The grffile package*

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November 11, 2019

Abstract

The package extends the file name processing of package graphics to support a larger range of file names. For example, the file name may contain several dots. Or in case of pdfTeX in PDF mode the file name may contain spaces.

Contents

*The documentation here describes version 1.x, accessed via `\usepackage{grffile}[=v1]`, the current version 2.0 does nothing as the current graphics package handles multiple dots, spaces and UTF-8 characters in filenames

†Please report any issues at https://github.com/ho-tex/grffile/issues

1 Usage

1.1 Option multidot

The file name parsing of package graphics is changed, in order to detect known extensions. This allows both the use of dots inside the base file name and extensions with several dots.

Assume there are two files in the currect directory: `Hello.World.eps` and `Hello.World.pdf`. `\includegraphics{Hello.World}` will find `Hello.World.pdf` with driver pdftex or `Hello.World.eps` with driver dvips.

Limitations: Problem could occur on systems, which don't use the dot as extension delimiter. These systems needs an own `texsys.cfg` containing definitions for `\filename@parse`. The author could not test that, due to a missing example.

1.2 Option babel

This option allows the use of shorthand characters of package babel inside the graphics file name. Additionally the tilde '~' is supported. The option is turned on as default. (In version v1.1 or below of this package, the features of this option were part of option extendedchars.)

Example:

```
\usepackage[frenchb]{babel}
\usepackage{grffile}
Image:␣\includegraphics{C:/path/image}
```

1.3 Option extendedchars

If the input encoding is the same encoding as the encoding that is used for file names and the driver allows non-ascii characters. Without option extendedchars the 8-bit characters are expanded, if they are active characters. For example, see the LaTeX package inputenc. However a file name is not input for LaTeX. Therefore this option extendedchars removes the active status and the 8-bit characters are not expandable any more.

Example:

```
\usepackage[latin1]{inputenc}
\usepackage[extendedchars]{grffile}
\includegraphics{Bäckerstraße}
```

If the `draft` option of the graphics package is enabled, the file name is printed with the current font encoding for `\ttfamily`. Thus it is possible, that such characters are omitted or the wrong characters are displayed, if the font encoding is not the same as the file name encoding.

1.4 Option encoding

Consider the following scenario. Your file system is using UTF-8 as encoding for file names. But you use latin1 as input encoding for your TeX files, because some packages are not ready for multi-byte encodings (listings, ...).

Then this option encoding loads support for converting encodings by loading package stringenc. The option is not defined after the preamble, because LaTeX limits package loading to the preamble.

File names are converted, if package stringenc is loaded and the encodings are known, see options inputencoding and filenameencoding.

1.4.1 Option inputencoding

Option inputencoding specifies the encoding of the file name in your TeX input file.

Package inputenx and package inputenc since version 2006/02/22 v1.1a remember the name of the input encoding that is looked up by this package. Therefore option inputencoding is usually not mandatory.

1.4.2 Option filenameencoding

This is the encoding of the filename of your file system. This option is mandatory, file names are not converted without this option. The option is disabled, if the value is empty.

1.4.3 Example

Back to the scenario where the file system uses UTF-8 and the LaTeX input files are encodind in latin1.

```
\usepackage[latin1]{inputenc}[2006/02/22]
␣%␣\usepackage[latin1]{inputenx}
\usepackage{graphicx}
\usepackage[encoding,filenameencoding=utf8]{grffile}
```

For older versions of package inputenc option inputencoding provides the necessary informations.

```
\usepackage[latin1]{inputenc}
\usepackage{graphicx}
\usepackage{grffile}
\grffilesetup{
␣␣encoding,
␣␣inputencoding=latin1,
␣␣filenameencoding=utf8,
}
```

1.5 Option space

This option allows graphics file names that contain spaces if possible.

In general it is not possible to use space inside file names, because TEX considers the space character as termination in its syntax for commands that expect a file name.

Regarding graphics inclusion with the package graphics file names are used in two or three contexts:

1. The basic `\special` statement or primitive command for graphics inclusion. The `\special` statements for drivers dvips or dvipdfm do not allow spaces. However pdfTEX's primitive `\pdfximage` uses curly braces to delimit the file name and allows spaces. In case of XETEX file names can be enclosed in quotes to support spaces (at the cost that quotes no longer work).

