## Booklet Printing

Let's say your document looks like this:


Many printer drivers will offer a "Booklet Formatting" that will get something like this:

| 8 | 1 |
| :--- | :--- |



Print the document choosing "Print on both sides" in your printer preferences. If your printer can't print on both sides automatically, you can do it manually. Finally, stack the pages in the correct order, fold them in half, and staple them. This is how the booklet will look when completed:


Printing on both sides manually

## Using a utility

On Linux, use pdfbook2 from texlive-extra-utils

1. Install texlive-extra-utils:
sudo apt-get install texlive-extra-utils
2. Then run pdfbook: pdfbook2 [pdf file]

This will output a pdf file that is preformatted in the form of a booklet.

## Manually

You can make a folded booklet (like a small book or pamphlet) by printing pages of a document in a special order and changing a couple of printing options.

These instructions are for printing a booklet from a PDF document.
If you want to print a booklet from a LibreOffice document, first export it to a PDF by choosing File - Export as PDF.... Your document needs to have a multiple of 4 number of pages (4, 8, 12, 16,...). You may need to add up to 3 blank pages.

To print a booklet:

1. Open the print dialog. This can normally be done through Print in the menu or using the Ctrl+P keyboard shortcut.
2. Click the Properties... button

In the Orientation drop-down list, make sure that Landscape is selected.
In the Duplex drop-down list, select Short Edge.
Click OK to go back to the print dialog.
3. Under Range and Copies, choose Pages.
4. Type the numbers of the pages in this order ( n is the total number of pages, and a multiple of 4):
$\mathrm{n}, 1,2, \mathrm{n}-1, \mathrm{n}-2,3,4, \mathrm{n}-3, \mathrm{n}-4,5,6, \mathrm{n}-5, \mathrm{n}-6,7,8, \mathrm{n}-7, \mathrm{n}-8,9,10, \mathrm{n}-9, \mathrm{n}-10,11,12, \mathrm{n}-11 \ldots$

Examples:

- 4 page booklet: Type 4,1,2,3
- 8 page booklet: Type $8,1,2,7,6,3,4,5$
- 20 page booklet: Type 20,1,2,19,18,3,4,17,16,5,6,15,14,7,8,13,12,9,10,11

5. Choose the Page Layout tab.

Under Layout, select Brochure.

Under Page Sides, in the Include drop-down list, select All pages.
6. Click Print.

## How to do Two Sided Printing on a Single Sided Printer

## How

This saves paper and halves the bulk of printed documents to carry around. It is fairly easy:

- If the printer naturally outputs pages in the correct order (common for laser printers which give out sheets in a face-down pile).

1. Print only the even numbered pages, printing in reverse order.
2. Put the stack of printed paper back in the fresh paper tray.
3. Print only the odd numbered pages, printing in normal order.

- If the printer naturally outputs pages in reverse order (common for ink jet printers which give out sheets in a face-up pile).

1. Print only the even numbered pages, printing in normal order.
2. Put the stack of printed paper back in the fresh paper tray.
3. Print only the odd numbered pages, printing in reverse order.

If the number of pages in total is odd, remember to put a blank sheet on the end after printing the even number pages to give something for the final odd page to print on the back of.

## Getting the Paper the Right Way Round

The only tricky bit is getting the paper in the right way round when putting it back in. Getting it the wrong side up will cause overprinting and getting it the wrong end up will cause half the pages to be upside down. The correct way up will depend on the particular printer.

- Many small laser printers these days take paper in from a fresh paper tray at the bottom, fed in short edge first, print on it starting with the page top, flip it over top to bottom and spew it out above the fresh paper tray. For these, put the even-side printed paper back in the fresh paper tray printed-side down with the top of the page pointing towards the printer.
- Many cheap inkjet printers used to take paper in from a fresh paper tray at the top, fed in short edge first, print on it starting with the page top, and spew it out below infront of the printer. For these, also put the even-side printed paper back in the fresh paper tray printed-side down with the top of the page pointing towards the printer.

Anyway, it only needs testing once for a printer (or maybe twice, if it turns paper from the bypass feed a different number of times to that from the paper tray), there are only 4 possibilities to test and the sheets of paper consumed in testing will immediately be compensated for by the first pages of two-sided printing.

## What if Odd/Even Number Page Printing is Unavailable

Unfortunately, at least in Microsoft Windows 2k, printing just odd or just even page is not part of the operating system or basic printer driver but specific to each application, e.g. Microsoft Word 2 k \& Open Office 2 have it but Notepad 5 \& Internet 6 do not.

Here are some workarounds that might be worth trying:

- If the application print dialogue contains the option to print a selection of pages, just put " $1,3,5,7$ " etc. in that box, print \& repeat with " $2,4,6,8$ " etc.. If you need a list of the first thousand page numbers divided into odd \& even comma separated lists for convenience, here they are: odd numbers; even numbers.
- 2. Convert it to PDF. I've read, but not tested, that the Acrobat Reader 8.1 has the option to print odd \& even pages separately.
- 3. Alternatively show the navigation pane in Acrobat Reader, resize the thumbnails so exactly 2 columns fit in and drag select the whole of one column then print that selection.


## Problems

There might be some risk of jamming (but this is only from not neatly restacking the paper before putting it back in), sticking (let laser printer ink cool before feeding the paper back in) or of water soluble ink jet inks soaking through the paper and dissolving the ink on the other side (but if your printer is doing that then there is a problem to be cured anyway before you waste too much expensive ink!).

It is hassle to keep putting paper back in for short documents (especially because it gets confusing if you are queuing lots of documents in the print queue or what to quickly close or edit a document after sending to the printer) but for big documents, I find it more hassle to have to carry around (or find filing space for) twice as much paper as necessary afterwards.

I have received a suggestion of an "improved" order that does not need one to remember the additional blank sheet when the number of pages is odd: print the odd numbered pages in reverse order, put the paper back in the fresh paper tray \& print the even numbered pages in normal order. However this creates a different inconvenience: the sheets need to be individually turned over as they come in page order 2,$1 ; 4,3 ; 6,5$ etc..

## 'Manual Duplex' Printers

Some single sided printers are advertised as doing double sided printing by 'manual duplex'. It is essentially the same as the method described above in this article but separating out of the odd \& even pages is built into the printer or printer driver for convenience. If your printer has it then it is probably easier to use it because it won't need you to find a program capable of odd/even division of printing, should automatically add a blank terminal even page if needed and the way to arrange the paper to feed back in should be specified in the instructions or on the printer itself.

By Andrew Hardwick. Distributable under GPL freeware licence. Written 2001/5/16.Updated $2002 / 4 / 20 \& 2008 / 10 / 19$. Removed now obsolete abbreviation 2018/5/12. Clarified paper orientation explanation 2020/12/19. Available on-line at http://duramecho.com. Pictures and instructions from BookletCreator info@bookletcreator.com

