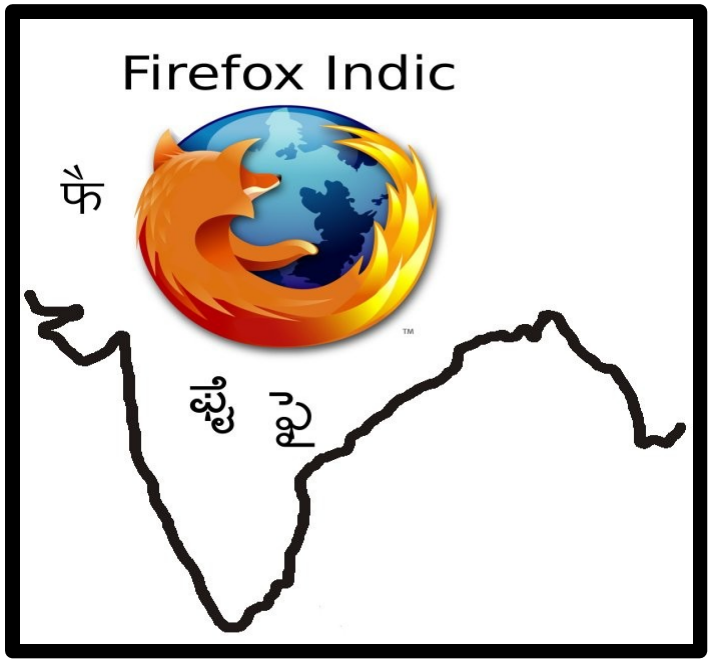
Firefox Indic Localization: Tips & Techniques

Presentation to BarcampBangalore7: 2008-09-14



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Copyleft: GNU FDL

Agenda

- Intro to Firefox
- Intro to Firefox Indic
- Contributing to Firefox
  - Learn Firefox Bugzilla
  - Learn Indic input method & display
  - Learn Config Management tool CVS
  - Learn how to translate/ update
  - Learn IRC Chat
  - Learn Wiki
  - Learn Mailing list
  - Learn Firefox localization process
  - Learn to maintain Momentum

Firefox

- An Open source web browser managed by Mozilla foundation a non-profit, public benefit corporation
- Projected Statistics (3.0.2)
  - No of Languages: 57
  - No of countries; 161
  - % of users: 20%; 200 million

Firefox Indic

- Version 3.0
  - Gujarati
  - Punjabi
- Version 3.0.2 (16 Sep)
  - Bengali
  - Hindi
  - Telugu
  - Kannada
  - Marathi

Bugzilla -Key fields

Bug 377126 - Intra-word spaces seen in pages containing telugu text.

Status: UNCONFIRMED

Product: Core
Component: GFX: Thebes
Version: unspecified
Platform: PC Linux

Importance: -- normal (vote)
Target Milestone: ---
Assigned To: Nobody; OK to take it and work on it
QA Contact: thebes@gfx.bugs

URL: http://eenadu.net
Whiteboard:
Keywords:

Depends on:
Blocks:

Show dependency tree / graph

Commit

Reported: 2007-04-11 02:05 PDT by Naresh
Modified: 2008-09-06 10:34 PDT (History)
CC List: 3 users including you (edit)

