



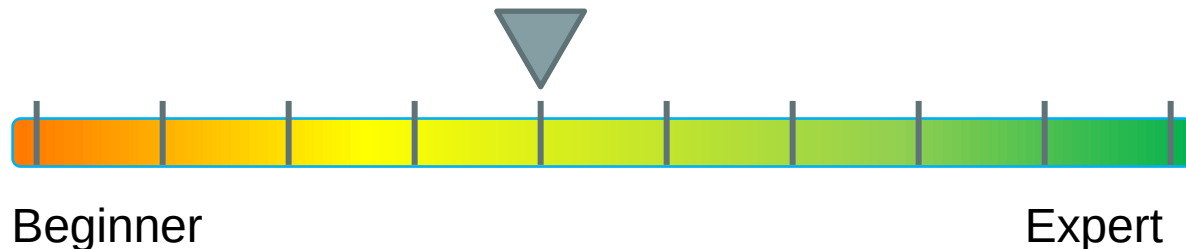
# **APROL E-Camp workshop**

## **Translation**



## Agenda

| Time                              | Topic                      |
|-----------------------------------|----------------------------|
| ~ 15 min                          | Short information          |
| ~ 15 min                          | Table of translatable text |
| ~ 30 min                          | System translation         |
| <input type="checkbox"/> ~ 15 min | Installation               |
| ~ 45 min                          | TranslationManager         |
| <input type="checkbox"/> ~ 30 min | Translate the system       |
| <input type="checkbox"/> ~ 30 min | Translation visualization  |
|                                   | Go on working              |





## Overview

### ● Short information

- Basics

### ● Table of translatable text

- Engineering environment
- Operator environment

### ● System translation

- Installation
- Special packages
- Language switching
- aproltr

### ● TranslationManager

- Important functionalities
- Translate the system TryIt
- Workflow visualization text
- Visualization text in the library
- Visualization text in the project
- Workflow alarm text
- Translation visualization TryIt



# Translation

## Short information



## Basics

### ● Basic – Installation

- 049 and 001 → B&R recommended English as default language

### ● Encoding

- UniCode → 4 Byte
- UTF8 → optimized Unicode

### ● Why a Translation?

- Usually the engineer can speak English, sometimes the operator not

### ● Marking of the target

- Dark blue is for operator environment
- Light blue is for the engineering environment

|                |                |                          |
|----------------|----------------|--------------------------|
| HM_D_SSTRING_T | HM_E_SSTRING_T | HM Description SSTRING_T |
| HM_D_LSTRING_T | HM_E_LSTRING_T | HM Description LSTRING_T |
| HM_D_STRING_T  | HM_E_STRING_T  | HM Description STRING_T  |



# **Translation**

## **Table of translatable text**



## Engineering environment

- Start your CaeManager and translate direct
  - Project all the time in 1 language ( B&R recommend English )
  - Change only the language to translate, not to project.
- Parts for the CaeManager:
  - Library
  - Library ( block with versioning )
  - Project
  - Project ( project part with versioning )
  - Database global information



## Engineering environment

|                                              |   |
|----------------------------------------------|---|
| Library description                          | X |
| Project part description including directory | X |
| Entries in the [Documentation] tab           | X |
| I/O pins description                         | X |
| I/O pins comment                             | X |
| Pin type description                         | X |
| Images description                           | X |
| Label description                            | X |
| Operating system description                 | X |
| Online rights description                    | X |
| Different variable type descriptions         | X |
| Python code in graphic blocks                | X |
|                                              |   |
|                                              |   |
| Project description                          | X |
| Project part description including directory | X |
| Alarm group name                             | X |
| Entries in the [Documentation] tab           | X |
| Operator and operator right descriptions     | X |
| Images description                           | X |
| Language-dependent links of URLs             | X |
| Project statistic descriptions               |   |
| Template descriptions                        | X |





## Operator environment

### ● The translation will only be here:

- If the aproltr is installed ( for the different application )
- If the parts are located, translated and downloaded
- If the application is started in the chosen language

