. The project is now automatically created and the zenon Project Wizardwill open

5. Close the wizard with the **`Close`**button

6. Confirm the dialog `Form Closing` by clicking **`No`**

> **Information**
>
> *A neutral environment is now available for the next tutorial steps.*

3.1.3 Create screen



State	Name	Screen type	Frame
F...	Filter text	Filter text	Filter text
	Main	Standard	Frame 0

- In the project manager, open the node**`Screens`**.

- Select **`New screen`**

- Go to the properties window and select the entry **`General`**.

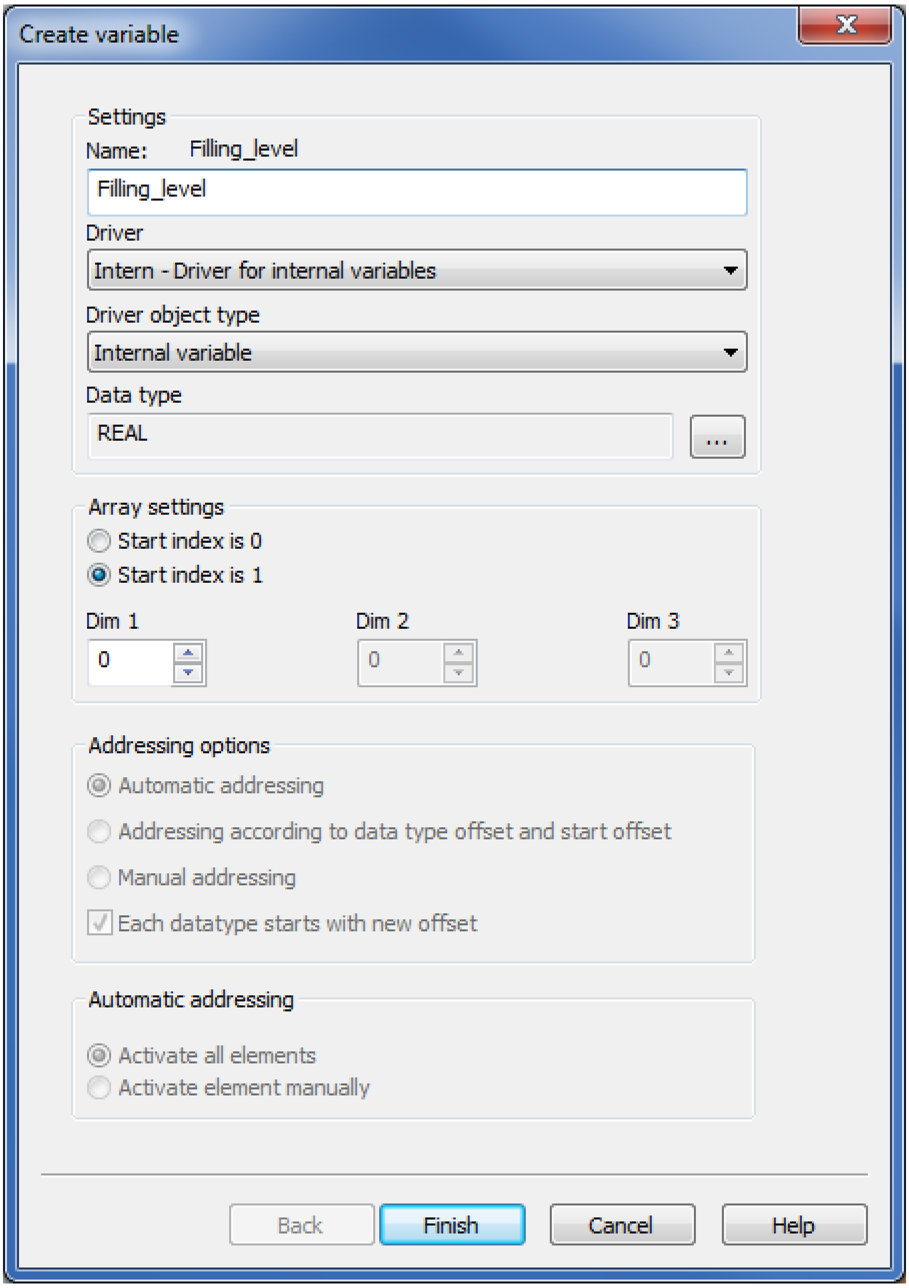
- Name the screen *Main*.

> **Information**
>
> *The tutorial project now has a (still empty) screen*

3.1.4 Creating two variables

This tutorial refers to two values. Temperature and filling quantity are adapted to the corresponding units of a country.

To do so, two variables are required. To create two variables:



Create variable

Settings

Name: Filling_level

Filling_level

Driver

Intern - Driver for internal variables

Driver object type

Internal variable

Data type

REAL

Array settings

○ Start index is 0

● Start index is 1

Dim 1: 0

Dim 2: 0

Dim 3: 0

Addressing options

● Automatic addressing

○ Addressing according to data type offset and start offset

○ Manual addressing

☑ Each datatype starts with new offset

Automatic addressing

● Activate all elements

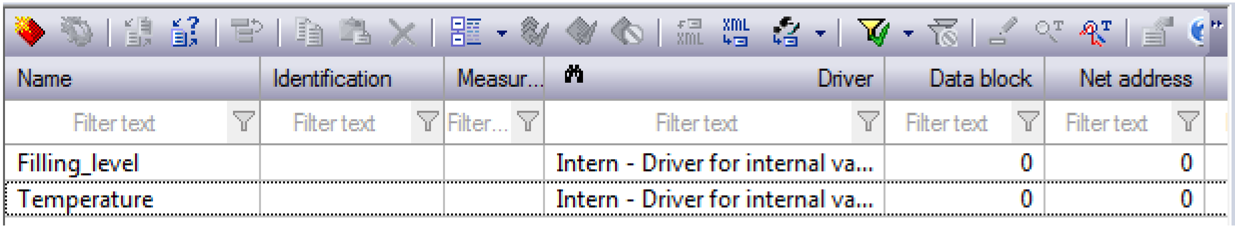
○ Activate element manually

1. In the project manager, open the node**Variable**.
2. Create a variable in the detailed view with the command **Variable new...**
3. In the dialog window Create variable select the entries
   - Internal - Driver for internal variables as Driver

- `Internal variable` as `Driver-Object type`
- `INT` as `Data type of the variable`
- `Filling quantity`as `Name`

4. Confirm the entry by clicking **`Complete`**

5. Create a second variable called *Temperature* (rest see above)



Name	Identification	Measur...	Driver	Data block	Net address
Filter text	Filter text	Filter...	Filter text	Filter text	Filter text
Filling_level			Intern - Driver for internal va...	0	0
Temperature			Intern - Driver for internal va...	0	0

3.2 Runtime operation

In this tutorial you will repeatedly be asked to start the Runtime. When doing so, don't forget to create the corresponding Runtime files in the COPA-DATA Editor.

In order to create Runtime files use

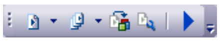
- keyboard shortcuts
- Tool bar

USAGE OF KEYBOARD SHORTCUTS:

Parameters	Description
`F7`	Create changed Runtime files.
`F5`	Starts Runtime.
`Alt+F4`	Ends Runtime.

> **Attention**
>
> Between the individual tests you should always end the Runtime. To do so, use the shortcut `Alt+F4`.

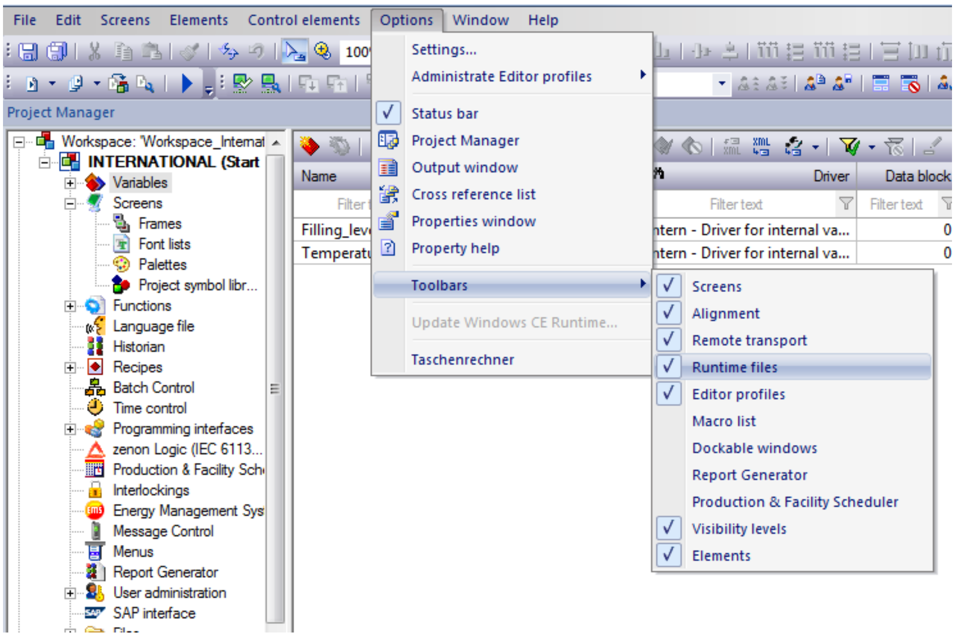
USAGE OF THE TOOLBAR



Use the symbols

- **`Create changed Runtime files`** in order to save.
- **`Start Runtime`** in order to check the configuration in the Runtime.

If this toolbar is not displayed in your Editor activate it:
Menu bar Options => Toolbar => Runtime files

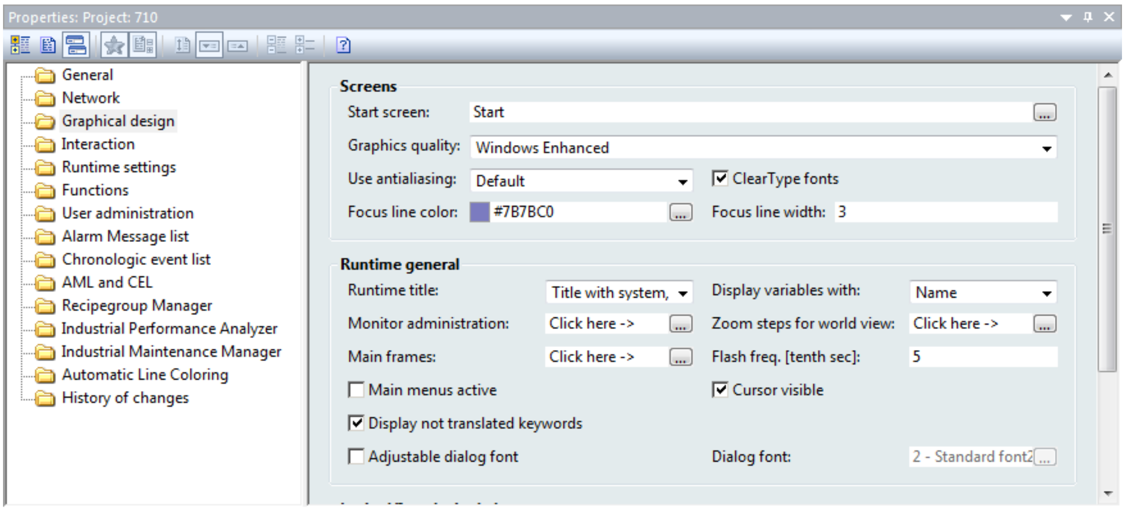


4. Project Settings

In the zenon Editor and Runtime it is possible to have the keywords which are to be translated displayed.

1. Open the project settings by clicking on the project name **`International`**.
2. Click on the properties in the menu item **`Graphical shapes`**,
3. **`Runtime general`**.

4. Activate the property `Display not translated keywords`.



Properties: Project: 710

- General
- Network
- Graphical design
- Interaction
- Runtime settings
- Functions
- User administration
- Alarm Message list
- Chronologic event list
- AML and CEL
- Recipegroup Manager
- Industrial Performance Analyzer
- Industrial Maintenance Manager
- Automatic Line Coloring
- History of changes

Screens

Start screen: Start

Graphics quality: Windows Enhanced

Use antialiasing: Default ☑ ClearType fonts

Focus line color: #7B7BC0 Focus line width: 3

Runtime general

Runtime title: Title with system, Display variables with: Name

Monitor administration: Click here -> Zoom steps for world view: Click here ->

Main frames: Click here -> Flash freq. [tenth sec]: 5

☐ Main menus active ☑ Cursor visible

☑ Display not translated keywords

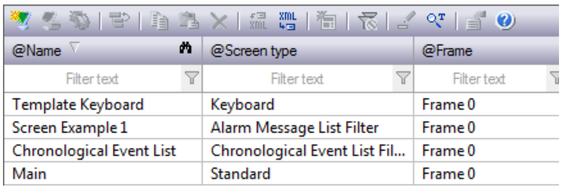
☐ Adjustable dialog font Dialog font: 2 - Standard font2

Information

This selection determines if in the Runtime keywords are displayed in the translated version or in the "source language" with an @ in front.

4.1 Keywords in the Editor

Have a look around the zenon Editor. For instance, if you click on the node `Screens` and look at the detailed view you will discover an @-symbol in front of the column headlines (after activating the keyword view).



