ScreenMatch: Providing context to software translators by displaying screenshots

Purpose

Software translation today

The developer sends the translator a file of messages to be translated, which the translator fills in. Translators currently see just the message they're translating, not how it appears in the application.

```
#. Translators: One or more doors
#. on the printer are open
#: cc-printers-panel.c:536
msgid "Open door"
msgstr ""
```
Translator fills this in
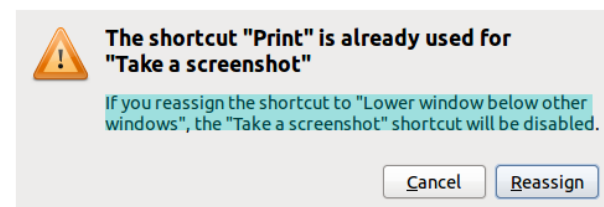
Problem

Translators lack context

A message can have several different meanings, which need to be translated differently. Translators need context to decide which is correct.

Message	Meaning	Translation (Japanese)
Open Door	The door is open	扉が開いています
Open Door	Please open the door	扉を開いてください

Solution

Show translators screenshots

We provide translators with context by displaying a screenshot corresponding to each message.

The shortcut "Print" is already used for "Take a screenshot"

If you reassign the shortcut to "Lower window below other windows", the "Take a screenshot" shortcut will be disabled.

Cancel   Reassign

If you reassign the shortcut to "#{Lower window below other windows}", the "#{Take a screenshot}" shortcut will be disabled.
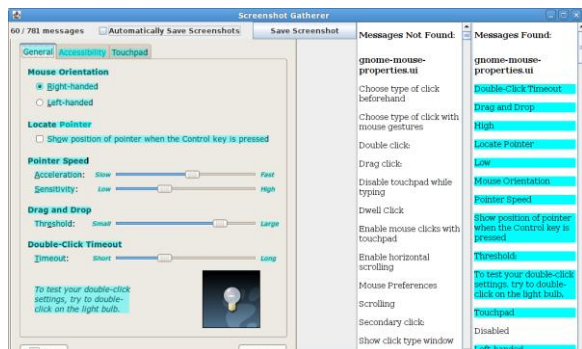
Si reasigna la combinación a «%s» se desactivará la combinación «%s».

```
#: ../capplets/keybindings/gnome-keybinding-properties.c:1207
msgid "If you reassign the shortcut to \"%s\", the \"%s\" shortcut will be disabled."
```
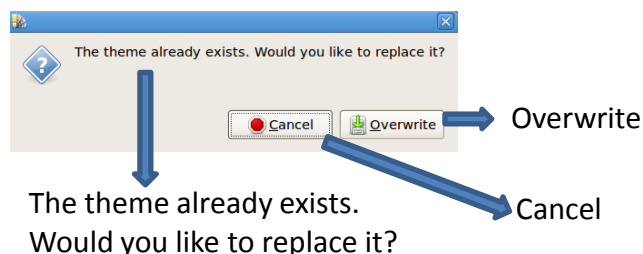
Implementation

Screenshot Gatherer

Takes screenshots of the running application, and provides feedback on how much of the application has been explored.

Message-Screenshot Matcher

Matches each translatable message to a screenshot by extracting text out of screenshots via OCR, then matching the OCR-ed text to messages.

The theme already exists. Would you like to replace it?

Cancel   Overwrite

Overwrite

Cancel

Evaluation

We gathered screenshots for three applications, and compared the matches made by the Message-Screenshot Matcher to matches made manually.

Application	Messages in Gathered Screenshots	Correctly Matched
Gnome Control Center	397	341 (86%)
XFCE Terminal Emulator	222	159 (72%)
PCManFM File Manager	124	99 (80%)