abc1@xyz.com
abc2@pqr.com
abc3@lmn.com

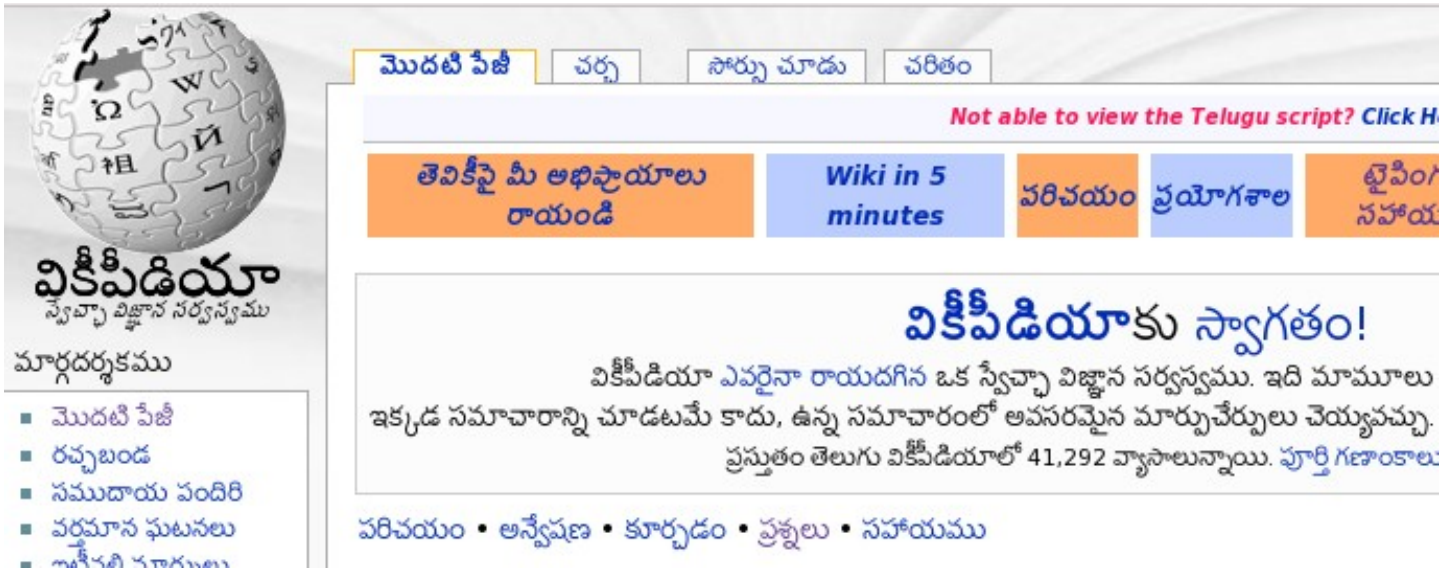
Flags:

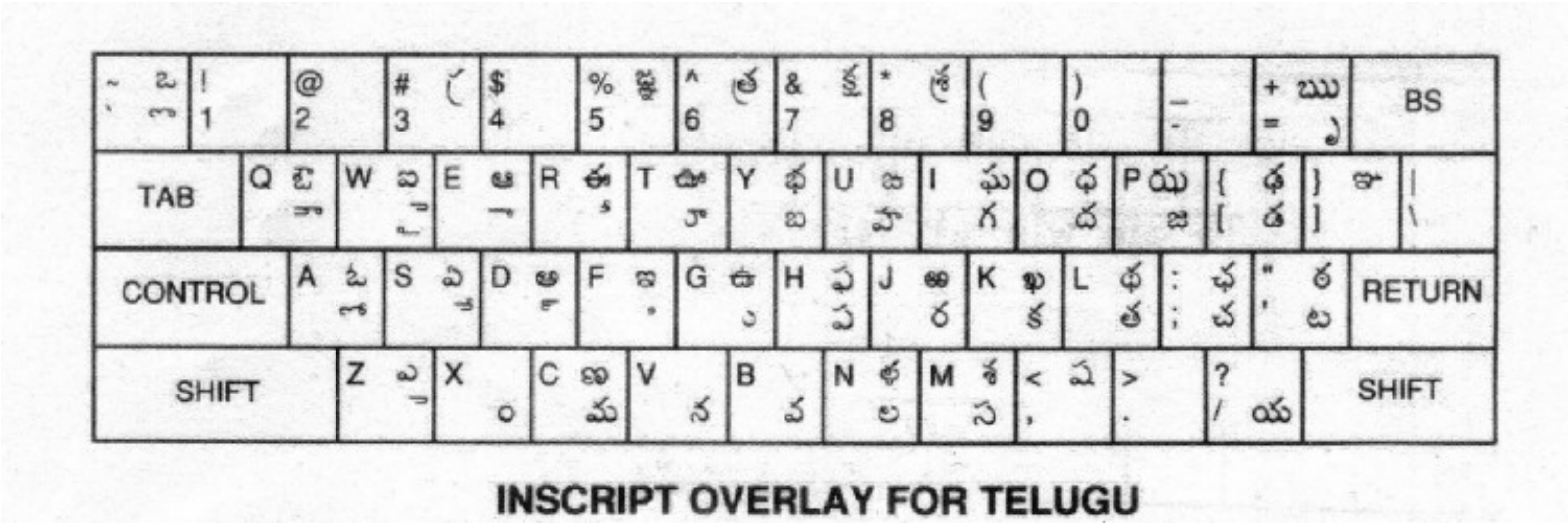
blocking1.8.0.15
wanted1.8.0.x
blocking1.8.1.17
blocking1.8.1.18
wanted1.8.1.x
wanted-next

