Package gentombow v0.9m

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It is convenient to print documents for final smaller paper sizes on paper of the printer's standard physical paper size; it allows printing close to the logical paper edge and even outside the logical page.

This package gentombow provides a Japanese-style crop marks (called 'tombow' in Japanese) for trimming paper stacks, and place the document page at the center of a larger physical paper sheet. It automatically detects the page size (\paperwidth, \paperheight) which is going to be set by document class. This document itself is a demonstration of this package, with final A4 paper printed on B4 (JIS B4; not ISO B4!) paper.

A basic usage:

\documentclass[a4paper]{article}
\usepackage{gentombow}
\usepackage{graphicx}
\begin{document}
The content
\end{document}

Note that this package does nothing about output paper size specification; use one of the followings to do it.

- graphicx package with setpagesize feature added in 2016 (supports all engines)
- bxpapersize package (supports all engines; by Takayuki YATO)
- bounddvi package (supports only DVI output mode; part of gentombow bundle)

This package is part of gentombow bundle:

https://github.com/aminophen/gentombow

Originally it was part of platex-tools bundle, but it has been moved since March 2018

1 Basic Functions

First, I introduce some basic functions of gentombow package.

1.1 Automatic Determination of Output Size

In this package, the following printer's standard physical paper sizes are predefined; A series (a0-a10), B series (b0-b10), C series (c0-c10), letter, legal and executive. In the current release, 'B series' is JIS standard, not ISO standard (this might be changed in the near future). Also, some variations a4var and b5var are predefined.

When one of the above sizes (except a0, b0 and c0) is detected, the output size is automatically determined along with the following rule:

- When A series detected: the output is going to be larger B series
- \bullet When B/C series or letter, legal, executive detected: the output is going to be larger A series

The crop marks are automatically added. The orientation (landscape/portrait) of the input paper is also preserved.

The following list shows common examples:

Detected page size	Output size
a6	b6
$_{\mathrm{b6}}$	a5
a5	b5
b5	a4
a4	b4
b4	a3
a3	b3
b3	a2
c6	a5
c5	a4
c4	a3
c3	a2
letter	a3
legal	a3
executive	a4

When Automatic Determination Failed

When the page size is different from any of the predefined sizes, the page is placed with the surrounding 1 inch margins. For example, when the page has $100\,\mathrm{mm}$ width and $200\,\mathrm{mm}$ height, the output size is going to be $100\,\mathrm{mm} + 2\,\mathrm{in}$ width and $200\,\mathrm{mm} + 2\,\mathrm{in}$ height.

1.2 Job Info Printing

By default, the crop marks are printed with a banner, which shows a job info like gentombow (2022-09-10 20:34). The format is similar to tombow option, which is available in most of the common Japanese classes. The default also reacts to tombo (without a job info) or mentuke (do not print actual crop marks) class options.

2 Package Options

You can specify output size and/or disable job info printing using package options

2.1 Explicit Specification of Output Size

You can also force the output size using package option. For example,

```
\documentclass[a4paper]{article}
\usepackage[tombow-a4]{gentombow}
\begin{document}
The content
\end{document}
```

forces the output size to be a3 (the automatic determination 'b4' is discarded). Available sizes are the same as the predefined sizes, that is, A series (a0–a10), B series (b0–b10), C series (c0–c10) and a4var, b5var, letter, legal, executive. The orientation (landscape/portrait) of the input paper is also preserved again.

The option format is: $\langle crop \; mark \; format \rangle - \langle output \; size \rangle$. The crop mark format is one of the following: tombow (default), tombo (without a job info), mentuke (do not print actual crop marks).

2.2 Disabling Job Info Printing

When you specify the output size explicitly, the crop mark format can be given at the same time, as described previously. When the output size is automatically determined, you can disable job info printing by notombowbanner option.

3 Customization of Crop Mark

The pxgentombow package provides some commands to customize crop mark format.

3.1 Banner content

Using $\ensuremath{\mbox{\sc Vsettombowbanner}}$, you can set the banner content. An example using $\ensuremath{\mbox{\sc VpdfTeX}}$ primitive)

```
\documentclass[a4paper]{article}
\usepackage{gentombow}
\settombowbanner{\jobname\space (\pdfcreationdate)}
\begin{document}
The content
\end{document}
```

will result in gentombow (D:20220910203411+09'00'). The argument is an arbitrary token list.

3.2 Banner font

Using \settombowbannerfont, you can change the font with which the banner is printed.

\settombowbannerfont{cmss10 at 9pt}

This feature internally calls the TEX primitive \font, and accepts all fonts supported by the engine. When LuaTEX or XeTEX is used, a native OpenType font can also be given.

3.3 Crop mark line width

By default, the line width of crop marks is 0.1 pt. This can be change to 1 pt by \settombowwidth{1pt}. The argument is an arbitrary dimension.

3.4 Bleed margin width

By default, the bleed margin width is 3 mm. This can be change to 5 mm by \settombowwidth{5mm}. The argument is an arbitrary dimension.

3.5 Crop mark color

Set the color of crop marks. Package xcolor (recommended) or xcolor is required. For example, \settombowcolor{\color[cmyk]{0,1,0,0}} sets magenta.

4 Setting PDF page box ("digital tombow")

This is an optional driver-dependent feature. When gentombow is required with the option pdfbox, following page boxes are emitted to the output PDF file. The paper size (/MediaBox) is also corrected.

- /TrimBox: final paper size.
- /BleedBox: paper size plus bleed margin.
- \bullet /CropBox and /ArtBox are not set.

Note: if the package pdfx is loaded with PDF/X mode, this optional feature is automatically enabled. Also, /CropBox is set explicitly.

5 Additional Notes

Here is some additional notes for use with several classes/packages.

5.1 Note for BXjscls users

When using BXjscls (by Takayuki YATO) with size option other than 10pt, please add nomag or nomag* to the class option. For example,

\documentclass[a4paper,14pt]{bxjsarticle}
\usepackage{gentombow}

will not work as expected (gentombow throws an error for safety).

5.2 Note about Layout Settings

You should not change \hoffset or \voffset to non-zero value, for the purpose of layout settings. Such settings will conflict with the feature of gentombow package. To set page layout correctly, you should adjust \oddsidemargin or \topmargin, or leave it to geometry package.

Note: since the package geometry also has a feature to change the paper size (\paperwidth, \paperheight), please load gentombow after geometry.

Change History

- $\bullet~2017/12/17~v0.9$ First CTAN release
- \bullet 2018/03/16 v0.9e Add \settombowbanner, \settombowbannerfont and \settombowwidth.
- 2018/05/17 v0.9g Add pdfbox option, \settombowbleed and \settombowcolor.
- \bullet 2018/08/20 v0.9h Add hagaki size for paper detection, improve patches for pdfpages.
- 2018/08/30 v0.9j Support jsclasses-style \mag employment also with pdfbox option. Fix a bug that \settombowbleed is not considered by \textstyle \mag employment.
- $\bullet~2019/07/21~v0.9k$ Support pdfx package.
- \bullet 2020/10/14 v0.9l Import to mbow-related patches from $\sf plautopatch$.
- 2022/09/10 v0.9m Fix c4 paper size (bug inherited from libpaper).