Translation Flow

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The Basics

Code

```
_("Hello!")
```

Filesystem

In the .pot file

```
msgid: "Hello!"
msgstr: ""
```

In the fr .po file

```
msgid: "Hello!"
msgstr: "Bonjour!"
```

In the fr .mo file

```
6D 73 67 69 64 3A 20 22
48 65 6C 6C 6F 21 22 20
6D 73 67 73 74 72 3A 20 22
42 6F 6E 6A 6F 75 72 21 22
```

Upstream Translation Tool: Transifex

- Commercial product to support translators and the l10n process
- Transifex support open source communities like The Foreman with free translation services (Thank You!)
- You will need an account if you want to help translate the Foreman into your language

Community Flow

1. Developer adds code with strings.

3. Transifex pulls pot file

4. Translators provide new translations

2. Packager extracts Strings into the .pot file

5. Packager extracts translations during release

Process Issues

- Only doing step 2 at release time means that a translation for version N of a plugin will not show up until N+1

- Skipping step 5 at release time means that a string introduced in version N of a plugin will not show up until N+2

How it is done, and Issues

Step	How it is done	Issues
1. Add code	You know, with an editor	New plugin writers forget to instrument with gettext and Makefile pattern

2. Extract Strings	From the locale directory:
	`make extract-strings`
	Or
	`rake plugin:gettext[plugin_name]`
		This is not done frequently enough to encourage constant translations

3. Transifex pull	Automatic, set up in Transifex	
4. Translation	Done in Transifex	Not enough Translators
5. Extract Translations	From the locale directory: `make tx-update`	Often forgotten, and since step 2 is not done there is likely not alot of new translations

Transifex Auto Update

transifex Dashboard Teams Reports Orders Community Foreman

Foreman
Overview
Languages
Resources
Announcements
Context
Settings

Create new project

to update resources | Add resources

Name (Ascending)

Words | Source Updated

Mar 12th 2018, 07:06
Mar 1st 2019, 05:58
Jan 10th 2019, 04:01
Jan 25th 2019, 06:30

Automatic update of source files

Set Transifex to automatically update your source files. Enter for each resource the URL that Transifex should check for updates of the source file.

Transifex will overwrite the existing source strings with those found in the linked file. This may lead to **loss of translations**, so make sure the URL points to the correct file before saving the URLs.

For foreman_remote_execution
https://raw.githubusercontent.com/theforeman/foreman_remote_execution/... Click to edit

For foreman_setup
https://raw.githubusercontent.com/theforeman/foreman_setup/master/local... Click to edit

For foreman_tasks
https://raw.githubusercontent.com/theforeman/foreman-tasks/master/locale/... Click to edit

For foreman_virt_who_configure
https://raw.githubusercontent.com/theforeman/foreman_virt_who_configure... Click to edit

For hammer-cli
https://raw.githubusercontent.com/theforeman/hammer-cli/master/locale/ha... Click to edit

For hammer-cli-foreman

Makefile

bkearney@fivehole:~/code/foreman/locale

bkearney@fivehole:~/code/foreman/locale 118x15

```
# Extract strings and update the .pot, prepare .edit.po files
extract-strings:
        bundle exec rake locale:find DOMAIN=$(DOMAIN) SKIP_MODEL=1

# Merge .edit.po into .po
update-po:
        bundle exec rake locale:find locale:po_to_json DOMAIN=$(DOMAIN) SKIP_MODEL=1

tx-update: extract-strings tx-pull update-po
        git commit -m "i18n - extracting new, pulling from tx" . ../app/assets/javascripts/locale
        -echo Changes commited!

# Remove all MO files
```

bkearney@fivehole:~/code/foreman/locale 118x11

```
[bkearney@fivehole locale]$ pwd
/home/bkearney/code/foreman/locale
[bkearney@fivehole locale]$ ls
apipie.rb  de  en_GB  foreman.pot  gl  ja  Makefile            nl_NL  pt_BR   ru     taxonomies.rb  zh_CN
ca         en  es     fr           it  ko  model_attributes.rb  pl     README  sv_SE  zanata.xml     zh_TW
[bkearney@fivehole locale]$
```

Notes

- Translation docs -> https://projects.theforeman.org/projects/foreman/wiki/Translating