Bugzilla -Tips

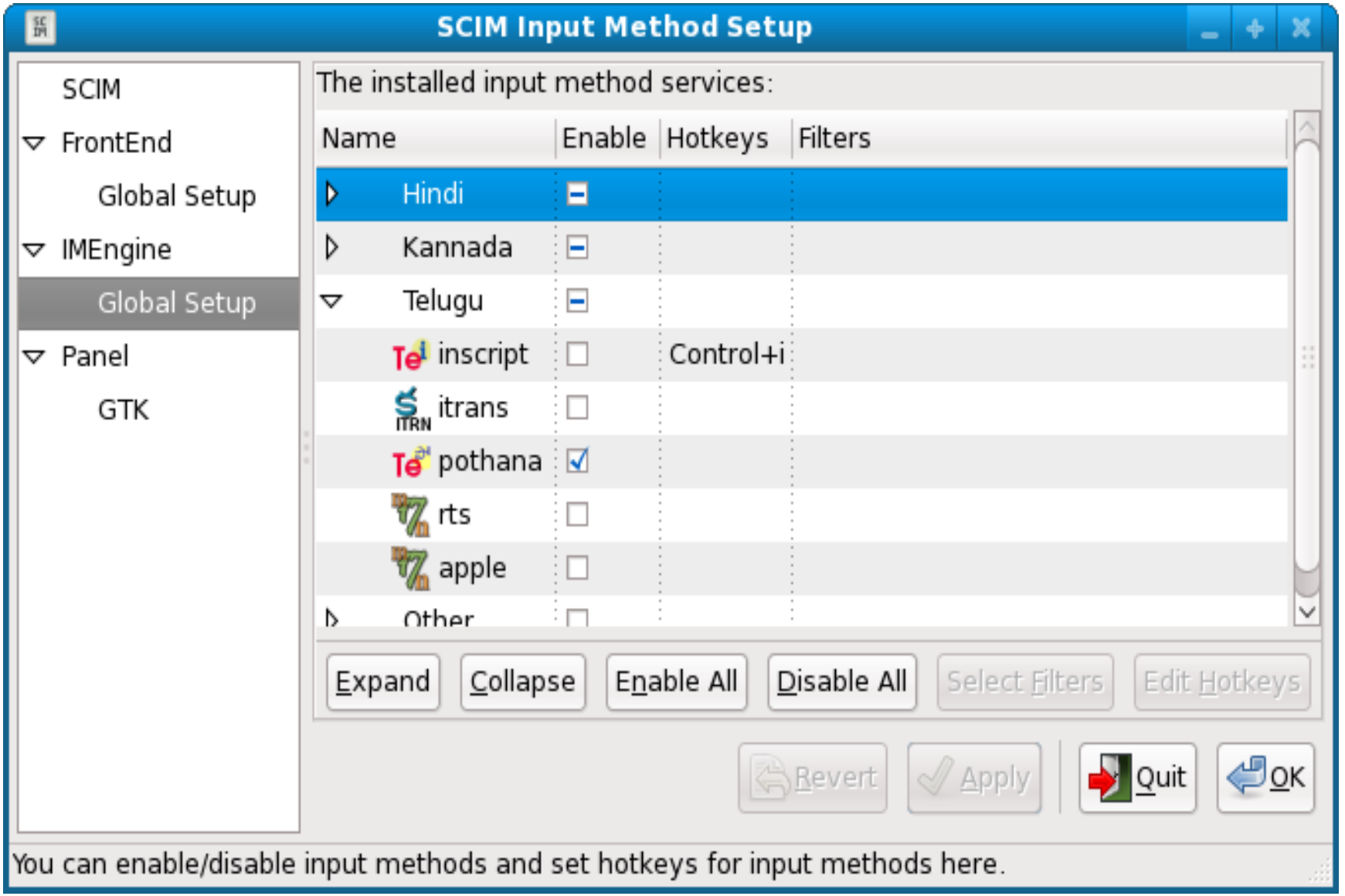
- URL:https://bugzilla.mozilla.org/
- Tips
  - Include two letter language code (like [te] for Telugu) in square brackets as first element in Summary field
  - Always enclose screen snapshots highlighting problem, when submitting indic font/display bugs
  - You can add attachment with comments
  - You can mark previous attachments as deleted and add fresh attachments

Telugu Inscript Keyboard Overlay & Display





SCIM Setup


SCIM Input Method Setup
SCIM
FrontEnd
Global Setup
IMEngine
Global Setup
Panel
GTK
The installed input method services:
Name
Enable
Hotkeys
Filters
Hindi
Kannada
Telugu
inscript
Control+i
itrans
pothana
rts
apple
Other
Expand
Collapse
Enable All
Disable All
Select Filters
Edit Hotkeys
Revert
Apply
Quit
OK
You can enable/disable input methods and set hotkeys for input methods here.

