

STIX Font Release Documentation

Version 1.1.0-latex

5/29/2013













Introduction

The Scientific and Technical Information eXchange (STIX) font is intended to solve the publishing needs of authors, publishers, printers, and others working in the scientific, medical, and technical fields. It is intended as a comprehensive Unicode based font of mathematical symbols and alphabets. The intent is to provide a single font that can be used throughout the production process. The production process can be a traditional print one, be entirely electronic, or be a combination. The font is available royalty-free under the <u>SIL Open Font</u> License.

The project began through the joint efforts of American Mathematical Society (AMS), American Institute of Physics Publishing (AIP), American Physical Society (APS), American Chemical Society (ACS), Institute of Electrical and Electronic Engineers (IEEE), and Elsevier Science. These companies are collectively known as the STI Pub companies.

What is new in this release?

Version 1.1.0-latex provides a new packaging format of the STIX fonts suitable for use with LaTeX. The glyph set is based on the previously released Version 1.1.0 glyph set. Previously released versions of the font are not included in this distribution.

The stix package provides LaTeX support for using STIX fonts in both text and math. While the primary focus of this release is the math portion of the fonts, text fonts are provided as well. The text fonts are provided in both T1 (default) and OT1 encodings, as well as TS1 symbol font encoding, which cover only a subset of Latin characters supported by STIX fonts.

The math support covers nearly every mathematical symbol in STIX fonts, around 2400 symbols in 11 regular fonts, in addition to around 1950 symbols in 10 bold fonts.

There are also three fonts containing extra miscellaneous symbols, stix-extra1, stix-extra2 and stix-extra3, provided as TFM and PFB files without support from the macro package.

What is provided in this release?

Two folders are provided in this distribution. They are

- Fonts
- License

The stix-tds sub-folder of Fonts contains the LaTeX distribution and conforms to the TeX Directory Structure hierarchy. (http://ctan.open-source-solution.org/tds/tds.html). Within this hierarchy, the LaTeX package, font support files and documentation can be found. We suggest

you review the documentation (stix-tds/doc/latex/stix/stix.pdf) for usage and technical information.

The font is distributed under the "<u>SIL Open Font License</u>, <u>Version 1.1</u>". A copy of the license is in the separate License folder included with this distribution.

Beta test information

The STI Pub companies would like to thank everyone who downloaded and tested the beta version of this release. The following updates were made based on feedback received:

- Fixed problem with bold smallcaps JE
- Updated glyph widths for mathscr alphabet in .TFM files to account for spacing issues with subscripts in math

We would also like to acknowledge feedback received regarding deficiencies with the text portion of the font. The project recognizes that the text portion of the font lacks the typographic tools of a more mature text font. Since its inception the project's main focus has been on the math portion of the font. The LaTeX stix package addresses this by providing the notext option. This option allows the math portion of STIX to be combined with the default text font.

Font implementation decisions

This release is intended to provide core level of support of the STIX fonts in LaTeX using modern TeX engines with the goal of producing high-quality PDF or PostScript files. Glyphs in this release are accessed via TFM files using Type 1 PostScript fonts, not True Type or Open Type.

Font installation help

For help installing STIX fonts, please refer to http://www.stixfonts.org/install.html which contains useful links and information.

Feedback

Please direct any questions or general comments to the STIX Fonts project. Bug reports and technical support issues should be reported through https://sourceforge.net/projects/stixfonts/support.