What flavour is it?

A gentle introduction to Albatross

Island of T_EX

Version 0.3.0 - January 13, 2021

1 Introduction

	Monty Python
Albatross!	
Albatross! A	lbatross!

Albatross is a command line tool for finding fonts that contain a given Unicode glyph. It relies on Fontconfig, a library for configuring and customizing font access. The tool is written in Kotlin and requires a Java virtual machine to run.

2 Requirements

Two	choc-ices please.
	Monty Python

Albatross has two hard requirements: a Java virtual machine (at least version 8.0, from any vendor) and the fc-list tool provided by the Fontconfig library, available in the system path. Linux and MacOS are known to have this library. For Windows, note that the TEX Live distribution contains Fontconfig tools. It is also highly recommended to use a terminal with Unicode support, as Albatross will try to render the given glyphs.

3 Basic use

I haven't got choc-ices. I only got the albatross. Albatross!

Monty Python

The tool is a typical command line application, so we need to invoke it by typing albatross in the terminal:

```
Usage: albatross [OPTIONS] glyphs...
Options:
  -s, --show-styles
                                    Show available font styles
                                    Show a detailed font list
  -d, --detailed
  -a, --ansi-level [n|a16|a256|tc]
                                    Set the default ANSI level
  -b, --border-style [1|2|3|4|5|6]
                                    Set the border style
  -o, --or
                                    Look for each glyph separately
  -V, --version
                                    Show the version and exit
  -h, --help
                                    Show this message and exit
```

Provided that Albatross is properly available in the underlying operating system, we will get the help message listing all the available options and the tool usage.

3.1 Glyphs

What flavour is it?
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Albatross takes a list of glyphs, separated by spaces, as input. Two formats are supported by the command line tool:

- The glyph itself, e.g, & (Eszett). Internally, the tool will convert it to the corresponding Unicode code point.

```
$ albatross ß
```

 The glyph as a Unicode code point in the hexadecimal notation, e.g, 0xDF. The 0x prefix is mandatory.

```
$ albatross 0xDF
```

Note that the tool takes the value as case insensitive, e.g, 0xDF is equal to 0xdf (or any case combination thereof).

Formats can be used interchangeably.

When a list of glyphs is provided, the tool will take a conjunctive approach and look for fonts that contain all elements in such list (default behaviour). Use the -o flag (or --or for the long flag) to look for each glyph separately. For instance:

- Look for fonts that contain both a and b:

```
$ albatross a b
```

- Look for fonts that contain a and fonts that contain b, separately:

```
$ albatross --or a b
```

3.2 Output

It's a bird, innit? It's a bloody sea bird... it's not any bloody flavour.
Albatross!

Monty Python

Albatross prints the results as a table. The default behaviour is to just display the font names, e.g,

Unicode code point DF mapping to ß

 Font name	
3270Medium Nerd Font	
3270Medium Nerd Font Mono	

Zilla Slab,Zilla Slab Medium

Zilla Slab,Zilla Slab SemiBold

There is a -s option (or --show-styles for the long option) that includes the styles available for each font, e.g,

Unicode code point DF mapping to $\ensuremath{\mbox{\ensuremath{\mbox{\footnotesize B}}}}$

Font name	Available styles
3270Medium Nerd Font	Medium
3270Medium Nerd Font Mono	Medium
Zilla Slab,Zilla Slab Medium	 Medium Italic, Italic, Medium, Regular
Zilla Slab,Zilla Slab SemiBold	SemiBold, Regular, SemiBold Italic, Italic

For even more details, including the font type and paths, there is the -d option (or --detailed for the long option), e.g,

Unicode code point DF, font details, mapping to $\ensuremath{\mathtt{G}}$

Name	3270Medium Nerd Font
Туре	OpenType Font
Files	/home/paulo/.local/share/fonts/NerdFonts/3270-Medium Nerd Font Complete.otf

Unicode code point DF, font details, mapping to $\ensuremath{\mbox{\ensuremath{\mathbb{G}}}}$

Name	3270Medium Nerd Font Mono
Туре	OpenType Font
Files	/home/paulo/.local/share/fonts/NerdFonts/3270-Medium Nerd Font Complete Mono.otf

. . .