### ● Parts for the TranslationManager:

- Library
- Project
- Visualization text
- Alarm text



## Operator environment

|                                                                                              |   |
|----------------------------------------------------------------------------------------------|---|
| Default values on the input pins of a graphic block                                          | X |
| Static text in the graphic blocks                                                            | X |
| Constants in the configuration dialog of the widgets                                         | X |
| Static tool tips in the graphic blocks                                                       | X |
| Text in the Python code of a graphic block                                                   | X |
| 'Text' dynamization type in graphic blocks                                                   | X |
| 'Text list' dynamization type in graphic blocks                                              | X |
| Static tool tips                                                                             | X |
| Display of the descriptions via language switching                                           | X |
| Default values and hyper macro constants in graphic blocks in a hyper macro                  | X |
| I/O constants on the alarm block instances' TEXT input (alarm text to be shown)              | X |
| I/O constants on the alarm block instances' ALIAS input (description for the message system) | X |
| Hyper macro constant units                                                                   | X |
| Menu text in the applications                                                                | X |
| Composed text in dynamizations                                                               | X |
| Display of text in a process graphic                                                         | X |
| Alarm texts                                                                                  | X |



# **Translation**

## **System translation**

### **Prepare for the Operator**



## Installation

- Language DVD is available
- Set the source in the YaST2 Control Center
- Select your language and Development environment
- If the installation ends, close the YaST2
- After re-logging to the environment the language is available