@Name	@Screen type	@Frame
Filter text	Filter text	Filter text
Template Keyboard	Keyboard	Frame 0
Screen Example 1	Alarm Message List Filter	Frame 0
Chronological Event List	Chronological Event List Fil...	Frame 0
Main	Standard	Frame 0

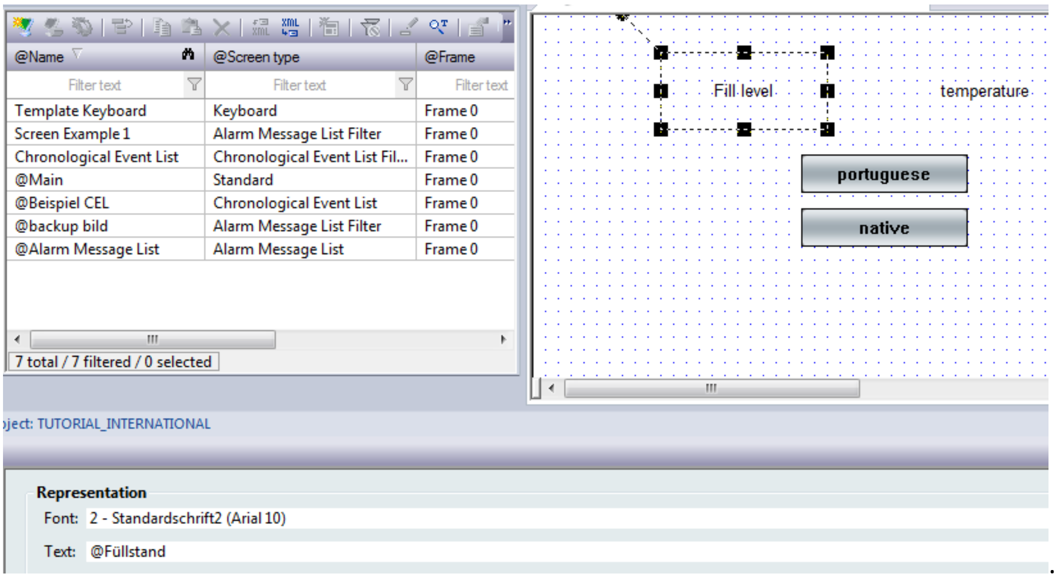
Click on different nodes in the project manager and look at the headlines of the detailed view.

Info

Now you know how to show and hide translatable texts.

Note:

In the Editor keywords with already existing translations are shown without the @.



@Name	@Screen type	@Frame
Filter text	Filter text	Filter text
Template Keyboard	Keyboard	Frame 0
Screen Example 1	Alarm Message List Filter	Frame 0
Chronological Event List	Chronological Event List Fil...	Frame 0
@Main	Standard	Frame 0
@Beispiel CEL	Chronological Event List	Frame 0
@backup bild	Alarm Message List Filter	Frame 0
@Alarm Message List	Alarm Message List	Frame 0

7 total / 7 filtered / 0 selected

ject: TUTORIAL_INTERNATIONAL

Representation

Font: 2 - Standardschrift2 (Arial 10)

Text: @Füllstand

4.2 Displaying key words in the Runtime

Now have a look at your project created up to now in the Runtime.

- If a keyword is linked to a translation, the translated text is displayed in the Runtime.
- If a keyword is not linked to a translation, no text is displayed in the Runtime.
- Texts which are not yet translated can be displayed as keyword.

Note: Please keep in mind that this @-symbol is only displayed during the first start of the Runtime. After the first language switch or a Reload of the Runtime these symbols are hidden.

4.3 Using the zenon internal language files

You will now learn how to use zenon internal keywords:

Example of use:

- Searching for missing or incorrect translations
- Using zenon resources for your configuration

- Using existing (and already translated) dialogs for your project
- Visualization of variable names in the zenon Runtime

The terms used in zenon are not integrated by default into the language file. You can request a language file from support@copadata.com. At present, the resources are available in the following languages:

- Chinese (simplified)
- English
- French
- Italian
- Russian
- Spanish
- Czech

> **Information**
>
> In practice, you will rarely have activated the property `Display not translated keywords`. This is also the reason why this property is always deactivated when creating a new project.

5. Configuration of the language change

The following steps will show you how easy it is to create language-changeable texts in zenon:

- The term filling level is supposed to be language-changeable.
- It is desired to be able to change between German and Portuguese.

5.1 Translation tables with keyword & keyword

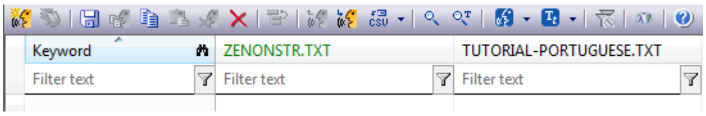
You will learn how to configure languages and words to be translated with the following steps. In order to do this the following steps are necessary:

1. Create language file (on page 17)
2. Managing keywords (on page 19)
3. Create function (on page 23)
4. Apply function (on page 25)

5.1.1 Create language file

Create a language file in order to be able to fill texts marked as language-changeable with the translation.

1. In the project manager, open the node**`Language file`**
2. select **`Language file new...`**
3. enter the name of the new language file
   (in this example **`PORTUGUESE.TXT`**)
   Note: naming the language files is automatically carried out in capitals
4. confirm by clicking on the **`Save`** button



Keyword	ZENONSTR.TXT	TUTORIAL-PORTUGUESE.TXT
Filter text	Filter text	Filter text

Practical tips for language files

Stick to simple and international standards when naming the language tables. Keep in mind that also project partners will be working with them who don't know your language (e.g. translators, administrators on site). From the beginning on, opt for a standard you can also apply in later extensions.

Examplee

- Name your language table*German* instead of*Deutschland* and/or *Deutsch*

or ...

- use internationally valid terms such as *D, USA*, *GB*, *JP* ...

Info

Clear and efficient naming of language files make a cooperation easier and increase efficiency.

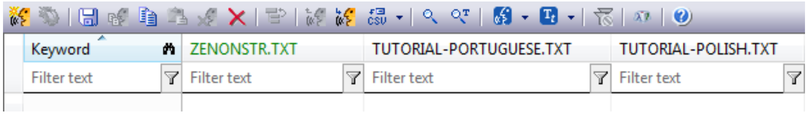
VARIOUS LANGUAGE FILES IN DIFFERENT PROJECTS

If you use various language files - e.g. global projects or projects with integrated projects - remember to use different names.

Otherwise it is difficult to recognize which language file must be imported into which project when using the export and import function for the translation of a language file.

Example

TUTORIAL-PORTUGUESE instead of Portuguese



Keyword	ZENONSTR.TXT	TUTORIAL-PORTUGUESE.TXT	TUTORIAL-POLISH.TXT
Filter text	Filter text	Filter text	Filter text

Information

Exact designations make the allocation in Global Projects easier.

AVOIDING LANGUAGE-DEPENDENT CHARACTERS

When naming language tables avoid language-dependent special characters in order to optimize the cooperation with international partners.

Examples for language-dependent special characters:

öäüß in German-speaking countries

øåæ in Scandinavian countries

Of course the contents of the language tables - i.e. the translations - may contain special characters!

> **Information**
>
> *In projects with cross-country and -language cooperations language-dependent characters in the naming of language tables and entries of the keywords may lead to misunderstandings between the project partners!*

The meaning of the language file ZENONSTR.TXT

In zenon the entries of the column keywords are used for configuring the language change. The language file `ZENONSTR.TXT` refers to the zenon setup language defined on the executing computer.

INDIVIDUAL LANGUAGE FILE FOR MOTHER TONGUE

Under certain circumstances it can make sense to also create an individual language table for your "mother tongue" in the configuration. In particular if you are working together on a project with foreign colleagues (keyword: global and network project). In this case `ZENONSTR.TXT` is location-dependent.

Interesting facts of the language file

- It is possible to insert a language file at any time. It is possible to unproblematically insert one at a later point of time. In this way, you can easily adapt your existing projects to a new language region if your business expands!
- Sorting the keywords takes place automatically with every request of the node **`Language file`**.
- Clicking on the headline will sort the list again.

5.1.2 Managing keywords

The larger your project gets the more words will be displayed in several languages. Managing this is done with keywords.

1. In the project manager open the node **`Language file`**

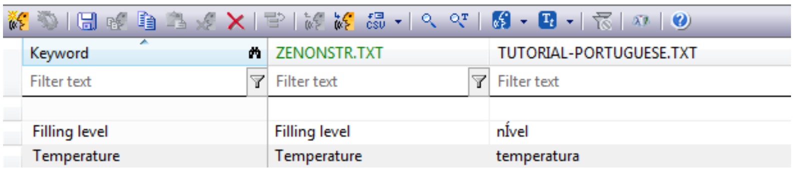
2. Place the cursor in the last row of the column `Keyword`.

3. Enter the keyword to be translated *Filling level*.

4. Confirm the entry with the enter key (the cells of the remaining language files are pre-filled with this entry).

5. Enter the translation in the corresponding column of your language file.
(In our example *nível* in the column `TUTORIAL-PORTUGUESE.TXT`.

6. Enter the term*Temperature*with the corresponding translation *temperatura*.



Keyword	ZENONSTR.TXT	TUTORIAL-PORTUGUESE.TXT
Filter text	Filter text	Filter text
Filling level	Filling level	nível
Temperature	Temperature	temperatura

Integrating foreign special characters

You might have noticed it in our example: the Portuguese translation of filling quantity is nível.

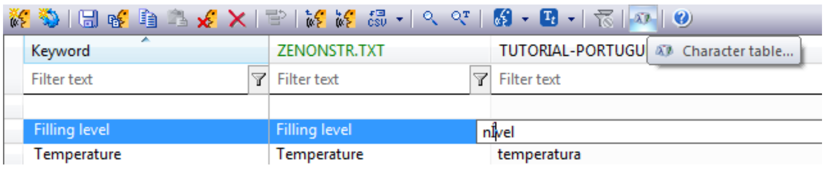
Look closer at the dot on the i: The Portuguese alphabet uses so-called diacritical signs. There is not always a dot in Portuguese above the lower case letter í - there is sometimes an accent instead.

So what can you do if the configuration must be in Portuguese but you don't have a Portuguese keyboard at hand?

The solution is very simple:

1. In the project manager, open the node **`Language file`**.

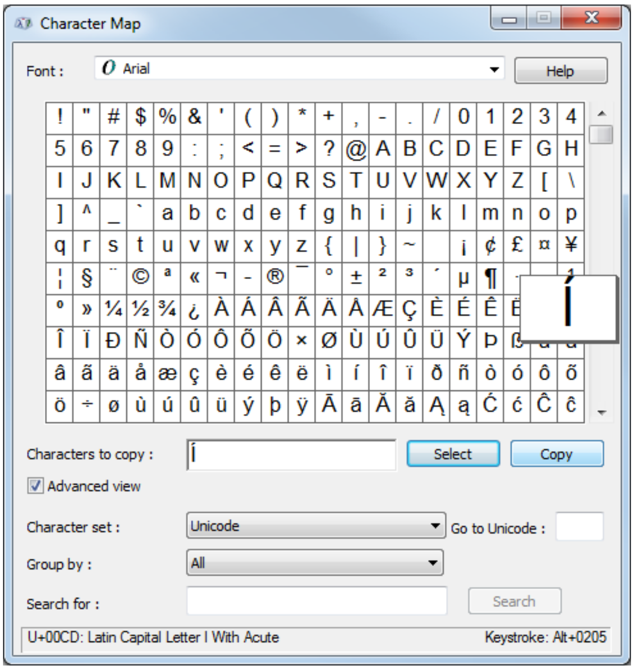
2. In the language change toolbar, select the symbol `Character table...`



Keyword	ZENONSTR.TXT	TUTORIAL-PORTUGU
Filter text	Filter text	Filter text
Filling level	Filling level	nível
Temperature	Temperature	temperatura

3. The Windows character table will open.

4. Select the required character



Character Map

Font : Arial

!	"	#	$	%	&	'	(	)	*	+	,	-	.	/	0	1	2	3	4
5	6	7	8	9	:	;	<	=	>	?	@	A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[	\
]	^	_	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
q	r	s	t	u	v	w	x	y	z	{	|	}	~		¡	¢	£	¤	¥
¦	§	¨	©	ª	«	¬	-	®	¯	°	±	²	³	´	µ	¶	·		¹
º	»	¼	½	¾	¿	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë		
Î	Ï	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß	à	á
â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï	ð	ñ	ò	ó	ô	õ
ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ	Ā	ā	Ă	ă	Ą	ą	Ć	ć	Ĉ	ĉ

Í

Characters to copy : Í

☑ Advanced view

Character set : Unicode

Go to Unicode :

Group by : All

Search for :

U+00CD: Latin Capital Letter I With Acute

Keystroke: Alt+0205

5. The button Copycopies the selected letter to the clipboard.

6. Change back to the Editor. Paste the letter with `Ctrl+V` to the desired position.

> **Information**
>
> If the desired letter is not visible change the character set.

§§ Trenner

> **Example**
>
> Russian letters are in the Windows character set: Cyrillic

Practical tips for keywords

These tips serve to help you to efficiently configure language-changeable texts in zenon as well as to minimize errors in advance:

CORRECT COMPLETION OF THE ENTRY OF A KEYWORD

Always complete the entry of every single keyword with the enter key.

Background:

In many computer programs it is standard practice to go to the next entry box with the tab key. This function is not supported in the language file! On the contrary, this approach has a high potential for errors since the tab key does not go to the next box but actually sets the tab key as (invisible) content!

ADAPTING TO COUNTRY-SPECIFIC LANGUAGE DIFFERENCES

You can also use the language change function for national terms of one language family. As an example, the differences between British and American English are listed below.

Example comparison British and American English	
GB	**USA**
colour	color
modelling	modeling
licence	license

CONFIGURED KEYWORD = ENTRY IN THE LANGUAGE TABLE

Make a habit of immediately creating an entry of configured keywords in the language table.

If the translation is not available yet, for instance an international language from the business environment of your company (e.g. English, French, Spanish, Russian, ...) can be entered as pre-translation.

It is also possible to use hybrid forms. However, keep the additional management effort and increased risk of errors in mind.

"FOREIGN-LANGUAGE" KEYWORDS

In projects in which employees with different mother tongues are working together it is recommended to create the keywords in a standard language.

5.2 Function Language switch

Using the already created language files and keywords takes place with the help of a zenon function. To do so, the following two steps have to be taken:

1. Create function
2. Apply function

5.2.1 Function Create language switch

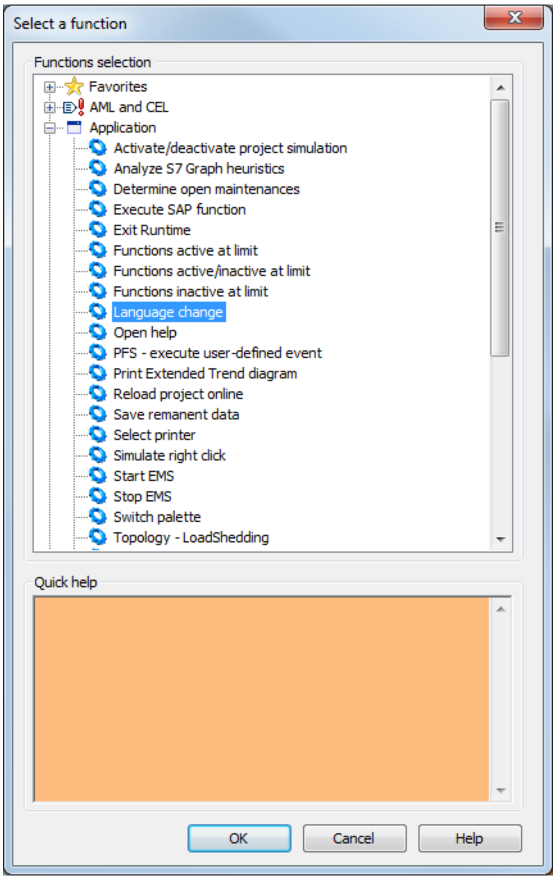
One function must be created once for every language:

1. In the project manager, open the node `Functions`.

2. Select **`Function new...`**

   The function selection box will open

3. Select the application function `Language change`



4. In the dialog now open select the language file by clicking `...`

5. In the next dialog select `TUTORIAL-PORTUGUESE.TXT`

6. Confirm your entry with **OK**

7. Name this function *Language_portuguese* in the properties window.

   To do so, in the properties window go to the node `General`.