2. `\includegraphics` checks the existence of the file. Also it looks for the right extension if the extension is not given.

   If pdfTEX 1.30 is given, the file existence test can be rewritten using a new primitive that allows spaces. This works in both modes DVI and PDF.

   In case of XETEX the file existence test is rewritten to automatically add quotes.

3. Sometimes files are read as TEX input files. For example, `.bb` files or MPS files.

If pdfTEX 1.30 or greater is used in PDF mode then the graphics file names may contain spaces except for MPS files. Therefore option space is only enabled by default, if the supported pdfTEX in PDF mode is detected or XETEX is running. You can enable the option manually, if you know, your DVI driver supports spaces in its `\special` syntax and if there is no need to read the image file as TEX input file (third context).

1.6 General use

The options can be given at many places:

1. As package options:
   `\usepackage[<options>]{grffile}`

2. Setup command of package grffile:
   `\grffilesetup{<options>}`

3. The options are also available as options for package graphicx:
   `\setkeys{Gin}{<options>}`

4. If package graphicx is loaded the options can also be applied for a single image:
   `\includegraphics[<options>]{...}`

1.7 Default settings

multidot	`true`	
babel	`true`	
extendedchars	`false`	
space	`true`	if pdfTeX 1.30 or greater is used in PDF mode
	`false`	otherwise

2 Implementation

2.1 New Package status.

Changes to the core `graphics` code have made the main features of this package (supporting multiple dots and spaces in filenames) unneeded as they are supported in the core code. The changes in the core also mean some patches in this package no longer work.

So by default this package does nothing but (especially if you have rolled back other aspects of the latex code) you may want the original version, which is available as

```
␣\usepackage{grffile}[=2017/06/30]
␣
```

```
1 ⟨*new⟩
2 \DeclareRelease{v1}{2017-06-30}{grffile-2017-06-30.sty}
3 \DeclareCurrentRelease{}{2019-11-11}
4 \ProvidesPackage{grffile}%
5   [2019/11/11 v2.1 Extended file name support for graphics (legacy)]%
6 \PackageInfo{grffile}{This package is an empty stub for compatibility}
7 \DeclareOption*{}
8 \ProcessOptions
9 \RequirePackage{graphicx}
10 ⟨/new⟩
```

2.2 Identification

```
11 ⟨*package⟩
12 \NeedsTeXFormat{LaTeX2e}
13 \ProvidesPackage{grffile}%
14   [2017/06/30 v1.18 Extended file name support for graphics (HO)]%
```

2.3 Catcode stuff

```
15 \edef\grffile@RestoreCatcodes{%
16   \catcode`\noexpand\=\the\catcode`\=\relax
17   \catcode`\noexpand\:\the\catcode`\:\relax
18   \catcode`\noexpand\.\the\catcode`\.\relax
19   \catcode`\noexpand\'\the\catcode`\'\relax
20   \catcode`\noexpand\<\the\catcode`\<\relax
21   \catcode`\noexpand\>\the\catcode`\>\relax
22   \catcode`\noexpand\*\the\catcode`\*\relax
23   \catcode`\noexpand\^\the\catcode`\^\relax
24   \catcode`\noexpand\~\the\catcode`\~\relax
25 }
26 \@makeother\=
27 \@makeother\:
28 \@makeother\.
29 \@makeother\'
```

```
\@makeother\<
\@makeother\>
\@makeother\*
\catcode`\^=7 %
\catcode`\~=\active
```

2.4 Options

```
\RequirePackage{ifpdf}[2010/01/28]
\RequirePackage{ifxetex}[2010/09/12]
\RequirePackage{kvoptions}[2006/08/17]
\SetupKeyvalOptions{%
  family=Gin,%
  prefix=grffile@%
}
\DeclareDefaultOption{\@unknownoptionerror}
\DeclareBoolOption[true]{multidot}
\DeclareBoolOption[true]{babel}
\DeclareBoolOption[false]{extendedchars}
\DeclareBoolOption{space}
\DeclareVoidOption{encoding}{%
  \RequirePackage{stringenc}\relax
}
\DeclareStringOption{inputencoding}
\DeclareStringOption{filenameencoding}
\DeclareDefaultOption{%
  \PassOptionsToPackage\CurrentOption{graphics}%
}
```

