

Adding Unicode සිංහල to GNU/Linux: sinhala.linux.lk

Harshula Jayasuriya
<harshula at gmail dot com>

Benefits of GNU/Linux

- Source code available and modifiable
- Open standards and file formats
- Quick adopter of new technologies
- Strong support community

GNU/Linux development model

- GNU/Linux is an example of decentralised/distributed development
 - There is no central body for co-ordination
 - Need to co-ordinate with many project maintainers
 - Relies on international, accessible, open standards

Steps to include සිංහල support in GNU/Linux

- Infrastructure
 - Only one GNU/Linux සිංහල project initiative exists.
 - LKLUG (<http://www.lug.lk>) since 2003
- Translation
- Distribution

Infrastructure

- Renderers: ICU, Pango, QT
- Apps: Firefox, Open Office, Evolution, Thunderbird
- Window Managers: Gnome, KDE
- Input Methods: SCIM, XKB
- Issues
 - Ensure international standards are correct
 - Provide and justify patches

2006/08T7 Get approval by project maintainers

Translation

- Derive words
- Get approval by linguists

Distribution

- LKLUG provides online package repositories and source code
 - Latest changes available
- Companies (e.g. Red Hat) take our source code & patches and include in their distributions
 - This is a mutually beneficial process

Current Status

- SLS1134:2004 support in one renderer, near complete support in two other renderers
- Wijesekera, de facto phonetic and transliteration input methods available
- LKLUG Unicode සිංහල font
- No progress with translation projects
- Online Distribution mechanism for the latest changes

Areas requiring immediate attention

- Open Office & ICU renderer
- Standardise phonetic and transliteration input methods
- Translation projects
- Education about Unicode རི་པུལ

Other areas requiring attention

- Improve quality of සිංහල fonts at small sizes
- Extend GNU/Linux infrastructure to better suit our needs
- Address the needs of niche users. e.g. publishing industry, databases
- To keep updated, please visit:
<http://sinhala.linux.lk>