8. Repeat the step described above for your system language.

   Name this language change function *Language_native*. Select `ZENONSTR.TXT` as language file.

Note: The file to be linked `ZENONSTR.TXT` always contains the language your system is set to. If you work with zenon on an operating system in German language, in our example link point 8 of the above instruction with `ZENONSTR.TXT`.

THE ADVANTAGE:

This function only has to be created once for every language!

Any time you'd like to use the language change, link the existing function with the corresponding element (e.g. button, screen element, ...). You only have to make sure then that there is an @-symbol in front of the keyword in the configuration and that this keyword is also stored in the language file.

> **Info**
>
> *Now you know how you can create a function for language change in your project.*

5.2.2 Apply function

1. Put the previous steps together in order to make your translation visible and applicable in the Runtime.

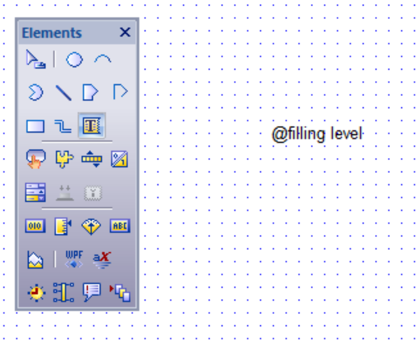
In order to activate the language change, put them on two buttons *Native* and *Portuguese*.

1. Open the `Main` screen.
2. Select *Elements => Button*from the menu bar
3. Draw a button in the `Main` screen
4. Select the `Language_Portuguese` function
5. In the properties window in the property group `Display`enter `Text line1`: in the box . *Portuguese* on.
6. Repeat steps 1 to 4 and use the function for language change to your system language (*zenonstr.txt*).
   In a previous step (on page 23) this function has already been created and named *Language_native*.

Insert text boxes

Since you now know the preparatory steps to take, apply the language table in a screen with two texts:

1. In the project manager, open the node **Screens**
2. Select the screen Main
3. Open the screen by double-clicking Main
4. From the menu bar **Elements** => select **Static text**
5. In the screen Main draw the text box



6. In the properties window, in the propertyText enter*@filling level*
7. Repeat steps 4 to 6 with the term *Temperature*

   (im the properties window *@Temperature* must be entered)

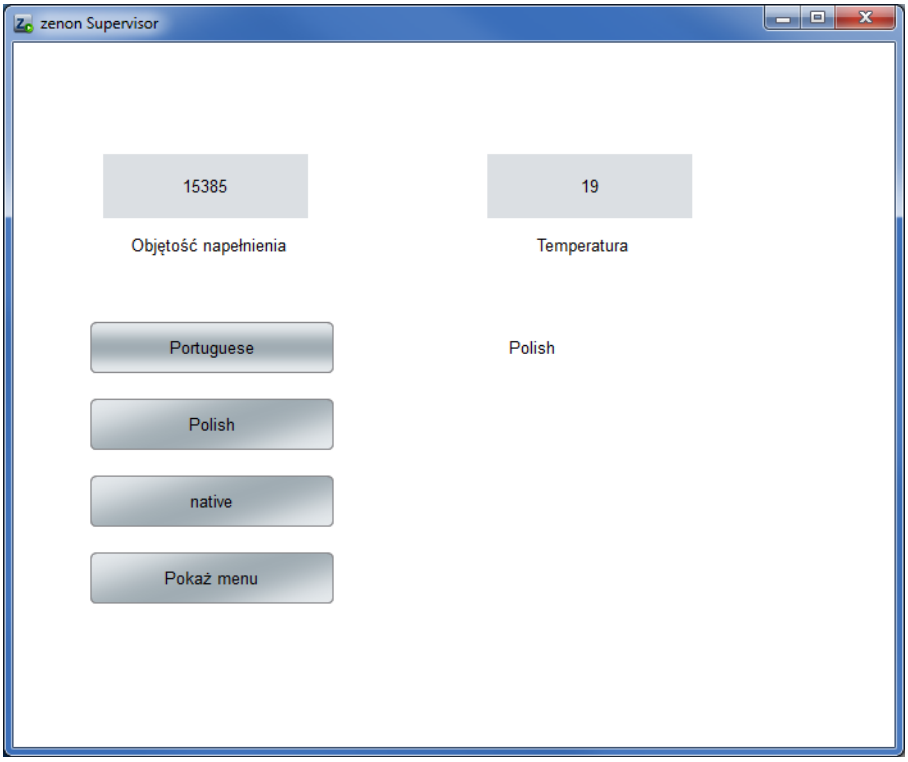
> **Information**
>
> *The @-symbol is an indicator for language-changeable texts!*

First test in the Runtime

Now you can test the configured language change in the Runtime:

- The current Runtime files are created with the *F7* key.
- The Runtime is started with the *F5* key.

Depending on the positioning of your text box and buttons the Runtime view should look similar. By clicking on the language buttons the texts should change between both languages.



Information

The Runtime can be ended with the shortcut ALT + F4.

Displaying language as text

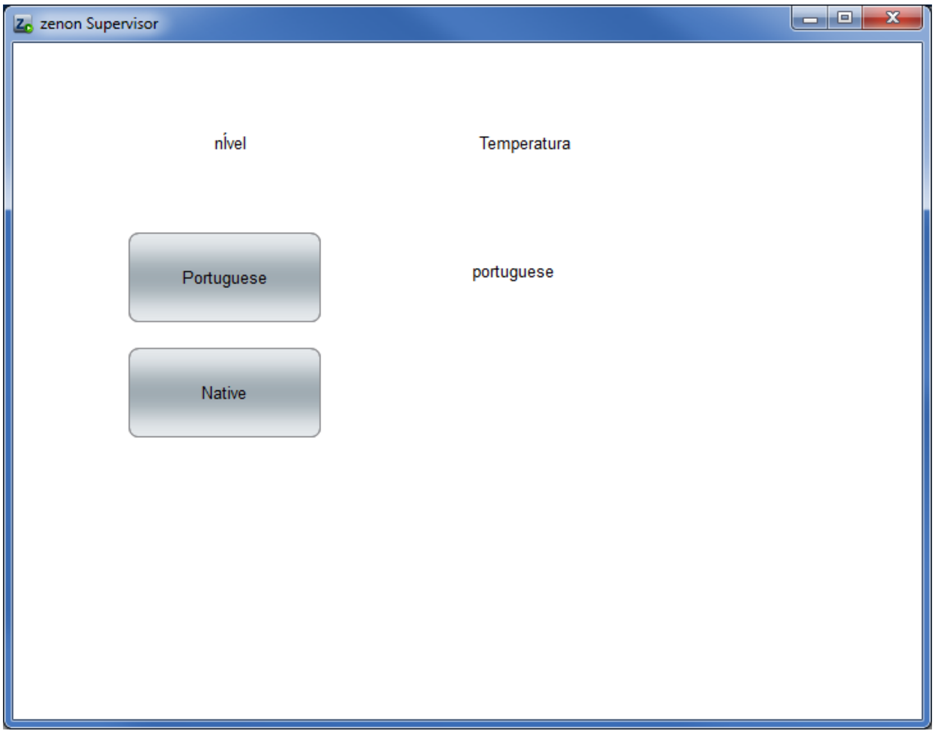
This example shows how to display the corresponding project language as texts in multilingual projects.

The following steps are required - in addition to the previous configuration:

1. translate a keyword
2. make the keyword language-changeable by placing an @-symbol in front
3. place a text box in your screen

This is configured as follows:

1. In the project manager, open the node**Language file**
2. enter a new keyword: *Language*
3. In the corresponding language, enter the terms *native* (in the column ZENONSTR.TXT) and *portuguese* (in the corresponding column) instead of a literal translation
4. In the project manager change to the node Screens.
5. Place an**Element** Static Text and enter Text box *@Language* in the display properties in the entry box
6. Start the Runtime (F5)



Note: The keyword is not translated in its original way but rather serves as a wild-card character. In this example, the translation represents the translation language.

Information

Now you know how to display the selected language as text

Practical hints for the Language change function

- Always create a new language table if you create a function language change and vice-versa.
- Give your function an unambiguous name.
- Always put a prefix in front of all language change functions when naming them (e.g. *Language_ ...*, *Switch_to_ ...*).
- In order to optimize the clarity in the detailed view `Functions` use filter texts and sorting.

5.3 Add further languages

In the following steps Polish is added as a further language to the existing project.

The following steps are required:

- Create language file
- Enter keywords
- Create function

1. Create a new language file:
   a) In the project manager, open the node **`Language file`**.
   b) Create a new language file and name it *TUTORIAL-POLISH*
   c) Complete this new language file with the corresponding translations (filling level: *poziom*, temperature: *temperatura*)
2. Create a new function:
   a) In the project manager, open the node **`Functions`**
   b) Create a new function with **`Function new`**
   c) In the function selection window in the node **`Application`**select the entry `Language change`
   d) Select the allocation by clicking the button `...` and selection of `TUTORIAL-POLISH.txt`
   e) Name this function *Language_polish*
3. Link function

a) Open the screen `Main` by double-clicking it

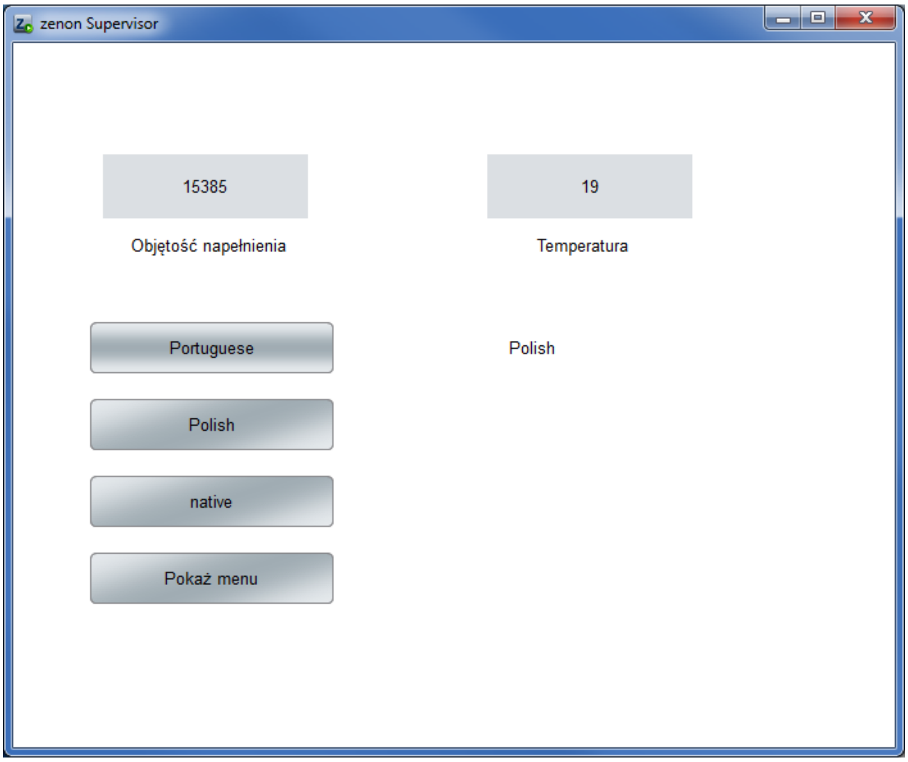
b) Select **`Elements => Button`**from the menu bar

c) Draw a button

d) select the `Language_polish` function

e) In the properties window in the display properties add text row 1 in the text box: *Polish*

f) Test the newly configured language change for Polish in the Runtime `(F5)`.



Info

The Runtime can be ended with the shortcut ALT + F4.

5.4 Simulating the language change in the Editor

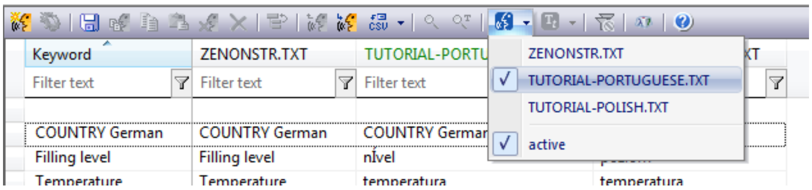
It is possible to already simulate the first effects of a language change during the configuration in the Editor. This step is particularly helpful for making different lengths of texts visible already during the configuration in the Editor. The dialog language of the Editor remains unchanged.

To do this:

1. In the project manager open the node `Language file`
2. Select `Language file for Editor` in the context menu or the symbol bar and select the corresponding language.

   The labeling is analogous to the names of the language tables.

   The lowest entry of the drop-down list `active` activates the functionality (in case of an active checkbox) or deactivates it (entries are gray).

