



Xerox 700 Digital Color Press with Integrated
Fiery® Color Server



Workflow Examples

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INTRODUCTION

This document provides examples of complex printing scenarios and an overview of Xerox 700 Digital Color Press with Integrated Fiery Color Server features used in the examples. The example workflows illustrate how you can combine features to create jobs. Each workflow includes cross-references to help you locate more information about performing each task.

Terminology and conventions

This document uses the following terminology and conventions.

Term or convention	Refers to
Aero	Integrated Fiery Color Server (in illustrations and examples)
Digital press	Xerox 700 Digital Color Press
Integrated Fiery Color Server	Xerox 700 Digital Color Press with Integrated Fiery Color Server
Mac OS	Apple Mac OS X
Titles in <i>italics</i>	Other documents in this set
Windows	Microsoft Windows 2000, Windows XP, Windows Server 2003, Windows Vista
	Topics for which additional information is available by starting Help in the software
	Tips and information
	Important information
	Important information about issues that can result in physical harm to you or others

About this document

This document covers the following topics:

- Mixed Media and how it is used in an example workflow.
- Variable Data Printing (VDP) with FreeForm and how it is used in an example workflow using FreeForm.
- Variable Data Printing with FreeForm2 and how it is used in an example variable data workflow with Mixed Media.
- Definitions for popular applications and printing terms used within this document.

MIXED MEDIA

This chapter provides an overview of Mixed Media and an example workflow that includes Mixed Media.

What is Mixed Media?

The Mixed Media feature allows you to print ranges of pages on different types of media. For example, you can use Mixed Media to specify a heavy stock for the cover, add blank pages, insert colored media on designated pages, and specify duplex pages within a single print job. Specify Mixed Media settings when you print a job from an application with the printer driver. Define and modify the Mixed Media settings of jobs already sent to the Integrated Fiery Color Server from Command WorkStation.

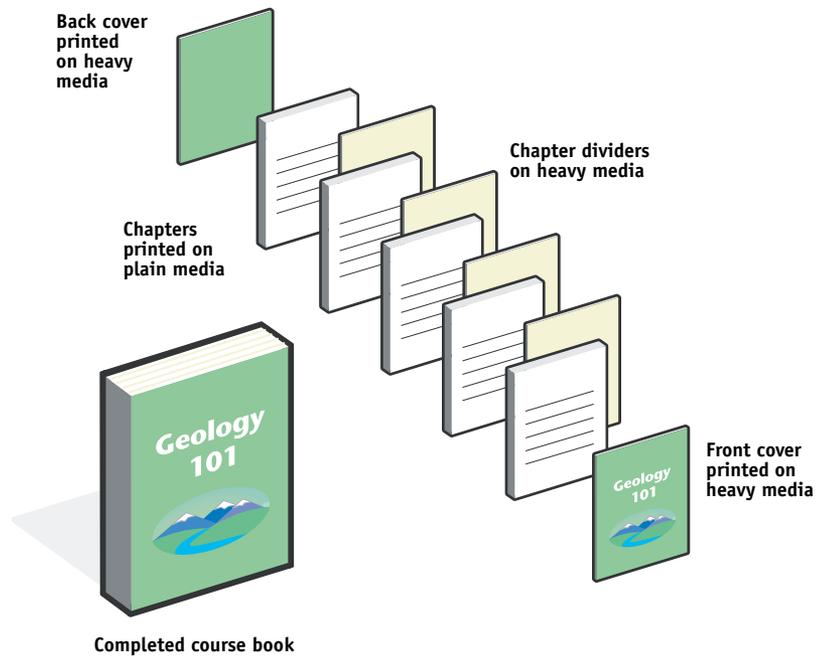
For more information about Mixed Media, see [Utilities](#).

Example: Workflow with Mixed Media

A geology professor at Ocean Crest University wants to print her new course book for the fall semester. The new course book consists of eight chapters. She wants her students to be able to find the information they want easily and quickly. To ensure this, each chapter divider in the book is printed on heavy media. The chapter text is printed on plain media and the front and back covers are printed on heavy media.

