

Sample Script Implementations

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Introduction

This paper describes the two sample script implementations which are being provided to UNESCO. These include an implementation for Myanmar and a pan-African implementation (a single implementation for many Roman writing systems across Africa).

Included in each package are fonts, keyboards and sample text files. The font files also contain the Graphite source. The keyboard files include the Keyman source. The sample text files are in the form of WorldPad files, screenshots and html.

Myanmar

Font related



Myanmar font, keyboard and sample texts
Martin Hosken, 2003-06-27
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The following files are part of this package (under the \fonts directory):

- `padauk.ttf` – original regular font

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- `padaukbold.ttf` – original bold font
- `padaukg.ttf` – Graphite-enabled regular font
- `padaukgbold.ttf` – Graphite-enabled bold font
- `padauk.gdl` – the font-specific GDL and main GDL file for `padauk.ttf`
- `padaukbold.gdl` – the font-specific GDL and the main GDL file for `padaukbold.ttf`
- `myanmar.html` – Unicode Myanmar description of the GDL
- `myanmar.gdl` – This file contains the font independent GDL for rendering Myanmar from Unicode. It is designed to be used in conjunction with and included by the font-specific GDL code that is created automatically from the `.ttf` font and `.xml` attachment point database.

The GDL files are provided primarily as a sample for those who wish to learn to write GDL. However, these are all the files you need for [recreating the Padauk Graphite enabled Myanmar font](#).

Keyboard

The following files are part of this package (under the `\Keyboards` directory):

- `Layout_Uni.pdf` – a description of the keyboard layout
- `MyanmarU5.kmx` – the compiled keyboard file
- `MyanmarU5.kmn` – the source file for the Myanmar keyboard
- `myankey.bmp` – the bitmap file needed for compiling the source keyboard files

File names for legacy (non-Unicode) keyboard:

- `layout.pdf` – a description of the keyboard layout
- `Myanmar5.kmx` – the compiled keyboard file
- `Myanmar5.kmn` – the source file for the Myanmar keyboard

These keyboards were developed for Keyman 5.0 or later. With this package you should have the source of this keyboards and can easily make modifications, or you may choose to look at the source to [learn more about creating Keyman keyboards](#).

Sample data in the Myanmar script for demonstration purposes

The following files are part of this package (under the `\Sample Texts` directory):

- `Myanmar_health.wpx` – WorldPad file which can be used to show Graphite rendering in WorldPad
- `Myanmar_health.htm` – HTML file which can be used to show Graphite rendering in a Graphite-enabled browser such as Mozilla
- `Myanmar_health.png` – This is a screenshot from the WorldPad file showing correct rendering of the Myanmar text
- `Myanmar_health_word.png` – This is a screenshot from the same text, but in Microsoft Word, showing incorrect rendering of the Myanmar text and lack of line breaking
- `Myanmar_health.pdf` – This is a pdf of the Myanmar text as it should appear as well as an English translation of that text.

- `health_eng.txt` – This is a text file of the English translation of the Myanmar text

Africa

Font related



Doulos SIL Sample font, keyboards and sample texts

NRSI team, 2003-06-27

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The following files are part of this package (under the `\fonts` directory):

- `sildlrg.gdl` – GDL source file
 - `features.gdh` – a gdl file that defines font features which allow for variant glyphs to be displayed (called by `sildlrg.gdl`).
 - `main.gdh` – a gdl file that defines the main behavior of the glyphs (called by `sildlrg.gdl`).
 - `pitches.gdh` – a gdl file that handles tone marks (is that the right term?) (called by `sildlrg.gdl`).
 - `stddef.gdh` – a gdl file that defines standard constants used by many GDL files (called by `sildlrg.gdl`).
 - `viet.gdh` – a gdl file that supports an alternate way of stacking diacritics (Vietnamese style) (called by `sildlrg.gdl`).
- `tmpl.ttf` – original font
- `sildlrg.ttf` – Graphite enabled font (with OpenType support as well)

These are all the files you need for [recreating a Graphite enabled Roman font](#).

Keyboard

Kenya

The following files are part of this package (under the `\Keyboards\Kenya` directory):

- `Kenya Unicode Keyboarding System.pdf` – a description of the keyboard layout
- `KenyaU.kmx` – the compiled keyboard file for the Kenya keyboard
- `KenyaU.kmn` – the source file for the Kenya keyboard
- `Kenya.bmp` – the bitmap file needed for compiling the source keyboard file

With this package you should have the source of this keyboard and can easily make modifications, or you may choose to look at the source to [learn more about creating Keyman keyboards](#).

Pan-Africa

With this package you should have the source of this keyboard and can easily make modifications, or you may choose to look at the source to learn more about creating Keyman keyboards.

