



## PL/PDF TrueType font support

v2.3.1

The PDF specification enables the use of TrueType fonts in PDF documents. With the use of TTF fonts, the number of print types can be extended. To do this TTF files are embedded into the PDF document. PL/PDF supports the use of embedded TTF fonts.

To use TTF fonts:

1. Obtain the desired TTF file: to embed the TTF font, the file with TTF extension is needed. Please take into account that the usage of certain fonts are under copyright. Important: check that the TTF file contains all the characters needed.
2. Generate the Adobe Font Metrics (AFM) file: the AFM file may be generated by the TTF2PT1 program (<http://ttf2pt1.sourceforge.net>). The binary version can be downloaded from [ttf2pt1](http://ttf2pt1). From the command line run the following command: `ttf2pt1 -a .ttf`. The AFM file is create as `.afm`.
3. Load the PLPDF\_TTF\_FILE table (To load BLOB type data use SQL\*Loader or TOAD.):
  - o ID (NUMBER): unique identifier
  - o FONTFILE\_NAME (VARCHAR2(255)): TTF file name with extension (.ttf)
  - o FONTFILE\_DATA (BLOB): the binary TTF font
  - o AFMFILE\_DATA (BLOB): the uploaded AFM file
4. Load the PLPDF\_TTF\_AFM table: The content of the AFM file is stored in the table line by line. Use `afm.ctl` to load the table, and then overwrite the value of the FILE\_ID field to the unique identifier specified in the PLPDF\_TTF\_FILE table.
5. Generate the data necessary for the embedding: run `plpdf_ttf.StoreTTF` procedure where the parameters are:
  - o P\_FONT\_FILE\_ID: the value of the ID in PLPDF\_TTF\_FILE
  - o P\_ENC: encoding value, use the encoding values specified in the PL/PDF documentation. The default value is `cp1252`.

The generated data is stored in the PLPDF\_ADD and PLPDF\_ADD\_CW tables. The ID is taken from the PLPDF\_TTF\_S sequence. The ID can be used to reference the font during the generation of the PDF document.

The create data can now be used while generating a PDF document. Here is how to use the fonts in the PDF generator:

- Declare a `Plpdf_Type.t_addfont` type variable, e.g. `l_ttf Plpdf_Type.t_addfont;`
- Retrieve the font using the `Plpdf_TTF.GetTTF` procedure. The parameter is the ID field of the PLPDF\_ADD table, e.g. `l_ttf := Plpdf_Ttf.GetTTF(21);`
- Add the TTF font to the PDF document: run the `Plpdf.addTTF` procedure, where the parameters are:
  - o P\_FAMILY: the name that can be used to reference the font in the `SetPrintFont` procedure.
  - o P\_STYLE: the font style (some TTF fonts only contain the regular style):
    - NULL: regular



- B: Bold
- I: Italic
- BI: Bold, Italic
- P\_DATA: data needed to embed the font. Use the result of the Plpdf\_TTF.GetTTF function.

Example: `Plpdf.addTTF('ArialMT', NULL, l_ttf);`

- After this the font can be referenced by the SetPrintFont procedure using the P\_FAMILY.

Warning: using TrueType fonts in conjunction with PDF file Protection may significantly decrease the speed of PDF generation, because the embedded file is also encrypted using the RC4 encryption.