The professor sends her request, along with the book file in PDF format (Geology101.pdf), to the university's in-house production department.

The following diagram illustrates the components of the course book.



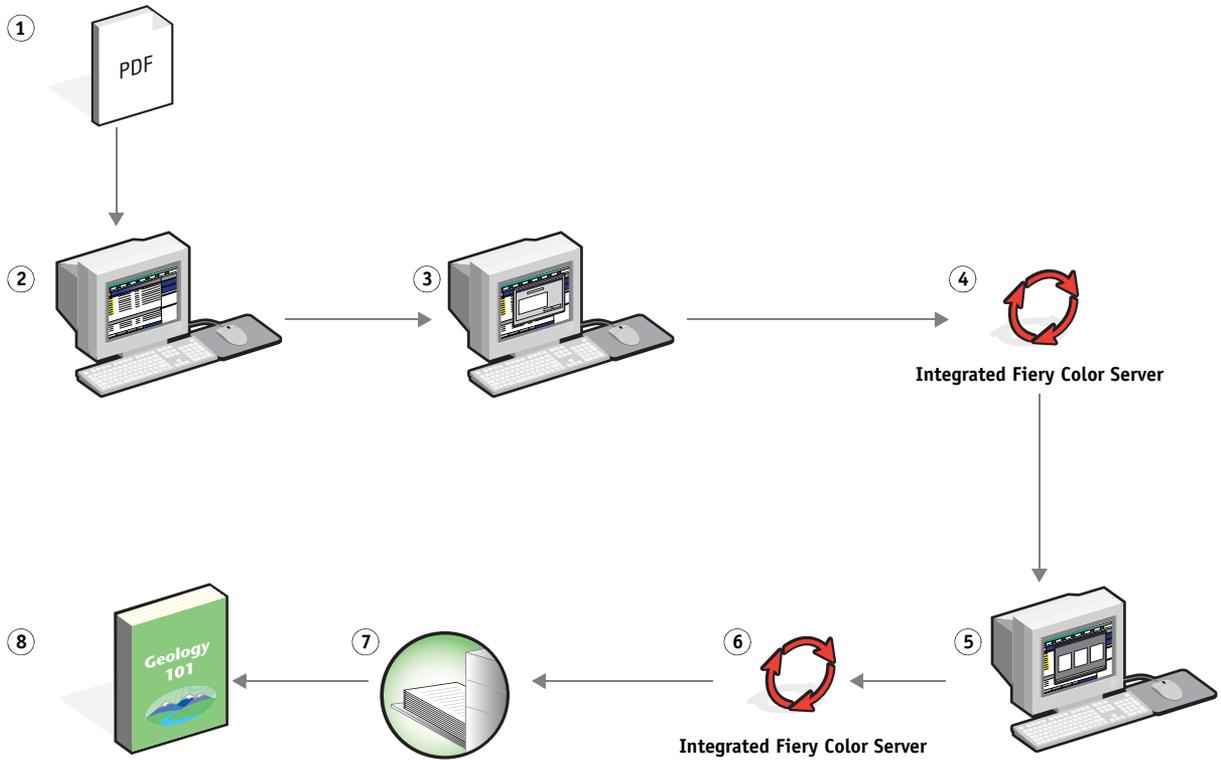
Items required for this example

- Geology101.pdf
- Integrated Fiery Color Server
- Command WorkStation with Mixed Media
- Heavy media for the front and back covers
- Heavy media for chapter dividers
- Plain media for the chapter text

For information about supported media types, see [Print Options](#).

NOTE: The Integrated Fiery Color Server supports PDF versions 1.2 through 1.6.

