Quick Start Guide

English

Creo PDF Trapper

version 3.0

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www.creo.com

Creo PDF Trapper

version 3.0

Quick Start Guide

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RE37,376	5,283,140	5,517,359	5,699,740	5,969,872	6,134,393	6,283,589
4,456,924	5,291,273	5,519,852	5,708,736	5,973,801	6,136,509	6,295,076
4,500,919	5,323,248	5,526,143	5,713,287	5,986,819	6,137,580	6,299,572
4,558,302	5,325,217	5,532,728	5,742,743	5,995,475	6,147,789	6,318,266
4,743,091	5,339,176	5,561,691	5,764,374	5,996,499	6,158,345	6,340,817
4,992,864	5,343,059	5,568,595	5,764,381	5,998,067	6,159,659	6,352,816
5,049,901	5,355,446	5,576,754	5,771,794	6,003,442	6,164,637	6,353,216
5,079,721	5,359,451	5,579,115	5,785,309	6,014,471	6,180,325	6,366,339
5,081,617	5,359,458	5,592,309	5,802,034	6,016,752	6,181,362	6,371,026
5,103,407	5,367,360	5,594,556	5,813,346	6,031,932	6,181,439	6,377,739
5,111,308	5,384,648	5,600,448	5,818,498	6,043,865	6,186,068	6,387,597
5,113,249	5,384,899	5,608,822	5,854,883	6,060,208	6,189,452	6,396,422
5,122,871	5,412,491	5,615,282	5,861,904	6,063,528	6,191,882	6,396,618
5,124,547	5,412,737	5,625,766	5,861,992	6,063,546	6,204,874	6,407,849
5,132,723	5,420,702	5,636,330	5,875,288	6,072,518	6,208,369	6,414,755
5,150,225	5,420,722	5,649,220	5,894,342	6,090,529	6,214,276	6,422,801
5,153,769	5,459,505	5,650,076	5,900,981	6,096,461	6,217,965	6,435,091
5,155,782	5,473,733	5,652,804	5,934,196	6,098,544	6,252,522	
5,157,516	5,481,379	5,680,129	5,942,137	6,107,011	6,260,482	
5,208,818	5,488,906	5,691,823	5,946,426	6,112,663	6,266,080	
5,208,888	5,497,252	5,691,828	5,947,028	6,115,056	6,266,134	
5,247,174	5,508,828	5,696,393	5,958,647	6,121,996	6,267,054	
5,249,067	5,509,561	5,699,174	5,966,504	6,130,702	6,268,948	

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1 Introducing the Trapper

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What Is the Creo PDF Trapper?

The PDF Trapper is vector-based trapping software available in different versions to suit different trapping workflows for commercial and packaging printers.

With This Version of the Trapper Plug-In	Available As A	You Can Do the Following to a Refined or Trapped PDF Page in Adobe Acrobat
PDF Trap Viewer	Standard feature with Prinergy when the Trap JTP is licensed	• Check selected trap properties • Check selected object properties • Delete all traps on the page
PDF Trap Editor	Licensed option used mainly by commercial offset printers	All PDF Trap Viewer functions, plus: • Trap whole pages • Trap selected objects • Edit existing traps • Add traps
Advanced PDF Trap Editor	Licensed option with some advanced features used mainly by packaging printers	All PDF Trap Viewer and PDF Trap Editor functions, plus: • Set trap geometry • Create keepaway traps
Trap JTP	Licensed option that includes some advanced features	Trap PDF pages as part of a Prinergy workflow. For more information, see the Prinergy Workshop online help.

Who Should Use This Guide?

This manual is intended for anyone who uses Creo PDF Trapper software version 3.0.

To use this manual, you should:

- Have a working knowledge of prepress operations, including trapping
- Be familiar with either the Macintosh® or Windows® operating system
- Be familiar with the Prinergy workflow

This manual assumes that:

- All the hardware, software, and network components of your Prinergy system are installed, configured, and operating correctly.
- Files submitted to Prinergy are free of common errors usually resolved during preflight, such as missing fonts and PostScript® errors.

What Is In This Guide?

This quick start guide covers the PDF Trap Viewer, PDF Trap Editor, and the Advanced PDF Trap Editor versions of the PDF Trapper plug-in for Acrobat. The guide provides:

- A graphical reference to the main menus, dialog boxes, and their functions
- Some essential tutorials



For detailed procedures on how to use the PDF Trap Viewer and PDF Trap Editor plug-ins, see the PDF Trapper plug-in help, available with the PDF Trapper plug-ins. Process template options for the Trap JTP are documented in Prinergy Workshop online help.

Preparing Input Files

Before checking and changing traps on a PDF page, you must refine, color match, color map, and trap the PDF file in Prinergy. For best results, follow these steps:

1. Remove any traps made in a source software.
2. Embed any fonts used in the input file. You can do this either while creating the PostScript output file in the source software, or in Prinergy during the refine step.
3. Use a composite PostScript (PS) or PDF file for the input file. Trapping and color matching make changes that can be done only to a composite file. Separated files (that is, with one color per PDF page) cannot be trapped by the PDF Trapper.
4. Set up the Color Matcher JTP in the refine process template to convert RGB colors to CMYK colors. Depending on your input file or design requirements, you may want to select **Map All Spot Colors to Process** (in the Spot Color Handling section), **Set Colors to Knockout**, and/or **Set Black to Overprint** (in the ColorConvert section).
5. Do not set colors to knock out when you will need double hits of spot colors.
6. Add ink types to the color database in Prinergy Workshop. Ink type is set to **Normal** by default but can be changed in the Color Editor in Prinergy Workshop.
7. Map spot colors to final output color separations.
8. For files with *opaque colors*, set the (Ink) **Printing Order** from the Prinergy Color Mapping dialog box to determine the trap directions for traps between opaque inks. You can also set the **Treat as Black** option for inks.

Once the PDF file is successfully set up and refined, you can check, change, and/or add traps in the refined PDF pages using a PDF Trapper plug-in for Acrobat.

Trapped By The Trap JTP

Any PDF file refined and trapped using the Trap JTP will contain an identifying “trapped by” icon in the upper-left corner of the page when opened with the Trapper plug-in. This is a standard Acrobat annotation that does not print.

To see the date that the page was trapped, close the Trapper plug-in and double-click the “trapped by” icon.

To delete the icon:

- In the Mac OS, press CMD and click the icon.
- In Windows, right-click the icon.

From the list, select **Delete**.

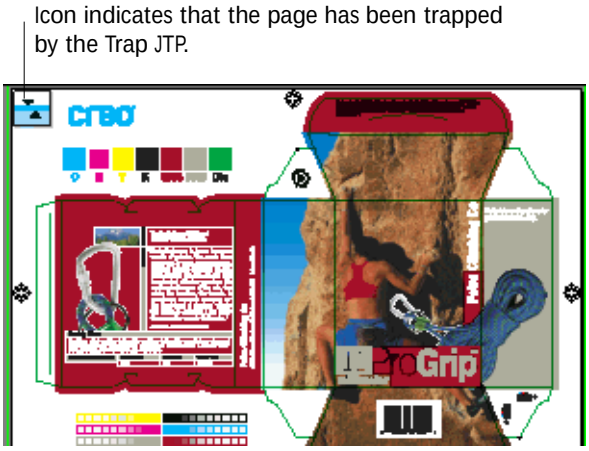


Figure 1: PDF Trapper “trapped by” icon

Selecting an Output Plan

The PDF that you check, edit and/or retrap with the PDF Trapper plug-in is returned to Prinergy to be output via a Prinergy process template such as:

- Imposition proof output
- Loose page output (loose proof)
- Final output



See Prinergy online help for more about using these process templates.