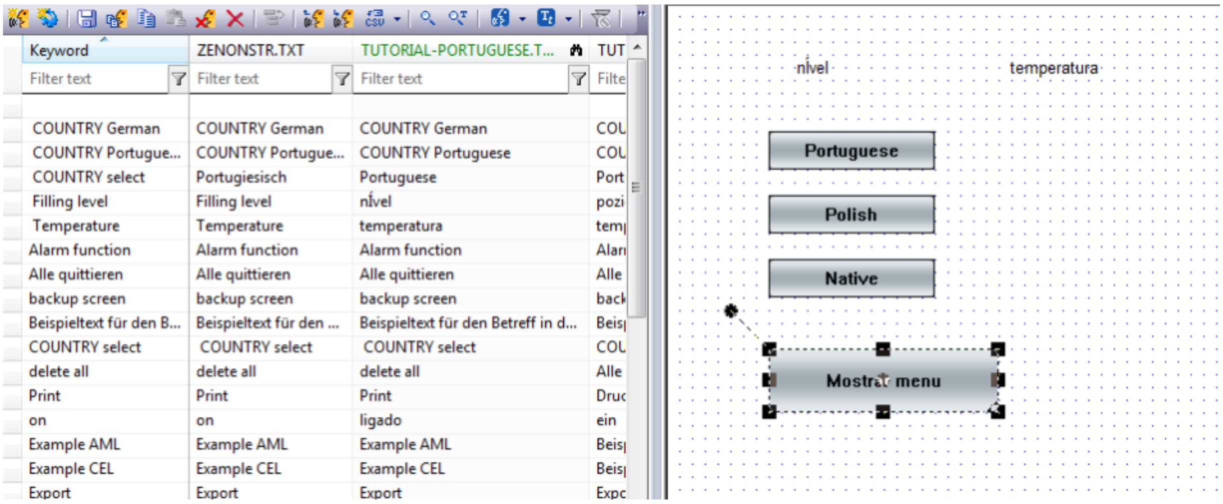


Keyword	ZENONSTR.TXT	TUTORIAL-PORTU	XT
Filter text	Filter text	Filter text	
COUNTRY German	COUNTRY German	COUNTRY Germar	
Filling level	Filling level	nível	
Temperature	Temperature	temperatura	temperatura

Information

You can have your configuration displayed directly in the Editor in the selected language with the selection language file for Editor. The selected language file is marked with a green headline.

EDITOR VIEW WITH SELECTED LANGUAGE TABLE



Keyword	ZENONSTR.TXT	TUTORIAL-PORTUGUESE.T...	TUT
Filter text	Filter text	Filter text	Filte
COUNTRY German	COUNTRY German	COUNTRY German	COU
COUNTRY Portugue...	COUNTRY Portugue...	COUNTRY Portuguese	COU
COUNTRY select	Portugiesisch	Portuguese	Port
Filling level	Filling level	nível	pozi
Temperature	Temperature	temperatura	tem
Alarm function	Alarm function	Alarm function	Alar
Alle quittieren	Alle quittieren	Alle quittieren	Alle
backup screen	backup screen	backup screen	back
Beispieltext für den B...	Beispieltext für den ...	Beispieltext für den Betreff in d...	Beis
COUNTRY select	COUNTRY select	COUNTRY select	COU
delete all	delete all	delete all	Alle
Print	Print	Print	Druc
on	on	ligado	ein
Example AML	Example AML	Example AML	Beis
Example CEL	Example CEL	Example CEL	Beis
Export	Export	Export	Expc

5.5 Using the @-symbol

The @-symbol is an indicator that the following text is supposed to be language-changeable.
After creating the corresponding translation in the language table (seeManaging keywords (on page 19)) these translations are available.

In practice, there will be multiple uses of one keyword. In this case only enter the keyword used once in the language table.

5.5.1 Rules for using the @-symbol

Keywords are marked by the @-symbol For this, the following applies:

@Text	The whole text will be translated.
Text	This text will not be translated.
@Text	The text between the two “@” will be translated. The following is true: After an odd number of “@” the text will be translated (start counting at the beginning of the entry). **For example:** @user@Doe - user is translated - Doe is not translated

LINKING

It is possible to link text elements which are to be translated with those which are not to be translated.

Example

@The user@ Doe @is logged out.

@Text1@ Text2 @Text3

- Text 1: will be translated
- Text 2: will not be translated
- Text 3: will be translated

5.5.2 Examples with compound words

Already existing keywords can also be used in combination.

Task description:

The following terms should be localizable and be displayed in menus:

- Light on
- Air conditioning on

The translation is:

- lâmpada ligado
  (Light on)
- ar condicionado ligado
  (Air conditioning on)
- lâmpada desligado
  (Light off)
- ar condicionado desligado
  (Air conditioning off)

The easy way

The easiest way in this example is to enter the text into the language table as follows:

@Light on

@Air conditioning on

In the language table, in our example the terms "light on" and "air conditioning on" would be translated with both words independently of each other.

The elegant way

However, it is much more efficient to combine already translated (individual) words. The more extensive your project is the bigger synergies you will get!

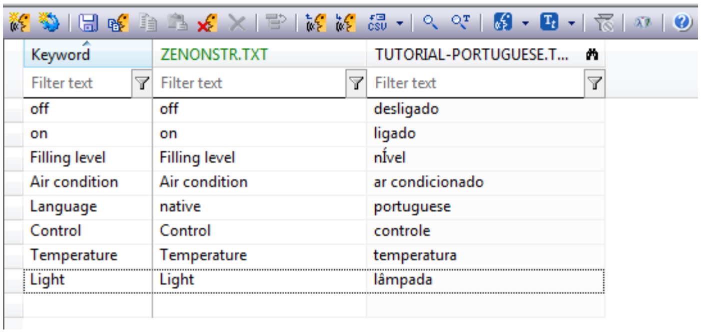
1. Add the new keywords to your language file *ZENONSTR.TXT*:
   a) Light
   b) Air conditioning
   c) on
   d) off
   e) Control
2. Add the translations to the language file *TUTORIAL-PORTUGUESE.TXT*:
   a) lâmpada

b) ar condicionado

c) ligado

d) desligado

e) controle



Keyword	ZENONSTR.TXT	TUTORIAL-PORTUGUESE.T...
Filter text	Filter text	Filter text
off	off	desligado
on	on	ligado
Filling level	Filling level	nível
Air condition	Air condition	ar condicionado
Language	native	portuguese
Control	Control	controle
Temperature	Temperature	temperatura
Light	Light	lâmpada

Attention:

Work calmly and concentratedly. In this case, every space and its placing counts. *@Light@ @on* is not the same as *@Light@@ on*. Observe the rules as described in the chapter "Rules for using the @-symbol" (on page 32).

Menus and Web Server

It is just as simple to create language-dependent menus as to create elements. In this example, only menus for displaying text switching are created. Linking the menu entries with a variable is intentionally omitted.

1. In the project manager, open the node **Menus**.

2. In the the tool bar of the detailed view select **Main menu new**

3. Name the newly created main menu *Main*

   a) To do so, in the node of the menu properties click on the first entry.

   b) Enter the name *Main* in the text box in the properties window.
   The text box is in the node **Display / Type**.

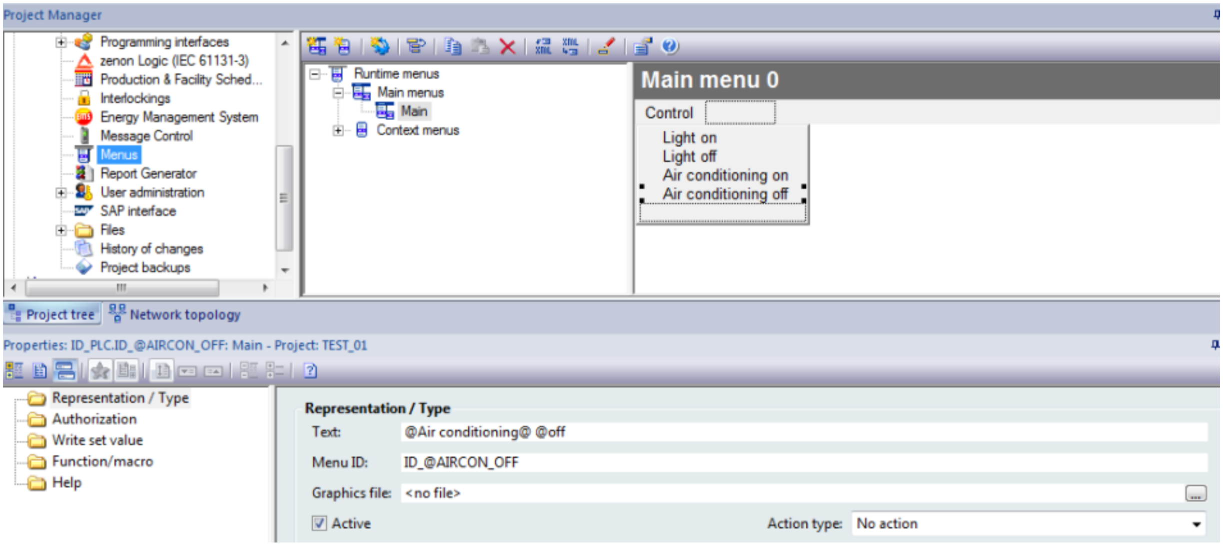
4. In the cross-reference list click in the first box (left corner above) and create the entry *@Control*

5. Fill the boxes below with the entries
   @Light@ @on

@Light@ @off

@air conditioning@ @on

@air conditioning@ @off



Properties: ID_PLC.ID_@AIRCON_OFF: Main - Project: TEST_01

Representation / Type

Text: @Air conditioning@ @off

Menu ID: ID_@AIRCON_OFF

Graphics file: <no file>

☑ Active

Action type: No action

Note:

In the Web Server the language change is not available in the menu function!

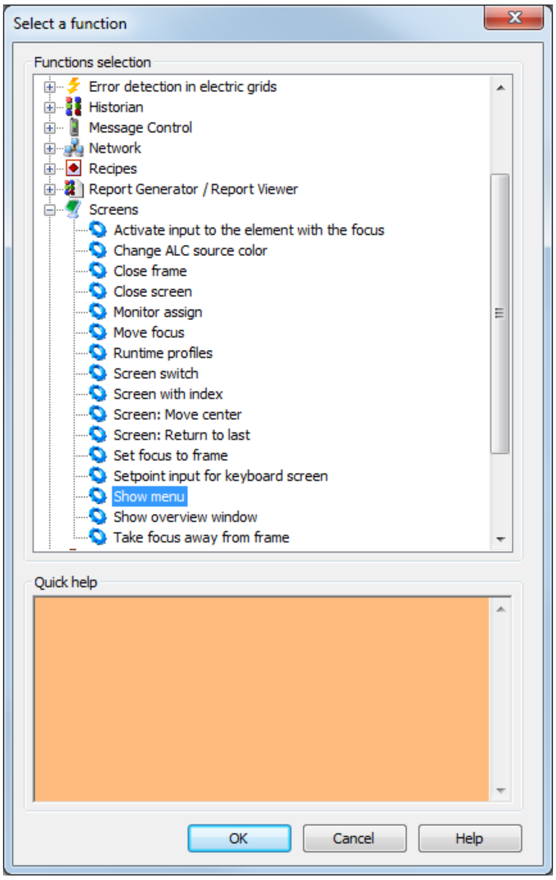
Making menus visible in the Runtime

Before you'll be able to use your language-changeable menus in the Runtime you have to activate them in the Editor. This takes place with the help of a function.

1. In the project manager, open the node **Functions**.
2. Select **Function new...**
3. Select

a) the screen function

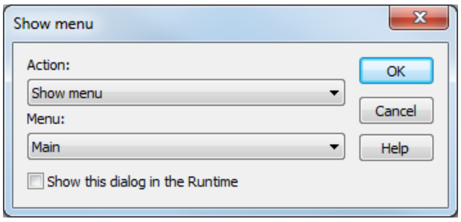
b) `Display menu`



4. In the dialog box now open select

   a) `Display menu` and

   b) `Main` as menu



Action: Show menu

Menu: Main

□ Show this dialog in the Runtime

5. Name this function in the properties window `Show_Menue`

Finally, in the screen Main draw another button and apply the newly created function.

After having taken these preparatory steps apply the created menu to a button:

1. In the project manager, open the node**`screens`**.

2. Select the screen Main

3. Open the screen by double-clicking Main

4. Select *Elements => Button*from the menu bar

5. In the opening window

   a) Functions selection

   b) select the Show_Menue function

6. Name the button *Display menu*.

   To do so, in the properties window change to the node Displayand enter the text in the box Text Zeile 1:.

> **Information**
>
> *If you also enter the term "Display menus" in your language table this button is also displayed depending on the language. Accordingly, place an @-symbol in front of the button labeling.*
>
> *The translation is: Mostrar menu*

Test your entries in the Runtime.

5.6 Font lists and length of text

If you have followed this tutorial step by step you might already have noticed: different languages have different lengths of texts.

In particular, this makes it difficult to label buttons. Due to the limited space texts might be cut off.

A very simple and efficient solution is to use a smaller font size for longer texts. To do so, zenon makes the functionality of font lists available.

5.6.1 Font lists

When using font lists not every font has to be set with size, type, cut, code and effect individually for every text or labeling.

Another advantage: Changes in a font list object are automatically applied to the entire configuration.

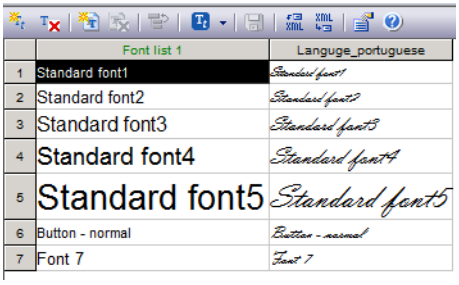
FOREIGN-LANGUAGE CHARACTER SETS:

Font lists are also used for foreign-language character sets. For Asian, Cyrillic or Arabic characters it is thus possible to display letters of the corresponding alphabet. It is also possible to display language-dependent special characters.

5.6.2 Working with font lists

To create a font list proceed as follows:

1. In the node **Screens**change to **Font lists**
2. Create a new font list with the button **New font list**.
3. For a better orientation, name the created font list.
   In this example: *Language_portuguese*
4. Change the respective font.
   In order to make this configuration visible in the Runtime, select a font type that significantly differs, such as Vladimir Script.



