

Package `bounddvi` v7.1

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2016/10/25

Package `bounddvi` sets papersize special into DVI file. This package can be used in both *tate* (vertical) and *yoko* (horizontal) writing directions of Japanese $\mathrm{p}\mathrm{L}\mathrm{A}\mathrm{T}\mathrm{E}\mathrm{X}$ / $\mathrm{u}\mathrm{p}\mathrm{L}\mathrm{A}\mathrm{T}\mathrm{E}\mathrm{X}$, and both `dvipdfmx` and `dvips` drivers are supported. The `tombow` option defined in Japanese $\mathrm{p}\mathrm{L}\mathrm{A}\mathrm{T}\mathrm{E}\mathrm{X}$ kernel is also supported. Of course, this package can be used also with the original $\mathrm{L}\mathrm{A}\mathrm{T}\mathrm{E}\mathrm{X}$ in DVI output mode.

This package (after v7.0) is part of `platex-tools` bundle:

<https://github.com/aminophen/platex-tools>

Usage

Load this package in preamble.

```
\documentclass[a5paper]{article}
\usepackage{bounddvi}
...
```

Process the `.tex` file using `latex + dvips` chain or `latex + dvipdfmx` chain.

Known limitations

1. The compatibility with `geometry` package may not be perfect. When `dvips` is used, the specification which appears *first* in DVI takes effect. On the other hand, when `dvipdfmx` is used, the specification which appears *at last* in DVI takes effect. For this reason,

```
% latex + dvipdfmx
\documentclass{...}
\usepackage{bounddvi}
\usepackage[dvipdfm]{geometry}
```

can sometimes fail to set proper paper size.

2. This package supports “`jsclasses`-like employment” of `\mag`, because it’s more widely used in Japan. This may be incompatible with some classes or packages which employ `\mag` in other ways (see descriptions below).

Note about `\mag` handling

Among the packages in CTAN, there are two types of implementation in terms of `\mag` employment. It seems that there is no (official or practical) “standard” in `\mag` treatment.

When the output is going to the physical size of A4 (210 mm × 297 mm), there are two ways: some classes/packages can set

```
\mag=2000
\paperwidth=210mm (= 420truemm)
\paperheight=297mm (= 594truemm)
```

and others can set

```
\mag=2000
\paperwidth=105mm (= 210truemm)
\paperheight=148.5mm (= 297truemm)
```

The first way is adopted by `geometry` package etc, and it’s (probably) based on the behavior of the `papersize` special of `dvips`. It does not handle true units properly, and accepts only non-true units and evaluates them as if they were true units. The second way is adopted by `jsclasses` document class etc, and is also supported by `pdf:pagesize` special of `dvipdfm(x)`. This can be more consistent with L^AT_EX, since all other layout parameters (e.g. `\textwidth`) are set according to the unit `truemm`.

The `bounddvi` supports the latter, so some classes/packages which are based on the former may or may not work properly when using `bounddvi` package.

References

- Setting paper size using `dvips` & `dvipdfm` (description in Japanese)
<https://www.ma.ns.tcu.ac.jp/Pages/TeX/bounddvi.sty.html>

ChangeLog

- 2002/03/10 v1.0 (KI) First version
- 2002/10/30 v2.0 (KI) Add `dvipdfm pdf:pagesize` special
- 2003/03/22 v3.2 (KI) Compatibility with `hyperref`
- 2004/05/08 v4.0 (KI) Support for `\mag ≠ 1000`
- 2004/12/08 v5.2 (KI) Compatibility with `geometry`
- 2004/12/15 v6.0 (KI) Not to use `dvipdfm(x) pdf:pagesize` special
- 2016/10/25 v7.1 (HY) Support for pL^AT_EX 2_ε `tombow` option, compatibility with `graphics/color` packages