Setting and Using Thai on Linux

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Text Console

- Console-tool root dir
  - RedHat: **`/lib/kbd`**
  - Mandrake: **`/usr/lib/kbd`**
  - Debian: **`/usr/share`**
- Keyboard
  - Put **`th.kmap`** in **`$LCTROOT/keymaps/i386/qwerty`**
    - **`loadkeys th`**
- Console font
  - Put **`*.psf`** in **`$LCTROOT/consolefonts`**
  - Call

    `consolechars -m cp437 -f <font>`

    or

    `setfont -m cp437 <font>`
- Packages
  - console-tools : loadkeys, consolechars, setfont
  - console-data : console fonts, keymaps
- Resource
  - ftp://ftp.nectec.or.th/pub/thailinux/cvs/software/thai-console-data

X Window : Input Method

- X Keyboard map (XKB)
  - Immediate: **`setxkbmap th`**
  - Permanent: add to **`/etc/X11/XF86Config-4`** or

```
/etc/X11/XF86Config:
    Section "InputDevice"
       Option "XkbLayout" "th"
    EndSection
```

  - Language switching:
    - Alt-LeftShift for English
    - Alt-RightShift for Thai
- X Input Method (XIM)
  - Set locale to th_TH: **`export LANG=th_TH`**
  - Locale modifiers: **`export XMODIFIERS="@im=<mode>"`**, where
    - <mode>=Passthrough : no check (WTT level 0)
    - <mode>=BasicCheck : basic check (WTT level 1) [default]
    - <mode>=Strict : strict check (WTT level 2)

X Window : Fonts

- Preparing font path
  - Bitmap font

```
cd /your/font/path
mkfontdir
```

  - Type1 font

```
cd /your/font/path
type1inst
mkfontdir
```

  - TrueType font

```
cd /your/font/path
ttmkfdir > fonts.scale
mkfontdir -e /usr/X11R6/lib/X11/fonts/encodings
```

X Window : Fonts

- Adding font path
  - Immediate: **`xset fp+ ‘pwd‘; xset fp rehash`**
  - Permanent:
    - Without font server: add to **`/etc/X11/XF86Config[-4]`**

```
Section "Files"
    ...
    FontPath  "/your/font/path1"
    FontPath  "/your/font/path2"
EndSection
```

  - With font server:
    - Add to **`/etc/X11/fs/config`**

```
catalogue=/your/font/path1,/your/font/path2
```

      and restart X font server

```
/etc/rc.d/init.d/xfs restart
```

    - Or use **`chkfontpath`** (RedHat & Mandrake only)

```
chkfontpath --remove ‘pwd‘
chkfontpath --add ‘pwd‘
```

X Terminal : xiterm+thai

- Normal invoking: **`txiterm`** or **`xiterm`**
- Language switching: Ctrl-Space or normal XKB switching
- Note: switching with Ctrl-Space wouldn't activate XIM
- Thai options:
  - **`-tspace <n>`** : n spaces to trigger compensation
  - **`-tkb <mode>`** : Thai keyboard map; **`mode = tis|ket -tim <mode>`** : Thai input method; **`mode = BasicCheck|Strict|Passthrough`**
- X resources: (**`~/.Xresources`** or **`~/.Xdefaults`**)
  - Format: **`xiterm*<resource>: <value>`**
  - Resources:
    - **`thai_space: <n>`** : n spaces to trigger compensation
    - **`thai_keyboard: <mode>`** : **`tis|ket`**
    - **`thai_im: <mode>`** : **`BasicCheck|Strict|Passthrough`**
    - **`cursorColor: <color>`** : English cursor color
    - **`cursorColorThai: <color>`** : Thai cursor color

GNOME

- Keyboard
  - Same as X
- Fonts
  - GNOME Control Center -> Desktop -> Theme Selector
    - User Font -> Use custom font, select your font
  - Known problem: font won't reflect setting
    - Remove or rename **`/etc/gtk/gtkrc.th`** and **`~/.gtkrc.th`**

KDE

- Keyboard
  - Right-click at keyboard language icon in kpanel, choose "Configure..."
  - Select the languages and language switcher you like
- Fonts
  - KDE Control Center -> Look & Feel -> Font

LaTeX

- Preamble
  - **`\usepackage[thai]{babel}`**
- Word segmentation
  - **`swath -f latex < yourdoc.tex > yourdoc.ttex`**
- Compiling
  - **`latex yourdoc.ttex`**
- Screen viewing
  - **`xdvi yourdoc.dvi`**
- Postscript generation
  - **`dvips -o yourdoc.ps yourdoc.dvi`**
- PDF generation
  - **`pdflatex yourdoc.ttex`**

LaTeX : Example Document

```
\documentclass[a4paper]{article}
\usepackage[thai]{babel}

\begin{document}
 -K˚·Ñ˚·Õ/ˆÑ”
\end{document}
```

LyX : LaTeX Editor

- Keyboard
  - Edit -> Preferences -> Lang Opts tab -> Language tab
    - Check on the Keyboard map
    - Set 1st keymap to null
    - Set 2nd keymap to **`thai-kedmanee`**
  - Quit and add to **`~/.lyx/preference :`**

    `\bind "C-backslash" "keymap-toggle"`

    This makes Ctrl-Backslash the language toggle key
- Fonts
  - Edit -> Preferences -> Look & Feel tab -> Screen Fonts tab
    - Select Thai fonts for Roman, Sans Serif, Typewriter
    - Encoding should be **`tis620-0`**

(Thanks to K.Chanop for the LyX Howto)

Abiword

- Keyboard
  - Upgrade to version 0.9.6
  - Don’t be amazed by the version number. The patch is not checked-in in the current version yet. :-)
  - We’ll try to make the patched version available in TLE 4.1 soon
  - **`export LANG=th_TH`** before calling
- Fonts
  - Create **`TIS620`** subdir under **`$ABISUITE_HOME/fonts`** directory
  - **`$ABISUITE_HOME`** can be found by
    `grep "ABISUITE_HOME=" ‘which abiword‘`
  - Copy or make symlink of TrueType fonts into the **`TIS620`** subdir
  - In the **`$ABISUITE_HOME/fonts/TIS620`** subdir, run
    `ttfadmin.sh ‘pwd‘ TIS-620`
  - Do not shoot me if you get some errors. You know it’s not the version I mentioned. :-)
  - Make the fonts accessible to X font server (refer to the X Window font setup section)

Thank you

This slide will be downloadable soon at
ftp://ftp.nectec.or.th/pub/thailinux/cvs/docs/thai-howto/