

Helpful Tips when Designing with Clear Dry Ink

- Dry Ink in itself adds a certain amount of sheen to the page. To maximize the effect of adding Clear Dry Ink to your design, make sure to place your clear elements on top of or next to light colors.
- Paper sheen is important too. Use matte or dull coated papers for best results.
- If clear elements are not printing correctly:
 - Check your layers. The clear layer needs to be at the top of all other layers. All clear elements need to be located on the clear layer at the top of all other elements.
 - Make sure the designated name for Clear Dry Ink has been set up correctly and the name is the same across all programs used. Names are case sensitive.
- Covering an entire image with Clear Dry Ink will even out the sheen and enhance the depth across the image.
- Check your PDF file in AcrobatPro Print Preview before sending it to the print provider: **Advanced > Print Production > Output Preview**. Check > **Simulate Overprinting**.
- Make sure you follow all the steps to save your PDF correctly. (See page 11)
- If a clear element has knocked out the image below, make sure that you have specified overprint.
- If applying Clear Dry Ink in Photoshop, make sure the correct name has been assigned to the Spot Channel. Names are case sensitive and must match among all files.
- Don't use transparency functions in your layout program.

Xerox® Color
800/1000 Presses
FreeFlow® Print Server
Clear Dry Ink
User Guide



Xerox® FreeFlow® Print Server Clear Dry Ink User Guide Bring out the shine!



For more information on Xerox® FreeFlow® Print Server and Clear Dry Ink, call 1-800-ASK-XEROX or visit us at www.xerox.com

Printed on a Xerox® Color 800/1000 Press with a Xerox® FreeFlow® Print Server on Xerox® Digitally Optimized Paper.



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Creating a High-res PDF

It's important to choose the correct settings when saving a PDF for printing with Clear Dry Ink.

1. From the main menu select: **File > Adobe PDF Presets > Press Quality** and click **save**.
2. Under **Compatibility** choose **Acrobat 6 or higher**.
3. Under **General** check > **Create Acrobat Layers**. (Example E)
4. Select **Compression > Color Images**
Do Not Downsample
Compression > **JPEG**
Images Quality > **Maximum**
Grayscale Images
Do Not Downsample
Compression > **JPEG**
Images Quality > **Maximum**
Monochrome Images
Do Not Downsample
CCITT Group 4 (Example F)
5. Select **Marks and Bleeds >**
Set up Marks and Bleeds if desired.
6. Select **Output > Color**
Color Conversion > **No Color Conversion**
Profile Inclusion Policy > **Include All RGB and Tagged source CMYK Profiles**.

7. Click on Ink Manager and make sure the box for **All Spots to Process is unchecked**. (Example G)
8. Click on **Save Preset** and name it. We suggest **Xerox Digital Press Clear**.

Checking Your PDF

1. Open your PDF in Acrobat® Professional.
2. From the main menu select: **Advanced > Print Production > Output Preview**. Check > **Simulate Overprinting**. If your file is set up correctly, all areas designated in Clear should be visible and on a separate layer. If you mouse over Clear areas, the percentage should indicate the amount of Clear applied to the area. If 0% Clear shows, Clear has not been set up correctly.

Hint: If your layout file contains a raster image with a spot channel for Clear, you will not see your image in PDF until you turn on Output Preview and click on Simulate Overprinting. Only the area designated to print with Clear will be visible. If your clear area is transparent and your image shows, your file was not set up correctly.

Adding Clear to Variable Data Files with VIPP® Pro Publisher

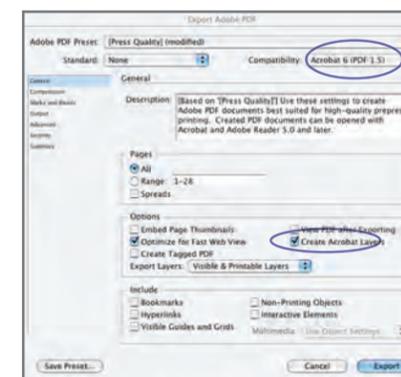
The use of Clear in variable data applications is supported with VPP 8.0 SP3 at the client, and requires FreeFlow® VI Interpreter 8.0d at the server.