Mixed Media workflow



Step	Task	For more information
1	The professor creates the PDF and sends the file to the university's in-house production department.	
2	The operator in the production department downloads the file to Command WorkStation.	 Command WorkStation Help

Step	Task	For more information
3	<p>The operator selects the job in Command WorkStation and chooses Properties from the Actions menu.</p> <p>a) The operator clicks the Media icon in the Job Properties toolbar and scrolls down to Mixed Media. From New Page Range, the operator types 2, 32, 64, 98, 124 for the page range (the pages that divide the chapters), specifies heavy media, and then indicates which tray contains the heavy media.</p> <p>b) While still in Mixed Media, the operator clicks New Insert and specifies inserting a blank page after the last page to distinguish the end of the print job, clicks Insert, and then clicks Close.</p> <p>c) The operator scrolls up and specifies front and back covers that print on front only, cover stock, and the tray to pull media from.</p> <p>d) The operator clicks the Layout icon, specifies duplex, clicks OK, and then saves the file.</p>	<i>Utilities</i>
4	The operator processes and holds the job.	 Command WorkStation Help
5	The operator previews the job.	 Command WorkStation Help
6	<p>The operator prints the job.</p> <p>NOTE: The operator can also print one set as a proof before printing multiple copies.</p>	 Command WorkStation Help
7	The operator retrieves the job from the digital press.	
8	The job is printed with a front and back cover and dividers for each chapter.	



To use Mixed Media in Command WorkStation, your downloaded file must be a non-raster file. To remove raster information from a file in Command WorkStation, right-click the file and select Remove Raster Data.

You can duplicate this workflow with a PostScript file instead of a PDF.

VARIABLE DATA PRINTING WITH FREEFORM

This chapter provides an overview of variable data printing, and an example workflow that uses FreeForm to create a variable data job.

What is variable data printing?

Variable data printing links a digital press to databases that contain the content for printed documents. Content can consist of text and images (including graphics and photographs) in electronic form. Variable data printing is used for direct-mail advertising or other targeted mailings. It typically combines a set of master elements that are common across copies of a document with a set of variable elements that change from copy to copy. An example is a brochure that greets customers by name and may include other personal information about the customer obtained from a marketing database. Background elements, illustrations, and text blocks that do not change across copies of the brochure are the master elements. The customer name and other customer-specific information are the variable elements.

For more information, see [Variable Data Printing](#).

Variable data printing languages

The Integrated Fiery Color Server is compatible with the following variable data printing languages:

- FreeForm and FreeForm 2

For more information about how to send variable data printing to the Integrated Fiery Color Server, see [Variable Data Printing](#).

What is FreeForm and how is it used with variable data print jobs?

FreeForm allows you to use print options to define and store master-element documents, called FreeForm masters, on the Integrated Fiery Color Server. You can send a variable-element job to the Integrated Fiery Color Server with instructions to combine the job with a particular FreeForm master.

For more information, see [Variable Data Printing](#).

Example: Variable data workflow using FreeForm

Ocean Crest University wants to promote their three schools through a mailing to prospective students. The students will be able to request information about the different campuses and programs. Students can reply via a postage-paid business reply card integrated into the mailer. The document is personalized with the prospective student's name, address, and a personal web link. The design is graphic-intensive to attract the attention of the reader. It is printed on 11x17 paper and folded three times, in order to qualify for the standard "letter" mail rate at the post office.