2

Installing and Updating

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Installing the Trapper

PDF Trap Viewer plug-in

The PDF Trap Viewer plug-in is available when the Trap JTP is licensed. The PDF Trap Viewer plug-in is installed when Acrobat and Prinergy Workshop are installed on Prinergy servers or on Windows and Macintosh client computers.

PDF Trap Editor and Advanced PDF Trap Editor plug-ins

The PDF Trap Editors are licensed versions of the PDF Trapper plug-in. Obtain a special Prinergy license key to activate either or both versions of the PDF Trap Editor on servers or client computers that have Acrobat and Workshop installed.

The Macintosh system extension Carbon Lib 1.6 or later is automatically installed on client computers running Mac OS 9.1 clients with a Prinergy update.

Updating the Plug-in

The PDF Trapper plug-in updates are included in Prinergy Workshop software updates.

Trap JTP

The Trap JTP is a licensed feature of a Prinergy job processing system. Obtain a special Prinergy license key to activate and use the Trap JTP with a Prinergy workflow.

Checking Client Computer Requirements

You can use the PDF Trapper plug-ins on client computers that include the following minimum requirements.

Component	Minimum Requirements
Operating System	Use one of the following operating systems: • Microsoft® Windows 2000 with service pack as qualified by Creo • Mac OS 9.2 or later with 100 MB of memory assigned to Acrobat. The actual memory requirement depends on the complexity and size of the processed file and other Acrobat plug-ins. • Mac OS X 10.2.3 or later **Note:** A Macintosh client must have both a computer name and a user name assigned.
Software	Acrobat 5.0, 6.0, or 7.0 If you send the refined and trapped files to another site for output, that site must have installed at least Prinergy 2.0.
Hardware and Connections	256 MB RAM; 300 MHz PII or G3 processor 100 MB free disk space for temporary files Mouse or trackball TCP/IP network connection to the Prinergy primary server

Getting Help



To get information about how to use the PDF Trapper, see the PDF Trapper plug-in help that is delivered with the PDF Trapper software, or call a service representative.

Finding Help Information

To open the PDF Trapper plug-in help, from the Acrobat main menu, select **Help > Plug-In Help > Creo PDF Trapper**. The PDF Trapper Quick Start Guide is also available in electronic format using this menu.



For information about the Trap JTP, see the Prinergy Workshop online help.

Viewing the About Dialog Box

To check which version of the plug-in is installed in your Acrobat plug-ins folder, from the Acrobat main menu, select **Help > About Third-Party Plug-Ins > Creo PDF Trapper**.

Calling Customer Support

Call a service representative at 1-877-788-2727 (toll free).

3

Setting Preferences

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Opening the Preferences Dialog Box

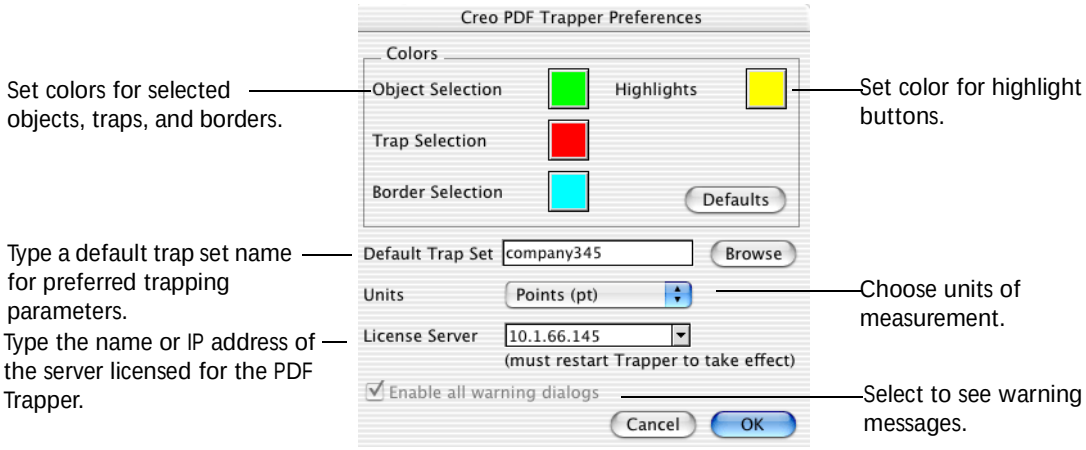
To open the PDF Trapper Preferences dialog box, from the Acrobat main menu:

- In the Mac OS, select **Acrobat > Preferences > Creo PDF Trapper**
- In Windows, select **Edit > Preferences > Creo PDF Trapper.**

Preferences Dialog Box Options



See the PDF Trapper plug-in help for a full description of the options in the Preferences dialog box.



4 Viewing Objects, Traps, and Borders

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Opening the PDF Trap Viewer Plug-in

