

Achieving High Quality Results Using I-Trap™

Version. 1.00 June 2002



Copyright and Trademarks

Achieving High Quality results using I-Trap[™] Version 1.00 June 2002

Copyright © 2001-2002 Lucid Dream Software, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Lucid Dream Software, Inc.

The information in this publication is provided for information only and is subject to change without notice. Lucid Dream Software, Inc. and its affiliates assume no responsibility or liability for any loss or damage that may arise from the use of any information in this publication. The software described in this book is furnished under license and may only be used or copied in accordance with the terms of that license.

Adobe, Adobe Photoshop, Adobe Type Manager, InDesign, Acrobat, Display PostScript and PostScript are registered trademarks and Distiller and PostScript 3 are trademarks of Adobe Systems Incorporated.

THIS PRODUCT IS COVERED BY ONE OR MORE OF THE FOLLOWING US PATENTS: 5,113,249; 5,323,248; 5420,720; 5,481,379.

Other brand or product names are the registered trademarks or trademarks of their respective holders.

Lucid Dream Software, Incorporated

Tel. +1-847-202-8424 Fax +1-847-202-9352



www.trapping.org www.luciddream.com www.ontimeproof.com

e-mail: trap@luciddream.com



Achieving High Quality Results using I-Trap™

I-Trap[™] Viewer is a powerful tool that can be used not only to adjust trapping parameters but to effectively learn how to create the highest quality trapping.

Trap On Fly option helps you view and adjust trapped results without printing the proofs.

Highlight Traps option helps to clearly indicate applied traps.

Open your source page in the Viewer, select a part of the page and apply trapping *On-the-Fly* to immediately view the results. Modify trapping parameters and repeat trapping *On-the-Fly* until the desired results are achieved. Save the trapped page to disk and send it to the Rip for final output.

In this manual you will find some examples of trapping parameters settings.

Miter Trapping and Fine Elements options

Miter trapping is an art of detecting various corner conditions and adjusting the shape of the trap brush to produce better corner results.

You can set the Miter Trapping parameter in the tab /Area/Parameters.

The picture on the left in Figure 1 shows the miter trapping option turned on to demonstrate how the brush shape tapers down at the corners to produce the best shape. The picture on the right shows the miter trapping option turned off, which has resulted in some overlapping of traps in the corners. Miter trapping adds some overhead to the trapping process, so it is generally enabled only when the trap size is fairly large. The figure below shows the source data and trapped results with this option switched off and on.





The Figure 2 demonstrates using the **Process Fine Elements** parameter that is set in the tab */Area/Parameters*. The check box is enabled for editing only if Miter Trapping is *on*. The brush intelligently changes its width so that traps applied to close elements don't overlap.

	Source Trap On Fly
Areas Area Name Display Show No Order Name Color(R.G.B) Show No 0 Page defaults 0.0.0 ✓ □ Brush Parameters Color Components Image Settings Center Trap (0.4%100%) 2 □ Black Density Level (0.4%100%) 1.72 ∪ Vignette Threshold % 5 □ ✓ Miter Trapping ■ Process Fine Elements Information Area Job Settings □	
Areas Areas Display Order Name Color(F),6,8 Show No Trap O Page defaults 0,0,0 V Brush Parameters Color Components Image Settings Center Trap (0,4%100%) 2 Black Density Level (0,00110) Vignette Threshold % 5 V Miter Trapping V Process Fine Elements Information Area Job Settings	Source Trap On Fly



Both the miter trapping and the fine element options require longer times for job processing (up to 30% for complex pages).

Image Trapping options

Image trapping is one of the most important features of I-TrapTM. The ability to properly trap image data is one of the features that define high-end high quality trapping. I-TrapTM provides an extensive set of tools for image trapping. While these tools provide the needed support for just about any type of image trapping, it is important to understand how to properly use these tools.

The Figure 3 shows the first sample document with which to demonstrate the image trapping capabilities. This is a Quark document with background Line Art colors and two images placed on the page. In the layer above the colored boxes is a Grayscale TIFF of a spider web. This is a single channel file with only black channel data. In the top layer is a CMYK image consisting of 100 C 100 Y (Green) and placed inside a clipping path to produce an outlined image. The green man reading a book is positioned to knockout parts of the grayscale image and the background tints. This image trapping example provides several complex trapping conditions.



Figure 3

In this example, all Quark trapping is turned off and a composite PS is being sent to the rip.

The Figure 4 shows a sample job after being ripped and opened in I-Trap[™] Viewer. As you can see from the info window, the cursor is placed over the green man. The blue-colored values in the **Extended Color Info** panel indicate this data under the cursor is considered image data.