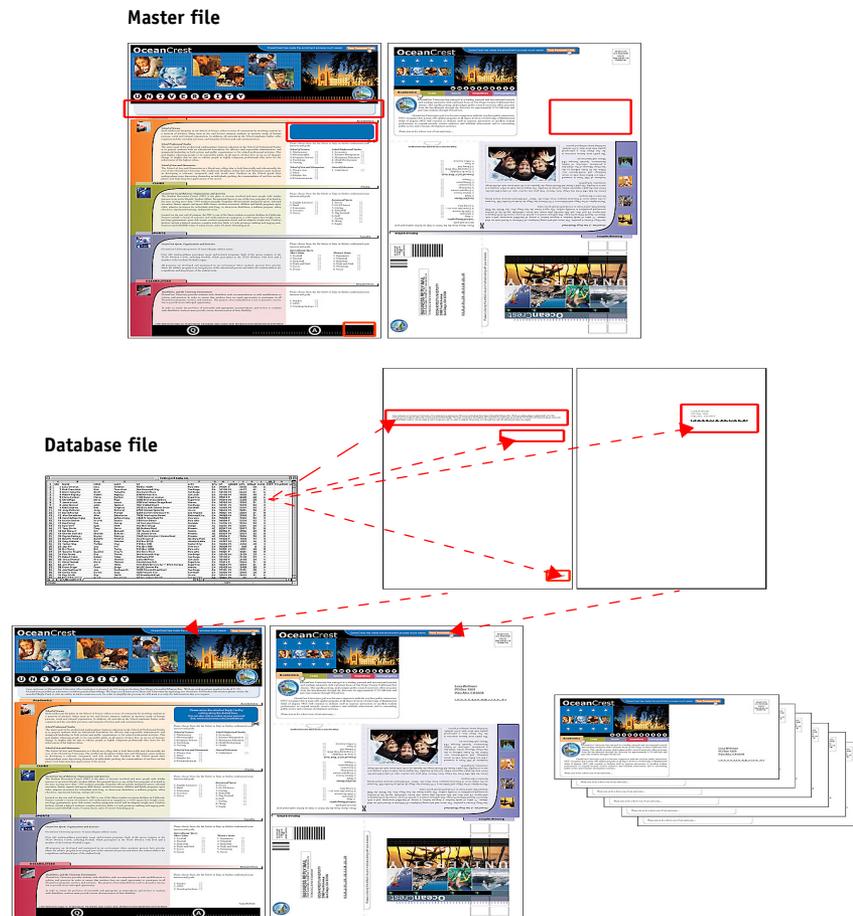
To create this mail piece, the in-house production department decides to use the caching capabilities of FreeForm. FreeForm allows them to store a rasterized version of the graphic intensive layout in memory, since these elements are common to all pages (send and process once). The variable text (address, name, and web link) is printed separately and merged with the layout at the Integrated Fiery Color Server.

The production department creates the master document with all the common elements and saves the file as a PDF (College_Master.pdf). Next, they create the variable document in Microsoft Word (College_Variable.doc) and link the variable information to their database file (College_data.xls).

NOTE: No specialized variable printing software is used to build this job. You can use any page layout application to create the FreeForm master and any mail merge function, such as Microsoft Word Mail Merge, to build and print the variable data.

For more information about how to use the Mail Merge feature in Microsoft Word, see the documentation that accompanies Microsoft Word.