Indic Input method Tips

- Visit wikipedia for help on configuring your system for indic input and display http://en.wikipedia.org/wiki/Wikipedia:Enabling_complex_text_support_for_Indic_scripts
- On Linux, setup SCIM with hotkeys for toggling SCIM and stepping through selected indic input keymaps
- On Windows, setup hotkeys to toggle between English and selected alternate keymaps
- Be aware of lack of rendering standards of ZWJ and ZWNJ on Windows and Linux. Use vowel endings of words and ZWNJ where no space is required between two word fragments

Config Management

- Firefox used CVS till 3.0 version
- Setup CM tool
  - Linux: Built in
  - Windows: Tortoise CVS client tool
- Instructions for anonymous download as part of language pack creation at http://developer.mozilla.org/en/docs/Creating_en-X-dude
- Commit changes
  - Make a diff file and send to the maintainer or raise a bug for patch submission

CVS account

- Raise a bug requesting CVS account. Select Component as “Account request-CVS”
- Fill up the Aggrement form http://mozilla.org/hacking/form.html and mail it or attach to the issue.
- Get someone to vouch for you. If you are the first person for your language, the l10n-driver will vouch for you
- Get l10n-driver to authorize you
- Submit your SSH public key file on the bug
- You will get an email with your account details
- Example https://bugzilla.mozilla.org/show_bug.cgi?id=427984

IRC

- Internet Relay Chat is the best way to get help
- Setup client
  - Linux: Chatzilla
  - Windows: Chatzilla or alternatives
- Basic commands
  - Attach to a server: /attach irc.mozilla.org
  - Join a channel: /join #l10n

Wiki

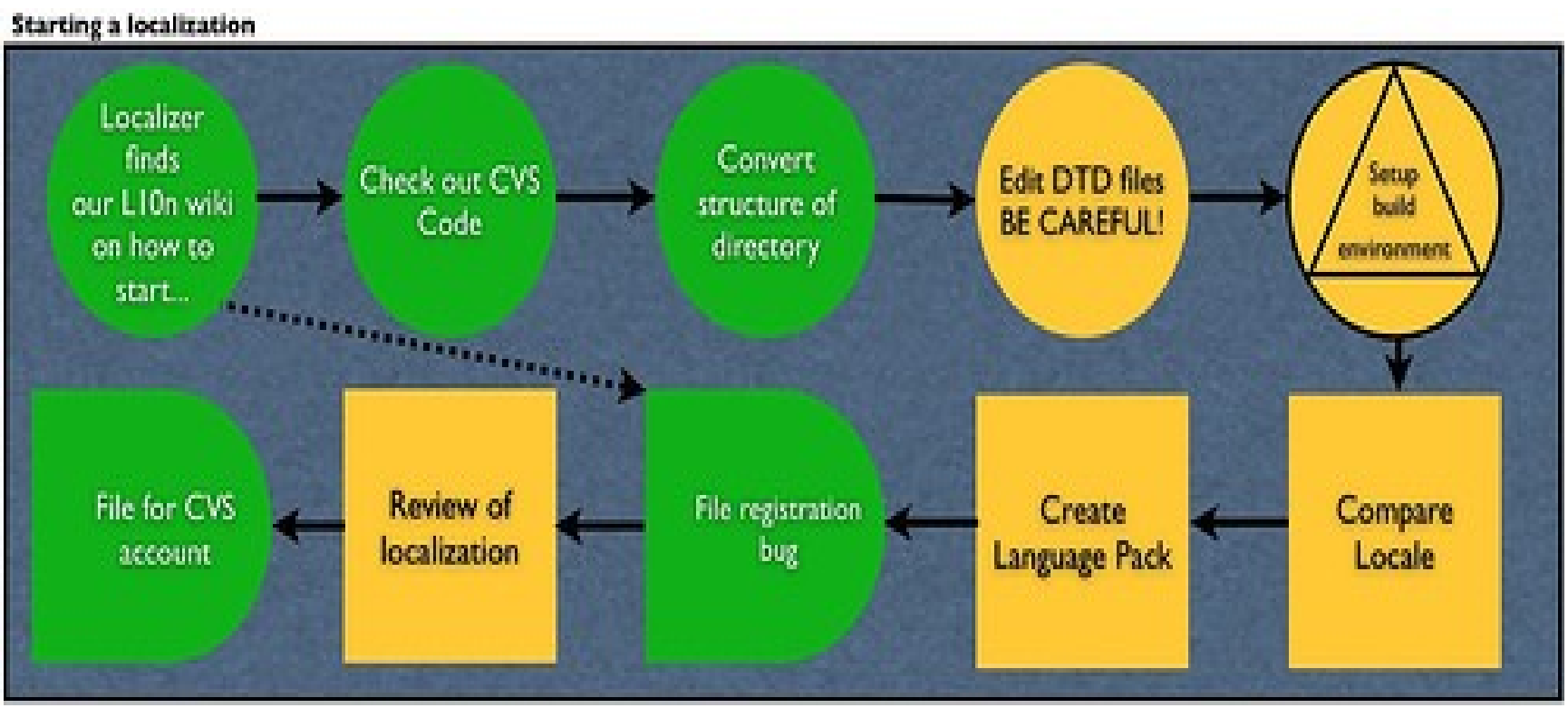
- Wiki is a very good collaboration tool
- Get account on http://wiki.mozilla.org or on http://mozdev.org/
- Create a page (Ensure you use English text for page/subpages as referring to these will be easier than indic text page titles)
- Create subpages by typing <URL for mainpage>/<subpagename>
- Ensure parent links by using [[parent page]]

