



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
```

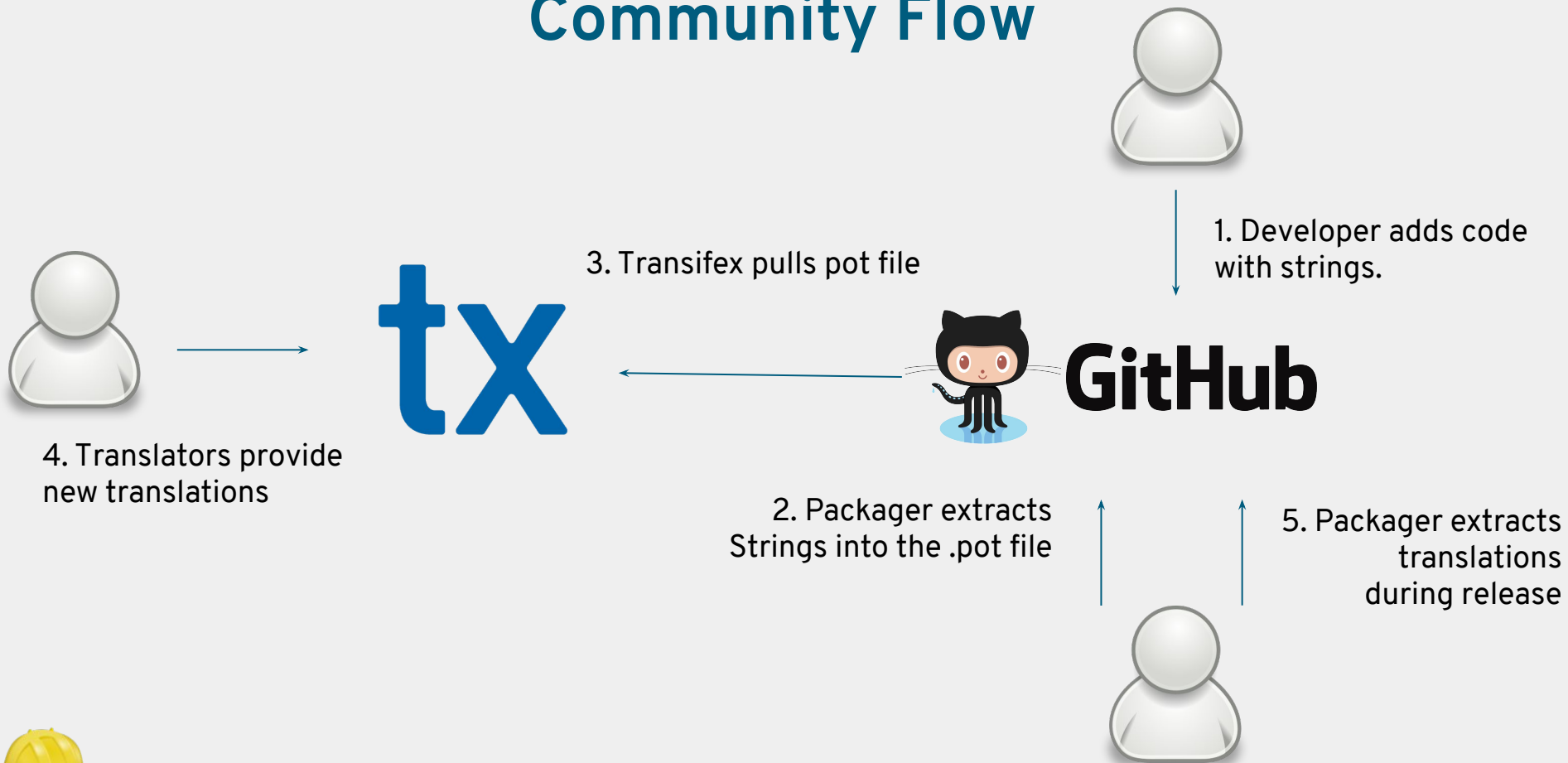


Upstream Translation Tool: Transifex

- 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



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

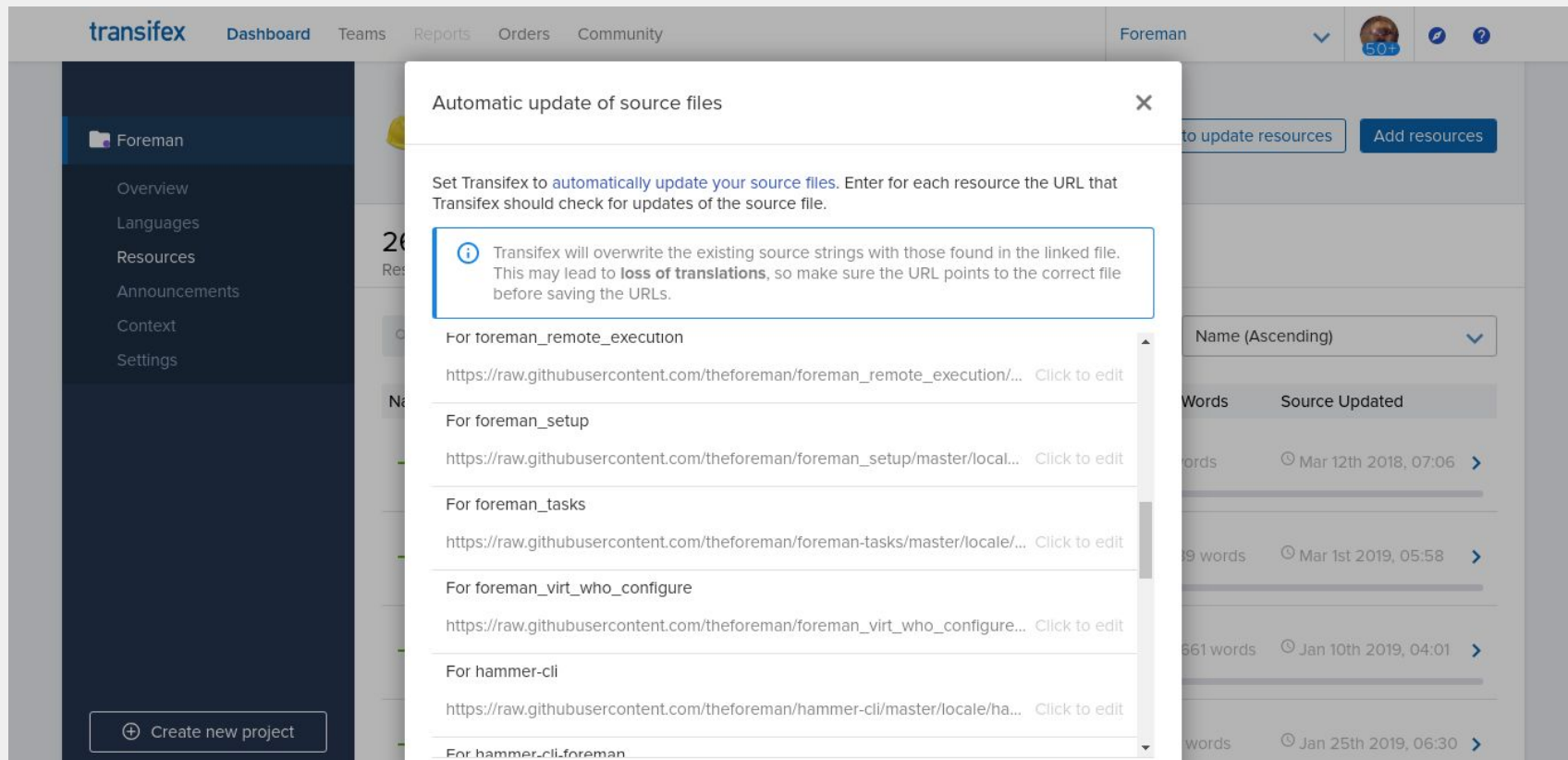


How it is done, and Issues

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: <code>make extract-strings</code> Or <code>rake plugin:gettext[plugin_name]</code>	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: <code>make tx-update</code>	Often forgotten, and since step 2 is not done there is likely not alot of new translations



Transifex Auto Update



The screenshot shows the Transifex dashboard for a user named 'Foreman'. A modal dialog titled 'Automatic update of source files' is open in the center. The dialog contains a warning message and a list of resources with their corresponding GitHub URLs for automatic updates.

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.

Warning: 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.

Resource	URL	Action
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/locale/...	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		

The background dashboard shows a sidebar with 'Foreman' selected, and a main area with a table of resources. The table has columns for 'Name (Ascending)', 'Words', and 'Source Updated'. The 'Source Updated' column shows dates and times, with a right arrow indicating more details.



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 committed!