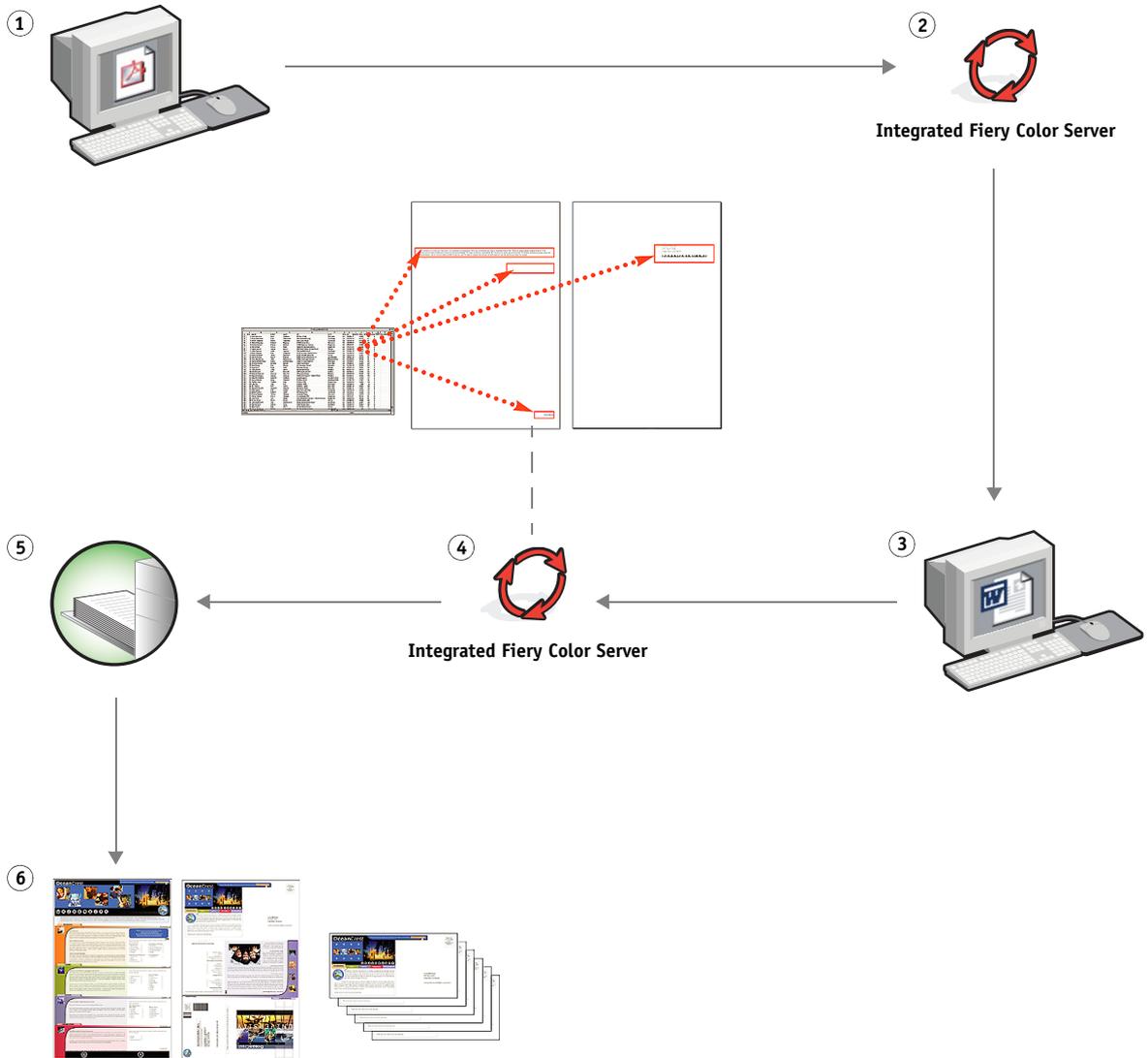
The following diagram illustrates the components of the mailer.



Items required for this example

- College_Master.pdf
- College_Variable.doc
- College_data.xls
- Integrated Fiery Color Server
- Integrated Fiery Color Server printer driver with FreeForm
- A computer with Adobe Acrobat, Microsoft Word, and Microsoft Excel installed

Variable data printing workflow using FreeForm



Step	Task	For more information
1	The operator in the production department opens College_Master.pdf in Acrobat.	
2	The operator prints the file to the Integrated Fiery Color Server, specifying 11x17 and duplex, and choosing 1 for Create Master in the printer driver.	Printing from Windows Printing from Mac OS

Step	Task	For more information
3	<p>The operator opens the College_Variable.doc in Microsoft Word.</p> <p>The variable document also opens the College_data.xls file, since the two documents are linked. If the documents are not linked, Word prompts the operator for the location of the Data Source File.</p> <p>The operator selects Data Merge in Word.</p>	Microsoft Word documentation
4	<p>The operator prints the file to the Integrated Fiery Color Server, specifying 11x17 and duplex, and choosing 1 for Use Master in the printer driver.</p> <p>The master file and variable file are combined on the Integrated Fiery Color Server.</p>	<p><i>Printing from Windows</i></p> <p><i>Printing from Mac OS</i></p>
5	The operator retrieves the job from the digital press.	
6	The mailer includes the combined master and variable data.	



Certain elements of the master and variable information must match. For example, the page size and orientation must match. For a complete list, see [Variable Data Printing](#).

You cannot send FreeForm jobs to the Direct connection.

If Two-Way Communication is enabled in the printer driver, the printer driver can detect what masters already reside on the Integrated Fiery Color Server. Use stored FreeForm masters as often as needed with multiple sets of variable elements. For more information about Two-Way Communication, see [Printing from Windows](#).

If the administrator clears the Integrated Fiery Color Server, all FreeForm masters are deleted. For more information about administrator functions, see [Configuration and Setup](#).

VARIABLE DATA PRINTING WITH FREEFORM 2 AND MIXED MEDIA

This chapter provides an overview of how you use Mixed Media with variable data printing jobs, and provides an example workflow that uses variable data printing and Mixed Media.