Unicode code point DF, font details, mapping to ß

 Name	Zilla Slab,Zilla Slab Medium	
Туре	OpenType Font	
Files	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-MediumItalic.otf	
	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-Medium.otf	

L	1
	Unicode code point DF, font details, mapping to ß
Name	Zilla Slab,Zilla Slab SemiBold
Туре	OpenType Font
Files	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-SemiBold.otf
	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-SemiBoldItalic

For more verbosity, --detailed can be combined with --show-styles to include all font details, e.g,

Unicode code point DF, font details, mapping to ß

Name	3270Medium Nerd Font
Туре	OpenType Font
Files	/home/paulo/.local/share/fonts/NerdFonts/3270-Medium Nerd Font Complete.otf
Styles	Medium

Unicode code point DF, font details, mapping to $\ensuremath{\mathtt{G}}$

 Name	3270Medium Nerd Font Mono
Туре	OpenType Font
Files	/home/paulo/.local/share/fonts/NerdFonts/3270-Medium Nerd Font Complete Mono.otf
Styles	Medium

. . .

Unicode code point DF, font details, mapping to $\ensuremath{\mathtt{G}}$

Name	Zilla Slab,Zilla Slab Medium
Туре	OpenType Font
Files	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-MediumItalic.otf
	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-Medium.otf
Styles	Medium Italic, Italic, Medium, Regular

Unicode code point DF, font details, mapping to ß

Name	Zilla Slab,Zilla Slab SemiBold	
Туре	OpenType Font	
Files	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-SemiBold.otf	
	/usr/share/fonts/mozilla-zilla-slab/ZillaSlab-SemiBoldItalic	

Styles

Since the results can span several rows (the more common the glyph, the more fonts will contain it), we strongly recommend using a pipeline and pass the results to a terminal pager, e.g, the less utility:

```
$ albatross ß | less
```

3.3 Coloured output

Do you get wafers with it?

Monty Python

Albatross supports terminal colours by including the -a option (or --ansi-level for the long option) followed by the corresponding colour level. The following levels are available:

Level	Description
n	No colours at all (default)
a16	ANSI 16 colours
a256	ANSI 256 colours
tc	Support for true colours

Note that colours might mess the output when passed to a terminal pager. You might need to either adjust the terminal pager accordingly (e.g, less -r makes control characters to be displayed) or disable colours altogether (which is the default behaviour).

3.4 Table styles

Albatross provides 6 table styles. Include the -b option (or --border-style for the long option) followed by the corresponding border style. The following styles are available:

- Style 1:

Font name	Available styles
3270Medium Nerd Font	•

6

- Style 2:

Font name

3270Medium Nerd Font

. . .

- Style 3:

Font name Available styles 3270Medium Nerd Font Medium

. . .

- Style 4:

Font name	Available styles
3270Medium Nerd Font	Medium

.. . . .

- Style 5:

Font name	Available styles
3270Medium Nerd Font	Medium

. . .

- Style 6:

Font name	Available styles
3270Medium Nerd Font	Medium

. .

These are the keys to be used as option values:

Key	Description
1	Style 1 (ASCII)
2	Style 2 (rounded corners)
3	Style 3 (blank)
4	Style 4 (double lines)
5	Style 5 (square corners, default)
6	Style 6 (heavy lines)

License

Course you don't get bloody wafers with it. Albatross!

Monty Python

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Changelog

How much is it?

Monty Python

0.3.0 (current)

Changed

 Conjunctive behavior is now default. Previously, albatross a b would have looked for fonts for a and separately for fonts for b. As we see more use cases for looking for fonts that contain a as well as b, we changed the default and left the previous behavior as albatross --or a b.

0.2.0 (2020-12-09)

Added

- Inclusion of a man page.

Fixed

 Windows paths were incorrectly parsed, causing font names and styles to be displayed incorrectly.

0.1.0 (2020-12-07)

- Initial release.

The team

Ninepence.	
-	Monty Python

Albatross is brought to you by the Island of $T_E X$. If you want to support $T_E X$ development by a donation, the best way to do this is donating to the $T_E X$ Users Group.