	Font list 1	Languge_portuguese
1	Standard font1	Standard font1
2	Standard font2	Standard font2
3	Standard font3	Standard font3
4	Standard font4	Standard font4
5	Standard font5	Standard font5
6	Button - normal	Button - normal
7	Font 7	Font 7

Attention

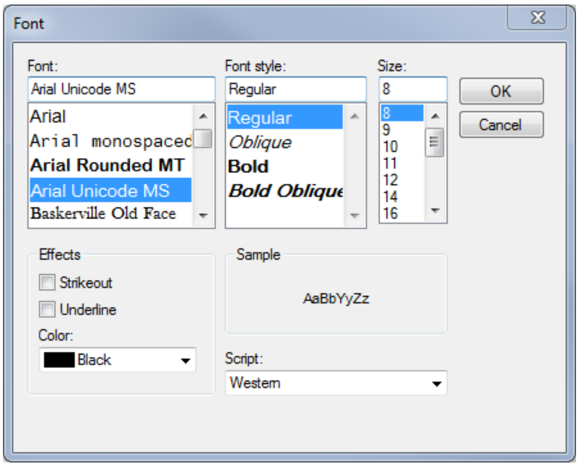
The changes must be made individually for each font.

5.6.3 Default font(s)

Contents from the toolbar elements are given default values.

In order to change the default settings, proceed as follows:

1. In the node **Screens** change to **Font lists**.
2. Go to the line with the corresponding font.
3. Click `...` next to the property **Font type** in the properties window in order to open the font type window.
4. Change the font settings to your requirements.



Font: Arial Unicode MS

Font style: Regular

Size: 8

□ Strikeout

□ Underline

Color: Black

Script: Western

CONFIGURATION OF FONT LISTS:

- `Standard font2` (Position 2) for text elements inzenon
- `Button`- (Position 6) usually for naming the button element

> **Information**
>
> *Note that changing font type or size will have effects on your previous configuration.*

5.6.4 Configuration of the font list switching

Font list switching is also carried out with the function `Language change`. Please note: Create a function, which can be used any number of times, for every font list.

If you have already created a function for language change you can use it. You only have to indicate the corresponding font list in the function.

Creating the function for font switching

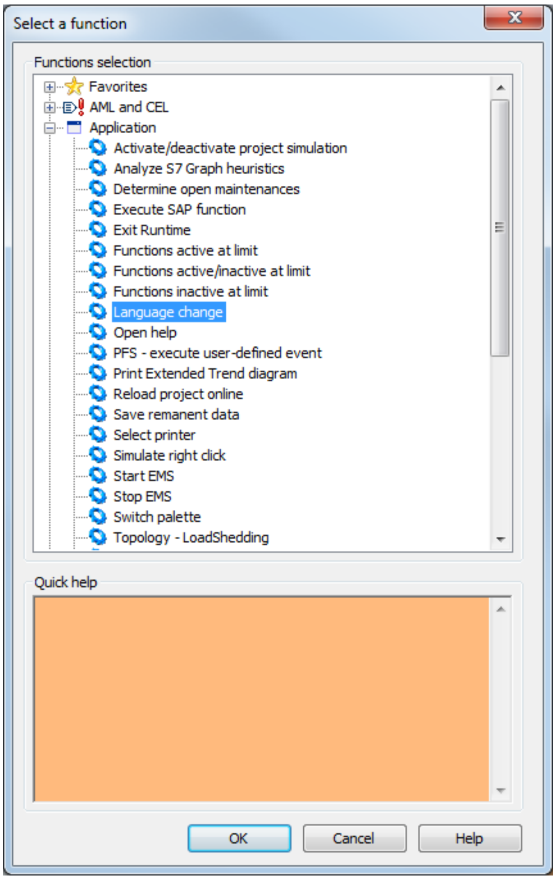
The following steps will explain how to create a function for switching between individual font lists. Changing a language file is intentionally omitted in this case.

1. In the project manager, open the node **`Functions`**.

2. Select **`Function new...`**

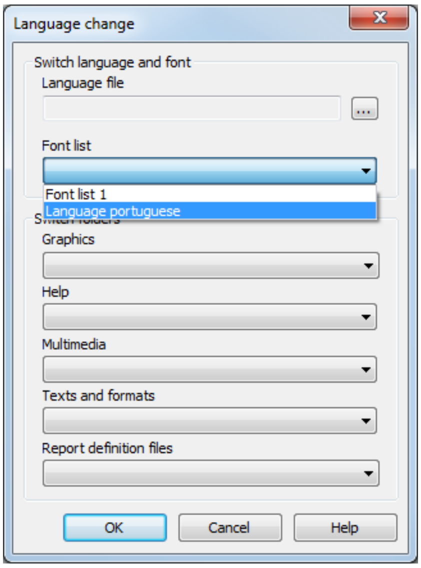
   The function selection box will open.

3. In the application folder select `Language change`.



4. In the dialog box that now opens select the font list by clicking on the drop-down menu `Font list`

5. Select *Language_portuguese* in the `Font list`.



6. Confirm your entry with **OK**

7. Name this function *Font_list_portuguese* in the properties window.

   To do so, go to the `General` node in the properties window.

8. Repeat the step described above for your system language.

   To do so, select `Font list1` . name this function *Font_list_native*.

Font switching in case of existing language change function

If you have already created a function for language change you can use it. You only have to indicate the corresponding font list in the function.

The following steps build on the previous tutorial steps:

1. In the project manager, open the node **`Functions`**.

2. Select the existing function `Language_portuguese`.

3. In the properties window of the function select *Language_portuguese*

4. Confirm the entry with OK.

5. Name this function *Language_portuguese* in the properties window.
   To do so, in the properties window go to the node `General`.

6. Repeat the step described above for your system language.
   Name this language change function *Language_native*. Select `ZENONSTR.TXT` as language file.

5.6.5 Practical tips for designing different text lengths

During the configuration keep in mind that words may differ in length in different languages.

The following suggestions may help you to master this task:

- Configure an individual font list for every language:
  z. B.: *Button english big*, *Button italian big.*
- Configure several font lists for every field of application:
  z. B.: *Button font large / button font small.*
- Configure your font lists with a larger font size:
  z. B.: Button font two points larger than usual in order to adapt longer fonts occurring at a later time by only correcting the font size once.

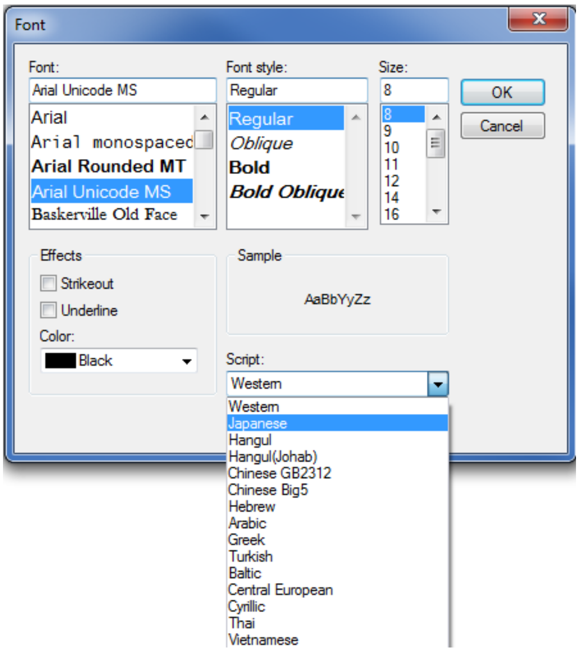
Recommendation: Use one of these steps already at the start of the configuration. Even if the project at first is only supposed to be available in two languages you will save additional adaptations during later extensions.

PRACTICE EXAMPLES FOR DIFFERENT TEXT LENGTHS

German	English	Italian
ein	on	innestato
aus	off	OFF

FOREIGN LANGUAGE CHARACTERS

Note: Not every font contains the required characters or symbols. If you configure an Asiatic or Cyrillic font select a font containing the required special characters.



Font: Arial Unicode MS

Font style: Regular

Size: 8

Color: Black

Script: Western

For this reason, keep in mind to use a font which contains foreign-language character sets already during the configuration.

Example

The font Arial Unicode MS offers a selection of the most common font scripts.

NOTE FOR SHORTCUTS

Note when assigning keyboard shortcuts to international identifications, similar to the already-familiar system in applications (ALT+P for Print instead of *ALT+D* for Drucken, the German word for print).

Note: The keyboard shortcuts are configured in the element settings in the `Runtime` node in the `keyboard shortcut input field`.

ADDITIONAL BENEFIT OF THE LANGUAGE CHANGE

A further application option of the language change is the adaptation of the textual appearance to external circumstances. Changing the language not necessarily has to result in a second language:
Examples:

- Bolder font for a high-contrast display
- Change of font color to avoid problems due to red-green visual impairments.

6. Language-changeable graphics

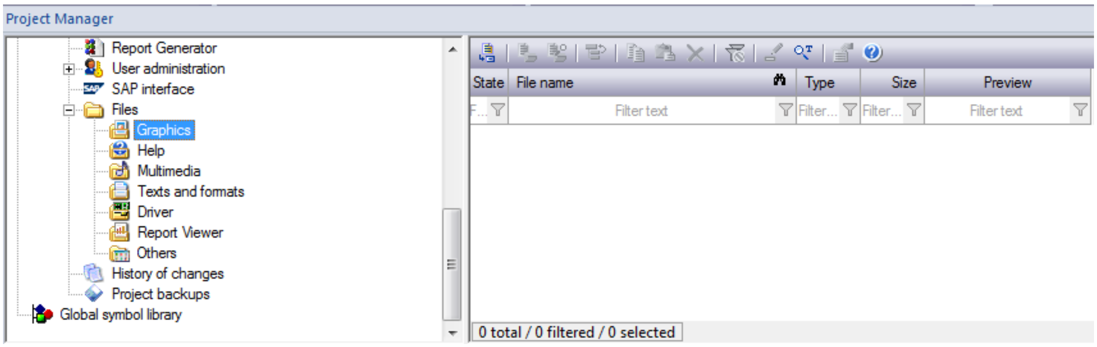
In the following section the language change is displayed graphically with the corresponding flag.

6.1 Language-changeable graphics - file system

In contrast to texts graphics do not have to be separately marked as language-changeable. The allocation is carried out on the file level with the help of standardized indices (predetermined by zenon).

In order to understand this principle note the following:

1. In a neutral and empty project open the node **`Files`**.
2. Click on the node `Graphics`.



Note: Observe the empty content of this folder

3. Change to the node **`Language file`** and create a *New language file.*

4. Name the new language file `TUTORIAL-PORTUGUESE`.

5. Change back to the node Files:

   The first thing you will notice is that the folder graphics contains subfolders (recognizable by the prefixed`[+]`).

6. Open the folder Graphics by *clicking[+]*.

7. For a better understanding we will now add a third language

8. Expand the view of the node **`Files`**so that the folders Files and Graphics are opened.

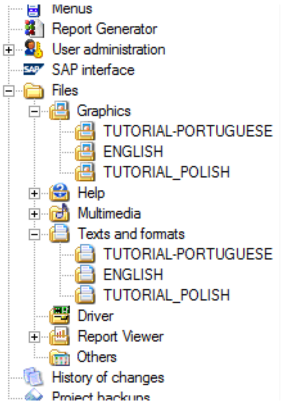
9. Now click once in the node on the entry **`Language file`**

10. Keep an eye on the folder `Files` while you are configuring the following:

    a) create a new language table

    b) name it with *TUTORIAL-POLISH*

    c) and confirm this entry with **`OK`**.


Menus
Report Generator
User administration
SAP interface
Files
Graphics
TUTORIAL-PORTUGUESE
ENGLISH
TUTORIAL_POLISH
Help
Multimedia
Texts and formats
TUTORIAL-PORTUGUESE
ENGLISH
TUTORIAL_POLISH
Driver
Report Viewer
Others
History of changes
Project backups

When the language change function is carried out the graphic is automatically loaded into the Runtime from the corresponding folder.

Information

If a language table is deleted the subdirectories in the node Files are maintained.

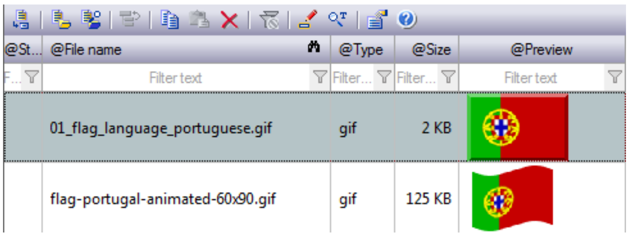
6.2 Language-changeable graphics - Preparation

After having been introduced to the principle of changeable graphics now configure the task.

PREPARATION:

You should have one screen with the corresponding country flag for each language ready for the next steps.

1. In the node **Language change** create two new language files and name these *TUTORIAL-PORTUGUESE.TXT* and *TUTORIAL-POLISH.TXT*.
2. Change to the screen `Main`.
3. Draw a button and confirm the following dialog without selecting a function with **OK**.
4. In the properties windows in `Display` select the property `Graphic file` and select the button `...`
5. In the dialog now open select **Import file...**



@St...	@File name	@Type	@Size	@Preview
F...	Filter text	Filter...	Filter...	Filter text
	01_flag_language_portuguese.gif	gif	2 KB	
	flag-portugal-animated-60x90.gif	gif	125 KB	

6. In the file browser now open select the graphic file (country flag) corresponding to your language.

6.3 Configuration of language-changeable graphics

After you have created a project in your language and have added a corresponding graphic now the foreign-language graphics will be added.

This is a two-step process:

1. Upload the graphic in the corresponding folder
2. Customizing the language change function

6.3.1 Uploading graphics into file folders

Follow the usual steps for uploading graphics in zenon:

1. Open the node **Files**.
2. In the structural point Graphics click on the folder TUTORIAL-PORTUGUESE.
3. Upload the corresponding graphic with the command **Import file...**.
4. Repeat this step with the graphic for the Polish language.

> ⚠ **Attention**
>
> *The file naming of the images must be identical in all languages in the language change.*

6.3.2 Customizing the language switch function

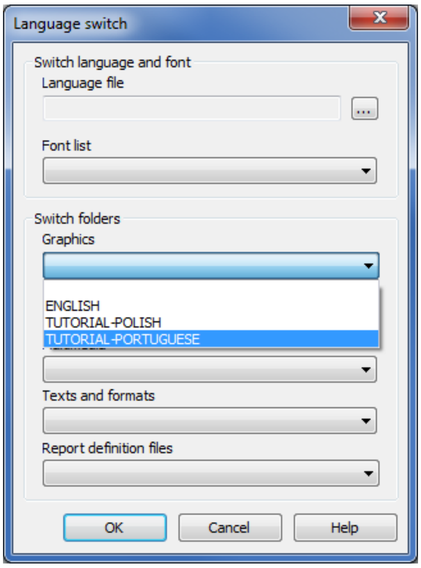
If you create a language change function you will be able to test the configuration of your language-dependent graphic conversion in the Runtime.