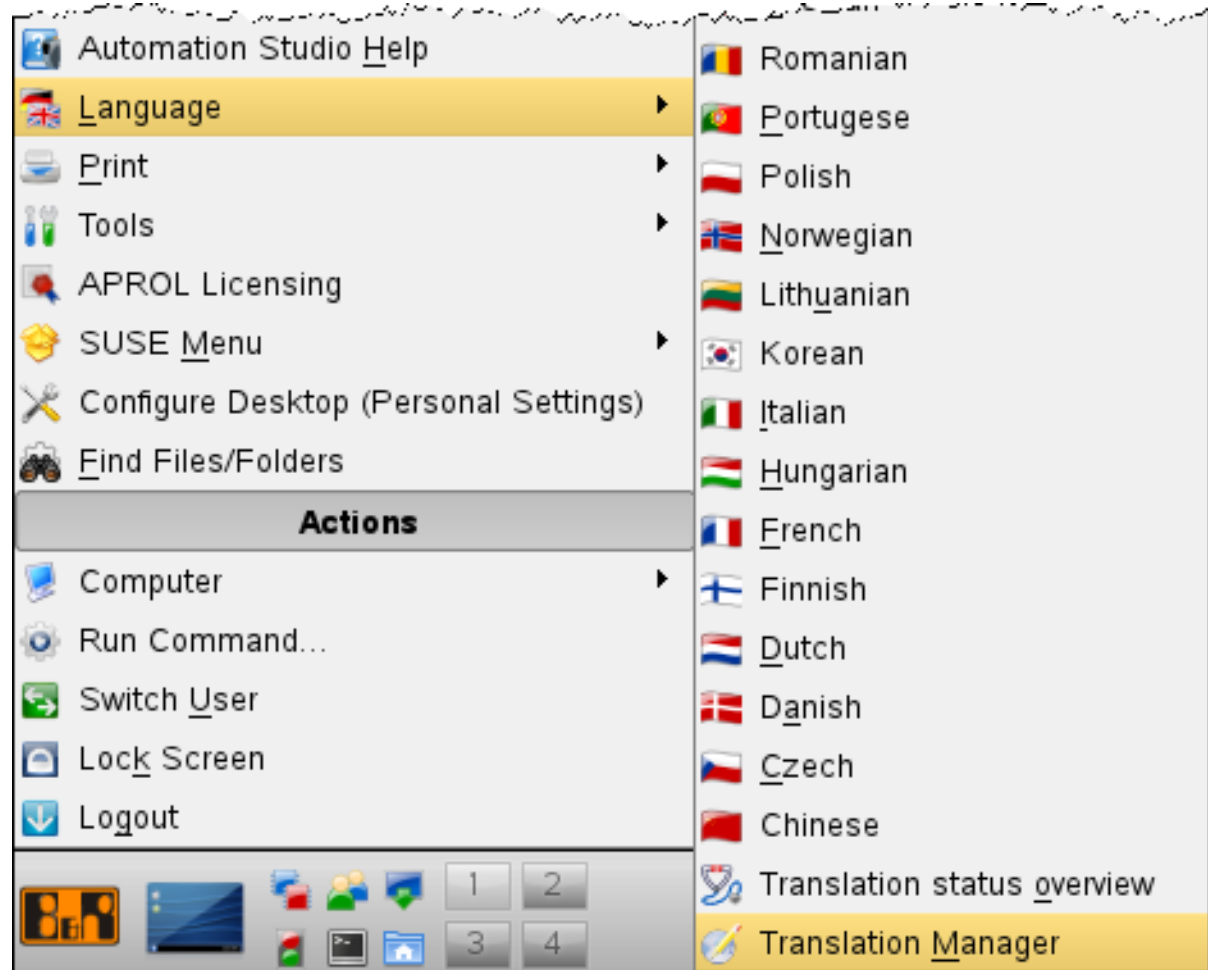
## Special packages

- APROL supplies the „UIM“ – tool
- It supports traditional and simplified Chinese, Korean and Russian.
- Use of the UIM tool
  - See D5 – 2.3.3 The special languages packages



## Language switching

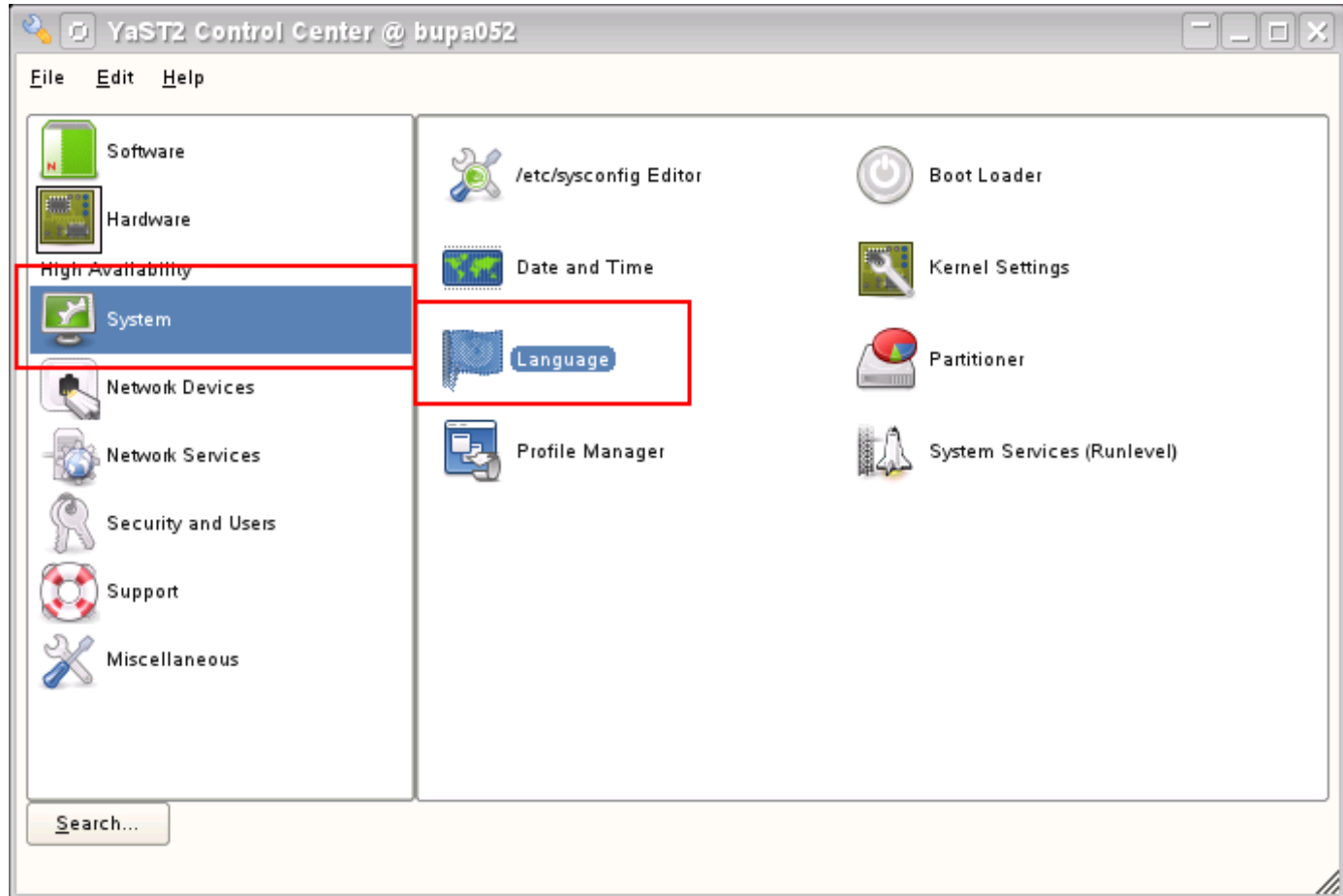
### ● KDE:





