Ink Manager

1.0 Revision history

Date	Name	Description of changes
12/00	J Aguirre	First draft
12/08/00 12/12/00	MScanlon	Added comments from Eng. (Susan Cheng-Looi)
03/23/01	MScanlon	Updated per new mock-ups from Johnni.
04/05/01	J Aguirre	Updated per team review.
04/27/01	J Aguirre	Ditto. Remove Solidity control.
05/03/01	J Aguirre	Updated with latest screens from Johnni.
06/21/01	J Aguirre	Updated with latest mock-ups from Johnni.
07/09/01	J Aguirre	Change Neutral Density values to .001 - 10 per team (previously .01-10).
07/10/01	J Aguirre	Removed description of drag-and-drop resequencing ability.

2.0 User Problem/Solution

This spec describes the new Ink Manager features in Annapurna. In v1.5, this feature was accessed from the Trapping panel in the Print dialog; in Anna it is accessible from both the Print and Export dialogs as well as from the Swatches palette menu. While some of the controls in the new Ink Manager dialog were available in v1.5, the full feature set was not available. In particular, the following description of workflow highlights two key features in the new Ink Manager.

The Ink Manager allows prepress and production people to set the correct number of plates to print, and to set ink options without changing the design of the document. If a designer accidentally has a spot color in a process job, the prepress person can open the document and choose "All Spots to Process." If a designer has two Pantone colors that are almost the same and they were only supposed to use one, the prepress person can alias the inks. It basically gives more control over the swatches without affecting the design.

3.0 Conventions

This document uses the following keyboard equivalents:

Key in Windows	Key in MacOS
Alt	Option
Ctrl	Command[a]
Enter	Return[b]

a. The Macintosh Control key is used in the Adobe user interface standards only in the Control-click gesture to access context menus.
b. Also the Enter key found on the numeric keypad on both platforms.

Context-click refers to the gesture on both platforms that displays a context menu. In Windows, this is a right-click; in Mac OS, this is a Control-click.

All colors in an InDesign document are treated either as **spot colors** (special inks having a specific color) or **process colors** (a blend of screened cyan, magenta, yellow, and black).
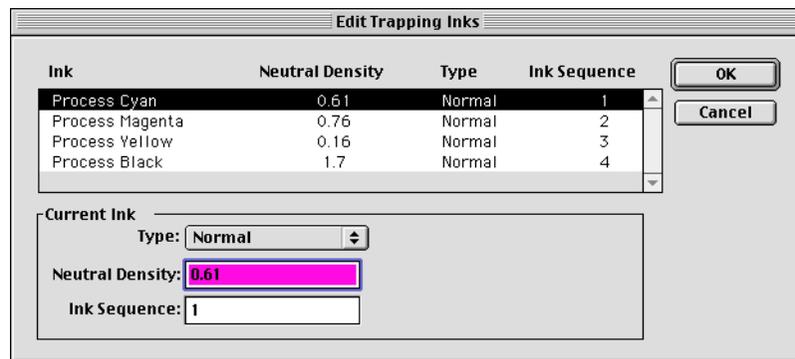
4.0 Related info

See also the following Anna UI specs:

- Color
- Print
- Export PDF

5.0 Current UI
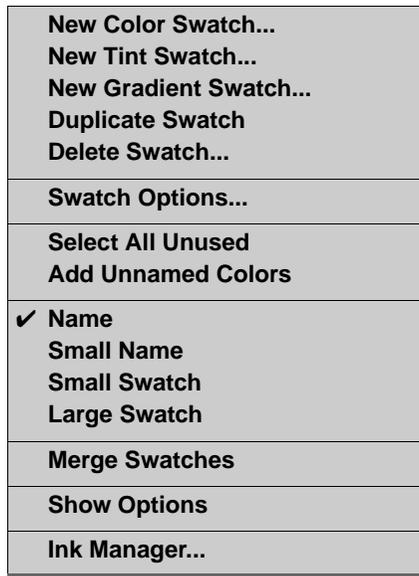
InDesign 1.5 includes the following Ink features:

Figure 1: InDesign v1.5 Edit Trapping Links dialog

6.0 New Ink Manager

The new Ink Manager is always available from the Swatches palette fly-out menu (see the Anna Color UI spec for details on the other menu choices):

New Color Swatch...
New Tint Swatch...
New Gradient Swatch...
Duplicate Swatch
Delete Swatch...
Swatch Options...
Select All Unused
Add Unnamed Colors
✔ **Name**
Small Name
Small Swatch
Large Swatch
Merge Swatches
Show Options
Ink Manager...