What is FreeForm 2 and how is it used with variable data print jobs?

FreeForm 2 extends the functionality of FreeForm (see “[Variable Data Printing with FreeForm](#)” on page 11). FreeForm 2 requires a third-party variable data printing application that supports FreeForm 2 technology, such as Atlas PrintShop Mail. Using the third-party printing application and FreeForm 2, you can create multiple page masters, allowing more customization to your documents. You can still use any master created in another application, and then use a third-party application that supports FreeForm 2, such as PrintShop Mail, to combine the design and database information.

Multiple masters allow you to define more than one master file for your job, while drawing from the same database of variable information. For example, if you own a movie rental company, you may maintain a database of customer names, addresses, and the last five movies the customer rented, categorized by genre. As a promotion, you want to send a coupon booklet with a new movie rental release pictured on the front cover. You want to customize your mailer with a movie of a similar genre as the last movie the customer rented. The variable information, such as the customer names and addresses, is always drawn from the database. However, the different movie images are defined by the multiple masters.

For more information about FreeForm 2, see [Variable Data Printing](#).

What is Mixed Media and how can it be used in variable data print jobs?

The Mixed Media feature allows you to print ranges of pages on different types of media. For more information, see “[What is Mixed Media?](#)” on page 7.

Variable data printing links a digital press to databases that contain the content for printed documents. For more information, see “[Variable Data Printing with FreeForm](#)” on page 11.

Use variable data print jobs with Mixed Media to create custom jobs, such as mailers. For example, use the variable information to create booklet mailers that greet customers by name, and print the booklet cover on a different medium than the body of the mailer.

The Mixed Media that you specify for your job is applied for every record, relative to the record start. For example, if Mixed Media is set to print Page 1 with cover stock, the first page of every record is printed on cover stock.

Example: Variable data workflow with FreeForm 2 and Mixed Media

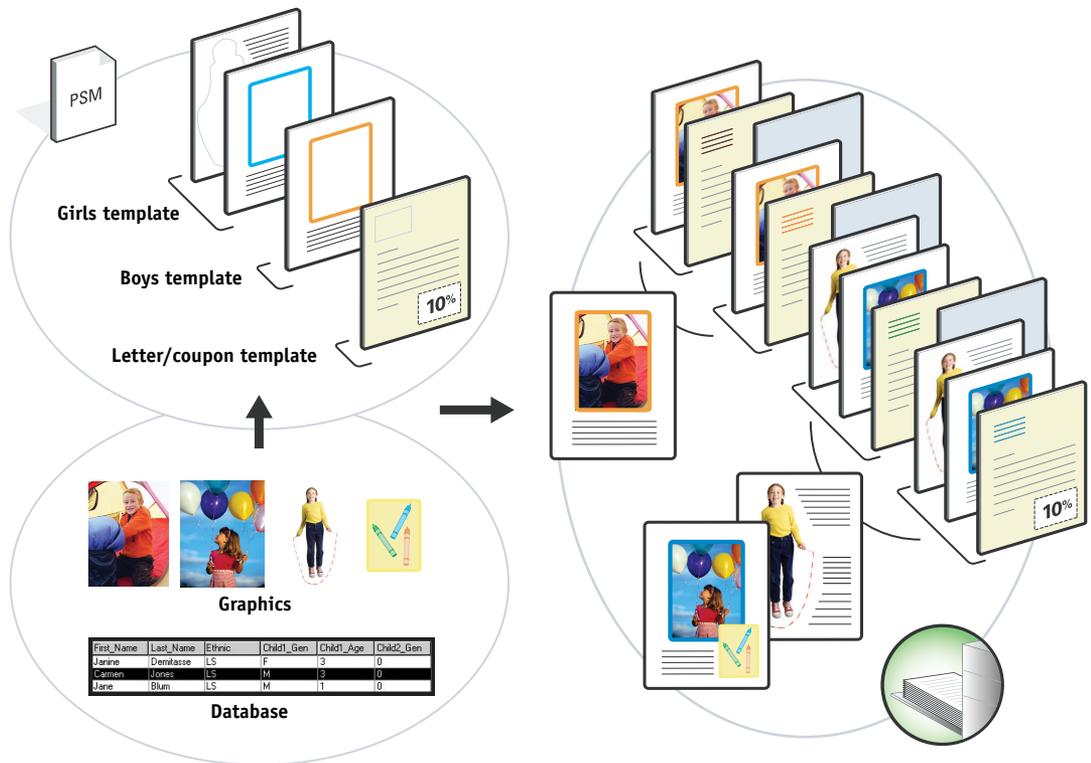
To announce its new line of children's styles, Banana Rama is creating a promotional mailer that targets customers by ethnicity, gender, and age. The company has compiled a database of customers by name and attributes, such as ethnicity, gender, and age. For the promotional mailer, Banana Rama also draws from a content database consisting of images of children of different ages, gender, and ethnicity wearing the new Banana Rama clothes; images of typical gadgets enjoyed by these children; and background graphics. Using a variable data application such as PrintShop Mail and images that match the targeted individual, Banana Rama creates, in one print run, a mailer targeting the parents of girls aged 7 to 10 years and customized mailers targeting the parents of boys in different age groups. The mailers feature images of children in the targeted age group wearing Banana Rama clothing and playing with their favorite toys.