## Language switching

### ● GUI:





## Aproltr

- For your GUI (because the operator want his language)
- Following types are used:
  - POT
    - msgid contains original and msgstr is empty
    - The PO for the different languages are derived from the POT
  - PO
    - msgid contains the original and msgstr the translated
    - One individual PO for each language
  - GMO
    - Like PO, but in binary format
  - MO
    - Corresponds to the content of GMO
    - These are accessed when the language is switched





## Aproltr

### ● Compendium:

- Change to the TRANSLATE/<LANG>
- Execute: `msgcat -o <own_compendium_name> *.po`

### ● Check the completeness

- <Lang>\_check.po file will be created after a make.
- It contains all not-translated and fuzzy entries

### ● Local installation

- Execute `Make install` in TRANSLATE/<LANG> to install it
- ALT + letter codes are identified by an „&“.



# **Translation**

## **TranslationManager**

### **Prepare for the Operator**



## Important functionalities

### ● Edit Export/Import:

- Export the loaded PO-files as CSV for external tools

### ● Rough translation:

- Quick translation with the help of a compendium

### ● Child elements:

- If a translation is other than majority, it can be changed automatically.



## Important functionalities

### ● Creating the MO file

- An internal „make“ and „make install“ is executed

### ● Execute application:

- Check your results

### ● Manage compendium:

- You can use a external compendium
- If the existing translation of a previous release should be used, the compendium can be incorporated and translated with „Rough translation“

