

TRANSLATE.VI (Version 1.2)

by Robert Nell: nell@rofa.at

Introduction

To localize your front panel, you need to translate all front panel strings. To use "Export VI Strings" and "Import VI Strings" has many disadvantages:

- If you modify the VI, importing a previously exported and translated text file results in errors.
- The exported text file has a structure close to XML. If you want to give it a translator, you would need a parser that would allow you to extract only the translatable strings.
- It is not possible to change the strings at runtime, because the you can not import the textfile if the VI is running.
- Each VI of your application has its own textfile. If strings appear in many VIs (like "cancel" of a cancel button), you have to translate them in each textfile.
- Run Time Menu (RTM) items are not included in the exported textfile.

The "translate.vi" allows you to localize your front panel with none(!) of the disadvantages listed above!

How to use

It is very easy to use (see the tutorial):

- (1) Place the "translate.vi" at the beginning of the VI which strings you want to translate (main VI).
- (2) Start the main VI.
- (3) In the directory of your main VI a translation file "strings.txt" was created, that contains a column of front panel strings of your main VI.
- (4) Add a new column for each new language to the translation file. (e.g. with EXCEL).
- (5) Select the language index of the translation VI according to the desired language.

Important: If you use the default settings, only VIs that have the *Show Front Panel When Called* or *Show Front Panel When Loaded* options set are translated. Your top level VI may not have set one of these options and therefore will not be translated. Either set one of these options of your top level VI or change the *Show FP on Call/Load VIs* parameter of the *translation options* (see description below).

Be careful to set Show FP on Call/Load VIs to FALSE if the VI(s) to translate parameter is set to hierarchy or memory, because this can produce very large translation files.

How it works

It extracts and searches for the front panel strings and RTM items (dependent on the translation options and menubar parameters) in the translation file (a tabulator delimited

spreadsheet file of strings, each line contains a string to translate and each column contains a different language) and replaces them with the strings of another column of this file (dependent on the language index parameter).

Lines in the translation file beginning with // (double slash) are ignored and can be used as comment lines to insert version information etc. into the translation file. See "string.txt" as an example for a translation file.

The translation file can be a different one for each VI or the same for all (or some) of them, dependent on the *translation file* parameter.

If you add front panel objects to your VI, all new strings will be appended to the translation file automatically, after you start the VI the next time. Afterwards you need only add the translation(s) of the new string(s) to the translation file

If you do not want to translate single objects, add their labels (!) to the *labels of objects not to translate* array.

If you want to translate all VIs of a hierarchy or all VIs in the memory, it may be useful to exclude some VIs from the translation. Just add the names of the VIs you do not want to translate to a text file, each name in a single line, and connect the name of this file to the *file with VIs not to translate* parameter.

For any questions or comments please contact Robert Nell: nell@rofa.at

Connector Pane



Controls and Indicators

Menubar

Connect "Current VIs Menubar" from the Application Control >> Menu palette, if the run time menu of the caller shall be translated.

1321 language index (0)

Column number of the translation file from which the strings are taken.

VI(s) to translate (caller)

Selects which VIs to translate: caller: translates only the caller VI hierarchy: translates all VIs of the callers hierarchy memory: translates all VI in the memory

append strings not found (T)

If TRUE, all strings that where not found in the translation file are appended to the translation file.



translation file (strings.txt)

Name of the translation file, that is a spreadsheet file of strings. Each line contains a string to translate and each column contains a different language. If this is a relative path, it is realtive to the directory of the caller VI.

translation options

This cluster makes it possible to select which front panel strings are translated.

TFI Show FP on Call/Load VIs (T)

Translates VIs that have set the options "Show Front Panel When Called" or "Show Front Panel When Loaded" only.

- TFI Window Title (T) Front panel window title TFI Static Text (T) Free labels TF Visible Captions (T) Visible captions Invisible Captions (F) TF Invisible captions TFI TipStrips (T) Tip strips TFI Strings (T) Value of string controls TFI **Boolean Text (T)** Boolean text
- TFI Rings (T)
- Ring items
- TFI Enums (F)
- Enumerate items (not recommended!!)
- **TFI** Knob Labels (T)

| | Knob lables |
|-----|------------------------------------|
| TF | Array Elements (T) |
| | Array elements |
| TF | Cluster Elements (T) |
| | Cluster elements |
| TFI | ListBox Items (T) |
| | List box items |
| TFI | Table Items (T) |
| | Table items |
| TF | Table ColHdrs (T) |
| | Table column headers |
| TFI | Table RowHdrs (T) |
| | Table row headers |
| TFI | Graph/Chart Scales (T) |
| | Graph or chart scales |
| TF | Graph/Chart Plots (T) |
| | Graph or chart plot names |
| TFI | Graph Cursors (T) |
| | Graph cursor names |
| TFI | Tab Captions (T) |
| | Tab Control Captions |
| TFI | Tab Elements (T) |
| | Tab Control Elements |
| TF | MCListBox Items (T) |
| | Multicolumn listbox items |
| TFI | MCListBox ColHdrs (T) |
| | Multicolumn listbox column headers |
| | |
| | |

[abc] labels of objects not to translate

An array of labels of controls that shall not be translated.

file with VIs not to translate (exclude.txt)

Name of file, that contains a list of VIs that shall not be translated.

error out The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

History:

Changes since 1.0:

- new parameter VI(s) to translate
- new translation option Show FP on Call/Load Vis
- lines in the translation file beginning with // (double slash) are ignored (comment lines)

Changes since 1.1:

- new parameter lables of objects not to translate
- new parameter file with VIs not to translate