VIPP Pro Publisher (VPP) is an application plug-in for use with Adobe® InDesign (CS3 and later). It is designed to allow a graphic artist to:

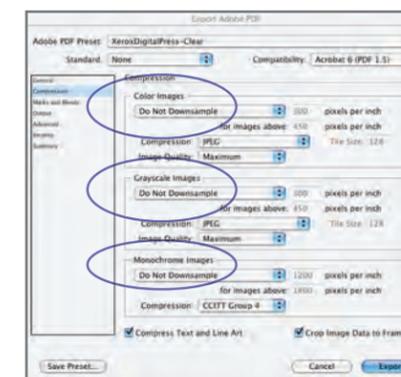
- Create applications that contain variable information.
- Export those applications to a VI Container (VPC) file.
- Print the application at production speed on a Xerox® VIPP Pro-enabled print device.
- Process the VPC using VI Designer, VI Explorer, or VI PDF Originator.

In addition, VPP allows the graphic artist to do all of that without having to learn VIPP programming techniques or the VIPP Pro language. For more information on VIPP Pro Publisher (VDP) printing, see the user guide that comes with the software kit.

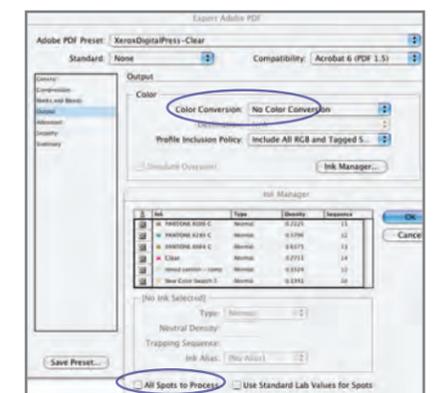
E



F



G



InDesign File Setup for Clear Dry Ink

Setting Up Your InDesign File for Printing with Clear Dry Ink

1. Add a new layer in the layers palette and name it **Clear**. (Example A)
2. Move the clear layer to the top in the layers palette.
3. Add a new color in the swatches palette and name it **Clear**.
Important: This is the default in some DFEs. It's very important to use the same swatch name across all applications you might use. The swatch name is **case sensitive**. (Example B)
4. Designate the Color Type as **Spot**.
5. Set the Color Mode to **CMYK: 0/100/0/0**. You can choose any of the 4 process colors and set it to **100%**.
6. Assign the color **Clear** to fills and strokes of text or shapes created in InDesign and **move them to the clear layer**.
7. To print clear over an image, text or graphic, set it to **overprint** so it will not knock out any image below. Select **Window > Attributes > Overprint Fill and/or Stroke**. (Example C)

Graphics from Adobe Illustrator

Vector graphics can be pasted into InDesign and designated to print with Clear Dry Ink as a watermark or to print over colors or photographs.

1. Copy and paste a graphic from Illustrator into your InDesign document.
2. Designate the fill and/or line to be **Clear**.
3. Move all clear elements to the **clear layer**.
4. Set all clear elements to **overprint**.

Tinted Effects

A tinted effect is created by layering two identical objects on top of each other. The objects on the top layer will print with Clear Dry Ink allowing the color from the object below to show through.

1. Paste or create a vector graphic.
2. Apply a color or tint to it.
3. **Copy** your graphic and **paste in place** on the **clear layer**. It is important that the graphic to print in Clear Dry Ink be located on your **clear layer**.
4. Apply the color **Clear** from the color palette.
5. Chose **Window > Attributes > Overprint Fill and/or Stroke**. (Example C)

Creating Raster Effects with Adobe Photoshop

To highlight an area of your image with a soft edge and/or a gradient fill, add a spot channel for Clear Dry Ink in your Photoshop file. Save it as a TIFF or PSD file and place it into InDesign on the clear layer.

Creating a spot channel in Photoshop:

1. Open an image in Photoshop.
2. Create a new path or select a shape.
3. With your shape selected, add a new **spot channel**. (Example D)
 - a. Name the new spot channel **Clear** or use the same name as your clear ink swatch in InDesign.
 - b. Select **Color > M 100%** or the same color chosen in InDesign.
 - c. Select **% value** if desired.
4. Save as **PSD** or **TIFF** with **spot color included**.
5. Place into InDesign on the **clear layer**.

Note: To see your image in your PDF file, select **Advanced > Print Production > Output Preview** and click on **Simulate Overprinting**.

Printing Clear Dry Ink with the Xerox® FreeFlow® Print Server

With Xerox® FreeFlow Print Server, it's easy to print with Clear Dry Ink to create the customized spot or flood effects designed into your customers' files.