# 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](https://projects.theforeman.org/projects/foreman/wiki/How_to_Create_a_Plugin#Extracting-strings)



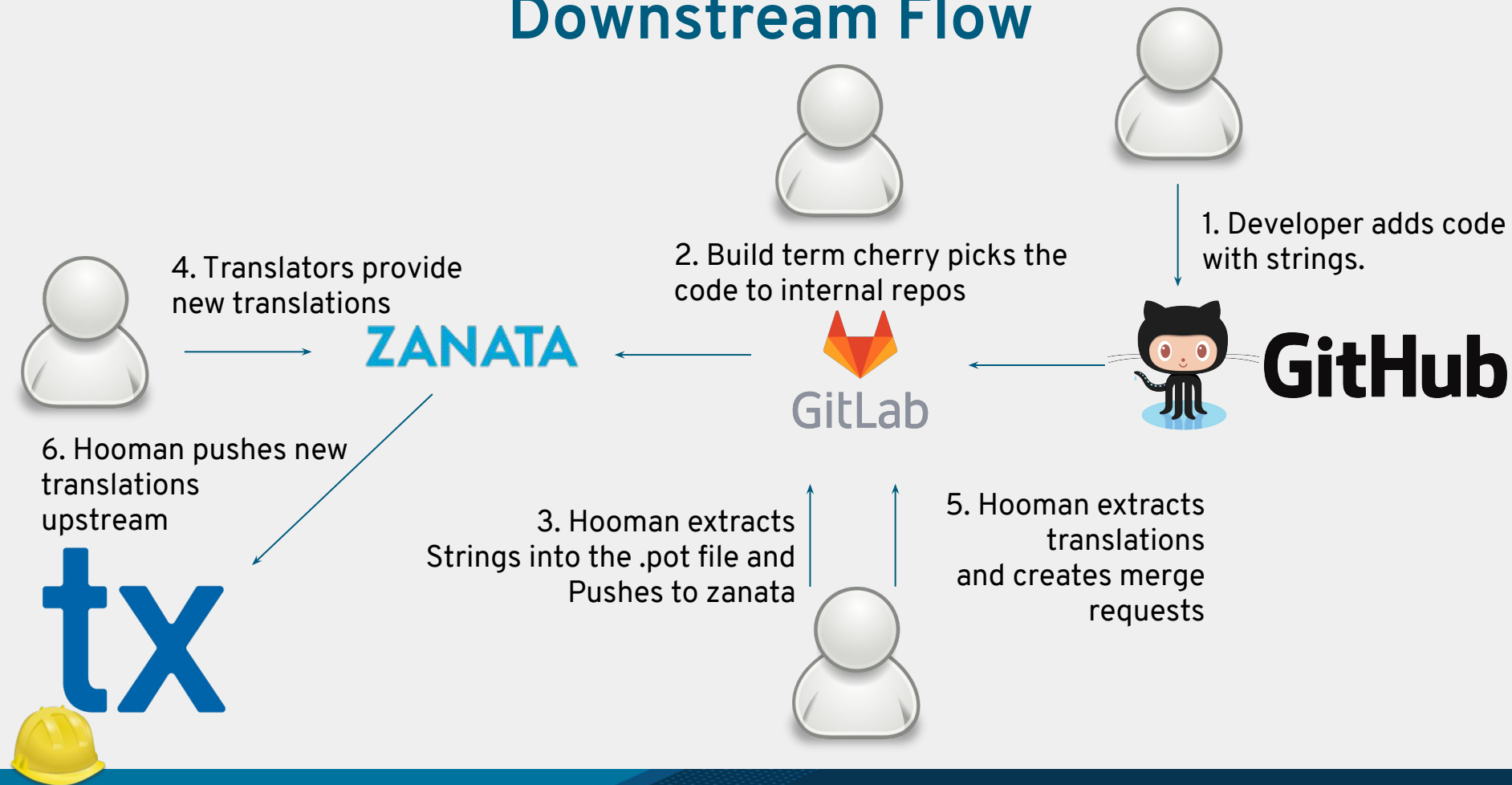
Downstream Translation Tool: Zanata

- 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
<code>load_all_into_transifex.sh</code>	Pull translations from zanata, overwrite in transifex
<code>load_new_into_transifex.sh</code>	Pull translations from zanata, do not overwrite in transifex
<code>push_source.sh</code> <code>push_trans.sh</code> <code>push_bastion_source.sh</code> <code>push_bastion_trans.sh</code>	From a good checkout, push either the strings or translations into zanata.
<code>pull_source.sh</code> <code>pull_trans.sh</code> <code>pull_bastion_source.sh</code> <code>pull_bastion_trans.sh</code>	From a good checkout, pull either the strings or translations from zanata.
<code>*/plugin_name</code>	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.