Default setting for option space.

```
\RequirePackage{pdftexcmds}[2007/11/11]
\ifxetex
  \grffile@spacetrue
\else
  \begingroup\expandafter\expandafter\expandafter\endgroup
  \expandafter\ifx\csname pdf@filesize\endcsname\relax
    \grffile@spacefalse
    \let\grffile@space@disabled\@empty
    \def\grffile@spacetrue{%
      \PackageWarning{grffile}{%
        Option `space' is not available,\MessageBreak
        because it needs pdfTeX >= 1.30 or XeTeX%
      }%
    }%
  \else
    \ifpdf
      \grffile@spacetrue
    \else
      \grffile@spacefalse
    \fi
  \fi
\fi
\ProcessKeyvalOptions*
\AtBeginDocument{%
  \DisableKeyvalOption[package=grffile]{Gin}{encoding}%
}
\RequirePackage{graphics}
```

\grffilesetup

```
\newcommand*{\grffilesetup}{%
  \setkeys{Gin}%
}
```

`\grffile@org@Ginclude@graphics`

```
\let\grffile@org@Ginclude@graphics\Ginclude@graphics
```

`\Ginclude@graphics`

```
\renewcommand*{\Ginclude@graphics}{%
  \ifx\grffile@filenameencoding\@empty
  \else
    \ifx\grffile@inputencoding\@empty
      \expandafter\ifx\csname inputencodingname\endcsname\relax
        \expandafter\ifx\csname
            CurrentInputEncodingOption\endcsname\relax
        \else
          \let\grffile@inputencoding\CurrentInputEncodingOption
        \fi
      \else
        \let\grffile@inputencoding\inputencodingname
      \fi
    \fi
    \ifx\grffile@inputencoding\@empty
    \else
      \grffile@extendedcharstrue
    \fi
  \fi
  \ifnum0\ifgrffile@babel 1\fi\ifgrffile@extendedchars 1\fi>\z@
    \begingroup
```

Support of babel's shorthand characters.

```
      \ifgrffile@babel
        \csname @safe@activestrue\endcsname
```

Support of active tilde.

```
        \edef~{\string~}%
```

Support of characters controlled by package inputenc.

```
      \fi
      \ifgrffile@extendedchars
        \grffile@inputenc@loop\^^A\^^H%
        \grffile@inputenc@loop\^^K\^^K%
        \grffile@inputenc@loop\^^N\^^_%
        \grffile@inputenc@loop\^^?\^^ff%
      \fi
      \expandafter\grffile@extchar@Ginclude@graphics
  \else
    \expandafter\grffile@Ginclude@graphics
  \fi
}
```

`ffile@extchar@Ginclude@graphics`

```
\def\grffile@extchar@Ginclude@graphics#1{%
  \toks@{#1}%
  \edef\grffile@filename{\the\toks@}%
  \ifx\grffile@inputencoding\@empty
  \else
    \ifx\grfile@filenameencoding\@empty
    \else
```

```
      \ifx\grffile@inputencoding\grffile@filenameencoding
      \else
        \expandafter\ifx\csname StringEncodingConvert\endcsname\relax
          \PackageError{grffile}{%
            Package `stringenc' is not loaded,\MessageBreak
            omitting file name conversion%
          }\@ehc
        \else
          \StringEncodingConvert\grffile@temp\grffile@filename
              \grffile@inputencoding\grffile@filenameencoding
          \StringEncodingSuccessFailure{%
            \let\grffile@filename\grffile@temp
          }{%
            \PackageError{grffile}{%
              Filename conversion failed%
            }\@ehc
          }%
        \fi
      \fi
    \fi
  \fi
%  \toks@\expandafter{\grffile@filename}%
  \edef\x{\endgroup
%    \noexpand\grffile@Ginclude@graphics{\the\toks@}%
    \noexpand\grffile@Ginclude@graphics{\grffile@filename}%
  }%
  \x
}
```