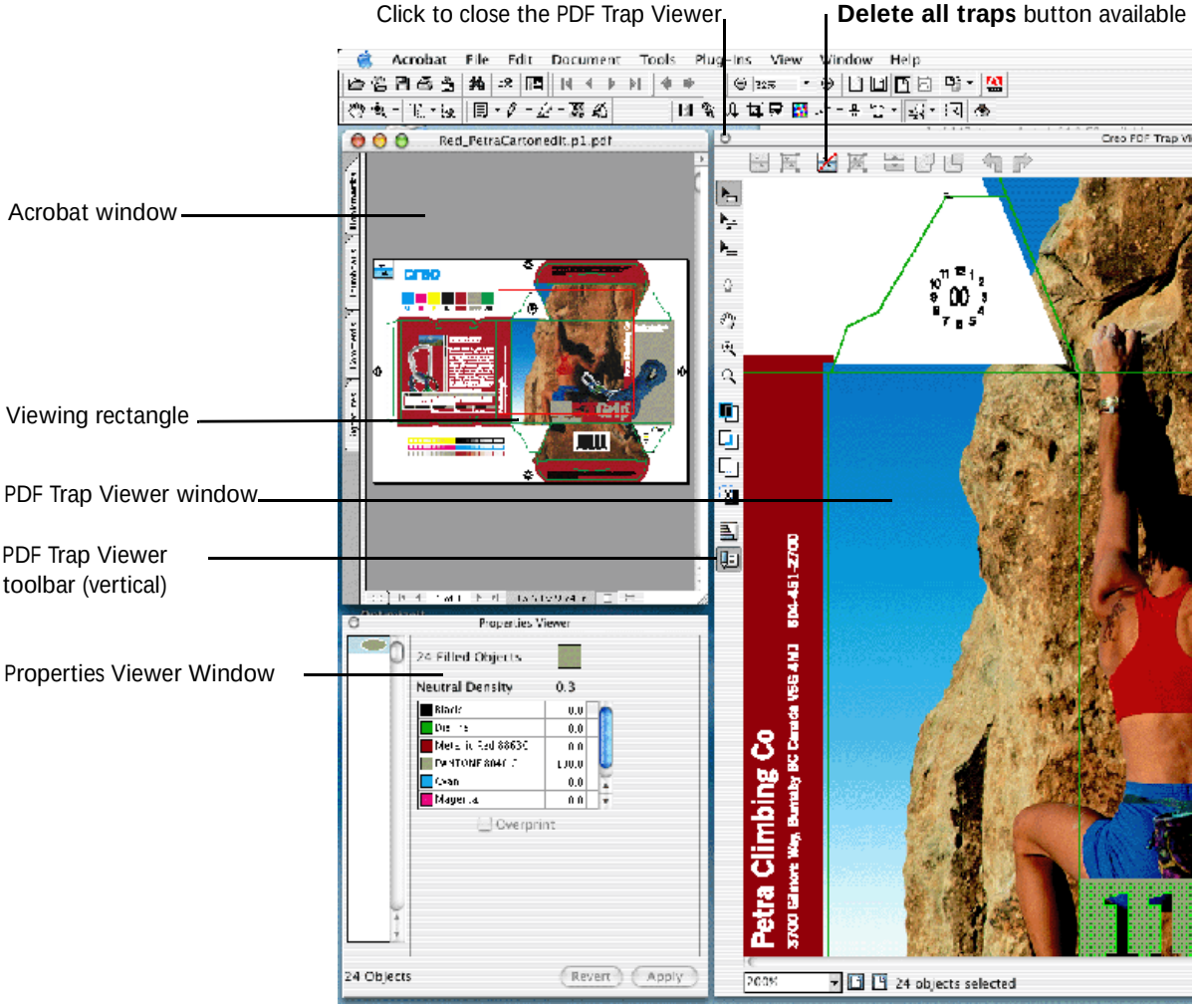
In Adobe® Acrobat® 5 and 6, use the **Tools** menu to access and open the PDF Trap Viewer plug-ins. Select **Tools > Creo Tools > Creo PDF Trap Viewer**.

In Acrobat 7, use the **Advanced** menu to access and open the PDF Trap Viewer plug-ins. Select **Advanced > Creo Tools > Creo PDF Trap Viewer**.

The PDF Trap Viewer and Acrobat windows open the first time in the default tiled layout. After the first time, the windows will open in the size and position they were last left in. To return to the default layout, from the main Acrobat menu, select **Window > Tile > Creo PDF Trapper**.

Main PDF Trap Viewer Windows

The main PDF Trap Viewer windows include the Acrobat window with its viewing rectangle, the PDF Trap Viewer window, and the Properties Viewer window.

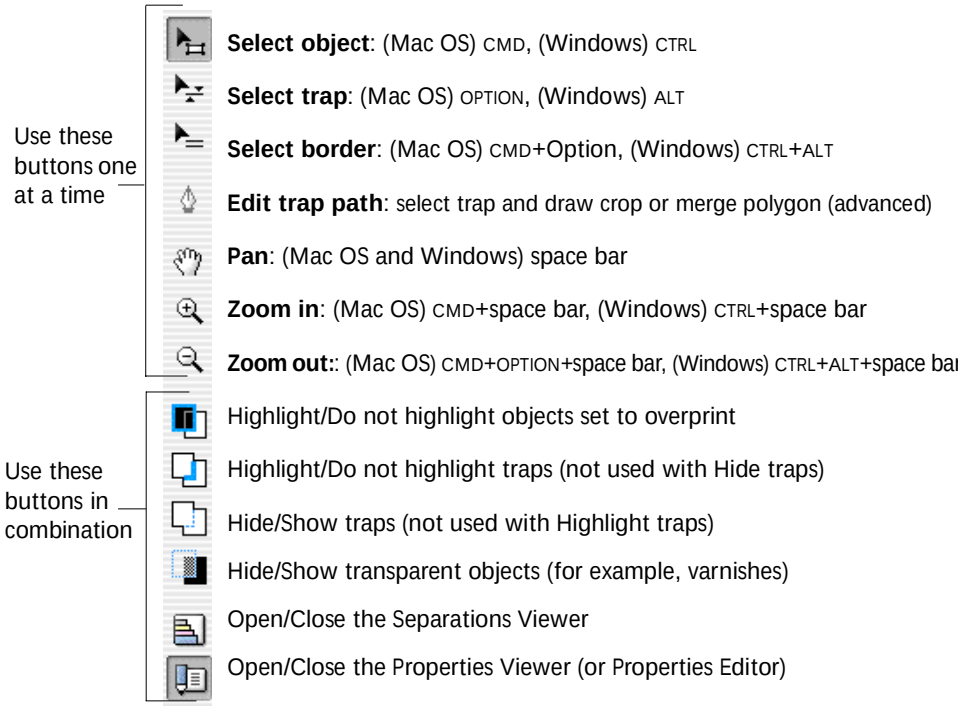


If you are licensed for both the PDF Trap Viewer and the PDF Trap Editor, you can switch between them without losing data.

PDF Trap Viewer Toolbar



The PDF TrapViewer toolbar is the vertical toolbar at the left side of the PDF Trapper plug-in window. The **Edit trap path** button is for Advanced PDF Trap Editor users only.



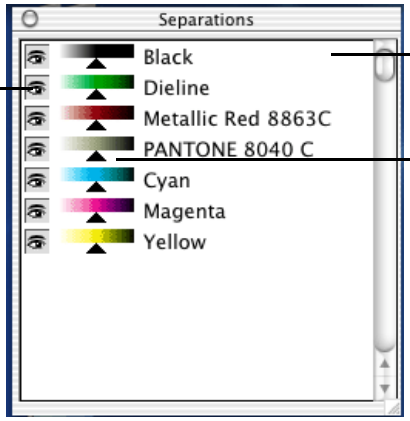
Note: The Macintosh keyboard may identify the CMD (Command) key with ⌘

For more information about the PDF TrapViewer toolbar, see the PDF Trapper Plug-In Help.

Separations Window

The Separations window opens when you start a PDF Trap Viewer session if the Separations window was opened in a previous session. To open it from the Acrobat main menu:

- In Acrobat 5 or 6, select **Tools > Creo Tools > Prinergy Separation Viewer**
- In Acrobat 7, select **Advanced > Creo Tools > Prinergy Separation Viewer**



