

GUST's e-foundry current font projects

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Outline

GUST e-foundry achievements

Math symbols subsets

A sans-serif Math Open Type Format font

A heavy Math Open Type Format font

A monospace font with math symbols

Enhancing the T_EX Gyre text fonts

Maintenance

Enhancements to existing fonts

Summary

GUST e-foundry achievements

Text fonts:

- ▶ Latin Modern,
- ▶ T_EX Gyre fonts (7 families),
- ▶ Antykwa Półtawskiego,
- ▶ Antykwa Torunska,
- ▶ Kurier,
- ▶ Iwona,
- ▶ Cyklop.

OTF Math fonts (6 out of 10 free and 3 commercial):

- ▶ Latin Modern Math,
- ▶ 4 T_EX Gyre Math fonts—Bonum, Pagella, Schola, Termes
- ▶ DejaVu Math

Math symbols subsets

Define subsets of math symbols for several uses:

- ▶ a sans-serif font (with the MATH table and a limited repertoire of glyphs); to be used in headings and slides;
- ▶ a heavy font (with the MATH table and a limited repertoire of glyphs); again, to be used in headings and for slides;
- ▶ a mono font (without the MATH table), to be used with text editors
- ▶ a text font for technical texts (in-line references to symbols and quoting of simple formulas without deploying the math fonts machinery);

This is a study project, with no direct deliverables, except for the selection of glyphs. It is, however, prerequisite for most of the following projects.

A sans-serif Math Open Type Format font

The goal is to make a sans-serif Open Type Format Math font, based on DejaVu ([see mock-up](#)), with an eye on doing the same for some other sans-serif fonts, for use in headings.

A heavy Math Open Type Format font

Making of a heavy version of one of the T_EX Gyre OTF math fonts, possibly T_EX Gyre Termes ([see mock-up](#)), with an eye on doing the same for some other serif fonts. Such fonts are earmarked for use in headings.

A prerequisite here is the result of selecting a proper subset of math symbols.

A monospace font with math symbols

A monospace (text) font enhanced with math symbols without extendibles (a proper subset of math symbols required), most probably DejaVu based ([see mock-up](#)).

Such a font should find its use for editing and source codes.

The main difficulties:

- ▶ “squeezing” of wide math symbols into the mono dimensions.
- ▶ the incompleteness of the Unicode Standard (e.g., the incomplete set of superscript glyphs) may turn out troublesome.

Enhancing the T_EX Gyre text fonts

The T_EX Gyre fonts will certainly benefit from enhancing them with a subset of math symbols.

Possible (open) problems:

- ▶ might require a revision of glyph selection, sans serif OTF math and heavy OTF math.
- ▶ should sans-serif fonts be also enhanced(?)
- ▶ and should they share the same repertoire of extra glyphs(?).

It makes little sense to enhance the T_EX Gyre Chorus (the Zapf Chancery replacement) font with math oriented glyphs.

Maintenance

- ▶ The fonts do require maintenance;
- ▶ until now done only when requests or bug reports were received.

To keep uniformity and spare users unpleasant surprises this must involve all GUST fonts, even when no changes/modifications ensue. This should be done carefully, on a planned schedule; the team proposes regular yearly (calendar) revisions.

Enhancements to existing fonts

The GUST e-foundry's math fonts will profit from being enhanced with math kerns and math oriented features like variant extra alphabets, e.g., double-struck or calligraphic, implemented using the “stylistic set” features, ss01–ss20.

Summary

The priorities will certainly influence the order in which the projects will be tackled, but the glyph selection is the prerequisite. As there is considerable amount of work involved in all those projects, we went out to some T_EX users groups to asking for funding.

Support already was rounded from:

- ▶ NTG,
- ▶ CS TUG,
- ▶ CG (Context Group),
- ▶ GUST (non-material)

Given time, the team will work on the projects, even when funds will not be available.

Thank you!