`\grffile@inputenc@loop`

```
\def\grffile@inputenc@loop#1#2{%
  \count@=`#1\relax
  \loop
    \begingroup
      \uccode`\~=\count@
    \uppercase{%
      \endgroup
      \edef~{\string~}%
    }%
  \ifnum\count@<`#2\relax
    \advance\count@\@ne
  \repeat
}
```

Support for option space

`\grffile@space@getbase`

```
\def\grffile@space@getbase#1{%
  \edef\grffile@tempa{%
    \def\noexpand\@tempa####1#1\noexpand\@nil{%
      \def\noexpand\Gin@base{####1}%
    }%
  }%
  \grffile@IfFileExists{\filename@area\filename@base#1}{%
    \grffile@tempa
    \expandafter\@tempa\grffile@file@found\@nil
    \edef\Gin@ext{#1}%
  }{%
```

```
  }%
}

\begingroup\expandafter\expandafter\expandafter\endgroup
\expandafter\ifx\csname pdf@filesize\endcsname\relax
  \ifxetex
```

\grffile@XeTeX@IfFileExists

```
    \long\def\grffile@XeTeX@IfFileExists#1{%
      \openin\@inputcheck"#1" %
      \ifeof\@inputcheck
        \closein\@inputcheck
        \expandafter\@secondoftwo
      \else
        \closein\@inputcheck
        \expandafter\@firstoftwo
      \fi
    }%
```

\grffile@IfFileExists

```
    \long\def\grffile@IfFileExists#1{%
      \grffile@XeTeX@IfFileExists{#1}{%
        \edef\grffile@file@found{#1}%
        \@firstoftwo
      }{%
        \let\reserved@a\@secondoftwo
        \ifx\input@path\@undefined
        \else
          \expandafter\@tfor\expandafter\reserved@b\expandafter
              :\expandafter=\input@path\do{%
            \grffile@XeTeX@IfFileExists{\reserved@b#1}{%
              \edef\grffile@file@found{\reserved@b#1}%
              \let\reserved@a\@firstoftwo
              \iftrue\@break@tfor\fi
            }{}%
          }%
        \fi
        \reserved@a
      }%
    }%
```

\grffile@org@Gread@QTm Patch `\Gread@QTm` of `xetex.def`.

```
    \def\grffile@org@Gread@QTm#1{%
      \IfFileExists{\Gin@base.bb}{%
        \Gread@eps{\Gin@base.bb}%
      }{%
        \G@measure@QTm{\Gin@base}{\Gin@ext}%
      }%
    }%

    \ifx\Gread@QTm\grffile@org@Gread@QTm
```

\Gread@QTm

```
      \def\Gread@QTm#1{%
        \grffile@IfFileExists{\Gin@base.bb}{%
          \Gread@eps{\Gin@base.bb}%
        }{%
          \G@measure@QTm{\Gin@base}{\Gin@ext}%
```

```
      }%
    }%

    \PackageInfo{grffile}{\string\Gread@QTm\space patched}%
  \else
    \begingroup\expandafter\expandafter\expandafter\endgroup
    \expandafter\ifx\csname Gread@QTm\endcsname\relax
      \@ifpackagelater{graphics}{2017/06/01}
        {}
        {%
          \PackageWarning{grffile}{%
            \string\Gread@QTm\space of xetex.def not found%
          }%
        }%
    \else
```

`\grffile@org@Gread@QTm`

```
      \let\grffile@org@Gread@QTm\Gread@QTm
```

`\Gread@QTm`

```
      \def\Gread@QTm#1{%
        \let\grffile@saved@IfFileExists\IfFileExists
        \let\IfFileExists\grffile@IfFileExists
        \grffile@org@GreadQTm{#1}%
        \let\IfFileExists\grffile@saved@IfFileExists
      }%

    \fi
  \fi
```