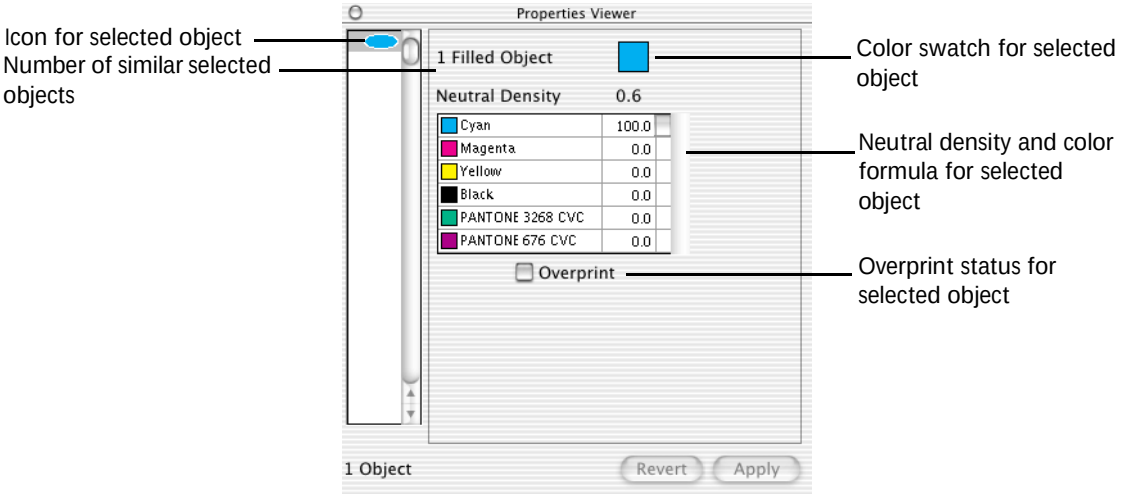
Note: Changing the color in the Prinergy Separation Viewer does not change the output of the page.

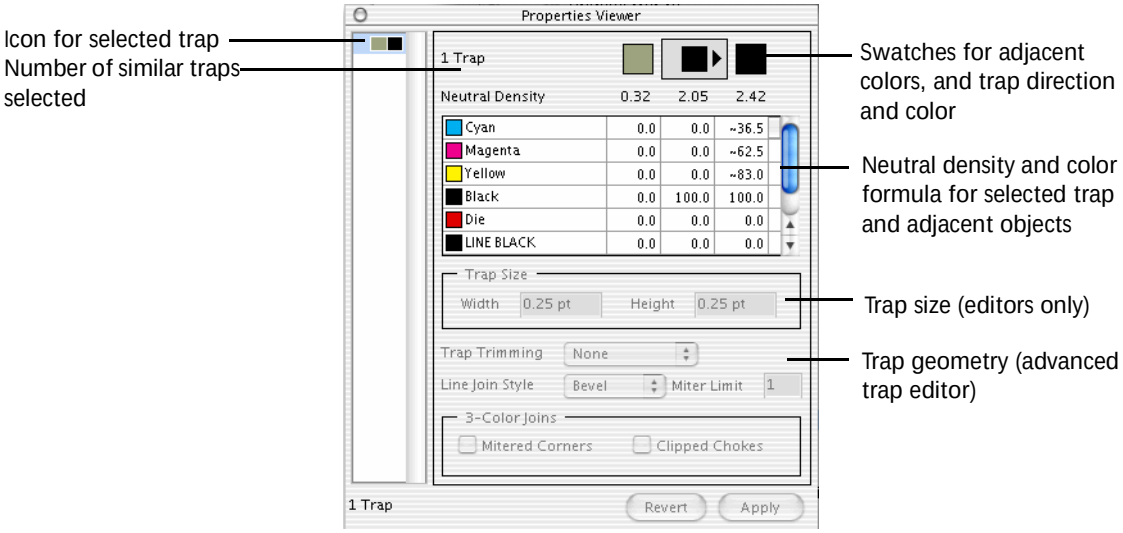
For more about the Prinergy Separation Viewer, see the PDF Trapper plug-in help.

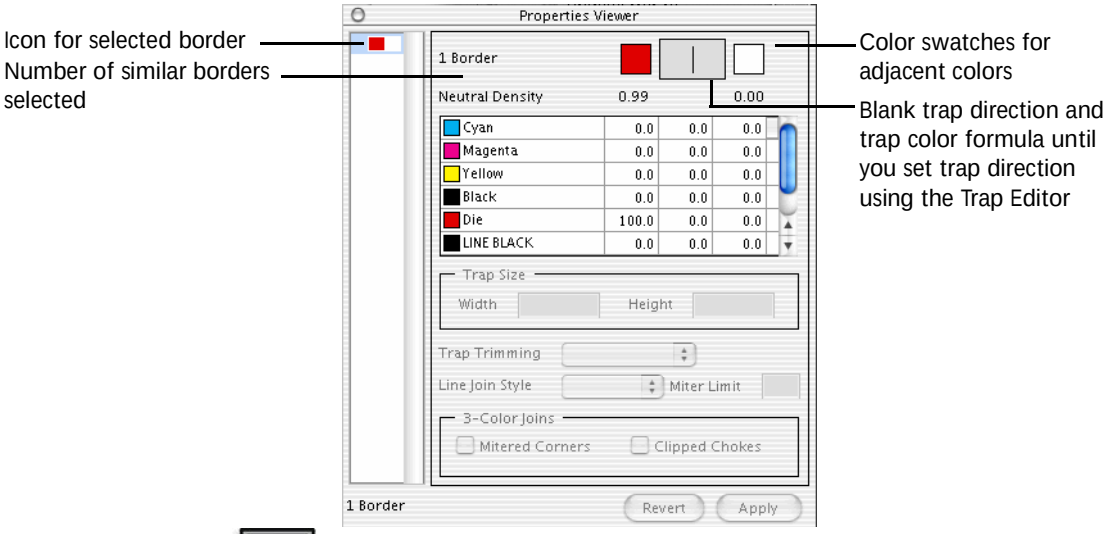
Properties Viewer Window

The Properties Viewer window opens when you start a PDF Trap Viewer session. If you have closed the Properties window and want it back, click the Properties Viewer icon ( ) on the Trapper's vertical toolbar.

The Properties Viewer window opens and shows properties for the selected objects, traps, and borders.







For more information about the Properties Viewer, see the PDF Trapper plug-in help.

5

Editing Trap Properties

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Opening the PDF Trap Editor Plug-in

