



# Fedora i18n

Flock 2017

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# i18n/l10n/g11n Track

- **Fedora i18n** (this session)
- Transtats (3:30pm)
- Fedora G11N (4pm)

# About us

- Jens Petersen
  - i18n Software Engineering Manager, Red Hat
  - Fedora i18n, Haskell, Packager Sponsor, Fedora Workstation WG
- Parag Nemade
  - Senior Software Engineer, i18n Software Engineering, RH
- Pravin Satpute
  - G11n Quality Engineering Manager, Red Hat

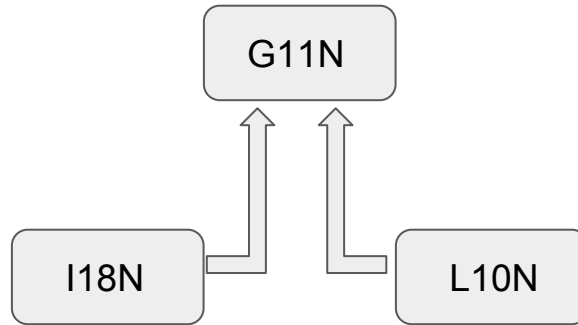
# I18n Agenda

- F24-F27 Review
- Langpacks auto-installation
- Input methods
- Fonts
- Transtats
- Modularity
- Fedora Editions
- QA and test automation
- Community involvement/events
- Brand

# Internationalization:

- helps to make your software work uniformly across multiple regions.
- includes adding i18n support in your code which allows UI strings to be translated (l10n).
- helps to set user locale settings such as date, number, currency, sorting, paper size.
- allows users to display and input text in their own preferred language.

# Globalization, Internationalization, and Localization



I18N is a part of G11N

# Recent Fedora i18n Changes

# F24 i18n Changes

- [Langpacks Installation With RPM Weak Dependencies](#)
- [Glibc locale subpackaging](#)



# F25 i18n Changes

- [IBus Emoji Typing](#)
- [Unicode 9.0](#)
- [ibus-typing-booster multilingual support](#)

# ibus Typing Booster

Suggestive text input

<https://mike-fabian.github.io/ibus-typing-booster/>

# F26 i18n Changes

- [libpinyin 2.0](#)
- [Fontconfig cache directory change](#)

# libpinyin-1.3



# libpinyin-2

打开(O) ▾



无标题文档 1

保存(S)



如果我随便输入呢

ru guo wo sui bian shu ru ne |

1 如果我随便输入呢 2 如果我随便输入讷 3 如果我随便输入呐 4 如果

I

# F27 i18n Changes

- [Chinese Serif Fonts](#)
- [libpinyin 2.1](#)
  
- Flatpak ibus support and fontconfig caches
- Emoji color rendering

# Chinese Serif font

┌ Chinese Serif Fonts:  
中文宋体

Chinese Sans Fonts:  
中文黑体

Future features and discussion



# How to install Langpacks for users?

After installing Workstation Live users want to have langpacks for Libreoffice etc automatically installed.

Where is do this:

- A. Initial-setup
- B. Gnome-initial-setup
- C. Gnome Control Center

??

# Current Fedora IMEs

- Japanese: `ibus-kkc`
- Simplified Chinese: `ibus-libpinyin`
- Traditional Chinese: `ibus-libzhuyin`
- Other Chinese: `ibus-table`
- Korean: `ibus-hangul`
- Other: `ibus-m17n`

Non-IME languages just use `xkeyboard-config`

# ibus Input Method framework

“Intelligent input bus”

<https://github.com/ibus>

# Input methods future

- Input method engines as a logical level above keyboard layouts
- Wayland input method protocol
- Flatpak ibus portal
- Improving the IM landscape

# Emoji rendering and input

- Fixes to cairo and pango to render color emoji correctly
- Input of emoji with gtk, ibus, ibus-typing-booster

# Glibc locales

- Mike Fabian working now along with Rafal Luzynski on upstream glibc locales maintenance
- Plans to sync gradually CLDR locale data to glibc

# Flatpak i18n

- ibus support - ibus portal
- Fontconfig cache path issue

# Fonts review

- Default Fonts
- Noto fonts
- Liberation fonts
- Fonts coverage
- Fonts quality



# Transtats

After this session Sundeep Anand will be presenting a talk on Transtats, a webapp for tracking translation status for packages in Fedora, upstream, etc.

- <http://transtats.org/>
- Hope to deploy to Fedora infrastructure during F27 cycle

# Modularity and i18n

What does modularity mean for Fedora i18n?

- Fonts
- Input methods
- Runtime
- ?

# Fedora Atomic and Atomic Workstation

- Locale handling
- Language support and langpacks

# Anaconda keyboard selection

Quite hard to find US layout with non-US layout set

# QE and Test automation

- Have to see broken system due to i18n?
  - Things break at system and also at application.
- Testing
  - Fonts
  - Rendering
  - Input method
  - I18n tools
- Test days has limitations
  - Not new test cases but change proposals are many.
  - Less participation
- Automation

# Fedora i18n Brand and Contributors

- Fedora i18n vs Fedora g11n
  
- More upstream
- More contributors?

# Long term ideas

- Dynamic locale switching
- Separation of translations (workflow and packaging)
- Multilingual configuration (fallback, fonts)

# Fedora i18n contacts

- #fedora-g11n
- Fedora i18n mailing list
- <https://fedoraproject.org/wiki/I18N>
- Biweekly meetings in #fedora-meeting @ Wed 00:00 UTC
- Bugzilla i18n keyword
- <https://pagure.io/i18n/issues>
  
- [petersen@redhat.com](mailto:petersen@redhat.com), [pnemade@redhat.com](mailto:pnemade@redhat.com), [psatpute@redhat.com](mailto:psatpute@redhat.com)

Thank you!