`\grffile@org@Gread@eps`

```
  \let\grffile@org@Gread@eps\Gread@eps

  \def\grffile@temp#1\immediate\openin#2 #3\grffile@nil#4\grffile@NIL{%
    \begingroup
    \toks@{#2}%
    \edef\grffile@temp{\the\toks@}%
    \def\grffile@test{\@inputcheck####1}%
    \ifx\grffile@temp\grffile@test
      \expandafter\@firstoftwo
    \else
      \expandafter\@secondoftwo
    \fi
    {%
      \toks@{%
        #1%
        \immediate\openin\@inputcheck"##1"\relax
        #3%
      }%
      \expandafter\endgroup
      \expandafter\def\expandafter\Gread@eps
      \expandafter##\expandafter1\expandafter{%
        \the\toks@
      }%
      \PackageInfo{grffile}{%
        \string\Gread@eps\space patched%
      }%
    }{%
      \@ifpackagelater{graphics}{2017/06/01}
```

```
          {}
          {%
            \PackageWarning{grffile}{%
              Unsupported \string\Gread@eps\space not patched%
            }%
          }%
        \endgroup
      }%
    }%
    \expandafter\grffile@temp\Gread@eps{#1}\grffile@nil
        \immediate\openin{} \grffile@nil\grffile@NIL
  \else
    \begingroup
      \let\on@line\@empty
      \PackageInfo{grffile}{%
        \string\grffile@IfFileExists\space without space support,%
        \MessageBreak
        because pdfTeX's \string\pdffilesize\space is not available%
        \MessageBreak
        or XeTeX is not running%
      }%
    \endgroup
```

`\grffile@IfFileExists`

```
    \long\def\grffile@IfFileExists#1{%
      \IfFileExists{#1}{%
        \let\grffile@IFE@next\@firstoftwo
      }{%
        \let\grffile@file@found\@filef@und
        \let\grffile@IFE@next\@secondoftwo
      }%
      \grffile@IFE@next
    }%
  \fi
\else
```

`\grffile@IfFileExists`

```
  \long\def\grffile@IfFileExists#1{%
    \expandafter\expandafter\expandafter
    \ifx\expandafter\expandafter\expandafter\\\pdf@filesize{#1}\\%
      \let\reserved@a\@secondoftwo
      \ifx\input@path\@undefined
      \else
        \expandafter\@tfor\expandafter\reserved@b\expandafter
            :\expandafter=\input@path\do{%
          \expandafter\expandafter\expandafter
          \ifx\expandafter\expandafter\expandafter
              \\\pdf@filesize{\reserved@b#1}\\%
          \else
            \edef\grffile@file@found{\reserved@b#1}%
            \let\reserved@a\@firstoftwo
            \@break@tfor
          \fi
        }%
      \fi
      \expandafter\reserved@a
    \else
```

```
      \edef\grffile@file@found{#1}%
      \expandafter\@firstoftwo
    \fi
  }%
\fi
```

`\grffile@Ginclude@graphics`

```
\def\grffile@Ginclude@graphics#1{%
  \begingroup
    \ifgrffile@space
      \let\Gin@getbase\grffile@space@getbase
    \fi
    \ifgrffile@multidot
      \let\filename@base\@empty
      \let\filename@simple\grffile@filename@simple
    \fi
    \grffile@org@Ginclude@graphics{#1}%
  \endgroup
}%
```

`\grffile@filename@simple`

```
\def\grffile@filename@simple#1.#2\\{%
  \ifx\\#2\\%
    \def\filename@base{#1}%
    \let\filename@ext\relax
  \else
    \def\filename@base{}%
    \grffile@analyze@ext{#1}.{#2}\\%
  \fi
}
```

`\grffile@analyze@ext`

```
\def\grffile@analyze@ext#1.#2\\{%
  \let\grffile@next\relax
  \ifx\\#2\\%
    \edef\filename@base{\filename@base#1}%
    \let\filename@ext\relax
    \def\grffile@next{\grffile@try@extlist}%
  \else
    \edef\filename@base{\filename@base #1}%
    \edef\filename@ext{\filename@dot#2\\}%
    \expandafter\ifx\csname Gin@rule@.\filename@ext\endcsname\relax
      \edef\filename@base{\filename@base.}%
      \def\grffile@next{\grffile@analyze@ext#2\\}%
    \else
      \grffile@IfFileExists{\filename@area\filename@base.\filename@ext}{%
        % success
      }{%
        \edef\filename@base{\filename@base.\filename@ext}%
        \let\filename@ext\relax
        \def\grffile@next{\grffile@try@extlist}%
      }%
    \fi
  \fi
  \grffile@next
}
```