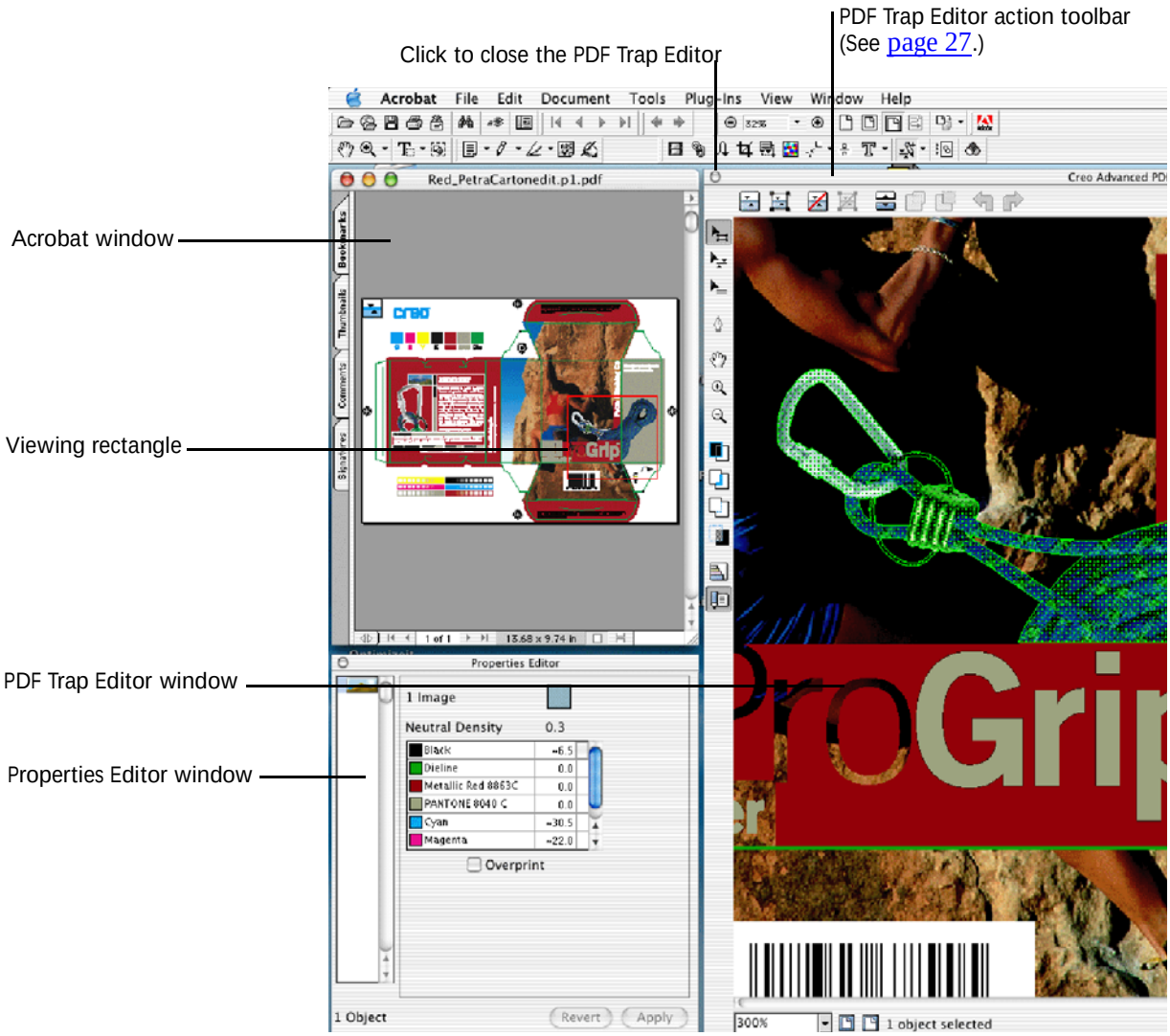
In Acrobat 5 and 6, use the **Tools** menu to access and open the PDF Trapper plug-ins. Select **Tools > Creo Tools > Creo PDF Trap Editor** or **Creo Advanced PDF Trap Editor**.

In Acrobat 7, use the **Advanced** menu to access and open the PDF Trapper plug-ins. Select **Advanced > Creo Tools > Creo PDF Trap Editor** or **Creo Advanced PDF Trap Editor**.

The PDF Trap Editor and Acrobat windows open the first time in the default tiled layout. After the first time, the windows will open in the size and position they were last left in. To return to the default layout, from the main Acrobat menu, select **Window > Tile > Creo PDF Trapper**.

Main PDF Trap Editor Windows

The main PDF Trap Editor windows include the Acrobat window with its viewing rectangle, the PDF Trap Editor window, and the Properties Editor window.



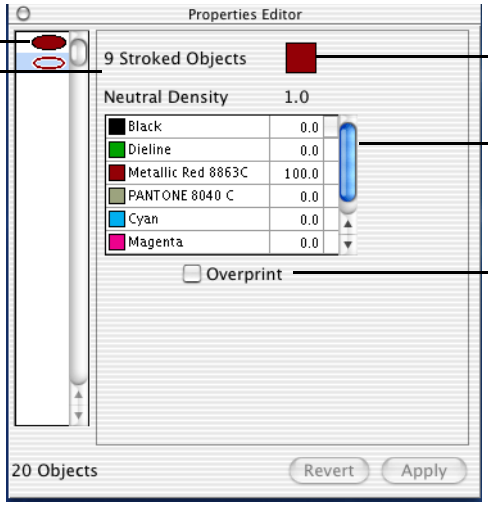
If you are licensed for both the PDF Trap Viewer and the PDF Trap Editor, you can switch between them without losing data.

To open the Prinergy Separations Viewer, see page 17.

Properties Editor Window

The Properties Editor window opens when you start a PDF Trap Editor session. If you have closed the Properties window and want to reopen it, click the Properties Editor icon ( ) on the Trapper's vertical toolbar.

The Properties Editor window opens and shows properties for selected objects, traps, and borders.



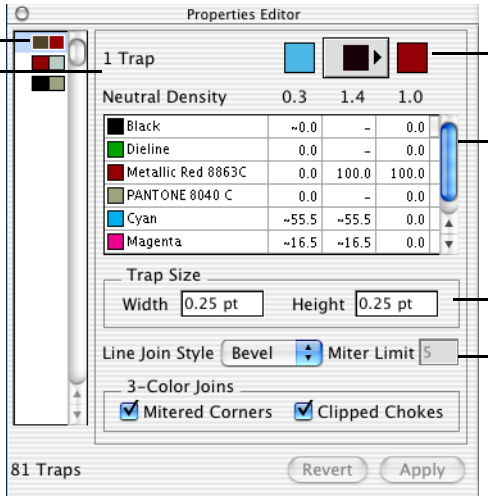
Icon for selected object

Number of similar selected objects

Color swatch for selected object

Neutral density and color formula for selected object

Change overprint status for selected object.



Icon for selected trap

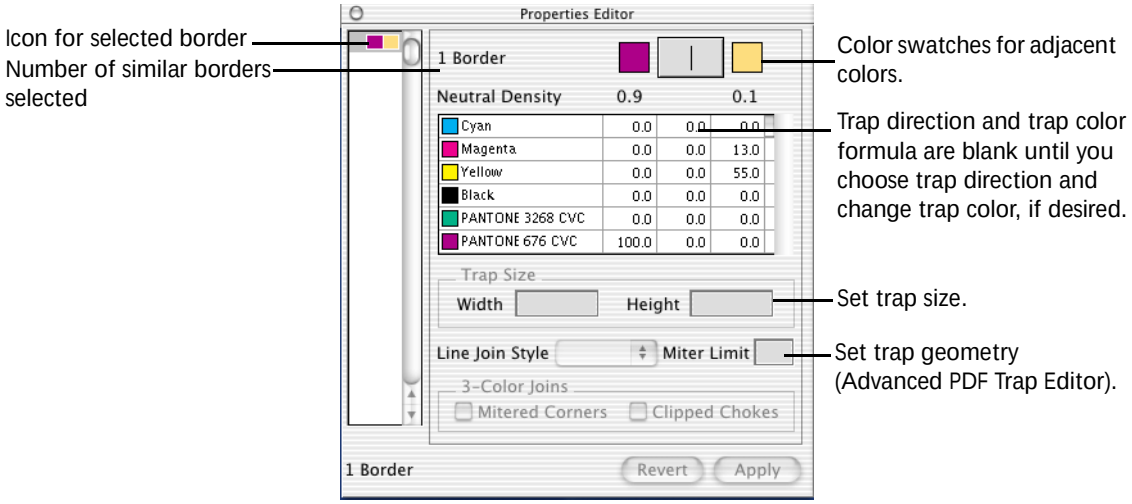
Quantity of traps selected

Swatches for trap and adjacent colors. Click to edit trap direction.