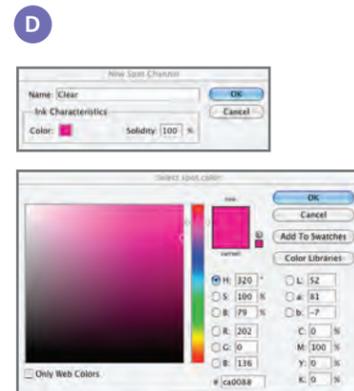
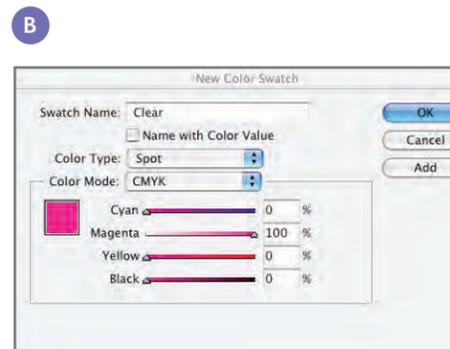
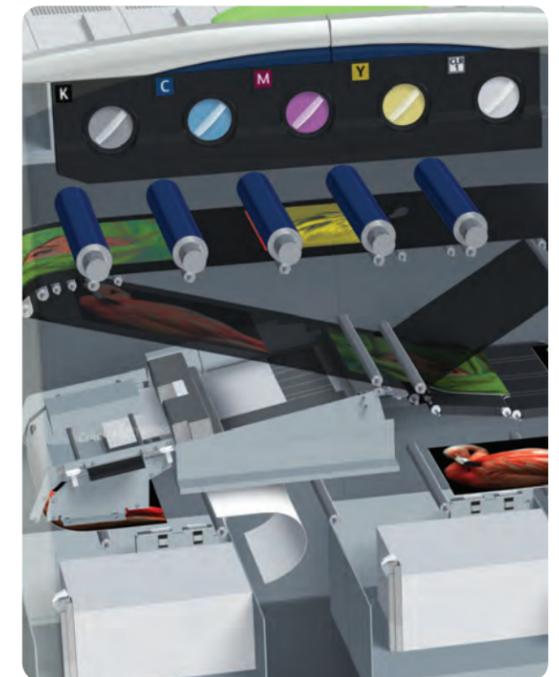
FreeFlow Print Server release 8.0 SP2 for the Xerox® Color 800/1000 Presses also enables you to select settings at the server for adding Clear Dry Ink—and adding value to your customers' output. This guide shows you the simple steps to take at the server to print with Clear Dry Ink through the use of information embedded within a job or by using the server options. It also includes instructions for designers on how to set up their files correctly to print with Clear Dry Ink.

Clear Dry Ink Overview

Standard with each press are four dry ink stations—one each for CMYK color. The fifth station, located on the far right, is designated for optional Clear Dry Ink.

With Clear Dry Ink, you can:

- **Flood an entire page or a document** – fully covers pages to enhance the appearance of the entire document.
- **Apply to an object or a specific area** – applies Clear Dry Ink to specific objects or areas in the document. Clear Dry Ink enables creative effects to:
 - Draw attention to headline text
 - Highlight photos
 - Emulate a metallic look with key colors such as silver, gold or copper
 - Enhance the appearance of metal objects
 - Highlight images for visual variety and make them pop off the page
 - Apply watermarks



Printing with Clear Dry Ink

Clear Dry Ink Print Options

The Clear Dry Ink setting in FreeFlow® Print Server (8.0 SP2 and higher) allows you to choose from these four options:

- Use Embedded Clear (default)
- Flood Clear
- Object Clear
- Suppress Clear

This setting is available at the queue and job level to apply to an entire document. It is also available at the page level through page exceptions or covers programming.

Clear Dry Ink is supported with PostScript, PDF and other PostScript-based files such as VIPP® jobs. For files in other formats, the Clear Dry Ink setting is ignored, and no Clear Dry Ink will be used.

