

The **epstopdf** package

Heiko Oberdiek
<oberdiek@uni-freiburg.de>

2006/08/26 v1.3

Abstract

This packages adds support of handling eps images to package **graphics** or **graphicx** with option **pdftex**. If an eps image is detected, **epstopdf** is automatically called to convert it to pdf format.

Contents

1 Usage	1
2 Implementation	2
2.1 Relead check and identification	2
2.2 Help macros for miniltx mode	2
2.3 Checks	3
2.4 Adding conversion support	3
3 Installation	4
3.1 Download	4
3.2 Bundle installation	4
3.3 Package installation	5
3.4 Refresh file name databases	5
3.5 Some details for the interested	5
4 History	5
[2001/01/06 v1.0]	5
[2001/02/04 v1.1]	6
[2006/02/20 v1.2]	6
[2006/08/26 v1.3]	6
5 Index	6

1 Usage

Required: * The program ‘epstopdf’.
 * The feature ‘\write18’ has to be enabled to get
 the conversion via the program epstopdf work:
 * command line option: -shell-escape
 example: pdflatex -shell-escape test.tex
 * configuraton file ‘texmf.cnf’: shell_escape = 1

Use: The package is loaded after **graphic{s,x}**, eg:
 \usepackage[pdftex]{graphicx}
 \usepackage{epstopdf}
 Images with extension ‘.eps’ are now detected
 and supported:
 * Implicitly: \includegraphics{bild}

If ‘bild.eps’ can only be found,
then it is converted to the file ‘bild.pdf’,
that will be used by pdfTeX.
On the next occurrences or on the next pdfTeX run,
the pdf file is already available, so the
conversion step is skipped.
* Explicitly: \includegraphics{bild.eps}
Each time the conversion program is called.

2 Implementation

1 <*package>

2.1 Relead check and identification

Reload check, especially if the package is not used with L^AT_EX.

```

2 \begingroup
3 \expandafter\let\expandafter\x\csname ver@epstopdf.sty\endcsname
4 \ifcase 0%
5 \ifx\x\relax % plain
6 \else
7 \ifx\x\empty % LaTeX
8 \else
9 1%
10 \fi
11 \fi
12 \else
13 \expandafter\ifx\csname PackageInfo\endcsname\relax
14 \def\x#1#2{%
15 \immediate\write-1{Package #1 Info: #2.}%
16 }%
17 \else
18 \def\x#1#2{\PackageInfo{#1}{#2, stopped}}%
19 \fi
20 \x{epstopdf}{The package is already loaded}%
21 \endgroup
22 \expandafter\endinput
23 \fi
24 \endgroup

```

Package identification:

```

25 \begingroup
26 \expandafter\ifx\csname ProvidesPackage\endcsname\relax
27 \def\x#1#2#3[#4]{\endgroup
28 \immediate\write-1{Package: #3 #4}%
29 \xdef#1{#4}%
30 }%
31 \else
32 \def\x#1#2[#3]{\endgroup
33 #2[#3]}%
34 \ifx#1\relax
35 \xdef#1{#3}%
36 \fi
37 }%
38 \fi
39 \expandafter\x\csname ver@epstopdf.sty\endcsname
40 \ProvidesPackage{epstopdf}%
41 [2006/08/26 v1.3 Conversion with epstopdf on the fly (H0)]

```

2.2 Help macros for miniltx mode

```

42 \@ifundefined{PackageWarning}{%

```

```

43 \def\PackageWarning#1#2{%
44   \begingroup
45     \newlinechar=10 %
46     \def\MessageBreak{%
47       ^^J(#1)\@spaces\@spaces\@spaces\@spaces
48     }%
49     \immediate\write16{^^JPackage #1 Warning: #2\on@line.^^J}%
50   \endgroup
51 }%
52 }{}
53 \ifundefined{PackageWarningNoLine}{%
54   \def\PackageWarningNoLine#1#2{%
55     \PackageWarning{#1}{#2\@gobble}%
56   }%
57 }{}
58 \ifundefined{on@line}{%
59   \def\on@line{ on input line \the\inputlineno}%
60 }{}
61 \ifundefined{@spaces}{%
62   \def\@spaces{\space\space\space\space}%
63 }{}

```

2.3 Checks

Check, whether package graphics is loaded (also graphicx loads graphics). Because miniltx.tex does not know `\ifpackageloaded` we test for `\Gin@setfile` instead.

```

64 \begingroup\expandafter\expandafter\expandafter\endgroup
65 \expandafter\ifx\csname Gin@setfile\endcsname\relax
66   \PackageWarningNoLine{epstopdf}{%
67     No graphics package \string'graphic{s,x}\string' found%
68   }%
69 \expandafter\endinput
70 \fi

```

Check, whether pdftex.def is loaded. `\ver@pdftex.def` is not available with miniltx.tex, thus we test for `\Gin@driver`.

```

71 \begingroup
72   \def\x{pdftex.def}%
73   \ifx\Gin@driver\x
74   \else
75     \PackageWarningNoLine{epstopdf}{%
76       Graphics driver file \string'pdftex.def\string' not found%
77     }%
78   \expandafter\endgroup\expandafter\endinput
79   \fi
80 \endgroup

