GNU gettext - Overview

- **libintl**: Message translation lookup (runtime)
- **Programmer tools**: xgettext, msgfmt
- **Translator tools**: msgcat, msggrep, etc.
- **Emacs PO mode**: (outdated)
Current problems

• Problem for package maintainers: The PO directory and version control.
  – Should the PO files from the TP be committed in version control?
  – “make dist” modifies the PO files before distribution. ⇒ version control conflicts.

• No support for Go, D, Rust.
Release 1.0

- New structure for the PO directory:
  - `po/*.po` - PO files after merging with POT
    NOT under version control
  - `po/from-translators/*.po` - Original PO files
    Possibly under version control, depends on project
Release 1.0

- New workflow regarding the PO directory:

```
Maintainer

po/*po

Translator

Input

po/from-translators/*.po

Output

msgmerge --for-msgfmt

po/*po

msgfmt -c

po/*.gmo

package.tar.gz
```
Run & Translate (1)

- Translators will be able to
  - set a couple of environment variables
  - run the program (in a terminal)
  - right-click on an untranslated or wrongly translated message
  - “open hyperlink” - opens the PO file editor at the location of that message
  - save the PO file
  - continue running the program, with the modified translations enabled
Run & Translate (2)

• Benefits:
  – Translators produce better translations when they know the context
  – Normal users are led to the path of becoming translators
Run & Translate (3)

• Behind the scenes:
  – libintl with modified gettext() function that produces a text string with hyperlink
  – an app-client daemon downloads the PO file, if necessary, and launches the PO editor
  – once saved, it is compiled to .mo
  – libintl with ability to reload a modified .mo file