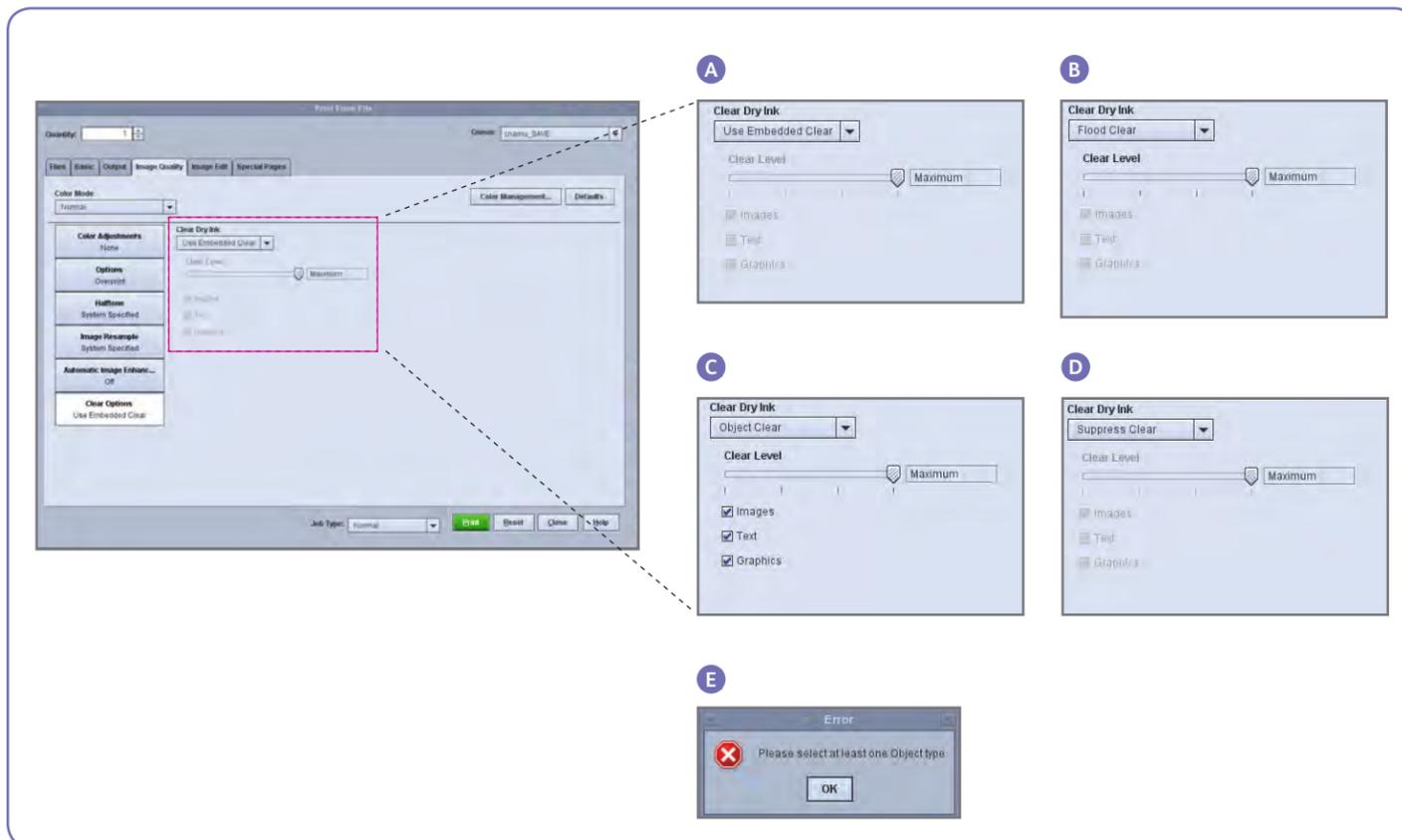
1. **Use Embedded Clear**—This is the default setting on a new queue—enabling Clear Dry Ink effects to print as specified in the file by the designer. (Example A)
- Selecting this option will only print Clear if the file contains a spot color Clear.
- The Clear Level does not apply and will be grayed out; the amount of Clear ink is specified in the file.

- This setting provides the same behavior as earlier software, which did not have the Clear Dry Ink UI controls.

2. **Flood Clear**—By choosing Flood Clear, you will print clear on the entire page. The amount of Clear is determined by the separate Clear Level selection. Flood Clear will override and obscure any custom effects embedded by the designer; however you can apply Flood Clear to a particular page or pages while honoring the embedded clear effects on others. (Example B)

- Exception Pages for Clear Dry Ink setting are applied to logical page images (pages in the input file), not physical pages (printed side of sheet).
 - Example: An 8-page letter/A4 file is imposed as a booklet onto two 11x17/A3 sheets, with Flood Clear on page 1 only. Clear Dry Ink is printed across the front of the booklet.
- Flood Clear is applied to RIPPed pages; it will not be applied to system-generated blank pages.
 - For instance if a 10-page letter/A4 file is imposed into a booklet on 11x17/A3 stock, final output has 12 pages on 3 sheets; the 10 image pages from the file will have Clear, the 2 system-generated blanks will not.
 - To ensure Clear across blank pages, the blank pages must be included in the file and not system generated.