\grffile@try@extlist

```
\def\grffile@try@extlist{%
  \@for\grffile@temp:=\Gin@extensions\do{%
    \grffile@IfFileExists{\filename@area\filename@base\grffile@temp}{%
      \ifx\filename@ext\relax
        \edef\filename@ext{\expandafter\@gobble\grffile@temp\@empty}%
      \fi
    }{}%
  }%
  \ifx\filename@ext\relax
    \expandafter\let\expandafter\filename@base\expandafter\@empty
    \expandafter\grffile@use@last@ext\filename@base.\\%
  \fi
}
```

\grffile@use@last@ext

```
\def\grffile@use@last@ext#1.#2\\{%
  \ifx\\#2\\%
    \edef\filename@base{\expandafter\filename@dot\filename@base\\}%
    \def\filename@ext{#1}%
    \expandafter\@gobble
  \else
    \edef\filename@base{\filename@base#1.}%
    \expandafter\@firstofone
  \fi
  {%
    \grffile@use@last@ext#2\\%
  }%
}
```

Print current option setting

\grffile@option@status

```
\def\grffile@option@status#1{%
  \begingroup
    \let\on@line\@empty
    \PackageInfo{grffile}{%
      Option `#1' is %
      \expandafter\ifx\csname ifgrffile@#1\expandafter\endcsname
                      \csname iftrue\endcsname
        set to `true'%
      \else
        \expandafter\ifx\csname grffile@#1@disabled\endcsname\@empty
          not available%
        \else
          set to `false'%
        \fi
      \fi
    }%
  \endgroup
}

\grffile@option@status{multidot}
\grffile@option@status{extendedchars}
\grffile@option@status{space}
```

2.5 Fix \Gin@ii of package graphicx

If the image file name contains the hash character macro \Gin@ii of package graphicx breaks.

\grffile@Gin@ii@graphicx

```
\def\grffile@Gin@ii@graphicx[#1]#2{%
  \def\@tempa{[}%
  \def\@tempb{#2}%
  \ifx\@tempa\@tempb
    \def\@tempa{\Gin@iii[#1][}% hash-ok
    \expandafter\@tempa
  \else
    \begingroup
      \@tempswafalse
      \toks@{\Ginclude@graphics{#2}}%
      \setkeys{Gin}{#1}%
      \Gin@esetsize
      \the\toks@
    \endgroup
  \fi
}
```

\grffile@Gin@ii@fixed

```
\def\grffile@Gin@ii@fixed[#1]#2{%
  \def\@tempa{[}%
  \begingroup
    \toks@={#2}%
    \edef\@tempb{\the\toks@}%
  \expandafter\endgroup
  \ifx\@tempa\@tempb
    \def\@tempa{\Gin@iii[#1][}% hash-ok
    \expandafter\@tempa
  \else
    \begingroup
      \@tempswafalse
      \toks@{\Ginclude@graphics{#2}}%
      \setkeys{Gin}{#1}%
      \Gin@esetsize
      \the\toks@
    \endgroup
  \fi
}
```

\grffile@Fix@Gin@ii

```
\def\grffile@Fix@Gin@ii{%
  \let\Gin@ii\grffile@Gin@ii@fixed
  \begingroup
    \escapechar=92 %
    \PackageInfo{grffile}{\string\Gin@ii\space of package `graphicx' fixed}%
  \endgroup
}

\ifx\Gin@ii\grffile@Gin@ii@graphicx
  \grffile@Fix@Gin@ii
\else
  \AtBeginDocument{\grffile@Fix@Gin@ii}%
\fi
```

```
\grffile@RestoreCatcodes
⟨/package⟩
```