The following files are part of this package (under the `\Keyboards\PanAfrica` directory):

using [deadkeys](#)¹

- `SIL Unicode Keyboard Chart for Africa using deadkeys.pdf` – a description of the keyboard layout
- `AfricaDeadKey.kmx` – the compiled keyboard file for the pan-Africa keyboard
- `AfricaDeadKey.kmn` – the source file for the pan-Africa keyboard
- `AFR.bmp` – the bitmap file needed for compiling the source keyboard file

using [deadkeys](#)² and shift keys (for US keyboards only)

- `SIL Unicode Keyboard Chart for Africa using shiftkeys.pdf` – a description of the keyboard layout
- `AfricaUS.kmx` – the compiled keyboard file for the pan-Africa keyboard
- `AfricaUS.kmn` – the source file for the pan-Africa keyboard
- `AFR.bmp` – the bitmap file needed for compiling the source keyboard file

Sample data in the pan-Africa font for demonstration purposes

Web files

The following files are included in the package under the `\Web files` directory:

- `Pokomo_4friends.htm` – This is a “Shell” book which was produced for the Pokomo people of Kenya. Shell books are designed to be easily converted for use in different languages. The format (“shell”) is already there, just the text has to be changed. This book is a Health book teaching about HIV/AIDS. The drawings in the book were used by permission from UNICEF Uganda. The Pokomo use no special characters in their alphabet, but they do have two diacritics which appear below some of letters. When used in a non-Graphite enabled browser the position of these diacritics is not accurate.
- `Ife book - Tsoko.htm` – This is a “Shell” book which was produced for the Ife people of Togo and Benin. Ife is spoken by approximately 155,000 spanning both countries. The book is about “Onyadon farms without getting into debt.” The Ife use many diacritics, including diacritics on top of diacritics. When viewed in a non-Graphite enabled browser the position of these diacritics is not accurate.
- `ShellBook.css` – a Cascading Style Sheet that is called by the `.htm` file for purposes of display formatting.

All graphics for the above files are included in the `\Web files\graphics` directory.

These files were not produced with WorldPad. Because they included graphics, which are not yet implemented in WorldPad, they were created by hand.

WorldPad files

The following files are included in the package under the `\Sample Texts` directory:

- `Pokomo_4friends.wpx` – This is a selection of the file `Pokomo_4friends.htm`. It was created in WorldPad.

¹ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=Glossary#deadkey

² http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=Glossary#deadkey

- `Ife book - Tsoko.wpx` – This is a selection of the file `Ife book - Tsoko.htm`. It was created in WorldPad.
- `Pokomo_4friends.htm` – This file was produced by using WorldPad's **Save As** XHTML feature, which uses an XSL transformation to convert WorldPad's proprietary XML to XHTML.
- `Ife book - Tsoko.htm` – This file was produced by using WorldPad's **Save As** XHTML feature, which uses an XSL transformation to convert WorldPad's proprietary XML to XHTML.

Screenshots

The following files are included in the package under the `\Sample Texts` directory:

- `Pokomo_4friends.png` – This is a screenshot from the WorldPad file (`Pokomo_4friends.wpx`) for you to see what the file should look like on your computer in WorldPad.
- `Ife book - Tsoko.png` – This is a screenshot from the WorldPad file (`Ife book - Tsoko.wpx`) for you to see what the file should look like on your computer in WorldPad.
- `Ife book - Tsoko_DOC.png` – This is a screenshot from the same text which was imported into Microsoft Word. You can see that the rendering is incorrect. Multiple diacritics clash with each other. Diacritics on uppercase characters do not even appear.

For Developers: Creating your own Graphite-enabled font

This is an overview of how to create your own font. The [Graphite](#)³ website gives more detailed information.

1. Download and install the [Graphite](#)⁴ compiler and the [WorldPad](#)⁵ application which will be used to test your font. The WorldPad package includes the Graphite rendering engine.
2. Locate the font containing the glyphs for your writing system. You will need a font whose license allows you to modify it. It may be helpful to make some initial modification to the font, although this is rarely absolutely necessary. Such modifications might include adding attachment points to the glyph curves, or assigning postscript names to the glyphs. In the case of Myanmar we use the “original” regular and bold Padauk font to create the “Graphite-enabled” regular and bold Padauk font.
3. Write a program using the [Graphite Description Language](#)⁶ (GDL), describing the smart behavior you want in your font. In this instance, the GDL is provided for you.
4. Compile the GDL program and the font together, using the Graphite compiler. The output is the Graphite-enabled version of the font. (The [Graphite documentation](#)⁷ describes this process.)
5. Test the font using WorldPad. You will also need to use the appropriate keyboard to input your data. Fix any bugs in your GDL program and recompile.

³ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=RenderingGraphite

⁴ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=GraphiteCompilerDownload

⁵ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=WorldPadDownload

⁶ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=CatGraphite#GDLDownload

⁷ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=CatGraphite#document

Creating your own keyboard in Keyman

Keyman may be downloaded from: <http://www.tavultesoft.com>.

For complete instructions on keyboard installation and usage, read the section on [Keyman keyboards](#)⁸ in ["Keyboard Installation and Use"](#)⁹.

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⁸ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=KeyboardInstallationAndUse#keyman

⁹ http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=KeyboardInstallationAndUse