1. In the project manager, open the node **Functions**.
2. Select **Function new...**

   The function selection box will open.

3. Select the `Language change` function.

4. In the dialog box now opened, select `Graphics` by clicking on the drop down list.



5. select `TUTORIAL-PORTUGUESE.`

6. Confirm the entry with **OK**.

> **Information**
>
> *Of course, you can add the assignment of the graphic to an already configured function.*

6.4 Practical tips Switching graphics

- As already mentioned: a standard denomination makes the configuration easier. Since in the case of switching graphics the graphic name is decisive you should (by way of exception) avoid naming the country in the file name. Instead, add a term like flag_language identification to the graphic name.
- The language change option can not only be used for the "translation" of graphics. Another application is the option of two user interfaces, e.g. in order to counteract external influences such as sun rays.

- A further application example for changeable graphics is the option of visualizing country-specific company logos in your HMI-system.
- Even if you only operate in one language region: use this function for your purposes. For instance, it is possible to graphically denote individual plants (also in one country) with this function.

7. Converting units

Not only language but also units depend on the regions. With zenon you are perfectly equipped for this task.

7.1 Configuration of the value conversion

In this tutorial you will now internationalize the measuring unit: Liters are converted to gallons and degrees Celsius to Fahrenheit.

To do so, follow the steps as indicated above:

- Parameterizing the value conversion
- Allocating to variable
- Creating a function
- Applying the function

7.1.1 Preparation of the project

If you have been following this tutorial step by step up to this point you will already have carried out some of the following settings. In this case, you can adopt your present work or skip the steps already taken.

- Select the screen `Main`

- Open the screen by double-clicking on the name

ENTERING TEXT

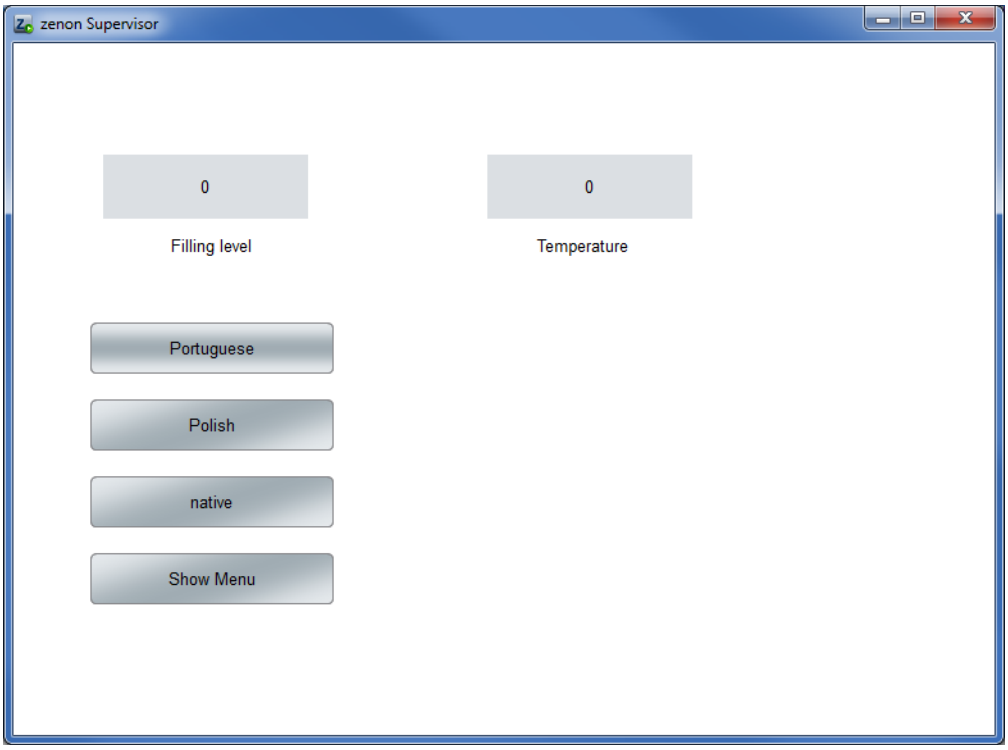
- Select the menu bar **`Elements.`**
- Select **`Static text.`**
- Place this text in your screen.
- In the properties window enter the term *@Filling level* .
- In the project manager open the node **`Language file.`**
- Place the cursor in the last row of the column `Keyword`.
- Enter the term to be translated *Filling level*.
- Confirm the entry with the enter key. The cells of the remaining language files are pre-filled with this entry.
- Enter the translation in the corresponding column of your language file (*nÍvel*).
- Repeat the steps with the term *Temperature*.
  The translation is: *temperatura*.

ENTERING NUMERICAL VALUES

In order to make the following configuration of the unit conversion visible add numerical values to your project:

- Select the menu bar **`Elements.`**
- Select **`Numerical value.`**
- Place this text in your screen.
- Select the variable *Filling level*.
- Repeat these steps with the variable *Temperature*.

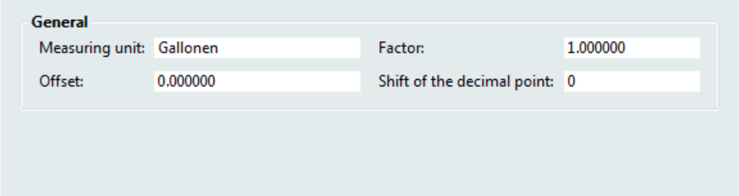
SAMPLE VIEW OF THE PRESENT CONFIGURATION IN THE EDITOR



7.1.2 Configuration of the Measuring unit

- In the project manager, open the node `Variables`.
- Select the entry `Measuring units`.
- Create a new basic unit with `Basic unit new`.
- In this example liters are to be converted to gallons.
  For this reason, name the basic unit *filling quantity.*
- With the help of `Converting unit new` create the entry *Liter.*
  To do so, press the symbol or use the right mouse key.
- Leave the settings in the properties window as defined.

- Create a second entry and name it *Gallons.*
- In the properties window of the entry **`Gallons`** change the factor to *0,264172.*



General

Measuring unit: Gallonen

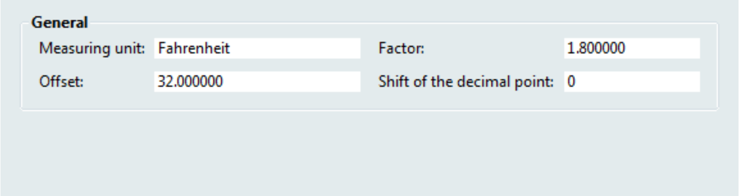
Factor: 1.000000

Offset: 0.000000

Shift of the decimal point: 0

MEASURING UNIT CONVERSION WITH FAHRENHEIT

- Repeat these steps for the temperature
- To do so create a new **`Basic unit`** *Temperature* and
- two **`Conversion units`** *Celsius* and *Fahrenheit*



General

Measuring unit: Fahrenheit

Factor: 1.800000

Offset: 32.000000

Shift of the decimal point: 0

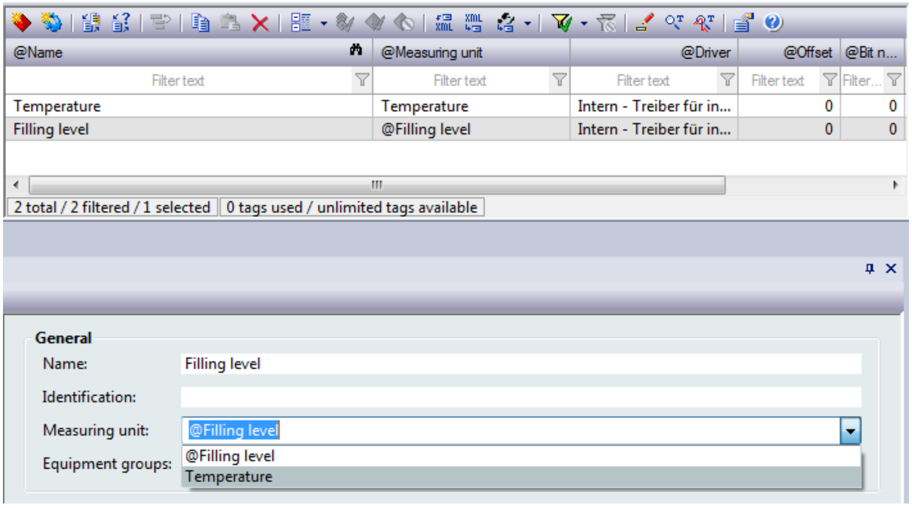
> **Information**
>
> *For converting Celsius to Fahrenheit set the following properties:*
>
> *Factor: 1.8 and Offset: 32*

7.1.3 Allocation to a variable

In order to be able to allocate a variable in zenon the following steps must be taken:

- In the project manager, open the node **`Variable`**.
- Select the variable Temperature.

- In the properties window in *General* select the property **Measuring unit:** .
- In the drop-down list select the measuring unit *Temperature*.



@Name	@Measuring unit	@Driver	@Offset	@Bit n...
Filter text	Filter text	Filter text	Filter text	Filter...
Temperature	Temperature	Intern - Treiber für in...	0	0
Filling level	@Filling level	Intern - Treiber für in...	0	0

2 total / 2 filtered / 1 selected | 0 tags used / unlimited tags available

General

Name:	Filling level
Identification:	
Measuring unit:	@Filling level
Equipment groups:	

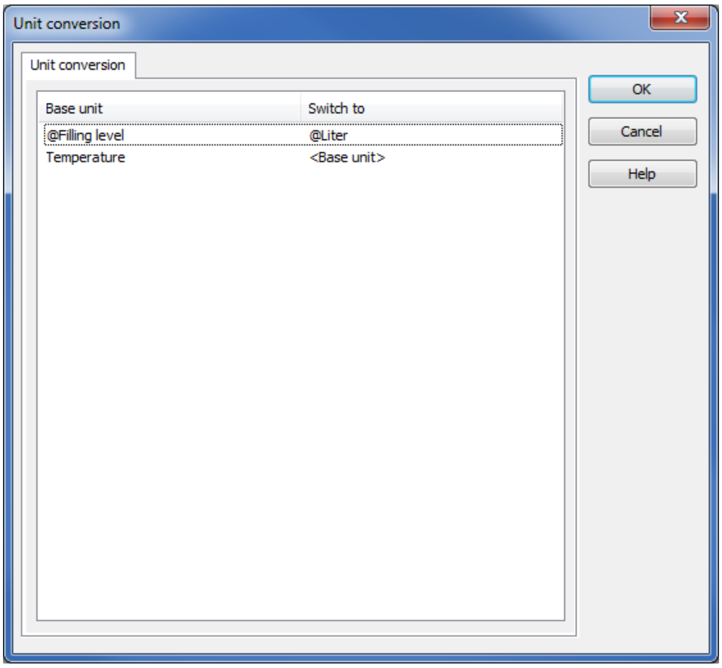
- Repeat this step with the variable *Filling level* and the measuring unit *Filling level*.

7.1.4 Configuration of the function

- In the project manager, open the node **Functions**.
- Create a new function with **Function new**.
- In the opening dialog, select the entry **Variable unit conversion**

  This entry is in the **Variable** node.
- In the next dialog box select the drop-down list **Change to**next to the basic unit filling quantity.
- In the drop-down list, change the entry <**Basic unit**> to**Gallons**.

- Name this function *convert_to_Gallons.*
- Repeat these steps for liters and name the new function *convert_to_Liter.*



Base unit	Switch to
@Filling level	@Liter
Temperature	<Base unit>

7.1.5 Applying measuring units and functions to a button

Applying the function unit conversion again is very simple:

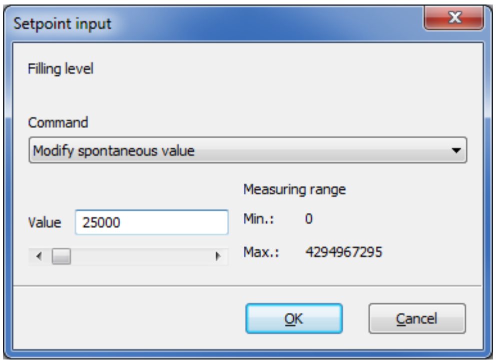
1. Create a button
2. name the button *Liter*
3. pull the function with Drag&Drop over the button
4. repeat these steps for gallons
5. test the configuration in the Runtime

Information

In order to be able to reconstruct the unit calculation in the Runtime the values for filling quantity and temperature must be filled.

To do so, left-click on the numerical value box and enter a `Modified spontaneous value`*, e.g. 20000*

EXAMPLE FOR SETPOINT SETTING:



Setpoint input

Filling level

Command: Modify spontaneous value

Value: 25000

Measuring range

Min.: 0

Max.: 4294967295

Of course, it is also possible to translate the button labeling liter with a prefixed @-symbol and an entry in the language table.

7.2 Scripts for summarizing several functions

In the course of this tutorial several functions were created. This chapter deals with the challenge of summarizing several functions in one script.

Summarizing several functions works according to the well-known pattern:

- Creating a script.
- Parameterizing the script.
- Applying the script with the function `Execute script`.

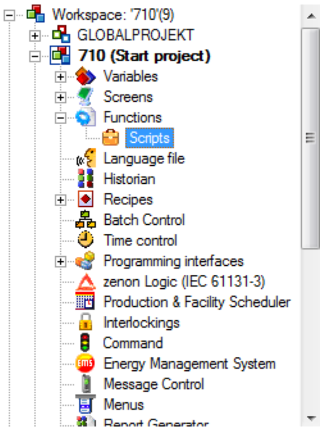
Example

A script is created which summarizes all the functions of one country.