Neutral density and color formula for selected trap and adjacent objects. Edit trap color.

Edit trap size.

Edit trap geometry (Advanced PDF Trap Editor).



For more information about the Properties Editor, see the PDF Trapper plug-in help.

6

Adding, Changing, Replacing, and Deleting Traps

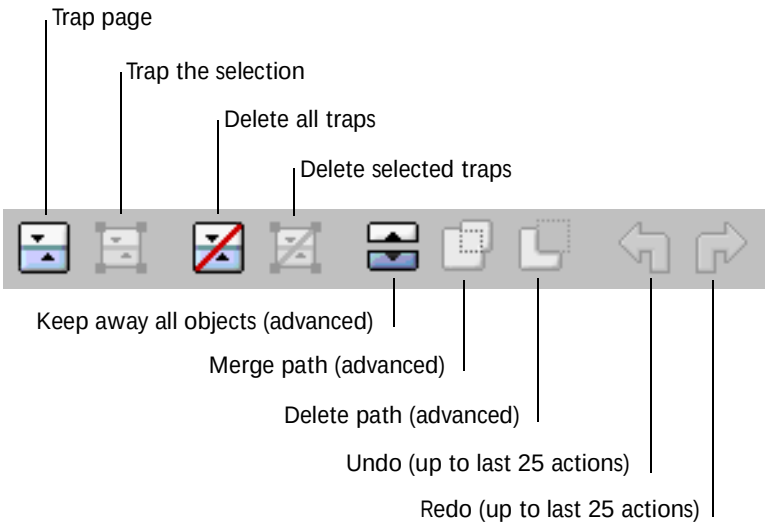
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PDF Trap Editor Action Toolbar

The PDF Trap Editor action toolbar is the horizontal toolbar in the PDF Trap Editor window. This toolbar is disabled in the PDF Trap Viewer, except for the **Delete all traps** button.

You must license the Advanced PDF Trap Editor to edit the trap path (using the **Merge path** and **Delete path** buttons) and to set keepaway traps (using the **Keep away all objects** button).

Only one of these buttons can be used at any time:

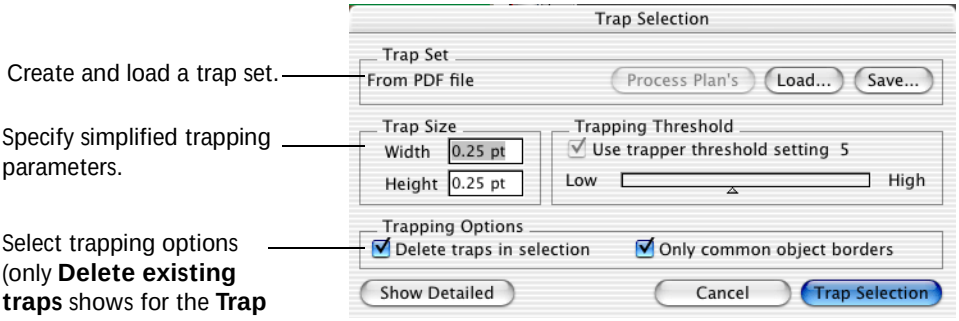


For more information about the PDF Trap Editor action toolbar, see the PDF Trapper plug-in help.

Simplified Trapping Dialog Box

You open the trapping dialog box by clicking either the **Trap page** or **Trap the selection** button on the PDF Trap Editor action toolbar.

To show the simplified dialog box, click **Show Simplified**. The simplified dialog box is similar for both **Trap page** and **Trap the selection** buttons.



For more information about the simplified trapping dialog box, see the PDF Trapper plug-in help.

Detailed Trapping Dialog Box

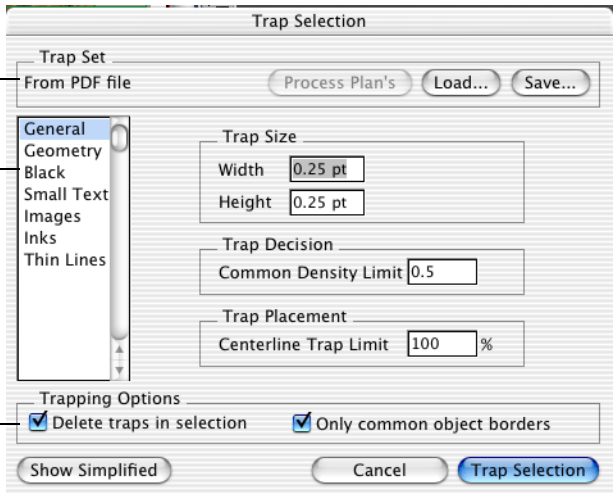
You open the trapping dialog box by clicking either the **Trap page** or **Trap the selection** button on the PDF Trap Editor action toolbar.

To show the detailed trapping dialog box, click **Show Detailed**.The detailed dialog box is similar for both **Trap page** and **Trap the selection** buttons.

Create and Load a trap set.

Specify detailed trapping parameters in the dialog boxes named in this list. Some parameters are available only with the Advanced PDF Trap Editor.

Select trapping options (only **Delete existing traps** shows for the **Trap page** button).





For more information about the detailed trapping dialog box, see the PDF Trapper plug-in help.

7

Trapping Exercises

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Introduction

This chapter includes exercises that show you how to:

- Select objects, traps, and borders
- Trap vector objects
- Edit trap properties
- Trap a complex bitmap
- Trap with opaque inks
- Trap rich blacks

Selecting Objects, Traps, and Borders

The main ways to build up a selection list before editing or retrapping the selected objects, traps, or borders, include:

- Using a *mouse click*
  This is especially useful for adding or removing one item from the list.
- Drawing a *marquee*
  This is especially useful for selecting or removing a text string, several items at a time, or an entire page.
- Using the *contextual menu*
  This is especially useful for selecting items that share a context within the page or one or more attributes such as color or overprint status.

Goals

At the end of this exercise, you should be able to:

- Open a trapped file and select one or several vector objects, traps, and/or borders using the three selection methods.
- Remove an item from the selection list.
- Check the number, type, and other properties of selected items in the Properties Viewer.

Procedure

Print the procedure and follow the steps using the opened drawing file:

1. Click to open NoCurvesTrapped.PDF.
2. Open the PDF Trap Viewer plug-in.
3. Click the object selection tool and then click to select the black car object.

   Does the item description appear in the Properties Viewer? What is the object's overprint status?

   The overprint status is knockout.
4. Using the mouse, draw a rectangle (a marquee) around several typed objects. (The marquee method is also useful for selecting lines of text objects.)

   Do the item descriptions appear in the Properties Viewer?

   What is the object's status?

   The object's status is overprint.
5. Select the background color and SHIFT-marquee to enclose the entire "CURVES" word in the marquee. Use SHIFT-click to add the yellow sign.

   How many icons are present in the Properties Viewer? What is their type and color?

   Each of the three icons represent the selected items which are filled objects with their own color formulas.

   Click the icon for the selected "CURVES" word in the Properties Viewer. What do you observe?