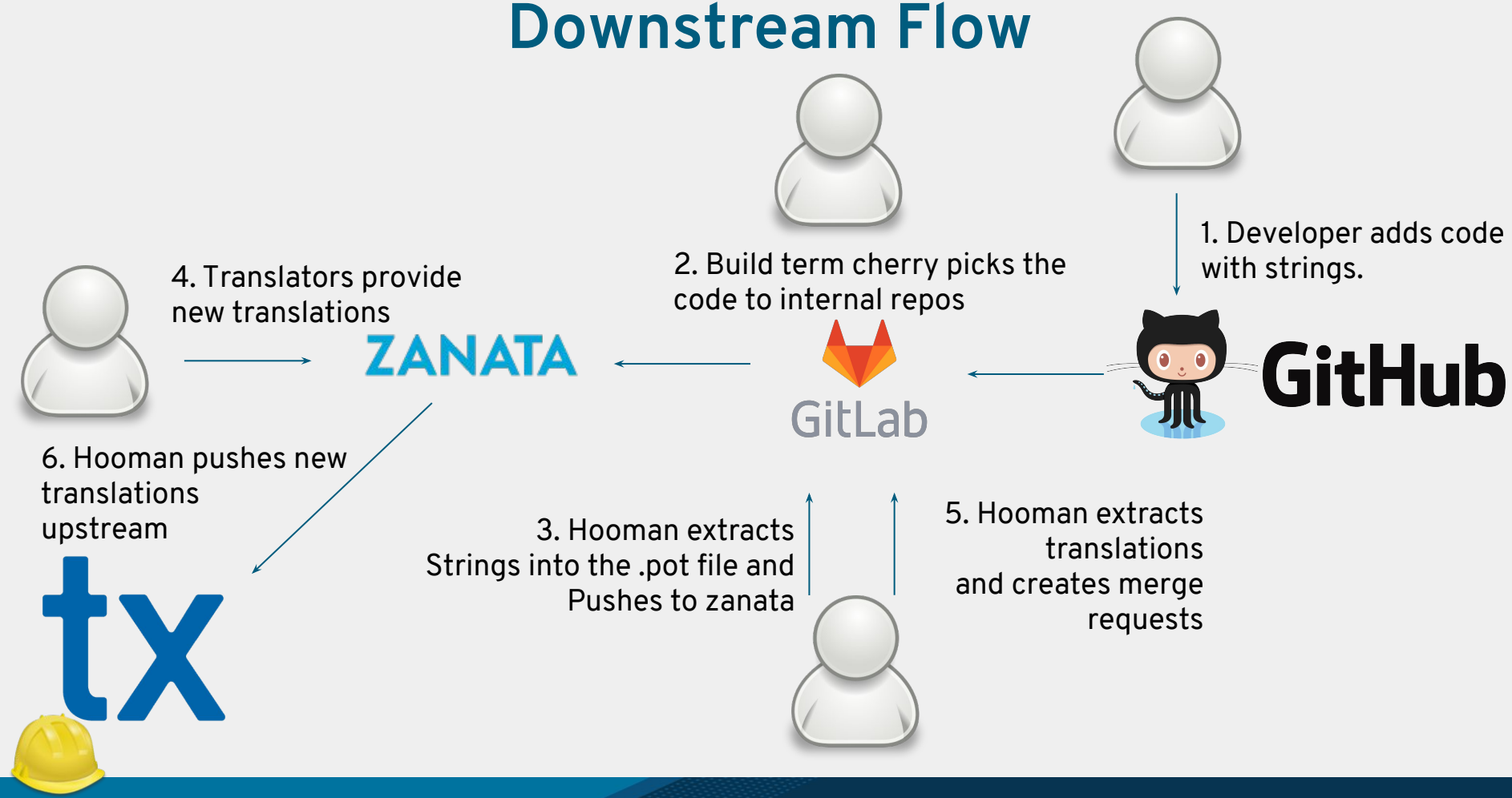
- Plugins String Extraction -> https://projects.theforeman.org/projects/foreman/wiki/How_to_Create_a_Plugin#Extracting-strings

Downstream Translation Tool: Zanata

- Red Hat will not try and change the tools the community uses, but may not use the same tools
- Zanata is the current translation tool used at Red Hat
- Red Hat current funds translations for French, Japanese, Spanish, Portuguese, and Simplified Chinese

ZANATA

Downstream Flow



Internal: Scripts for Downstream Flows

All located in https://gitlab.sat.engineering.redhat.com/satellite6/katello-team/tree/master/zanata

How it is done	Issues
load_all_into_transifex.sh	Pull translations from zanata, overwrite in transifex
load_new_into_transifex.sh	Pull translations from zanata, do not overwrite in transifex
push_source.sh | push_trans.sh | push_bastion_source.sh | push_bastion_trans.sh	From a good checkout, push either the strings or translations into zanata.
pull_source.sh | pull_trans.sh | pull_bastion_source.sh | pull_bastion_trans.sh	From a good checkout, pull either the strings or translations from zanata.
*/plugin_name	The zanata configuration file for each project

Internal Notes

- Satellite 6.5 Translation Group
  - https://vendors.zanata.redhat.com/version-group/view/satellite65

My Asks

1. Upstream, improve the frequency of extracting strings and pushing to transifex.

2. Upstream, ensure that any new plugin (foreman, hammer, smart proxy) extracts translations for every release.

3. Downstream, every time you see the word "Hooman", think "BK". Help me not be part of the critical path.