The grffile package

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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.

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*Please report any issues at https://github.com/ho-tex/oberdiek/issues

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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 Identification

```
1 ⟨*package⟩
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{grffile}%
4   [2016/05/16 v1.17 Extended file name support for graphics (HO)]%
```

2.2 Catcode stuff

```
5 \edef\grffile@RestoreCatcodes{%
6   \catcode`\noexpand\=\the\catcode`\=\relax
7   \catcode`\noexpand\:\the\catcode`\:\relax
8   \catcode`\noexpand\.\the\catcode`\.\relax
9   \catcode`\noexpand\'\the\catcode`\'\relax
10  \catcode`\noexpand\<\the\catcode`\<\relax
11  \catcode`\noexpand\>\the\catcode`\>\relax
12  \catcode`\noexpand\*\the\catcode`\*\relax
13  \catcode`\noexpand\^\the\catcode`\^\relax
14  \catcode`\noexpand\~\the\catcode`\~\relax
15 }
16 \@makeother\=
17 \@makeother\:
18 \@makeother\.
19 \@makeother\'
20 \@makeother\<
21 \@makeother\>
22 \@makeother\*
23 \catcode`\^=7 %
24 \catcode`\~=\active
```

2.3 Options

```
25 \RequirePackage{ifpdf}[2010/01/28]
26 \RequirePackage{ifxetex}[2010/09/12]
27 \RequirePackage{kvoptions}[2006/08/17]
28 \SetupKeyvalOptions{%
29   family=Gin,%
30   prefix=grffile@%
31 }
32 \DeclareDefaultOption{\@unknownoptionerror}
33 \DeclareBoolOption[true]{multidot}
34 \DeclareBoolOption[true]{babel}
35 \DeclareBoolOption[false]{extendedchars}
36 \DeclareBoolOption{space}
37 \DeclareVoidOption{encoding}{%
38   \RequirePackage{stringenc}\relax
39 }
40 \DeclareStringOption{inputencoding}
41 \DeclareStringOption{filenameencoding}
42 \DeclareDefaultOption{%
43   \PassOptionsToPackage\CurrentOption{graphics}%
44 }
```

Default setting for option space.

```
45 \RequirePackage{pdftexcmds}[2007/11/11]
46 \ifxetex
47   \grffile@spacetrue
48 \else
49   \begingroup\expandafter\expandafter\expandafter\endgroup
50   \expandafter\ifx\csname pdf@filesize\endcsname\relax
51     \grffile@spacefalse
52     \let\grffile@space@disabled\@empty
53     \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
}
```

\grffile@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
      \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%
      }%
    }{%
      \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}
```

2.4 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
```

```
479 newpath 28.34645 0 moveto
480 28.34645 7.51828 25.35938 14.72774 20.04356 20.04356 curveto
481 14.72774 25.35938 7.51828 28.34645 0 28.34645 curveto
482 -7.51828 28.34645 -14.72774 25.35938 -20.04356 20.04356 curveto
483 -25.35938 14.72774 -28.34645 7.51828 -28.34645 0 curveto
484 -28.34645 -7.51828 -25.35938 -14.72774 -20.04356 -20.04356 curveto
485 -14.72774 -25.35938 -7.51828 -28.34645 0 -28.34645 curveto
486 7.51828 -28.34645 14.72774 -25.35938 20.04356 -20.04356 curveto
487 25.35938 -14.72774 28.34645 -7.51828 28.34645 0 curveto closepath stroke
488 showpage
489 %%EOF
490 \end{filecontents*}
491 \usepackage{graphicx}
492 \usepackage[multidot]{grffile}[2008/10/13]
493 \DeclareGraphicsRule{*}{mps}{*}{} % for pdflatex
494 \begin{document}
495 \includegraphics{grffile-test.1}
496 \end{document}
497 ⟨/test1⟩
```

4 Installation

4.1 Download

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

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

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

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/oberdiek.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
```

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

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

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='1.17'/>
```

```
<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/oberdiek/grffile.pdf'/>
<ctan file='true' path='/macros/latex/contrib/oberdiek/grffile.dtx'/>
<miktex location='oberdiek'/>
<texlive location='oberdiek'/>
<install path='/macros/latex/contrib/oberdiek/oberdiek.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.

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

[2007/08/16 v1.5]

- Bug fix in encoding support.

[2007/11/11 v1.6]

- Use of package pdftexcmds for LuaTeX support.

[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.

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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