Each promotional mailer includes a cover sheet with the customer's name and a discount coupon. The Banana Rama girls' clothing line is more extensive, so the mailer targeting girls includes additional pages advertising the girls' fashions.

Since the promotional mailer may vary in length, depending on whether it is targeted toward a boy or a girl, a blank page is added between each mailer to indicate when a new mailer starts.

The print shop that received Banana Rama's mailer request first creates the master and variable document in Atlas PrintShop Mail to create a .psm project file. For more information about PrintShop Mail, see the documentation that accompanies the application.

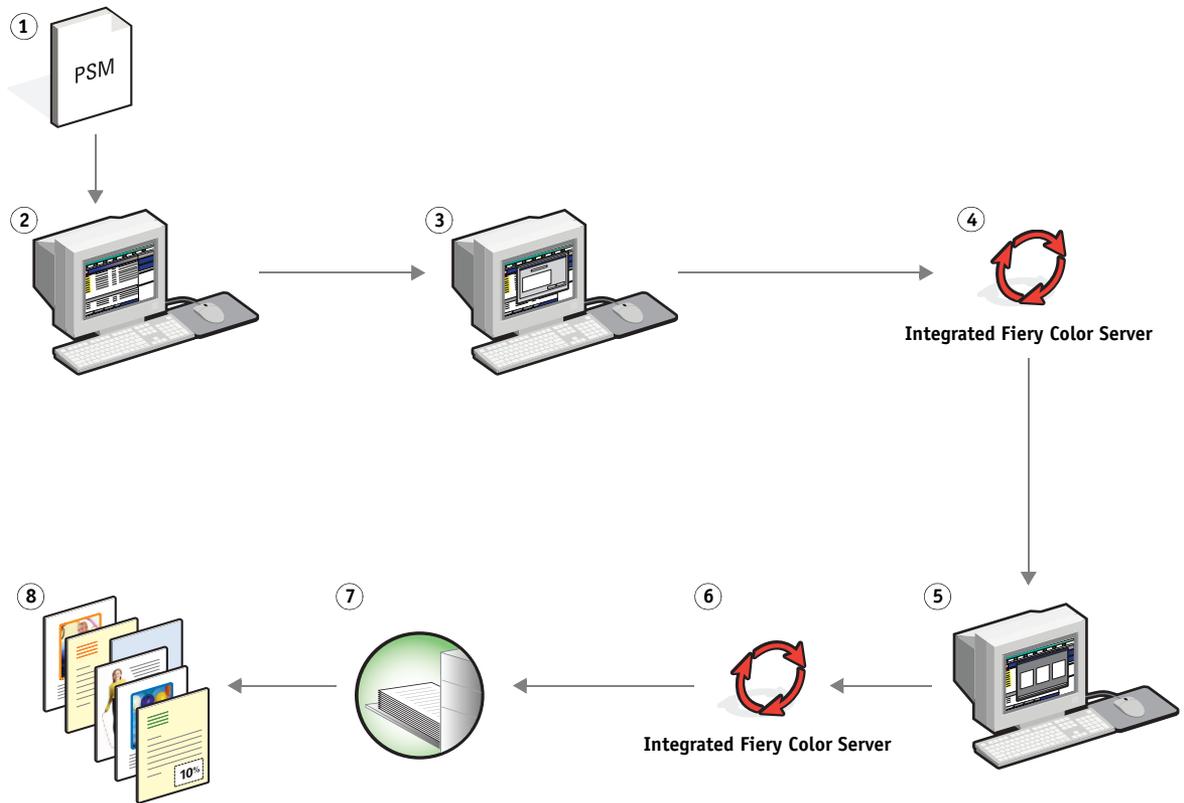
The following diagram illustrates the components of the mailer.