Mailing Lists

- Setup one on any host like Yahoo or Google
- Check whether an existing list covers the scope of your work before creating new one
- Promote it in language community like blogs wikipedia, indlinux,indianoss
- Keep the list active by regular updates
- Set approval mechanism for admitting members and approving initial emails to prevent spam

Firefox localization Proces

- https://wiki.mozilla.org/L10n:Becoming_an_Official_Localization

- 

Maintaining Momentum

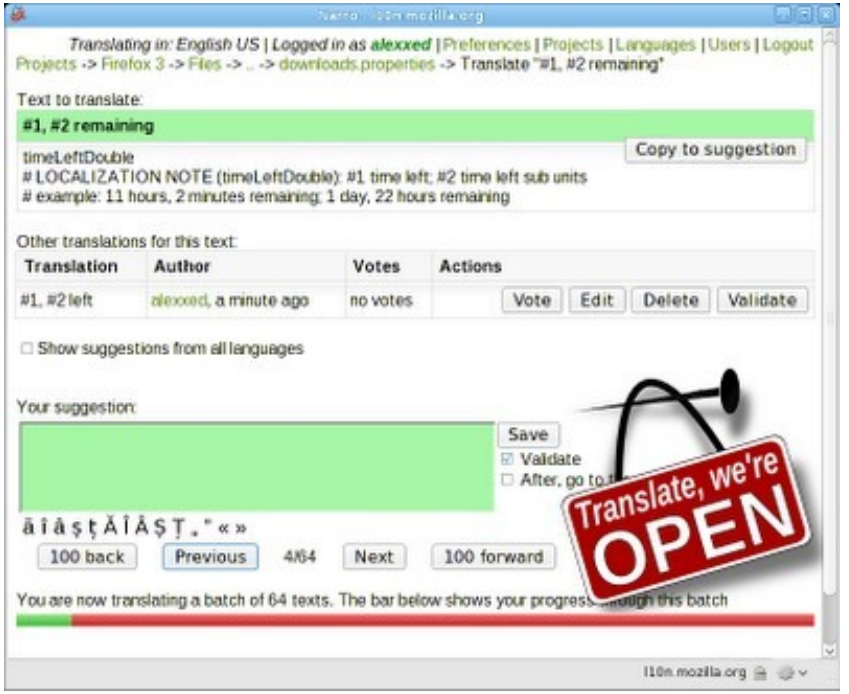
- Keep track of happenings on Mozilla/Firefox
  - http://planet.mozilla.org/
- Participate in community events and share the updates
  - Foss.in
  - Barcampbangalore.org

Translation Tips

- Translation Complexity
  - keys: 842
  - # of Strings: 5132
- Specific issues with zwj, zwnj rendering of foreign words into indic languages: Be aware of differences between linux and Windows
- Use BlueFish or other HTML editor to replace a string that appears in multiple files.
- Watch out for replace errors, when dealing with partial indic strings

Future directions

- Narro: Web hosted multiuser translation tool : https://wiki.mozilla.org/Narro
- Frequently Used Entries for localization (FUEL) https://fedorahosted.org/fuel



Appendix

Telugu Firefox URLs

- Wiki: http://wiki.mozilla.org/Firefox-te (Telugu & English)
- Mailing list: firefox_te@googlegroups.com
  - http://groups.google.co.in/group/firefox_te
- Blogs
  - http://teluginux.blogspot.com
  - http://tech4society.blogspot.com (in English)