(Windows) accelerator key for new Ink Manager command TBD by TommyD.

Figure 2: New Ink Manager command on Swatches palette menu

The Ink Manager is also available (via the Ink Manager button) from the Print and Export PDF dialogs.

6.1 Initialization, states, and defaults

The following figures show default settings for the Ink Manager dialog in different states. Initially, with no color selected, all fields in the group below the inks list are disabled. Figure 3 shows default settings when a process ink is selected:
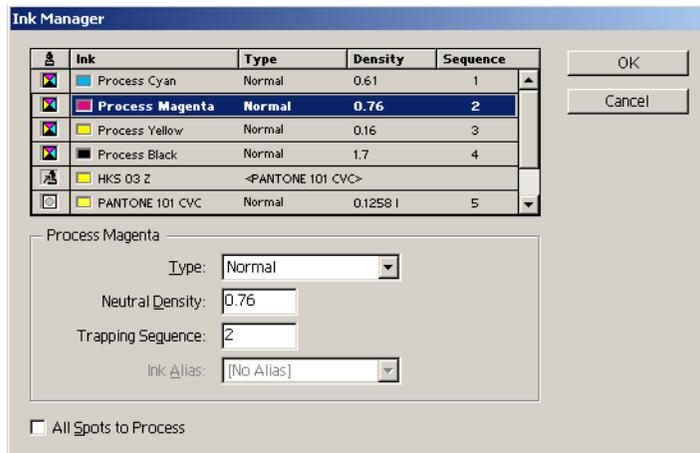

Figure 3: Ink Manager dialog (default settings with Process Magenta selected)

The Ink Alias control is not available in Figure 3 because a spot color is not selected. The All Spots to Process control is only available when there are spot colors defined.

UI: Update Print UI spec ink list to match this (vs. only those spot inks that are actually used)???

The Ink Manager shows all spot inks defined in the document (not just the ones actually used) as well as all process colors so that all defined inks can be managed in one place. Inks can be reordered in the list to change the ink sequence via the "Trapping Sequence" control.

By default, process colors are listed first in CYMK order, then spot colors that are defined for the document are listed. Only one ink can be selected at a time. The icon in the first column of the inks list toggles the ink among process, spot, and alias.
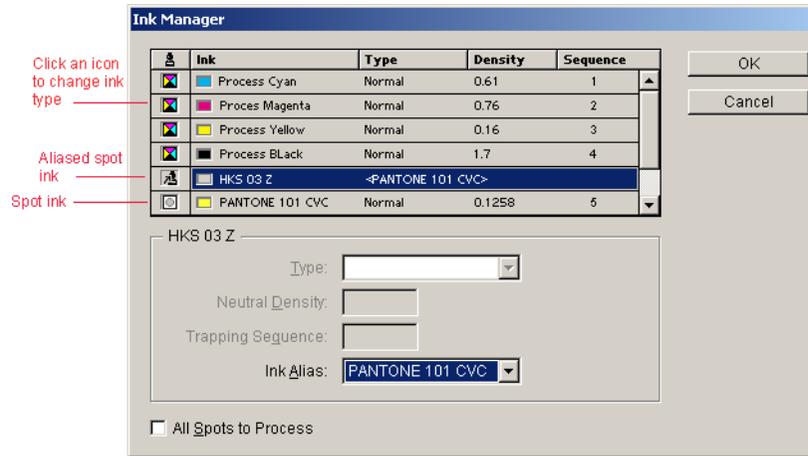
Figure 4: Ink Manager dialog with aliased spot color

When an aliased spot color is selected (see HKS 03 Z in Figure 4), only the Ink Alias and All Spots to Process controls are available (until No Alias is chosen from the Ink Alias menu). When a non-aliased spot color is selected (see Pantone 101 CVC in Figure 4), all fields are available.

6.2 Ink Manager controls

The Ink Alias and All Spots to Process controls are new in Anna; all controls in this dialog are described in the following sections.

6.2.1 Type menu

This ink type setting determines the trapping properties of an ink.

- Choose Normal for traditional process inks and most spot inks.

- Choose Transparent for clear inks to ensure that underlying items trap. Use this option for varnishes and die line inks.

- Choose Opaque for heavy, non-transparent inks to prevent trapping of underlying colors but allow trapping along the ink's edges. Use this option for metallic inks.

- Choose OpaqueIgnore for heavy non-transparent inks to prevent trapping of underlying colors and to prevent trapping along the ink's edges. Use this option for inks that have undesirable interactions with other inks.