The Figure 5 shows a sample page with *image trapping turned off* and highlight trapping set to Red. Here you can see traps between the tint boxes but neither of the images shows any trapping.



7

I-Trap[™] V. 1.00 Achieving High Quality Results

Figure 5

Note! When viewing highlight traps, you are only looking for placement. The highlight color can be very deceiving and actual traps should be viewed in their normal color.

The Figure 6 shows a sample page with image trapping set to *Trap Into the Line Work* and the special cases for yellow and black turned on, and highlight trapping set to Red. Here you can see traps between the tint boxes and both images are trapped to the tint boxes as well. There are no traps between the two images.





The **special case trap rules** for yellow and black will override other image trapping rules when they are enabled. The yellow case rule will always trap the yellow tint box into the image as you can see in the bottom right corner of the page. The black case rule will always trap the image into the black tint box.

The Figure 7 shows a sample page with image trapping set to *Trap Into the CT* and the *Special Cases* for yellow and black turned on, and highlight trapping set to Red. Here you can see traps between the tint boxes and both images are trapped to the tint boxes as well. There are no traps between the two images.



Figure 7

Here you can clearly see the effect of the black special case rule. Regardless of the fact that image trapping is set to Trap Into the CT, with the black special case enabled, the image data traps into the black tint box.

The Figure 8 shows a sample page with image trapping set to **Only the Special Cases for Yellow and Black**, and highlight trapping set to Red. Here you can see traps between the tint boxes and both images are only trapped to the black and yellow tint boxes. There are no traps between the two images.



Figure 8

This is a suggested default setting for a general case trapping as it applies image traps in the most inconspicuous ways.

The Figure 9 shows a sample page with image trapping set to calculate the image trap condition based on the same rules as it uses to apply line art trapping and the special cases for yellow and black turned on, and highlight trapping set to Red. You can see that portions of the images are trapped where needed and nowhere else. The green man is trapped to Magenta but not to Cyan.



Figure 9

While in this case this appears to be correct trapping, this type of trapping can produce traps with uneven edges for images, which can be distracting in some cases.

The Figure 10 shows a sample page with image trapping set to calculate the image trap condition based on the same rules as it uses to apply line art trapping and the *Special Cases* for yellow and black turned on, and highlight trapping turned to off, and *Internal Image Trapping* turned on. You can see that the green man is trapped to the web image in a real trap color. To create better-looking traps between the green man and the web, you should try to increase the Vignette threshold value so that there should be no "bulbs" along the trap line.



Figure 10

Appendix. Zone Trapping Using Acrobat

In release 1.00 of I-Trap[™], trap zones must be created using various existing tools for generating trap zones in different desktop page layout and viewing applications. For the purpose of this example, we will use the zone trapping tool for Acrobat. Please see the <u>www.trapping.org</u> links page for information on obtaining this tool. Lucid kindly acknowledges Agfa Corporation's copyright of this tool and shows it only for informational purposes.

The Figure 11 shows the main windows of the zone trapping plug-in for Acrobat in the foreground along with a document showing three trap areas, one of which is highlighted.





The basic use of the tool is to enable the preference options in the left panel and dismiss them. Click or draw trap zones with the trap zone creation tools. Next, using the zone settings floating palette, set the parameters of the zones. Once the zones are created, the job is ready to be printed to the rip.

Trap zones may be of any shape and in any location. The only constraint is that any given pixel of a job may belong to only one trap zone. This means that overlapping trap zones will be resolved in the overlap area by the top most trap zone.

The Figure 12 shows an area of a document that contains two overlapping trap zones. The underlying trap zone is curved around the bluish-colored arrow and the top most trap zone is selected and curves around the reddish-colored arrow. The two zones overlap as shown. In the area of the overlap, the top most zone (selected here) will determine the trap settings.



Figure 12

The trap zone floating palette can be used to set parameters for various trap zone objects.

Important! When processing PDF jobs with trap zones, Lucid strongly **recommends printing PS directly** from Acrobat rather than ripping the PDF file. This may change with future updates but the key issue is that Trap zones are stored as comments in the job and printing PS from Acrobat provides the Lucid I-TrapTM tools with a better access to these comments.

The Figure 13 shows a print dialog with the cursor positioned on the comments option to include the trap zones. Language Level 3 should also be selected.



Figure 13

The other settings, such as printer, copies and options should be set as needed.

Now you can go back to the I-Trap[™] user manual Chapter "Working with Areas" section and do your own experiments with the TrapTest.pdf file supplied in the installation.