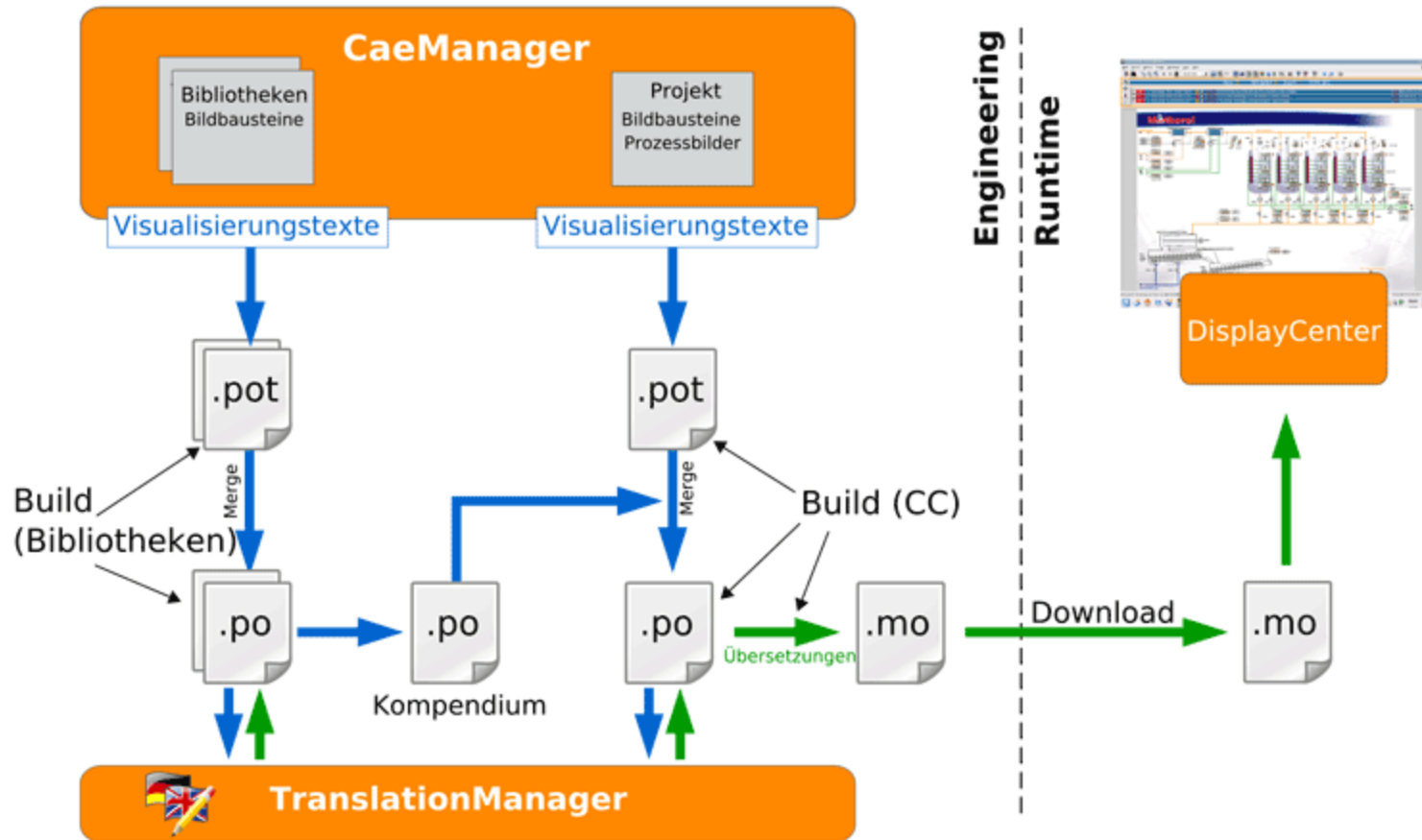


## Translate the System TryIt

- Install packages and Development environment
  - See D5-2.3.2 Installation
  
- Log in into the aproltr
  - aproltr
  - .aproltr
  
- Translate parts of the PO-File from the DisplayCenter
  - See D5-7 TranslationManager



## Workflow visualization text





## Visualization text in the library

- Go to Libraries
  - Select „Properties“ of the Library → „Localization“
- Select your language
- Make a „Build Library“
- Open the TranslationManager
  - Extras → Translations for Localization