- Variable Data Processing:
 - Use Embedded Clear: With Caching, areas requiring overprint between reused images/forms and variable content may result in knock-out. For instance, Clear variable text designed as a watermark will cause knock out on a static colored background (colored variable text will do the same, but with Clear there may be different expectations). Any Background Form or VI application should thus be proofed with sample data before committing to production. To avoid limitations, disable Caching (not available for Background Forms).
 - The Flood Clear and Object Clear options do not have limitations with caching.



Printing a Clear Sample Job

1. At the FreeFlow® Print Server, select > Print From File > Sample Jobs > **DesignTips-CDI-Xerox800-1000Presses_12x18_HR.pdf** > OK.

If this file is not available in the Sample Jobs folder, go to:

- www.xerox.com and select **Support & Drivers** at the top of the page.
- Enter **800/1000** in the blank field and click **Search**. All results for the Xerox® 800/1000 Digital Color Press appear.
- Click on Documentation, which appears under the Xerox® FreeFlow Print Server option.

Note: Use either the 12x18 or SRA3 demo file as appropriate for your region.

You can, optionally, view the file by clicking a View button (small monitor icon) under the file name box.

2. Select > **Basic Tab > Paper Stock 12x18 or SRA3** as appropriate for your region. Since this is a poster, the use of a heavy text or cover weight silk coated, with a matte finish to show off the clear, is recommended.
3. On the image quality tab select > **Clear Options > Use Embedded Clear**. Next select > **Print**. (Example A on page 4.)

Hints and Tips

Xerox® Color 800/1000 Press Considerations

Clear elements placed on top of or next to light colors will have the most effect.

Paper sheen is important too. Use matte or dull coated papers for best results.

Ink Limits: CMYK Dry Ink is limited to 240%, regardless of whether there is Clear Dry Ink added. CMYK with Clear Dry Ink is limited to 260%. FreeFlow Print Server automatically adjusts Clear Dry Ink levels to the printer ink limits, without impacting the CMYK colors.

Xerox® FreeFlow® Print Server Considerations

- Clear Dry Ink capabilities are supported with PostScript, PostScript-based languages (such as VIPP) and with PDF.
- Clear Dry Ink is not supported when using Parallel RIP (this is true for the original 8.0 and 8.0 SP1 software, but may be updated in a SPAR or other later release).

- Clear selections are applied during RIP.
 - Clear cannot be added or suppressed when reprinting a Saved Job. The Clear Dry Ink settings are not selectable.
 - If a Clear Dry Ink setting is changed on a Processed Job, the system will warn the user that the job will require re-RIPping.

3. Object Clear—This option allows you to add Clear Dry Ink to all Images, Text and/or Graphics. (Example C)

- As with Flood Clear, the amount of Clear Dry Ink applied is controlled by the Clear Level setting.
- The Object Clear option adds value to jobs or pages that **do not** have clear effects already embedded by the designer. It is not intended for use with jobs that were designed with embedded Clear, and will generally override or obscure the custom designed effects.
- If you deselect all of the Images, Text and Graphics options from the Object Clear screen, you will be presented with an error asking you to select at least one Object type. (Example E)

Note: All the types are selected by default.

- Some objects that appear visually as text or graphics may have been converted to image data in the layout program (common with logos, for instance); these will respond to the Images setting.
- Graphic objects are those defined with fill, stroke or sweep (smooth shading).
- Many images contain a white background area—for instance an image of a car may in fact be a car within a white rectangular area. In this case, selecting Object Clear on Images will apply Clear to the whole rectangular area, not just the car.

4. Suppress Clear—Use this setting to ensure the job or page does not print with any Clear Dry Ink. With this option selected, the system will not print Clear Dry Ink, even if the file includes a spot color for Clear Dry Ink. (Example D)

Clear Level

With the Flood Clear or Object Clear option selected, you can control the amount of Clear applied. The default is Maximum, which is the same as requesting 100% of the spot color Clear. This provides the “maximum” effect. The other options, Low, Medium or High, allow you to use less Clear Dry Ink, creating a more subtle effect.