Items required for this example

- Atlas PrintShop Mail
- FreeForm 2
- BananaRama.psm
- BananaRama_V.ps
- Integrated Fiery Color Server
- Command WorkStation with Mixed Media
- Cover stock
- Plain media

Variable data workflow with FreeForm 2 and Mixed Media



Step	Task	For more information
1	<p>The print shop operator opens the Banarama.psm file in PrintShop Mail, specifies FreeForm 2, and prints the file to the Integrated Fiery Color Server.</p> <p>In the Print dialog box, the operator sends both the master and variable data. The Integrated Fiery Color Server receives a master and variable PostScript document.</p>	<p>Variable Data Printing</p> <p>For more information about PrintShop Mail, see the documentation that accompanies the application.</p>
2	<p>The operator selects the BanaRama_V.ps file from Command WorkStation.</p>	<p> Command WorkStation Help</p>

Step	Task	For more information
3	<p>The operator chooses Mixed Media Setup from the Actions Menu and applies the following settings:</p> <p>a) From Define Cover, the operator specifies a front cover (print on front only), cover stock, and the tray for the media.</p> <p>b) From Insert Blank, the operator specifies to insert a blank page after the last page, indicates which tray is to be used for the media, and then clicks OK.</p>	<i>Utilities</i>
4	The operator processes and holds the job.	 Command WorkStation Help
5	The operator previews the job.	 Command WorkStation Help
6	The operator prints the job.	 Command WorkStation Help
7	The operator retrieves the job from the digital press.	
8	The job prints with the merged variable and master information with a blank sheet between records.	



Certain elements of the master and variable information must match. For example, the page size and orientation must match. For a complete list, see *Variable Data Printing*.

TERMS

Authoring tool

A software application used to create text or images, or to define layouts for documents.

Component

In variable data printing, an element such as text, a graphic, or a photograph that is printed on a page.

Encapsulated PostScript (EPS)

A PostScript file format designed to be embedded in another PostScript stream.

FreeForm

A variable data printing technology that works with variable-data printing solutions. It allows data that is used many times in a variable-data printing job to be processed just once, enabling a digital press to run at or near rated speed.

FreeForm 2

FreeForm 2 expands FreeForm technology by allowing you to determine page conditions and rules for printing a job containing multiple master pages. Unlike FreeForm, FreeForm 2 requires a variable data printing application that specifically supports FreeForm 2.

Master elements

Used in variable data printing with variable elements. Reusable data that is common across copies of a document.

Mixed Media

A feature that allows you to print ranges of pages on different types of media.

PDF (Portable Document Format)

An open file format specification that describes text and graphics in documents.

PostScript

A device-independent page description language that is used to print and display pictures and text. PostScript 3 includes many enhancements to older versions of PostScript, including improved image quality.

Raster image

Electronic representation of a page or image using a grid of points called pixels.

Rasterization

The process of converting code that describes text and graphics into the format that is understood by a printer's "print engine" to print them on a page.

Variable Data Printing (VDP)

Digital technology that links print engines to databases that contain the content for printed documents in order to print pages that vary in content.

Variable elements

Used in variable data printing with master elements. Data that changes across copies of a document.

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