   Each letter in "CURVES" is counted as an object and is set to knockout.
6. Shift-click to remove the "C" from the selection list.

   Check the Properties Viewer. How many red filled objects are there now?

   There are five red filled objects.
7. Now select objects according to object type, color, or overprint status using the contextual menu. (Mac OS) Press CTRL and click the "O" in "NO". (Windows) Right-click the "O" in "NO".

8. In the contextual menu, click **Select** **trap**.

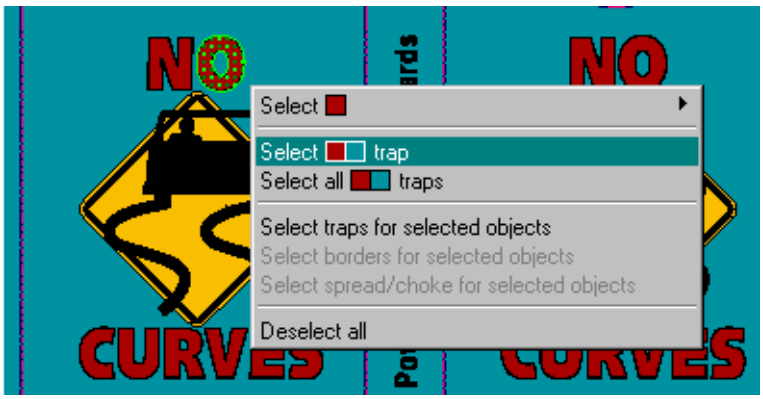


Figure 2: Contextual menu

Does the trap description appear in the Properties Viewer?

9. Context-select the “O” again and this time click **Select all** **traps.**

What appears in the Properties Viewer this time?

The traps for every combination of the red and turquoise color appear in the Properties Editor, in this case, all of the traps for “NO CURVES” on the front and back of the card box.

10. Repeat steps 3 to 9 for traps and borders.

For traps, check trap direction and trap color.
For borders, check that there is no trap direction or trap color.

11. Close **NoCurvesTrapped.PDF** without saving.

Trapping Vector Objects

Goals

At the end of this exercise, you should be able to:

- Use default trapping parameters to trap a page containing vector objects
- Correct overprint status for different objects
- Retrap the page.

Procedure

Print the procedure and follow the steps using the opened drawing file:

1. Click to open NoCurves.PDF.
2. Open the PDF Trap Editor plug-in.
3. In the PDF Trap Editor action toolbar, click on the **Trap page** button.

   In the Trap page dialog box, what is the status of the trap set?

   The status is Default, that is, the system trapping parameters are loaded.
4. Do not change any trap parameter settings.
5. Click the **Trap Page** button in the dialog box.
6. Click **Highlight traps** to display traps. What objects have been trapped on this page?

   Car and diamond objects, large text, and small text.
7. Turn off **Highlight traps**.
8. Select the “O” object in “NO”. What is the object type? Check the trap width for the “O” object.

   The “O” is a filled object and traps like any other object.

   Would you change the traps on the “NO CURVES” phrases or leave them as they are?
9. Click **Highlight objects set to overprint**.

10. What is the overprint status of the car drawings and the black diamond lines? Is this status producing the right results?

    The car objects and diamond lines are black-filled objects set to overprint. Slide back the black color in the Prinergy Separation Viewer to see that the car objects intersect with two different colors so they should be set to knock out and trapped.

11. Select and set car objects and diamond lines to knockout.
12. Click **Highlight objects set to overprint** to check that they are no longer set to overprint.
13. Turn off **Highlight objects set to overprint**.
14. Re-trap the page.
15. Click **Highlight traps** to check that cars, lines, and phrases are trapped correctly. Use the Prinergy Separation Viewer to confirm this.
16. Close **NoCurves.PDF** without saving.

Editing Trap Properties

Goals

At the end of this exercise, you should be able to:

- Use default trapping parameters to trap a page containing vector objects
- Edit traps for color, size, and, with the Advanced PDF Trap Editor, line join style.

Procedure

Print the procedure and follow the steps using the opened drawing file:

1. Click to open EditProperties.PDF.
2. Open the PDF Trap Editor plug-in.
3. In the PDF Trap Editor action toolbar, click on the **Trap page** button.
4. In the Trap page dialog box, do not change any trap parameter settings.
5. Click the **Trap Page** button in the dialog box.
6. Check the trapped page.

   Why didn't the "7" in the second drawing get a trap?

   The color values for the 7 and its background are too close to need a trap. Select each item as an object and check its color formula in the Properties Editor.
7. Using the **Trap page** dialog box, experiment with retrapping the page with different trap width settings.
8. Check the traps in the file. What trap width best suits this page. Why?

   Smaller trap widths are more suitable for commercial printing.
9. In the PDF Trap Editor action toolbar, click the **Trap page** button. In the Trap page dialog box, change the **Trap Width** setting back to the default 0.25 pt.

10. Check the traps for the first drawing in the file. Do some traps look too dark?

    Do the traps between objects Pantone® 3268 and Pantone 676 look too dark?
    Between 42c60m0y12k and Pantone 676?
    Between 89c12m27y0k and Pantone 676?
    Between 60c0m70y0k and Pantone 676?

11. Select a trap or traps from the list above and scale the trap color to your satisfaction by changing the trap's color separation values in the Properties Editor.

12. Select the circular object in the middle of the multi-colored square. Change its status from knockout to overprint. What happens?

    The underlying objects/colors show through the object. When printed, the inks for the underlying objects will be laid down, then the overprinting object will be painted on top. Since the top color doesn't have enough density to obscure the underlying colors, the underlying colors will bleed through.

13. Open the Advanced PDF Trap Editor plug-in. There is no need to close the basic PDF Trap Editor first.

14. In the third drawing, select the trap where the two rectangles meet and check its shape. Now apply clipped chokes to the trap using the Properties Editor. What happens to the trap?

    The trap forms a continuation of the yellow shape, which will be less noticeable if a misregistration occurs.

15. Select the trap between the blue triangle and its pink background and change the default beveled line join to a miter.

16. Experiment with applying different miter limits. What do you see?

    A low miter limit produces a bevel on the trap join.

17. Close **EditProperties.PDF** without saving.

Trapping a Complex Bitmap

Goals

At the end of this exercise, you should be able to:

- Process bitmap images as complex bitmaps
- Apply spread or choke traps to complex bitmaps

Procedure

Print the procedure and follow the steps using the opened drawing file:

1. Click to open ComplexBitmap.PDF.
2. Open the PDF Trap Editor plug-in.
3. Click the **Trap page** button.
4. In the **Images** tab, set the **Bitmap** option to **Ignore All**. Use the default settings for the other options.
5. Click **Trap page**.
6. You will see a message saying that bitmaps have been ignored. Click **OK**.
7. Click the object selection tool and then right-click near the bottom of the red ribbon.
8. Roll your mouse over the top blue flyout menu and choose S**elect all complex bitmaps set to knockout**.

   This should select the two blue bitmaps.
9. Right-click again in the same place and choose **Select Spread/choke for selected objects.** What is selected?