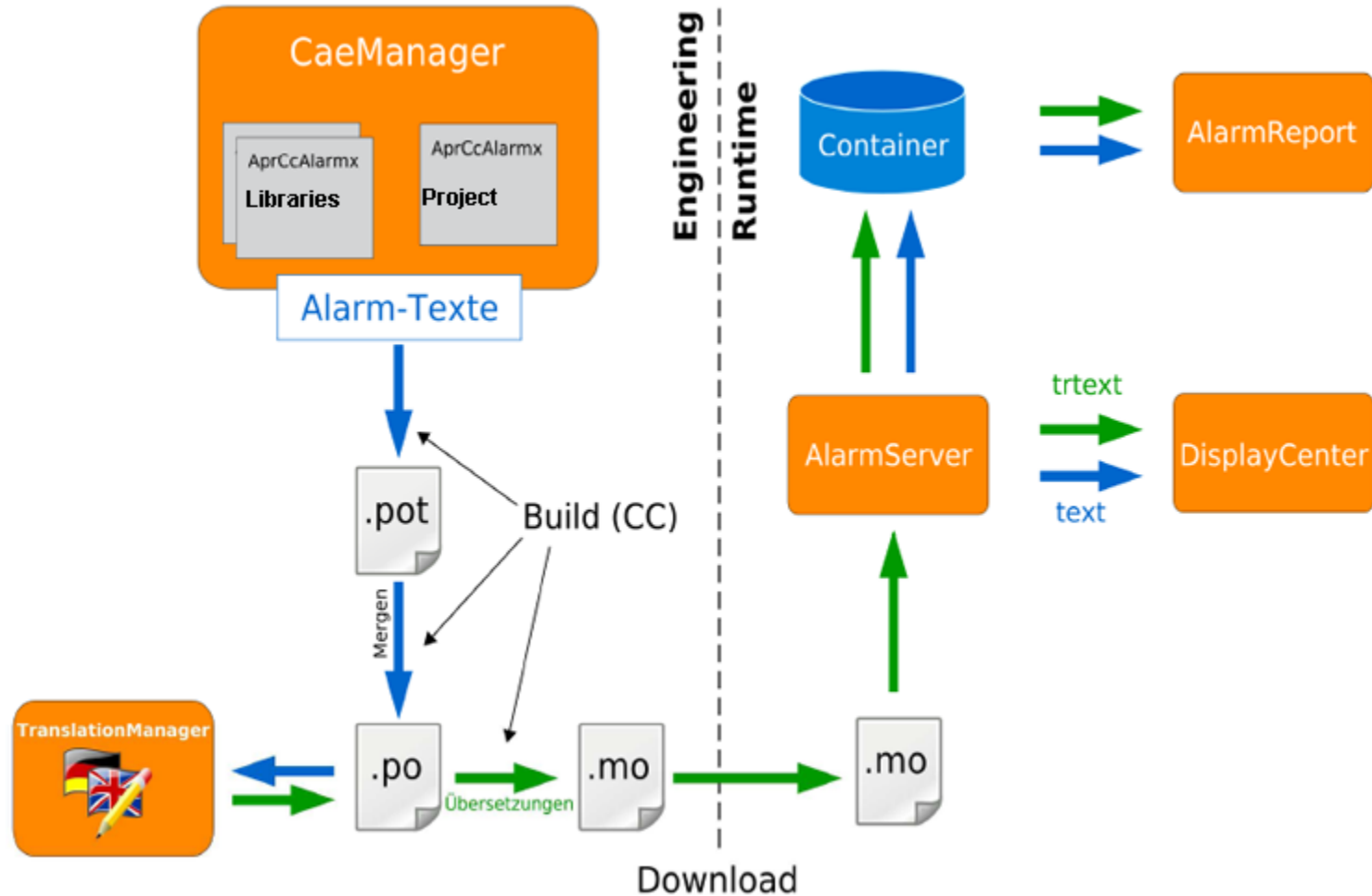
## Visualization text and alarm text in the project

- Go to Logical Structure
  - Open the „Project properties“ → „Localization“
- Select the language
- Make a „Build Target“ on AprSys
- Open the TranslationManager
  - Extras → Translations for Localization





## Workflow alarm text





## Visualization- and alarm-text translation TryIt

### ● Library:

- Select the language → Properties → Localization
- Make a „Build Library“
- Start the TranslationManager (Extras/Translations for Localization)
- Translate it

### ● Project:

- Select the language → Project properties → Localization
- Make a „Build Target“ on AprSys
- Start the TranslationManager (Extras/Translations for Localization)
- Translate it
- Edit/Generate and install the translation

### ● Download



Have fun

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AUTOMATION EXCELLENCE**