### Support package for free fonts by ParaType

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#### 1 Introduction

This package contains the LaTeX support for the fonts PT Sans and PT Serif released by ParaType. PT Sans has four basic styles, two narrow styles and two caption styles. PT Serif has four basic styles and two caption styles.

PT Sans Regular
PT Sans Italic
PT Sans Narrow
PT Sans Caption
PT Sans Caption
PT Sans Caption
PT Sans Caption

Figure 1: The styles of PT Sans

PT Serif Regular
PT Serif Italic
PT Serif Caption
PT Serif Caption
PT Serif Caption Italic

Figure 2: The styles of PT Serif

The fonts cover standard Western, Central European and Cyrillic code pages and contain also characters of all title languages of the Russian Federation. This package supports encodings T1, OT1, IL2, TS1, T2A, T2B, T2C and X2. The fonts are included in the original TrueType format and in the converted Type 1 format.

The fonts were developed by ParaType for the project *Public Types of Russian Federation* and released under an open user license. They were designed by Alexandra Korolkova, Olga Umpeleva and Vladimir Yefimov. For more information see the web-site of ParaType.

#### 2 License

The fonts are licensed under Paratype Free Font License (the license is included).

The fonts in TrueType format are original files provided by ParaType. The fonts in Type 1 format are not original files. They were converted by me using FontForge and may be distributed for TeX only. The distribution of these converted fonts was kindly allowed by ParaType.

All the support files are licensed under Lagrangian Public License, either version 1.3 of this license or (at your option) any later version.

#### 3 Using the package

The package was created using *fontools*, but with some changes. From *fontools* also come the mixed case names and the suffix *-TLF* (tabular lining figures) of the font families and also the mixed case names of the packages for the individual font families.

There are two map files for the fonts: *paratype-truetype.map* and *paratype-type1.map*. You should use just one of them. The file *paratype-type1.map* is a safe choice and you will get the full power of TeX. If you just want to create PDF files with pdfTeX or pdfLeTeX you can use the file *paratype-truetype.map* and the original TrueType fonts will be used. You install the fonts with a command like:

```
updmap-sys --enable Map=paratype-type1.map
```

There are several packages that you can use to set the fonts. You must explicitly use the package *fontenc* or *textcomp* (if needed). The easiest way to use the fonts is the package *paratype*:

```
\usepackage[T1]{fontenc}
\usepackage{paratype}
```

This sets the font *PTSerif-TLF* as the default serif family and the font *PTSans-TLF* as the default sans serif family.

There are also several packages that set the individual font families. They have the same name as the font family, but without the suffix: *PTSerif*, *PTSerifCaption*, *PTSans*, *PTSansNarrow* and *PTSansCaption*.

For example the package *PTSerif* sets the font *PTSerif-TLF* and you use it this way:

```
\usepackage[T1]{fontenc}
\usepackage{PTSerif}
```

If you want to use this font together with another font that has somewhat different proportions, you can use the option *scaled*:

```
\usepackage[scaled=0.9]{PTSerif}
```

You can also typeset some text in a desired font like this:

```
{\usefont{T1}{PTSerifCaption-TLF}{m}{it}Text in PT Serif Caption Italic}
```

You can see the available series/shape combinations in the table 1. There are just the combinations that really exist in the fonts, but you can use also some other combinations and then the substitution will be used. The bold extended series will change to the bold series and the slanted shape will change to the italic shape.

font family	series/shape combinations
PTSans-TLF	m/n, m/it, b/n, b/it, c/n, bc/n
PTSansNarrow-TLF	m/n, b/n
PTSansCaption-TLF	m/n, b/n
PTSerif-TLF	m/n, m/it, b/n, b/it
PTSerifCaption-TLF	m/n, m/it

Table 1: The series/shape combinations for the fonts

The family PTSans-TLF has also both narrow styles. The caption styles for both PT Sans and PT Serif are available only in separate families. Especially the caption styles in PT Serif are more different than it is usual from the four basic styles, therefore everyone should decide if and where he will use them.

#### 4 Notes for the Czech and Slovak users

I changed the width of some letters in the encoding IL2: Lcaron in PT Serif Bold and PT Serif Bold Italic; tcaron in PT Serif Bold; dcaron in PT Sans Regular and PT Sans Bold and tcaron in PT Sans Bold. In all cased I made the width equal to that of the unaccented letter. Now all letters dcaron, tcaron, lcaron and Lcaron have the same width as the unaccented letter in the encoding IL2. The encoding T1 was left untouched. You can see the differences in the following samples (first line is in T1 and second in IL2).

V kódování IL2 jsem změnil šířku znaku Ľ ve fontech PT Serif Bold a PT Serif Bold Italic; dále šířku znaku ť ve fontu PT Serif Bold; pak šířku znaku ď ve fontech PT Sans Regular a PT Sans Bold a nakonec šířku znaku ť ve fontu PT Sans Bold. Ve všech případech jsem změnil šířku tak, že je stejná jako šířka stejného písmene bez diakritiky. Nyní mají v kódování IL2 všechny znaky ď, ť, ľ a Ľ stejnou šířku jako stejné znaky bez háčku. Kódování T1 bylo ponecháno beze změny. Rozdíly je možno vidět v následujících ukázkách (první řádka je pro kódování T1, druhá pro IL2).

## Ľubomír *Ľubomír* šťovík laťka Ľubomír *Ľubomír* šťovík laťka

Obrázek 3: Changes in PT Serif

## ďas loďka **ďas loďka šťovík laťka** ďas loďka **ďas loďka šťovík laťka**

Obrázek 4: Changes in PT Sans

#### 5 Known bugs

I put the letters *Cyrillic letter short I with tail* and *Cyrillic letter EM with tail* to the slots where the same letters with descender should be. They are somewhat similar and some languages should use exactly these letters. I think that it is better than leaving the slots empty.

Please send me bug reports and suggestions about this package.