   This selects the spread/choke borders for the two bitmaps.
10. In the Properties Editor, click the trap direction button once, so that the direction is away from the blue swatch.
11. Optional step: change the trap size.
12. Click **Apply**.

13. Zoom in to the drop shadow and click to deselect the trap to view it. What do you see?

    The blue bitmaps are spread to their backgrounds.

14. To apply a choke trap, reselect the trap by right-clicking on shadow and rolling the mouse over the top blue flyout menu. Choose **Select object's spread/choke**. from the contextual menu.

15. In the Properties Editor, click the trap direction button once so that the arrow points towards the blue swatch and click **Apply**. The background will choke under the bitmap.

    Notice that the entire bitmap must be trapped in the same direction.

    *If you want to have the bitmap spread to the dark green background but have the light green choke under the bitmap, retrap the file using the **Trap All** option in step #3. If you use this option, you will sacrifice trapping speed to get the desired result because processing will take several minutes longer.*

16. Close **ComplexBitmap.PDF** without saving.

Trapping with Opaque Inks

Opaque inks are treated differently during trapping because they completely hide underlying inks so that colors underneath do not show through. This means that opaque inks that are light in color can actually be trapped as though they were very dark.

Some rules about trapping opaque inks:

- An ink can appear to be a very light ink, however, if set to opaque, a darker color will spread into the ink.
- Opaque inks will be the shape-defining color in a border between a normal ink and an opaque ink.
- In borders composed of two opaque inks, the ink that is later in the print order will be the shape-defining color.
- An opaque ink is considered solid if its tint value is greater than the value for the Black Color Limit. Where a solid opaque ink overprints another color, the combination of the two inks forms a rich black area. The underlying color is always choked back from any borders with rich black objects, leaving the opaque ink to define the border shape.

Goals

At the end of this exercise, you should be able to:

- vary the ink types between opaque and normal and check the difference in trap direction that results.

Procedure

Print the procedure and follow the steps using the opened drawing file:

1. Click to open OpaqueInks.PDF.

   This page contains dark blue text on a gold background.

2. Open the PDF Trap Editor plug-in.
3. In the PDF Trap Editor action toolbar, click on the **Trap page** button.

4. Select the **Inks** dialog box.

   Locate the dark blue color in the drawing. What are its properties?

   Dark blue is set to normal, its neutral density is 1.14, and it appears before the gold color in the print order.

   Locate the gold color in the drawing. What are its properties?

   Gold is set to opaque, its neutral density is 0.44, and it is the last color in the print order.

5. Select **Normal** for the gold ink type, clear the **Treat as Black** check box, and click **Trap page**.

   Click the **Select trap** button and click the edge of the dark blue type to see the trap between gold and blue in the Properties Editor. What is the trap direction?

   The dark blue defines the shape and the gold background is choked under the blue.

6. Click the **Trap page** button.

7. Select the **Inks** dialog box.

8. Select **Opaque** for the gold ink type and click **Trap page**.

   Click the **Select trap** button and click the edge of the dark blue type to see the trap between gold and blue in the Properties Editor. What is the trap direction?

   The gold defines the shape and the blue text spreads into the gold background.

9. (Optional step.) Experiment with ink opacity and print order. Remember that changing an ink to opaque and then trapping causes the **Treat as Black** check box in the Inks parameters to be automatically selected.

10. Close **OpaqueInks.PDF** without saving.

Trapping Rich Blacks

Often a designer or printer wants black objects to have more impact—to look as black as possible—so one or more additional colors are added. Commonly, 40 percent cyan or 30 percent each of cyan, magenta, and yellow are added to the 100 percent black. The extra ink makes objects colored this way look darker than 100 percent black when printed.

These rich black objects need a reverse trap to pull the extra inks, often called booster colors, in from the edges of the object, to avoid having them appear along the edges if there is a misregistration on press. These reverse traps are sometimes called stayaway or keepaway traps.

Goal

At the end of this exercise, you should be able to:

- Use the **Treat As Black** ink parameter to apply stayaway traps for rich black graphics.

Procedure

Print the procedure and follow the steps using the opened drawing file:

1. Click to open RichBlack.PDF.

   This is a logo that has been colored 40 percent cyan and 100 percent black.

2. Open the PDF Trap Editor plug-in.
3. In the PDF Trap Editor action toolbar, click the **Trap page** button.
4. Select the **Inks** dialog box.
5. Find the Black colorant, and make sure its **Treat as Black** check box is selected. There's usually no need to ever turn it off.
6. Click the **Trap Page** button.

   The PDF Trapper will now trap the page, creating a stayaway trap for the rich black logo.

   To see the effect better, do the following steps:

7. Click **Highlight Traps** to see the stayaway traps.
8. Click to turn off **Highlight Traps**, and open the **Separation Viewer**.

9. Select the Black color in the **Separations** window and move its triangle slider to the left. What do you see?

   This will lighten the display of black, and make the stayaway traps more obvious.

10. Close **RichBlack.PDF** without saving.

Trapping Double Hits of Spot Color

There are times when a printed document containing a spot color needs to emphasize a particular spot-colored element, typically a logo graphic. This is often done by printing the element twice with the same spot color ink. This requires careful handling in the desktop page-creation applications, and in the downstream workflow.

You cannot simply print the same element twice with 100 percent of the spot ink, because the second printing will attempt to put ink on top of wet ink. Usually there are ink adhesion problems, and not all the ink gets transferred to the paper. To avoid this, the first impression is often screened 30 percent to 60 percent with the spot ink, and the second impression is 100 percent. The screening allows the second impression to adhere to the paper.

If there is misregistration between the first and second spot ink impressions, you will see an objectionable screened edge showing. To prevent this, the PDF Trapper can apply the same stayaways that it applies to rich blacks. This is enabled by the **Treat As Black** setting in the **Inks** trapping parameters.

Goal

At the end of this exercise, you should be able to:

- Use the **Treat As Black** ink parameter to apply stayaway traps for graphics with double hits of spot color.

Procedure

Print the procedure and follow the steps using the opened drawing file:

1. Click to open DoubleHit.PDF

   This is a logo that has been colored 40 percent Pantone Cyan spot color, then duplicated and positioned exactly on top of the original. The duplicate has its color changed to be 100 percent Pantone Cyan 2nd Hit spot color, and set to overprint.

2. Open the PDF Trap Editor plug-in.

3. Marquee-select the entire logo.

   What do you read in the Properties Editor?

   The different layers of cyan are represented by icons that, when selected, show 40 percent and 100 percent cyan for the first and second hits of color.

4. In the PDF Trap Editor action toolbar, click the **Trap page** button.

5. Select the Inks dialog box.

6. Find the Pantone Cyan 2nd Hit colorant, and check the **Treat as Black** checkbox.

7. Click the **Trap page** button.

   The PDF Trapper will now trap the page, creating a stayaway trap for the double-hit spot color logo.

To see the effect better, do the following:

8. Click **Highlight Traps** to see the stayaway traps.

9. Click to turn off **Highlight Traps**, and open the **Separation Viewer**.

10. Select the Pantone Cyan 2nd Hit color in the **Separations** window, and move its triangle slider to the left. What do you see?

    This will lighten the display of the second hit of the spot color, and make the stayaway traps more obvious.

11. Close **DoubleHit.PDF** without saving.