

# Recent i18n Developments

Jens Petersen

i18n Software Engineering Team

Red Hat

Devconf 2017 Fedora track

i18n == Internationalization

# Agenda

## I18n developments

1. Unicode updates

2. Glibc locales subpackages

3. Langpacks with dnf

4. Emoji input with ibus

5. Typing Booster

6. Zanata clients

7. Future plans

8. Discussion

# Unicode updates

Mike Fabian

F22 Change [Glibc Unicode 7](#) (with Pravin Satpute)

F23 Change [Unicode 8.0](#)

F25 Change [Unicode 9.0](#)

- currently only Fedora glibc
  - Glibc upstream merge still pending
- also libicu, libunistring, unicode-ucd, glib2, fontconfig

Unicode 9 released on 21th June 2016

- adds 7,500 characters
- including six new scripts
- 72 new emoji characters

# Glibc locale sub-packaging

Mike Fabian and Carlos O'Donnell

F24 Change [Glibc locale subpackaging](#)

common subpackage split up:

- `glibc-all-langpacks`: `/usr/lib/locale/locale-archive` (103MB)
- `glibc-langpack-*`  
`glibc-langpack-en`: `/usr/lib/locale/en_*/LC_*`
- `glibc-locale-source`: `/usr/share/i18n/charmaps/*`  
`/usr/share/i18n/locales/*`
- `glibc-common`: `/usr/bin/*`, `C.utf8`, `/usr/share/locale/locale.alias`, etc

# Langpacks with RPM Weak Deps

Parag Nemade and Jan Silhan

F24 Change [Langpacks Installation With RPM Weak Dependencies](#)

- Replaces dnf-langpacks plugin
- Uses langpacks-\* metapackages and RPM Rich/Weak dependencies

Supplements: (base-core and langpacks-<lang>)

<https://fedoraproject.org/wiki/I18N/Langpacks/BasePackages>

# Input Methods

# Emoji input with ibus

Takao Fujiwara

F25 Change [IBus Emoji Typing](#)

- implemented in IBus XKB engines



# ibus typing booster

Mike Fabian

F25 Change [ibus-typing-booster multilingual support](#)

# Libpinyin

Peng Wu

Libpinyin enhancements: using open-gram to improve n-gram data

# Zanata Python Client

Sundeeep Anand

[zanata-python-client](#) 1.5

- Translation files mapping rules
- Many bugfixes and compatibility improvements
  - 'podir' projects handling
  - push and pull issues

# Zanata-js

Akira Tagoh

Zanata integration for Javascript projects

## [Zanata-js](#)

- Zanata client written in node

## [Grunt-zanata-js](#)

- Grunt task to perform operations to/from Zanata through zanata-js

# Future Plans

# Package Translation Statistics

Sundeep Anand

Get overview and trends for language translations across packages

To compare translations in:

- Downstream packages
- Upstream repos
- Translation repos

Useful data for developers, testers, and project managers

# Future plans

- Ibus-typing-booster: single multilingual Input Source
- Improved ibus emoji UI
- Colour emoji rendering
- i18nlint tool and best practices documentation
- Libpinyin sentence candidates
- Unicode 10

# Questions and discussion

i18n for:

- Modularity? Containers?
  - Atomic Workstation?
  - Flatpak - ibus?
  - Test automation?
- 
- Fedora i18n, g11n, l10n



# Thanks

- <https://fedoraproject.org/wiki/I18N>
- Freenode #fedora-i18n and #fedora-g11n
- [i18n@lists.fedoraproject.org](mailto:i18n@lists.fedoraproject.org)
- <https://pagure.io/i18n>

Slides: <https://petersen.fedorapeople.org/talks/Devconf-i18n-2017.pdf>

Contact: [petersen@redhat.com](mailto:petersen@redhat.com) ▪ irc/twitter: juhp