```

Check, whether the shell escape feature is enabled.

```

81 \begingroup
82   \expandafter\ifx\csname pdfshellescape\endcsname\relax
83   \else
84     \ifnum\pdfshellescape>0 %
85     \else
86       \PackageWarningNoLine{epstopdf}{%
87         Shell escape feature is not enabled%
88       }%
89     \fi
90   \fi
91 \endgroup

```

2.4 Adding conversion support

Patch `\Gin@setfile` to execute #3, if it contains a command.

```

92 \let\ETEorg@Gin@setfile\Gin@setfile
93 \def\Gin@setfile#1#2#3{%
94   \if'\@car #3\relax\@nil
95     \immediate\write18{\@cdr #3\@empty\@nil}%
96     \ETEorg@Gin@setfile{#1}{#2}{\Gin@base #2}%
97   \else
98     \ETEorg@Gin@setfile{#1}{#2}{#3}%
99   \fi
100 }

```

Adding .eps at the end of the list of extensions, defined by \DeclareGraphicsExtensions.

```

101 \@ifundefined{Gin@extensions}{%
102   \def\Gin@extensions{.eps}%
103 }{%
104   \expandafter\ifx\expandafter\indent\Gin@extensions\indent
105     \def\Gin@extensions{.eps}%
106   \else
107     \expandafter\def\expandafter\Gin@extensions\expandafter{%
108       \Gin@extensions,.eps%
109     }%
110   \fi
111 }

```

\DeclareGraphicsRule for .eps

```

112 \@namedef{Gin@rule@.eps}#1{{pdf}}{.pdf}{'epstopdf #1}}
113 \end{package}

```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

[CTAN:macros/latex/contrib/oberdiek/epstopdf.dtx](#) The source file.

[CTAN:macros/latex/contrib/oberdiek/epstopdf.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:macros/latex/contrib/oberdiek/oberdiek-tds.zip](#)

3.2 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/

```

¹<http://ftp.ctan.org/tex-archive/>

3.3 Package installation

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

```
tex epstopdf.dtx
```

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

```
epstopdf.sty → tex/latex/oberdiek/epstopdf.sty
epstopdf.pdf → doc/latex/oberdiek/epstopdf.pdf
epstopdf.dtx → source/latex/oberdiek/epstopdf.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`.

3.4 Refresh file name databases

If your \TeX distribution (te \TeX , mi \TeX , ...) relies on file name databases, you must refresh these. For example, te \TeX users run `texhash` or `mktexlsr`.

3.5 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 epstopdf.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{epstopdf.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 pdf \LaTeX :

```
pdflatex epstopdf.dtx
makeindex -s gind.ist epstopdf.idx
pdflatex epstopdf.dtx
makeindex -s gind.ist epstopdf.idx
pdflatex epstopdf.dtx
```

4 History

[2001/01/06 v1.0]

- First public version, published in the pdf \TeX mailing list.

[2001/02/04 v1.1]

- Minor documentation update.
- CTAN.

[2006/02/20 v1.2]

- DTX framework.
- Compatibility for `miniltx.tex`.

[2006/08/26 v1.3]

- Check for `\write18` if available and print a warning if the feature is not enabled.

5 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; numbers in roman refer to the code lines where the entry is used.

Symbols			
<code>\@car</code>	94	<code>\immediate</code>	15, 28, 49, 95
<code>\@cdr</code>	95	<code>\indent</code>	104
<code>\@empty</code>	95	<code>\inputlineno</code>	59
<code>\@gobble</code>	55	M	
<code>\@ifundefined</code>	42, 53, 58, 61, 101	<code>\MessageBreak</code>	46
<code>\@namedef</code>	112	N	
<code>\@nil</code>	94, 95	<code>\newlinechar</code>	45
<code>\@spaces</code>	47, 62	O	
C		<code>\on@line</code>	49, 59
<code>\csname</code>	3, 13, 26, 39, 65, 82	P	
E		<code>\PackageInfo</code>	18
<code>\empty</code>	7	<code>\PackageWarning</code>	43, 55
<code>\endcsname</code>	3, 13, 26, 39, 65, 82	<code>\PackageWarningNoLine</code> ..	54, 66, 75, 86
<code>\endinput</code>	22, 69, 78	<code>\pdfshellescape</code>	84
<code>\ETEorg@Gin@setfile</code>	92, 96, 98	<code>\ProvidesPackage</code>	40
G		S	
<code>\Gin@base</code>	96	<code>\space</code>	62
<code>\Gin@driver</code>	73	T	
<code>\Gin@extensions</code>	102, 104, 105, 107, 108	<code>\the</code>	59
<code>\Gin@setfile</code>	92, 93	W	
I		<code>\write</code>	15, 28, 49, 95
<code>\if</code>	94	X	
<code>\ifcase</code>	4	<code>\x</code> ..	3, 5, 7, 14, 18, 20, 27, 32, 39, 72, 73
<code>\ifnum</code>	84		
<code>\ifx</code>	5, 7, 13, 26, 34, 65, 73, 82, 104		