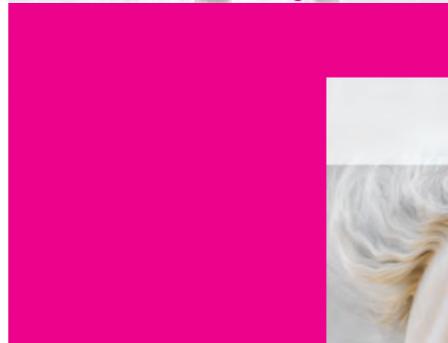
The Clear Level slider is not applicable with the Use Embedded Clear option; in that case the amount of Clear is specified for each effect in the file by the designer.

How is a spot color identified?

In a creative application such as Adobe InDesign, the designer creates a spot color with two pieces of information:

- 1. Name** – this is both for the convenience of the designer, as well as for the RIP/printer, to recognize and reference the color.
- 2. Alternative/display color** – color values (usually CMYK) that can be used to display or print the color on a device that does not have special recognition/processing of the name. The Xerox demo files, and the example design instructions in this guide, generally use Magenta as the alternative color—so while the FreeFlow Print Server RIP will recognize “Clear” and use Clear Dry Ink, Magenta will be displayed by generic PDF viewers such as Acrobat and the FreeFlow Print Server Thumbnail feature.

Clear Dry Ink



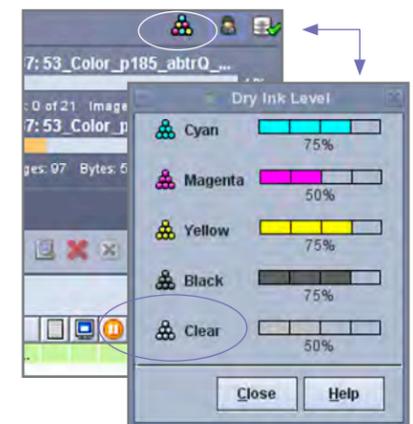
Display Color Seen in Viewers



Final Print

Verifying Clear Is Installed

To verify that the optional Clear Dry Ink is installed on your print server, click on the Dry Ink Level icon located in the upper right-hand corner of the FreeFlow® Print Server GUI and check if the Clear Dry Ink level is displayed. This feature also lets you check all Dry Ink levels during production.



Using Xerox® FreeFlow® Print Server Tools

Several job management tools on the server may be useful when working with Clear Dry Ink jobs.

- To check if a job contains Clear effects from the designer: **Thumbnail** shows the effects on the image display; **Preflight** identifies spot colors requested; **Advanced Preview** indicates if Clear is actually rendered for each page.
- If a job prints with unexpected color instead of Clear Dry Ink: The Error Report will indicate if there is a spot color name that is not recognized.
- To verify that Flood Clear or Object Clear is applied to a page: Advanced Preview indicates if Clear Dry Ink is used on each page.

Thumbnail

Thumbnail provides a quick viewer for PostScript and PDF files. It can be useful for identifying a job or checking the page size.

Note: For a file you are preparing to submit, the Preview button in Print from File (under the file name box) provides the same viewer as Thumbnail.

With Thumbnail, the file is not RIPped, and the server's spot color tables are not referenced. Spot colors are thus displayed using the alternative/display color definition (see side bar on page 8: How is a spot color identified?). For instance, the Xerox demo files typically use Magenta as the display color. Thumbnail, then, lets you know where to look for Clear Dry Ink when printing a file designed with Clear effects.

Thumbnail will not show effects from using the Flood Clear or Object Clear selection, as those effects are added in the RIP. (Example A)

Advanced Preview

The job Preview/Advanced Preview options actually RIP the file to provide a preview of the printed output. Instead of using the alternative display color, the server's spot color tables are used.

Any Clear effects will be rendered as the 5th separation, Clear Dry Ink, thus, not visible in the image display. (Example B)

The Advanced Preview option, however, has a feature to show whether Clear Dry Ink is used on a page. Next to the C, M, Y, K checkboxes is a special icon—move your mouse pointer over this icon to see a message indicating Clear is "On" or "Off" on that page. (Example C)

If the Preview/Advanced Preview images look similar to the Thumbnail, showing use of an alternative color where Clear should be (similar to Thumbnail), this is a good indication that the spot color name used in the file is not in the server's list of Clear equivalent names.