3 Test

3.1 Multidot with default rule

```
⟨*test1⟩
\NeedsTeXFormat{LaTeX2e}
\documentclass{article}
\usepackage{filecontents}
% file grffile-test.mp:
% beginfig(1);
%   draw fullcircle scaled 2cm withpen pencircle scaled 2mm;
% endfig;
% end
\begin{filecontents*}{grffile-test.1}
%!PS
%%BoundingBox: -32 -32 32 32
%%Creator: MetaPost
%%CreationDate: 2004.06.16:1257
%%Pages: 1
%%EndProlog
%%Page: 1 1
 0 5.66928 dtransform truncate idtransform setlinewidth pop [] 0 setdash
 1 setlinejoin 10 setmiterlimit
newpath 28.34645 0 moveto
28.34645 7.51828 25.35938 14.72774 20.04356 20.04356 curveto
14.72774 25.35938 7.51828 28.34645 0 28.34645 curveto
-7.51828 28.34645 -14.72774 25.35938 -20.04356 20.04356 curveto
-25.35938 14.72774 -28.34645 7.51828 -28.34645 0 curveto
-28.34645 -7.51828 -25.35938 -14.72774 -20.04356 -20.04356 curveto
-14.72774 -25.35938 -7.51828 -28.34645 0 -28.34645 curveto
7.51828 -28.34645 14.72774 -25.35938 20.04356 -20.04356 curveto
25.35938 -14.72774 28.34645 -7.51828 28.34645 0 curveto closepath stroke
showpage
%%EOF
\end{filecontents*}
\usepackage{graphicx}
\usepackage[multidot]{grffile}[2008/10/13]
\DeclareGraphicsRule{*}{mps}{*}{} % for pdflatex
\begin{document}
\includegraphics{grffile-test.1}
\end{document}
⟨/test1⟩
```

4 Installation

4.1 Download

Package. This package is available on CTAN[1]:

CTAN:macros/latex/contrib/grffile/grffile.dtx The source file.

CTAN:macros/latex/contrib/grffile/grffile.pdf Documentation.

[1] http://ctan.org/pkg/grffile

Bundle. All the packages of the bundle 'oberdiek' are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

CTAN:install/macros/latex/contrib/grffile.tds.zip

TDS refers to the standard "A Directory Structure for TEX Files" (CTAN:tds/tds.pdf). Directories with `texmf` in their name are usually organized this way.

4.2 Bundle installation

Unpacking. Unpack the `oberdiek.tds.zip` in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

Script installation. Check the directory `TDS:scripts/oberdiek/` for scripts that need further installation steps. Package attachfile2 comes with the Perl script `pdfatfi.pl` that should be installed in such a way that it can be called as `pdfatfi`. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

4.3 Package installation

Unpacking. The `.dtx` file is a self-extracting docstrip archive. The files are extracted by running the `.dtx` through plain TEX:

```
tex grffile.dtx
```

TDS. Now the different files must be moved into the different directories in your installation TDS tree (also known as `texmf` tree):

```
grffile.sty            → tex/latex/grffile/grffile.sty
grffile.pdf            → doc/latex/grffile/grffile.pdf
test/grffile-test1.tex → doc/latex/grffile/test/grffile-test1.tex
grffile.dtx            → source/latex/grffile/grffile.dtx
```

If you have a `docstrip.cfg` that configures and enables docstrip's TDS installing feature, then some files can already be in the right place, see the documentation of docstrip.

4.4 Refresh file name databases

If your TEX distribution (teTEX, mikTEX, ...) relies on file name databases, you must refresh these. For example, teTEX users run `texhash` or `mktexlsr`.

4.5 Some details for the interested

Attached source. The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is pdftk, e.g. unpack the file into the current directory:

```
pdftk grffile.pdf unpack_files output .
```

Unpacking with LaTeX. The `.dtx` chooses its action depending on the format:

plain TeX: Run docstrip and extract the files.

LaTeX: Generate the documentation.

