

PURPOSE

This resource provides a how-to duplex guide, informs the reader on the benefits and cost savings from automatic duplexing, and several off the shelf print management software options for your facility.

SAVINGS FROM DUPLEXING

- The average office worker uses **10,000 sheets** of copy paper each year.
- The United States alone, which has less than 5% of the world's population, consumes 30% of the world's paper.
- Over 40% of wood pulp goes toward the production of paper.
- Printing and writing paper equals about one-half of U.S. paper production AND,
- The costs of using paper in the office can run 13 to 31 times the cost of purchasing the paper in the first place!ⁱ

Researchers at Xerox found that about half of the documents printed in a typical office are thrown away within 24 hours.

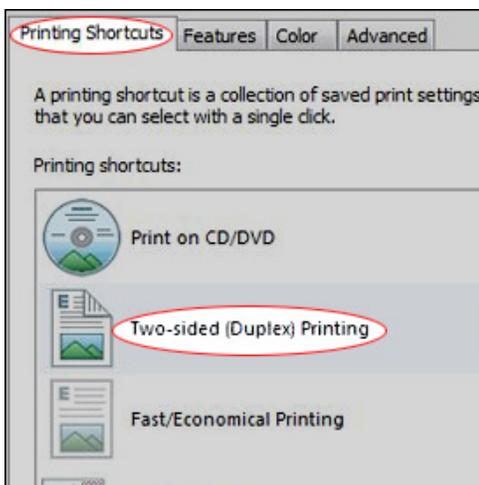
Duplexing can save between 30 - 50% of paper costs. Duplexing saves money on paper purchasing, as well as on storage and mailing. "It is estimated that companies will spend about \$8 billion this year (2008) on paper alone; that doesn't include costs for ink and toner, or for running copiers, printers and fax machines. In the typical office, for every dollar spent on printing documents, companies incur another \$6 in handling and distribution, according to Xerox."ⁱⁱ

SETTING UP AUTOMATIC DUPLEXING

There are many options for reducing the amount of paper when you are printing a document. Double-sided printing is a common way that most employees can immediately decrease their paper usage, and save their facility money.

To find out if your printer supports duplex printing, refer to your printer manual or look for the **Two-sided (Duplex printing)** or **Print on both sides** drop-down menu in the **Printer Properties** dialog box on your PC (sometimes found in the **Printer Shortcuts** tab).

If you can't locate any of these options in your printer manual or Printer Properties dialog box, you may not have driver support for duplexing or automatic duplexing. If your printer does have the option, it only takes a few simple steps to set your printer options to automatic duplexing:



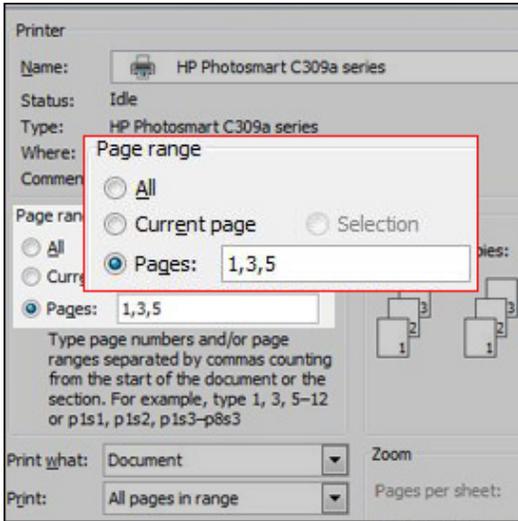
Step 1: Go to your PC's **Print** dialog box and click on **Properties**.

Step 2: Click on the **Printing Shortcuts** tab and then select **Two-sided (Duplex) Printing** from the drop-down menu.

Step 3: Select **Automatic** from the **Print on both sides** drop-down menu. Some printers have shortcuts that say eco-printing. (See picture at left)ⁱⁱⁱ

MANUAL DUPLEXING

If your printer does not have the option to set duplexing, you also have the option to duplex manually.



Step 1: Consult your printer manual or print a test sheet if you're not sure on which side of the paper—face up or face down—your machine prints.

Step 2: Enter the numbers of odd-numbered pages to be printed (1, 3, 5, and so on) in the **Print** dialog box.

Step 3: Load the paper and click **OK** to print the odd pages.

Step 4: Keep the pages in order and reload them into the printer, with the opposite side of the stack facing up this time. (Make sure the top edge of your pages is the same for both odd and even pages so you don't end up with upside-down printing on one side.)

Step 5: Enter the even-numbered pages to be printed in reverse order (12, 10, 8, 6, and so on) in the **Print** dialog box, and click **OK** to print.^{iv}

Most printers and copiers will also allow the user to print more than 1 page per sheet. This may be the next immediate way to reduce paper usage.

The ability to reduce or enlarge images is common on copiers. Image reduction is also possible with printing. For example, when copying a book, one can often get two original pages on to one side of the copied sheet. Because reduction works in two dimensions, you only need to reduce by 30% (to 70%) to cut in half the area of an image. While reproducing entire standard pages requires a 35% reduction (to 65%), books often have smaller than standard pages and most documents have larger than necessary margins, so the reduction can usually be less than this.

PRINT MANAGEMENT SOFTWARE

This section will provide you with off the shelf print management software to help your facility manage your printer operations. There are options for cutting costs, reducing paper, and streamlining your print operations with each of these software packages. *The US EPA does not endorse any of these products.*

CANNON	PHAROS BLUEPRINT® ENTERPRISE
EQUITRAC	PLUS TECHNOLOGIES
FITOSOFT	PRINT MANAGER PLUS
LEXMARK	PRINTUSAGE PRO
MPC TECHNOLOGY PRODUCTS AND SOLUTIONS	RICOH: InfoPrint® Manager
PAPERCUT	ZEROX

CONTACT INFORMATION

If you have questions related to this resource or need other assistance with the Federal Electronics Challenge, please contact your Regional Champion. The list of FEC Regional Champions is available at <http://www2.epa.gov/fec/forms/contact-us>.

FEDERAL ELECTRONICS CHALLENGE

Web site: <http://www.epa.gov/fec>

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RESOURCES AND REFERENCES

ⁱ <http://reduce.org/>

ⁱⁱ Hesseldahl, Arik, "The New Push to Get Rid of Paper," BusinessWeek, May 27, 2008,
www.businessweek.com/technology/content/may2008/tc20080526_370615.htm?link_position=link1

ⁱⁱⁱ <http://h71036.www7.hp.com/hho/cache/608028-0-0-225-121.html>

^{iv} <http://h71036.www7.hp.com/hho/cache/548309-0-0-225-121.html>
<http://www.stopwaste.org/docs/paperlessguide.pdf>