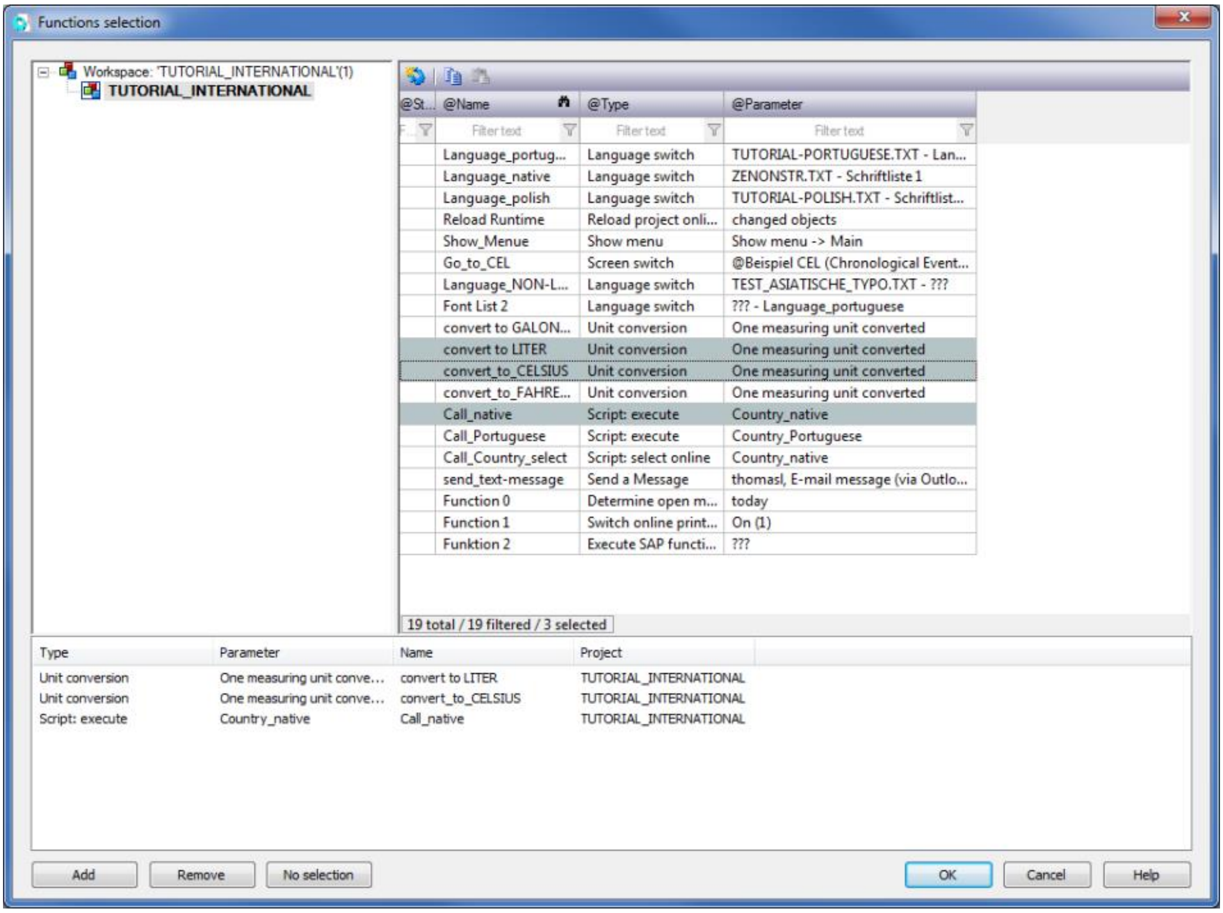
7.2.1 Configuring a script

In order to create a script and add functions:

- In the project manager, open the node **Functions**.
- Expand the view and select the entry **Scripts**.



- In the detailed view create a new script with **Script new**.
  In the properties window name it *Country_native*.
- In the detailed view press the button **Add functions**.
- Name this script *Call_German* in the properties window.
- Add the corresponding functions in the function selection dialog.
  Select the corresponding function and press **Add**.



@St...	@Name	@Type	@Parameter
	Filter text	Filter text	Filter text
	Language_portug...	Language switch	TUTORIAL-PORTUGUESE.TXT - Lan...
	Language_native	Language switch	ZENONSTR.TXT - Schriftliste 1
	Language_polish	Language switch	TUTORIAL-POLISH.TXT - Schriftlist...
	Reload Runtime	Reload project onli...	changed objects
	Show_Menue	Show menu	Show menu -> Main
	Go_to_CEL	Screen switch	@Beispiel CEL (Chronological Event...
	Language_NON-L...	Language switch	TEST_ASIATISCHE_TYPO.TXT - ???
	Font List 2	Language switch	??? - Language_portuguese
	convert to GALON...	Unit conversion	One measuring unit converted
	convert to LITER	Unit conversion	One measuring unit converted
	convert_to_CELSIUS	Unit conversion	One measuring unit converted
	convert_to_FAHRE...	Unit conversion	One measuring unit converted
	Call_native	Script: execute	Country_native
	Call_Portuguese	Script: execute	Country_Portuguese
	Call_Country_select	Script: select online	Country_native
	send_text-message	Send a Message	thomasl, E-mail message (via Outlo...
	Function 0	Determine open m...	today
	Function 1	Switch online print...	On (1)
	Funktion 2	Execute SAP functi...	???

19 total / 19 filtered / 3 selected

Type	Parameter	Name	Project
Unit conversion	One measuring unit conve...	convert to LITER	TUTORIAL_INTERNATIONAL
Unit conversion	One measuring unit conve...	convert_to_CELSIUS	TUTORIAL_INTERNATIONAL
Script: execute	Country_native	Call_native	TUTORIAL_INTERNATIONAL

Note: A multiple selection of variables is possible by pressing `Shift` or `Strg + mouse click`.

- Repeat these steps for a second script:

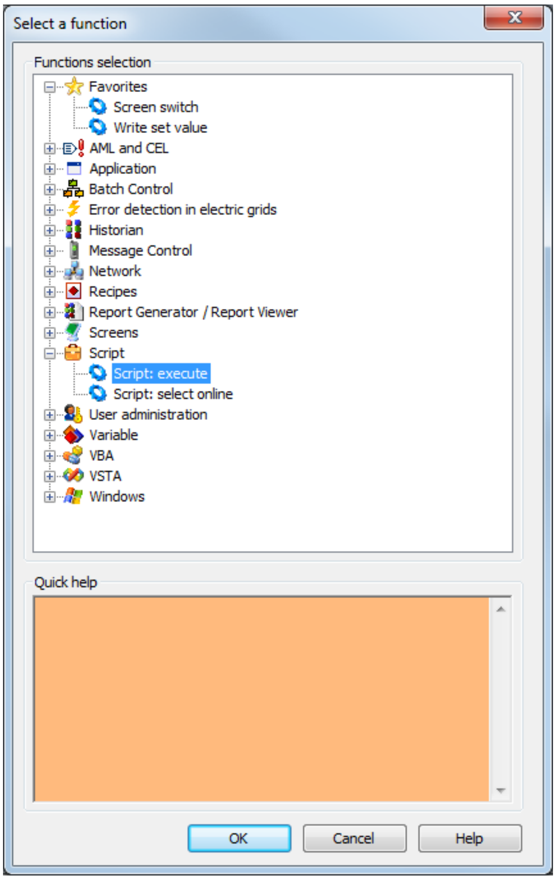
  Script name: *Call_Portuguese*

7.2.2 Applying a script

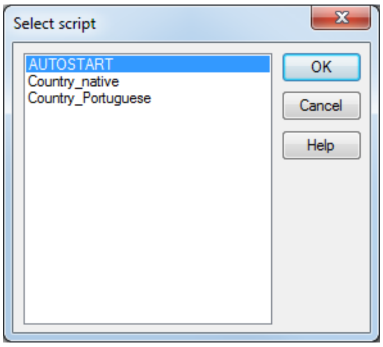
For applying a created script:

- Create a new function.

- Open the function group `Script`.
- Select **`Execute script`**.



- In the `select script` dialog that opens, select *Country_native*



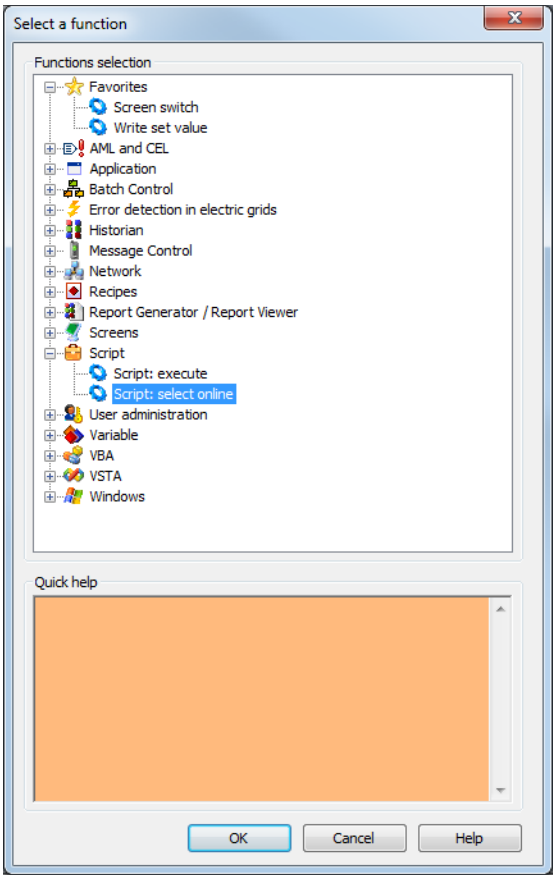
- Name this newly created script *Call_native*.
- Create a new script for changing to Portuguese.

If you draw two new buttons in the image *Main* and then apply the newly created function you have several functions with one mouse click.

7.2.3 Script with online selection

At the end of the script application you will now learn how to make the selection of your scripts selectable in the Runtime.

- To do so, follow the exact steps described in the previous chapter.
- However, select `Script with online selection` in the selection of the script switching function.



- In the screen Main draw a button Language selection and apply the newly created function to it.
- Now test your configuration in the Runtime.

> **Information**
>
> *The script function* `Script with online selection` *offers the operator of the Runtime a wide range of selections.*

7.2.4 Practical tips scripts

After having learned how to combine scripts there is a large quantity of applicatoins at your disposal.

EXAMPLES:

- Foreign employees can have the user interface be displayed in their mother tongue.
- A configuration of individual functions and scripts allows for flexibility and reutilization.
- Use scripts to summarize standard procedures.
- Thanks to the use of scripts and the resulting benefits individual functions can be cut down. Administration and clarity are made easier.

7.3 Value conversion predefined by the operating system

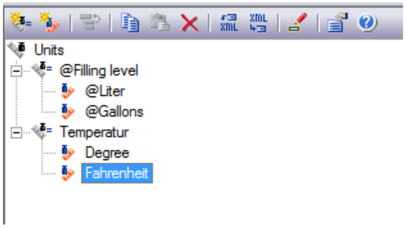
Not all value conversions have to be configured.

In zenon, the following values and their display are directly adopted from the operating system:

- Date format
- Time format

7.4 Tips for converting values

- For displaying values use a display in units whenever possible. There will be no need for a translation then.
  Example temperature display: The term degree(s) must be translated. The symbol ° however not only is the same symbol in all languages but can also equally be used for Celcius, Fahrenheit and Kelvin.
  Set the corresponding symbol in the properties of the basic unit.
- Of course you can also add translatable terms with the
  @-symbol when naming the measuring units. Both options are displayed on the screen:



Units
- @Filling level
  - @Liter
  - @Gallons
- Temperatur
  - Degree
  - Fahrenheit

- Add the corresponding value conversion to every language change function. Otherwise misunderstandings might easily occur.
- Set the exact unit name as tool tip. In the familiar environment every employee will automatically think in his or her corresponding mother tongue. For trouble-shooting, optimizing the internationalization and for engineers with focus on internationalization the use of this tool tip can significantly make their work easier.
  Make this tool tip translatable, use international denominations also for local projects. Of course you can translate the measuring unit (Celsius in our example) to the corresponding language.

8. Applying the wizard to existing projects

In this tutorial you learned how to meet potential challenges of working internationally with zenon. However, zenon would not be zenon if there wasn't a built-in way of making these steps easier.

With the help of the built-in wizard you can automatically convert an existing monolingual project to a multilingual one.

Information

The wizard is only available in English.

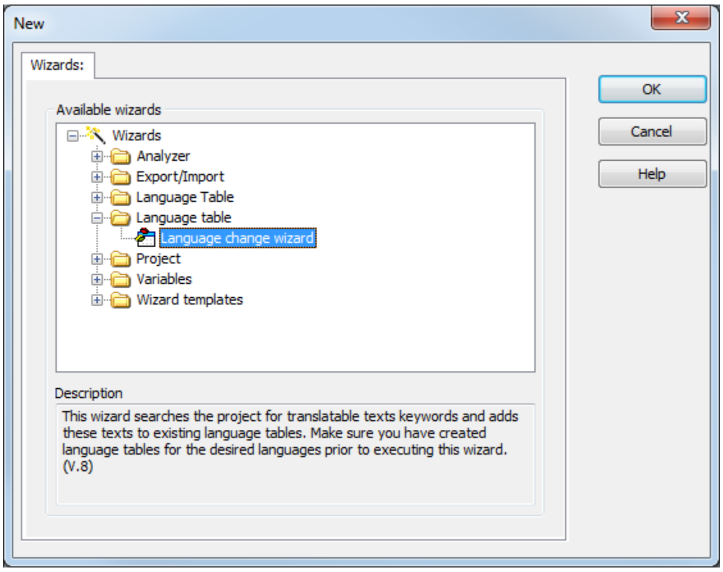
8.1 Configuration of a wizard

To start a wizard:

- from the menu bar **`File`** select the entry **`Wizards`** `...`

or

- press the short cut `Alt+F12`
- Select, in the `Language table` folder, the `Language change wizard`