If you insist on using LaTeX for docstrip (really, docstrip does not need LaTeX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{grffile.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

Generating the documentation. You can use both the `.dtx` or the `.drv` to generate the documentation. The process can be configured by the configuration file `ltxdoc.cfg`. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfLaTeX:

```
pdflatex␣grffile.dtx
makeindex␣-s␣gind.ist␣grffile.idx
pdflatex␣grffile.dtx
makeindex␣-s␣gind.ist␣grffile.idx
pdflatex␣grffile.dtx
```

5 Catalogue

The following XML file can be used as source for the TeX Catalogue. The elements `caption` and `description` are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is `grffile.xml`.

```
⟨*catalogue⟩
<?xml version='1.0' encoding='us-ascii'?>
<!DOCTYPE entry SYSTEM 'catalogue.dtd'>
<entry datestamp='$Date$' modifier='$Author$' id='grffile'>
  <name>grffile</name>
  <caption>Extended file name support for graphics.</caption>
  <authorref id='auth:oberdiek'/>
  <copyright owner='Heiko Oberdiek' year='2006-2012'/>
  <license type='lppl1.3'/>
  <version number='1.18'/>
  <description>
    The package extends the file name processing of package
    <xref refid='graphics'>graphics</xref> to support a larger range
    of file names. For example, the file name may contain several dots.

    Or in case of <xref refid='pdftex'>pdfTeX</xref> in PDF mode the
    file name may contain spaces.
    <p/>
    The package is part of the <xref refid='oberdiek'>oberdiek</xref>
    bundle.
  </description>
  <documentation details='Package documentation'
      href='ctan:/macros/latex/contrib/grffile/grffile.pdf'/>
  <ctan file='true' path='/macros/latex/contrib/grffile/grffile.dtx'/>
  <miktex location='oberdiek'/>
```

```
  <texlive location='oberdiek'/>
  <install path='/macros/latex/contrib/grffile/grffile.tds.zip'/>
</entry>
⟨/catalogue⟩
```

6 References

[1] David Carlisle, Sebastian Rahtz: *The graphics package*; 2006/02/20 v1.0o; CTAN:macros/latex/required/graphics/graphics.dtx.

[2] Sebastian Rahtz, Heiko Oberdiek: *The graphicx package*; 1999/02/16 v1.0f; CTAN:macros/latex/required/graphics/graphicx.dtx.

7 History

[2004/07/18 v0.5]

- First version, published in newsgroup de.comp.text.tex: "Re: Dateinamenproblem"[2]

[2006/08/15 v1.0]

- File existence check by new primitives of pdfTeX 1.30.
- Implementation partly rewritten.
- New DTX framework.

[2006/08/17 v1.1]

- Adaptation to version 2.3 of package kvoptions.

[2006/11/30 v1.2]

- New option babel. Before this feature was part of option extendedchars.

[2007/04/11 v1.3]

- Line ends sanitized.

[2007/06/13 v1.4]

- Encoding support added with options encoding, inputencoding, and filenameencoding.

[2007/08/16 v1.5]

- Bug fix in encoding support.

[2007/11/11 v1.6]

- Use of package pdftexcmds for LuaTeX support.

[2] Url: http://groups.google.com/group/de.comp.text.tex/msg/b85984095d1a3c95

[2007/11/24 v1.7]

- Bug fix of broken previous version.

[2008/08/11 v1.8]

- Code is not changed.
- URLs updated.

[2008/10/13 v1.9]

- Fix for option 'multidot' with default rule.

[2009/09/25 v1.10]

- Rewrite of 'multidot' algorithm to fix a problem ('multidot' with `\graphicspath`).

[2010/01/28 v1.11]

- Undefined `\pdf@filesize` fixed.

[2010/08/26 v1.12]

- Macro `\Gin@ii` of package graphicx fixed for the case that the file name contains a hash.

[2010/12/09 v1.13]

- Option space also supports XeTeX.

[2011/10/04 v1.14]

- Fix for option space support of XeTeX for EPS files (`\Gread@eps`). (Bug reported by Peter Davis.)

[2011/10/17 v1.15]

- Bug fix for option space support of XeTeX. Wrong usage of `\@break@tfor` fixed. (Bug reported by Martin Schröder.)

[2012/04/05 v1.16]

- Some fix for option extendedchars.

[2016/05/16 v1.17]

- Documentation updates.

[2017/06/30 v1.18]

- Update to follow graphics changes.

8 Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

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