

# The New Font Project

Hans Hagen  
Pragma ADE, Holland  
pragma@wxs.nl

Jerzy B. Ludwichowski  
Nicholas Copernicus University, Toruń, Poland  
Jerzy.Ludwichowski@uni.torun.pl

Volker R W Schaa  
GSI, Darmstadt, Germany  
v.r.w.schaa@gsi.de

## Abstract

In this short presentation, we will introduce a new project: the LM-ization of the free fonts that come with  $\text{\TeX}$  distributions. We will discuss the project objectives, timeline and cross-LUG funding aspects.

## Introduction

The New Font Project is a brainchild of Hans Hagen, triggered mainly by the very good reception of the LM project by the  $\text{\TeX}$  community. After consulting other LUG leaders, Bogusław Jackowski and Janusz M. Nowacki, aka “GUST type.foundry”, were asked to formulate the project.

The next section contains its outline, as prepared by Bogusław Jackowski and Janusz M. Nowacki. The remaining sections were written by us.

## Project Outline

Our aim is to prepare a family of fonts, equipped with a broad repertoire of Latin diacritical characters, based on the freely available good quality fonts. Actually, we think about an “LM-ization” of freely available fonts, i.e., about providing as many diacritical characters per font as we prepared for the Latin Modern font package (ca 400 characters) which would cover all European languages as well as some non-European ones (Vietnamese, Navajo).

Such “LM-ized” fonts would work with all  $\text{\TeX}$  packages that LM fonts work with, which would make easier using them. The result would be distributed, like the LM fonts, in the form of PostScript Type 1 fonts, OpenType fonts, MetaType1 sources and the supporting  $\text{\TeX}$  machinery.

We would like to emphasize that the preparing of fonts in the OpenType format is an important aspect of the project. OpenType fonts are becoming more and more popular, they are Unicode-based,

can be used on various platforms and claim to be a replacement for Type 1 and TrueType fonts.

Note that Type 1 fonts were declared obsolete by Adobe already a few years ago. Moreover, using Type 1 fonts in  $\text{\TeX}$  causes a proliferation of metric and encoding files because of the limit of 256 characters per font in  $\text{\TeX}$  metric files; therefore, each  $\text{\TeX}$  font comes actually in several files.

Please note also that we can also expect a firm assistance from pdf $\text{\TeX}$  users, because of the pdf $\text{\TeX}$  team working on the implementation on the support for OpenType fonts.

An important consideration by Hans Hagen: “In the end, even Ghostscript will benefit, so I can even imagine those fonts ending up in the Ghostscript distribution.”

Actually, the idea of preparing of such font families was suggested by the pdf $\text{\TeX}$  development team. Their proposal triggered a vivid discussion of an informal group of representatives of several  $\text{\TeX}$  LUGs – notably Karl Berry (TUG), Hans Hagen (NTG), Jerzy Ludwichowski (GUST), Volker R W Schaa (DANTE) – who suggested that we should approach this project as a research, technical and implementation team, and promised their help in taking care of promotion, integration, supervising and financing.

The amount of time needed to carry out the task depends on the number of fonts to be included in the collection, but it can be safely estimated that a 4-font family (regular, italic, bold, and bold italic)

can be prepared within 1–2 months, depending on the state of original stuff), which – for the collection of fonts mentioned below – would mean that the project can be accomplished within about 2 years. Assuming that the launch of the project could be made in the middle of 2006, the conclusion of the first stage of the project might be expected by the end of 2008.

Currently the following fonts are considered as being worthy of enhancement:

1. The collection of 33 basic PostScript fonts, donated by URW++ and distributed with Ghostscript, consisting of eight 4-font families:
  - URW Gothic (i.e., Avantgarde)
  - URW Bookman
  - Century Schoolbook
  - Nimbus Sans (i.e., Helvetica)
  - Nimbus Sans Condensed (i.e., Helvetica condensed)
  - Nimbus Roman (i.e., Times)
  - Nimbus Mono (i.e., Courier)
  - URW Palladio (i.e., Zapf’s Palatino)and one single-font “family”:
  - URW Chancery (i.e., Zapf Chancery)(Symbol and Zapf Dingbats fonts are left out.)
2. Donated by Bitstream (4-font families):
  - Bitstream Charter
  - Vera
3. Donated by Adobe (4-font family):
  - Utopia
4. Other families donated by URW++:
  - Letter Gothic
  - URW Garamond

Perhaps other interesting free fonts will emerge in the future.

As to the budget—let’s concentrate on the fonts listed above—there are altogether thirteen 4-font families and the 1-font URW Chancery. We would be satisfied if we could get a support of 1,500 EUR per a 4-font family and 500 EUR per a 1-font family. In the case of the fonts listed above this adds up to 20,000 EUR. We propose that the funding is made step-wise, i.e., the payments are made after the release of an enhanced family of fonts.

Obviously, there is scope for a second stage: the fonts can be further developed, as one can think for example of adding cap-small-caps, old style digits, proportional digits, and more. Once the first stage of the project is finished, we could embark on further enhancements. This would be a somewhat simpler, but still a laborious task; we estimate the effort to be about 60–70% of the first stage.

## Funding

The project can be divided into three stages:

- stage 1: combining existing fonts into LM compatible layouts and identifying gaps in the layout
- stage 2: filling in the gaps
- stage 3: math companion fonts

For these the estimated fundings needed are:

- stage 1: around 20,000 EUR
- stage 2: around 15,000 EUR
- stage 3: unknown

The exact figure for the second stage depends on what is needed and missing. We imagine the project to be extended with additional stages in order to bring more scripts into the Open Type version and/or to cleanup other fonts as well.

The current financial state of the project:

- TUG India: 2,000 USD for the first year of the project and—if possible—a contribution for the next year
- CSTUG: 500 EUR per year for the project duration and expenses directly connected with getting Czech and Slovak support right
- NTG: 20% of the project costs, i.e., 4,000 EUR for the first stage
- DANTE: 7,500 EUR this year; additional funding will be proposed at the October user group meeting
- GUST: local infrastructure and expenses of font developers
- TUG: positive but the amount is yet unknown, depends on contributions to the project fund, more info later this year.

Since the first stage runs this year and next year (start: May 2006) and since payments will take place after delivery of each completed font family, we can safely conclude that project expenses in 2006 can be covered and given the above we can also be confident that the rest of the first stage is secured.

The second stage is partly secured as well. We will try to broaden funding as soon and as much as possible. It would be good if this project can also take care of the specific needs of Indian, Greek, Cyrillic, Hebrew and Arab scripts, but we’ll see. . .

The suite of fonts will be officially presented on a special font CD for members of user groups.

## Co-ordination

This will done by DANTE e.V. in close co-operation with (at least) NTG and GUST.