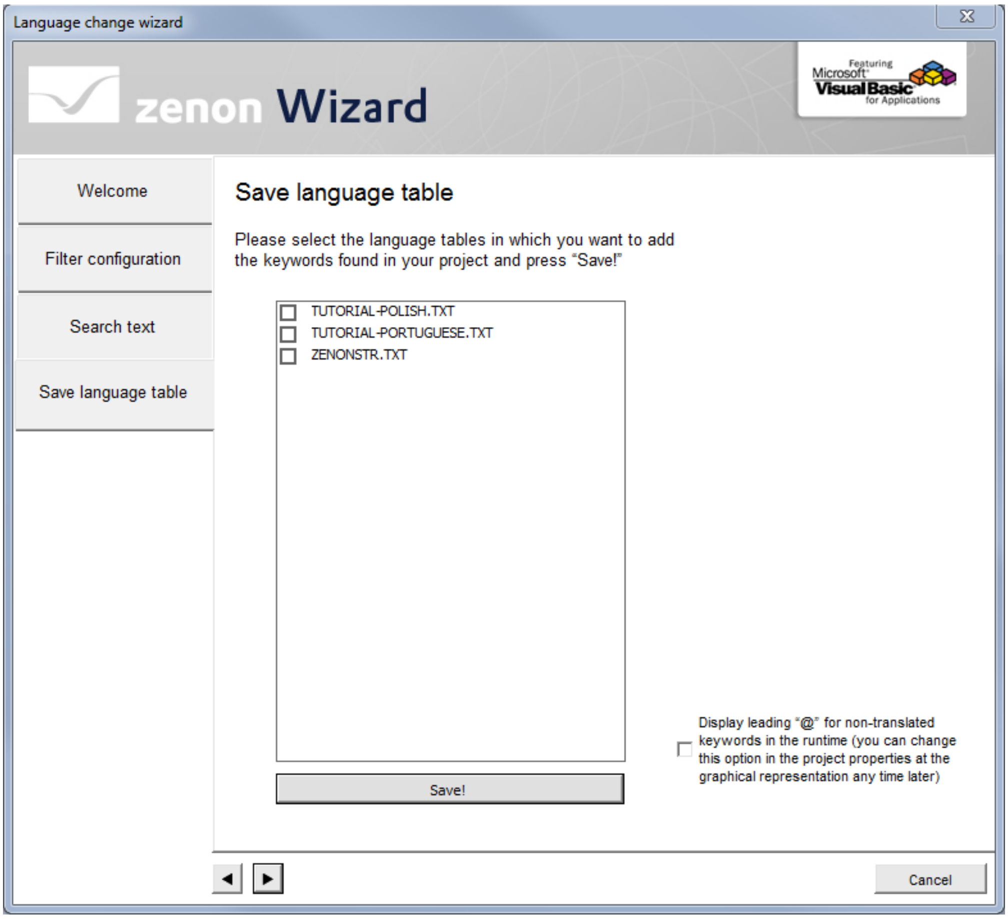


Description

This wizard searches the project for translatable texts keywords and adds these texts to existing language tables. Make sure you have created language tables for the desired languages prior to executing this wizard. (V.8)

- Select the corresponding entries.

- Navigate through the wizard with **`Left arrow`** and **`Right arrow`**.
- The wizard is executed with the button **`SAVE!`** at the `Save language table` page of the wizard



Save language table

Please select the language tables in which you want to add the keywords found in your project and press "Save!"

□ TUTORIAL-POLISH.TXT
□ TUTORIAL-PORTUGUESE.TXT
□ ZENONSTR.TXT

□ Display leading "@" for non-translated keywords in the runtime (you can change this option in the project properties at the graphical representation any time later)

- To end the wizard press **`Cancel`**.

In the language table of the project all existing language-changeable keywords are listed.

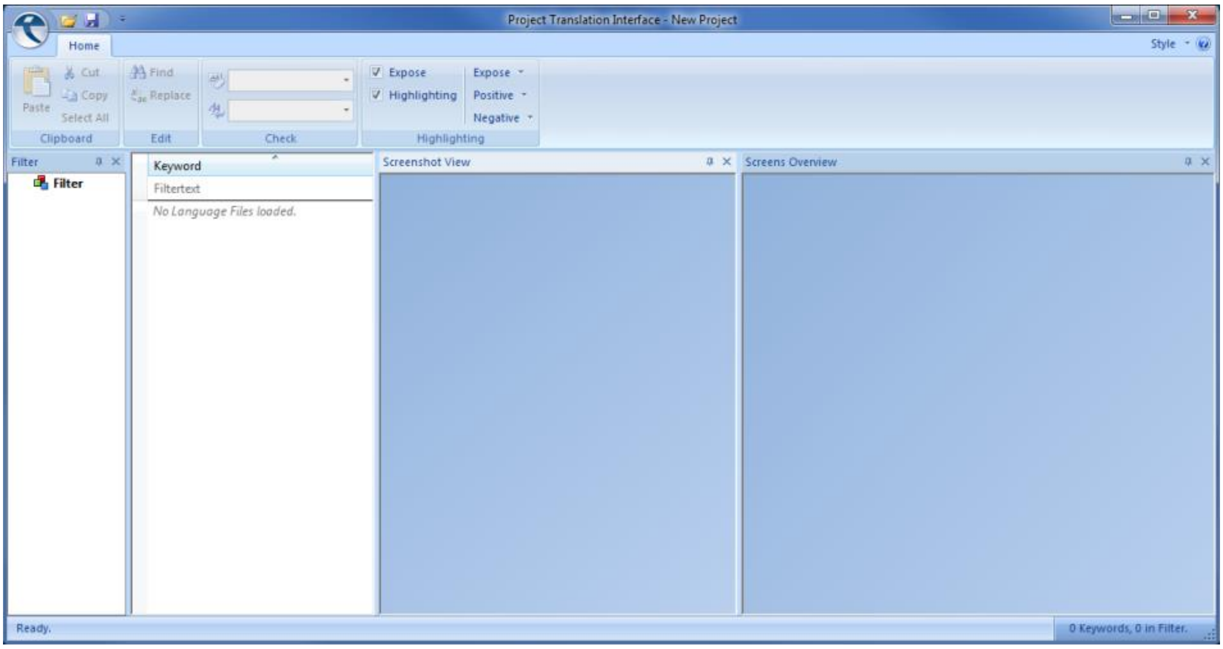
Information

After ending the wizard all language-changeable keywords contained in a project are listed.

9. Translation assistance Project Translation Interface

In order to be able to translate multilingual texts efficiently and fast zenon offers and external translation tool as of version 7.10 or higher.

This works in conjunction with the Language Translation Wizard:



Project Translation Interface - New Project

No Language Files loaded.

Ready.

0 Keywords, 0 in Filter.

- The wizard serves for exporting and processing multilingual contents configured in zenon.
- The Project Translation Interface supports the translator by displaying the configured screens as well as markers for text lengths.
- When the translation is complete the wizard will re-import the data to zenon.

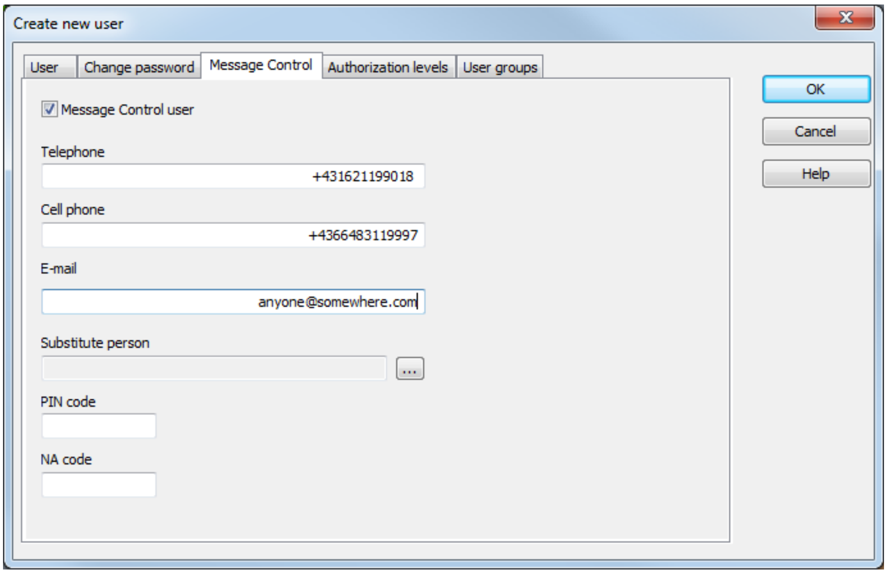
10. Message Control (subject to license)

Make sure you also create the entry Dynamic part of the subject language-dependent in the properties for the node Message Control.

Please also bear in mind that there are international standards when you configure the user administration. If you make a habit of always entering telephone numbers with their international prefix you will be perfectly prepared for later extensions.

Please also adhere to the requirements of the corresponding telephone system, such as dialling a "0 for exchange line".

Set these entries at: *User administration=> User=> Button User new => Tab Message Control*



☑ Message Control user

Telephone: +431621199018

Cell phone: +4366483119997

E-mail: anyone@somewhere.com

Substitute person:

PIN code:

NA code:

Attention

In case of voice messages bear in mind that the connected telephone for voice messages has the required authorizations (e.g. international calls).

10.1 Language-dependent texts in Message Control

Remember to also internationalize outgoing messages.

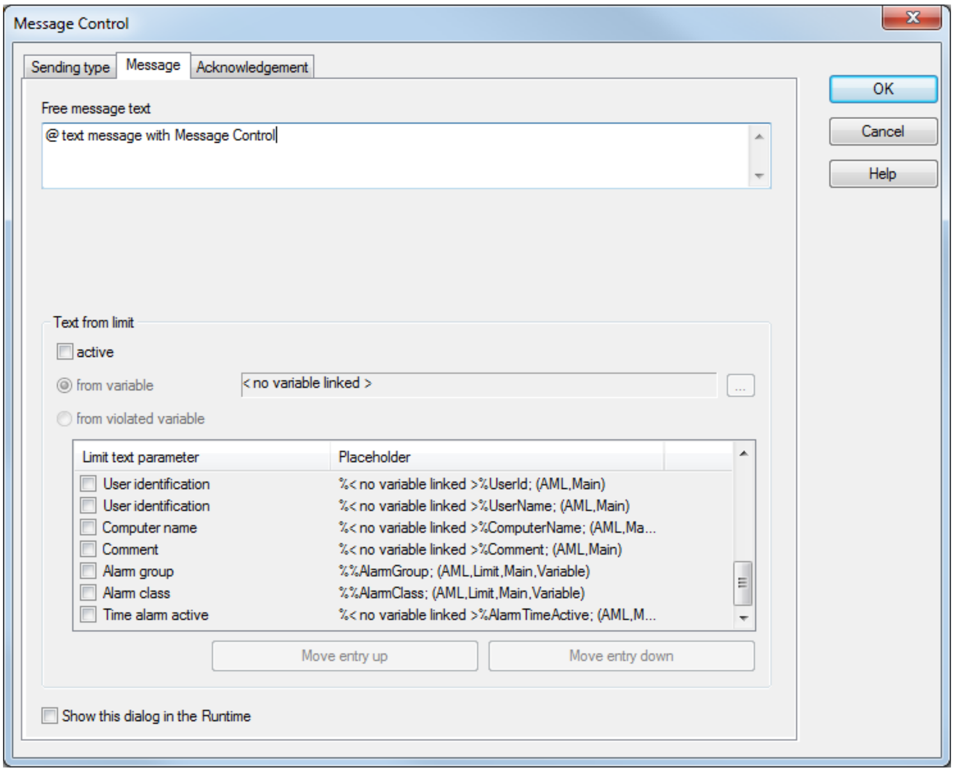
User administration and Message Control are working together:

- The contact information of the recipients is entered into the settings of the user administration.
- Language groups can be created with the help of user groups.
- The mailing type of the Message Control is added to the corresponding recipient

10.1.1 Configuration of the Message Control

In order to transmit a message:

1. In the project manager, open the node **`Message Control`**
2. In the properties window in the entry `Dynamic part of the subject`: enter the corresponding text. Make sure that there is an @-symbol in front of your text.
   In this example enter `@Example text for the subject in Message Control .`
3. In the project manager change to the node language file and enter this sentence as new keyword.
4. Next, create the corresponding function:
   To do so, in the function group `Message Control` select the function `Send message`
5. Parameterize this function in the tab `Message` by entering`@Text message in the module Message Control` in the box `Free message text`



Free message text: @ text message with Message Control

Text from limit

□ active

● from variable: < no variable linked >

○ from violated variable

Limit text parameter	Placeholder
□ User identification	%< no variable linked >%UserId; (AML,Main)
□ User identification	%< no variable linked >%UserName; (AML,Main)
□ Computer name	%< no variable linked >%ComputerName; (AML,Ma...
□ Comment	%< no variable linked >%Comment; (AML,Main)
□ Alarm group	%%AlarmGroup; (AML,Limit,Main,Variable)
□ Alarm class	%%AlarmClass; (AML,Limit,Main,Variable)
□ Time alarm active	%< no variable linked >%AlarmTimeActive; (AML,M...

□ Show this dialog in the Runtime

Note: A multiple selection is possible in the allocation of the recipient name in the tab `Mailing type`=> `Recipient name=> ....`

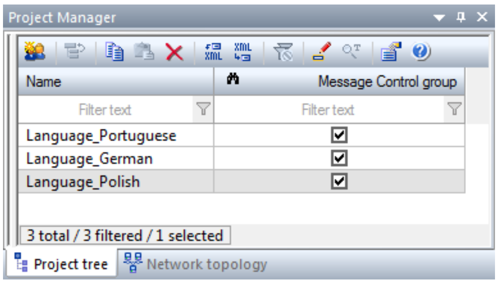
In the language file create the corresponding translation for your message text.

Translation for this tutorial: xxx

10.1.2 Practical tips for language-dependent Message Control

In order to be able to adapt the language of the outgoing message to the recipient create language-dependent user groups in the user administration. These groups can be created in addition to existing groups.

If you are working with this method it is recommended to put a corresponding labeling in front of the name when naming a group:



Name	Message Control group
Language_Portuguese	☑
Language_German	☑
Language_Polish	☑

3 total / 3 filtered / 1 selected

11. Application opportunities of the language change

The language change option is not limited to the classic language change only. Here are a few examples of how you can also use the multilingualism:

- Tool tips
- Menus
- Alarm Message List
- Chronological Event Lists

For the image types supplied by zenon as well as the dialogs used in Runtime and Editor you can request translated language tables from support@copadata.com.

The following language tables are available:

- English
- French
- Italian
- Russian
- Spanish

12. Summary

After having this tutorial completed you will know how to configure international projects efficiently and with little effort with zenon. Have fun!

RECOMMENDED CHAPTERS OF THE ONLINE HELP

For further information read the corresponding chapters in the online help.

The links mentioned will give you an overview over the information in this tutorial.

- Editor
  Description
- Basic Tutorial
- Project and workspace
- Project efficiently with the help of zenon
- Screens
- Functions
- Scripts
- Language switch
- Message Control
- Measuring unit conversion
- Wizard: Language change