Preflight

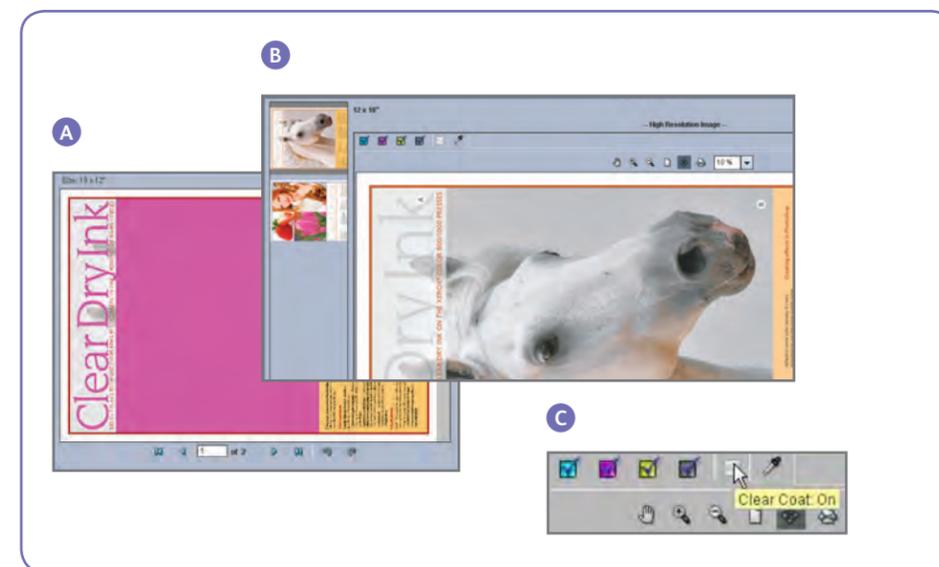
Using Preflight, you can inspect a job for spot color names that may be meant to represent Clear. In the Preflight-Setup, make sure the Spot Colors option is checked, and then run Preflight on your job. The report will list spot colors, giving you the opportunity to add a custom name to the Clear equivalent names list.

Error Report

If a job has a spot color name that is not recognized by the RIP, the job status will be Completed with Warnings, (Previewed with warnings if using preview rather than printing). An error page will be generated with the message: "Warning: <spot color name> is not a supported Pantone name/number, or does not exist in the Spot Color Editor. The alternative color provided in the application was used."

If "Print Error Page" is turned off, or you are using Preview rather than Printing, this message can be seen in Job Properties by selecting the "View Report" button.

*See section "Adding Spot Color Names for Clear Dry Ink".



Adding Spot Color Names for Clear

To enable Clear Dry Ink printing on the Xerox® FreeFlow® Print Server, a document designer should assign the name "Clear" to the spot color used for Clear Dry Ink. "Clear" is a predefined keyword that the server recognizes to mean "use Clear Dry Ink". Because a designer may use a custom name, the server allows you to manage a list of spot color names that are equivalent to Clear. The client may tell you the spot color name used to reference Clear Dry Ink, or you can identify the spot color through Preflight. Once you add the new spot color name to the list of equivalent names for Clear Dry Ink, it will be recognized in any job.

Using Spot Color Mapping for Clear

1. From the Xerox® FreeFlow Print Server GUI select **Color**, then select **Spot Color List** (Example D). When the Spot Color List window opens, select the **Color Mapping** tab (Example E).

Here you can:

- Edit Mapping
 - Create a New Mapping
 - Delete a mapping
2. To add a mapping, select **New Mapping**, enter the Clear Name in the From: column and select **OK** to close or **Apply** to enter multiple names to map.
 3. To edit a mapping, highlight the name to edit and select **Edit Mapping** to make changes.
 4. To delete a mapping, highlight the name and press **Delete**. At the confirmation Question window, select **Yes**.

Note: Equivalent names are case sensitive. **Clear** is not the same name as **clear**. You may use spaces in the name; for instance, you may enter **Clear Dry Ink**.

Tips

1. Each equivalent name added is retained. You only have to add an equivalent name once to the server.
2. If a job that was designed for Clear Dry Ink prints incorrectly, showing an alternative color where the Clear should be, check the error report or use Preflight to identify the spot color name used. Be sure this name is included in the list of equivalent names for Clear, including appropriate spaces and case sensitivity.

