# Fonts

## Context

LibreCAD uses its own font format for various reasons. Based on its roots in QCAD, which used its own CXF format, LibreCAD enhanced this format in LFF (LibreCAD Font Format).

## Deployment

LibreCAD comes with a collection of common used fonts. Some of them are contributions from our community, others are converted from TTF fonts with our command line conversion tool ttf2lff.

When LibreCAD is installed from a binary package, chances are good, that the fonts are installed properly, and that they are available in text tools. Their location depends on the used operating system.

If you have converted your own fonts, you can add an additional path in *Application Preferences*, that you can keep them separated from the deployed fonts.

For users who build LibreCAD themselves, they can find the font files on our Github repository

## Sharing drawings with text

Because LFF is a LibreCAD feature, other CAD applications probably can't show texts in DXF drawings. To share DXF with text with other CAD applications, create a copy of the drawing and explode all text. This makes them basic entities again and allow other CAD applications to show the text. The back draw is, that the exploded text is no longer editable as text.

## Font lists

#### Deployed

Font File	Alphabet	Font Type	Technical / Single Line
amiri-regular.lff	Arabic	Serif	
azomix.lff	Chinese	Sans Serif	X
azomix_i.lff	Chinese	Sans Serif	X
cursive.lff	Latin	Sans Serif, Italic	X
cyrillic_ii.lff	Cyrillic Sans Serif		X
gothgbt.lff	Latin	Blackletter / Gothic	
gothgrt.lff	Latin	Blackletter / Gothic	
gothitt.lff	Latin	Blackletter / Gothic	

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Font File	Alphabet	Font Type	Technical / Single Line
greek_ol.lff	Greek		
greekc.lff	Greek		
greekcs.lff	Greek		
greekp.lff	Greek		
greeks.lff	Greek		Х
iso.lff	Latin Sans Serif		Х
iso3098.lff	Latin	Sans Serif	
iso3098_i.lff	Latin	Sans Serif	Х
italicc.lff	Latin	Serif, Outline	
italiccs.lff	Latin	Serif, Outline	
italict.lff	Latin	Serif, Outline	
kochigothic.lff	Latin	Sans Serif, Outline	
kochimincho.lff	Latin	Serif, Outline	
kst32b.lff	Chinese	Sans Serif	Х
lc_opengost-ar.lff	Cyrillic, Greek, Latin	Sans Serif	Х
lc_opengost-br.lff	Cyrillic, Greek, Latin	Sans Serif	Х
opengosttypea-regular.lff	Cyrillic, Greek, Latin	Sans Serif, Outline	Х
opengosttypeb-regular.lff	Cyrillic, Greek, Latin	Sans Serif, Outline	Х
romanc.lff	Latin	Serif, Outline	
romancs.lff	Latin	Serif, Outline	
romand.lff	Latin	Sans Serif, Outline	
romanp.lff	Latin	Serif, Outline	
romans.lff	Latin	Sans Serif	Х
romansi.lff	Latin	Sans Serif, Italic	Х
romant.lff	Latin	Serif, Outline	
scriptc.lff	Latin	Script, Outline	
scripts.lff	Latin	Script	
simplex.lff	Latin	Sans Serif	Х
standard.lff	Latin	Sans Serif	Х
syastro.lff	Symbol		
symap.lff	Symbol		
symath.lff	Symbol		
symbol.lff	Symbol		
symbol_misc1.lff	Symbol		
symbol_misc2.lff	Symbol		
symeteo.lff	Symbol		
symusic.lff	Symbol		
unicode.lff	Multiple	Sans Serif	Х

### Additional

Font File	Alphabet	Font Type	Technical / Single Line
wqy-unicode.lff	Chinese	Sans Serif	

#### **Examples**

#### From 2.1.3

- DXF showing all fonts -
- PDF export from this DXF -
- PNG export from this DXF -

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amiri-regular.lff - The quick brown foz jumps over the lazy dog. 0123456749
AMIRI-REGULAR.LFF - THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG. P i@+$%*&*()
              azomix.lff - The quick brown fox jumps over the lazy dog. 0123456789
AZOMIX.LFF - THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG. ? 10#$5:3#()
              azomix_i.iff - The quick brown for jumps over the lazy dog. 0123456789
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              perbart.Iff - Ite quict brown fer jumpf ever the lays bes. 81234387888
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              sethill.Iff - Chr quick brees fax jumps over the lays bes. 0123458789
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ησεελγτ.μζζ - Τθε ρφιγλ βσοψέ ζοω κφυπτ όχεσ υθε μαιι δοη. 0123450789
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ISOLFF - THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG. ? \@#$%`$+D
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              italicc.lff - The quick brown for jumps over the lary dog. 0123456789
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              kechiminche.lff - The quick brown fox jumps over the lary dog. 0123436789
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              kst32b.lff - The ouldk brown fox jumps over the lazy dog. 0123456789
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              IC_opengost-brilff - The quick brown file jumps over the lazy dog_0123456789
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              DpenGoslTypeA-RegularIFF - The quick brown fox jumps over the lazy dog. 0723456789
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              DpenGostType8-RegularIff - The quick brown fox jumps over the lazy dog. 0123456789
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> wqy-unicode.lff - The quick brown fox jumps over the lazy dog. 0123456789 WQY-UNICODE.LFF - THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG. 7 L0#\$5\*&\*()

### Issues

Some fonts have performance issues. This depends on the number of entities defining a single letter. When there are fonts with mostly less than 10 entities per letter, there are others with 50 to well over 100 entities per Letter.

LibreCadFonts\_2.1.3.dxf

LibreCadFonts 2.1.3.pdf

# ttf2lff

### The Tool

ttf2Iff is the LibreCAD converter to create LFF fonts from TTF fonts.

The tool's source code is part of the LibreCAD code base and can be build optional with LibreCAD. There is no deployment for the tool, because it's just a console application which is not much comfortable to use for inexperienced users.

There are some binaries around, which may work on their targeted operating system, but without any warranty.

## Limitations

Because the *TTF* file format supports much more font types and features, it is not guaranteed that the conversion is possible with every *TTF* font.

The result is at most an outline font, because *LFF* format does not support filled letters.

There are some hints in the forum, explaining how to explode text and fill letters with solid hatch, but this can end in huge efforts and makes the text no longer editable.

### **Online Converter**

Because of the requests for **ttf2lff** binaries from time to time we recently launched an online converter.

This allows everybody to upload *TTF* fonts, let **ttf2lff** do its work on our server, and then provides a download link for the *LFF* font. It's basically working, we got first positive response, but it's probably not fully bullet proofed yet.

If any issues arise, please report them to the forum:

https://forum.librecad.org/Font-Roboto-in-LibreCAD-tp5723727p5723766.html

Before you convert a font, please check its license and ensure that conversion is allowed. For the upload provide correct data for author and license, these information is set into the *LFF* file to appreciate the authors work and probably to satisfy the license.

The online converter: https://librecad.org/ttf2lff The upload limit for TTF files is about 30MB.

From: https://dokuwiki.librecad.org/ - Wiki

Permanent link: https://dokuwiki.librecad.org/doku.php/community:fonts



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