6.2.2 Neutral Density

You can adjust the ink neutral density (ND) values that the selected trapping engine uses to determine the precise placement of traps. The default ND values for process inks are based on the neutral density readings of process ink swatches that conform to industry standards in different parts of the world. For example, the ND values for the U.S. English and Canadian versions of InDesign conform to the Specifications for Web Offset Publications (SWOP) solid ink density values published by the Graphic Arts Technical Foundation of North America. InDesign lets you adjust process ink neutral densities to match printing industry standards in a different part of the world.

The default ND values for a spot color are derived from its CMYK equivalent. For most spot colors, the ND values of their CMYK equivalents are accurate enough for proper trap creation. Spot inks that are not easily simulated using process inks, however, may need their ND values adjusted so that the trapping engine traps them correctly. By typing new values, you can ensure that an ink that is observed as darker or lighter is perceived that way in InDesign; the appropriate trap placement is then applied automatically.

Changing the neutral density for a spot color only affects how that color will trap. It does not change the appearance of that color in your document.

Values for ND are .001–10. Use the following guidelines for adjusting ND values:

- Metallic and opaque inks

  Metallic inks are usually darker than their CMYK equivalents, while opaque inks obscure any ink beneath them. In general, you should set the density values for both metallic and opaque spot colors much higher than their default values to ensure that these spot colors won't spread. It's also a good idea to set the metallic density to a higher value than that of Black so that Black does not spread into the metallic spot color.

- Pastel inks

  These inks are normally lighter than their process equivalents. You may want to set the density value for these inks lower than their default values to ensure that they do not spread into adjacent darker colors.

- Other spot inks

  Some spot colors, such as turquoise or neon orange, are significantly darker or lighter than their CMYK equivalents. You can determine whether this is the case by comparing printed swatches of the actual spot inks to printed swatches of their CMYK equivalents. You can adjust the spot ink's density value higher or lower as necessary.

6.2.3 Trapping Sequence

You can adjust the ink sequence (also called the *trapping order*) that corresponds to the printing press inking order. To reorder the ink sequence, type a new sequence number in the Trapping Sequence field. The Trapping Sequence does not affect the order in which plates are emitted from Anna, it only controls the TrappingOrder array in the PostScript.

6.2.4 Ink Alias menu

Open Issue: Should a swatch that's aliased in the Ink Manager have an alias icon in the Swatches palette?

This is a new feature that allows you to choose a different ink to print for a spot swatch. It is available only when spot colors are defined. There are a number of reasons for ink aliasing. One is to allow a service provider (SP) to change how the document is output without actually changing the document/swatches themselves. For example, the user sends in a job that has three spots defined but only one spot can be printed. The service provider might want to print all objects colored with spots 2 and 3 with a specific process color ~~or spot 1.~~

You can alias spot inks to Process Cyan, Process Magenta, Process Yellow, Process Black, ~~or any defined spot color.~~ These options are listed in this pop-up menu as well as the [No Alias] option.

6.2.5 All Spots to Process checkbox

This is a new feature that converts all spot colors to process even if they are aliased. The alias information is not lost until you choose No Alias from the Ink Alias list. The default for this checkbox is unchecked; it is only available when there are spot colors defined. To revert to spot colors, uncheck this box.

6.3 Behavior

When the user clicks OK at the Ink Manager dialog, the following occur:

- Aliases and spot-to-process settings are used for all relevant export paths (PDF, EPS, Prepress, and Print). See also "Interaction with other features".
- The on-screen display is updated to reflect the current ink aliasing (see Figure 4).

Changes made in the Ink Manager dialog can be undone via Edit > Undo when the Ink Manager is invoked from the Swatches palette flyout menu. Edit > Undo doesn't work if the Ink Manager is invoked from the Print dialog or the Export PDF dialog. If the user clicks Cancel from the Print dialog or Export PDF dialog after making Ink Manager changes, these changes are not saved.

When the user clicks Cancel, all changes are disregarded and the dialog closes.

7.0 Interaction with other features

When the Ink Manager is accessed from Export PDF, these commands do not affect the exported PDF file:

- Type
- Neutral Density
- Sequence

See also the Print UI spec for a description of how the Ink Manager interacts with the printing process.

8.0 Localization issues

9.0 Documentation issues

There is no easy way to reset the Neutral Density to a default value. Please document the default values in the manual.

See "Interaction with other features" for commands that do not apply to exported PDF files.

10.0 Future enhancements

Note: Design ideas in this section are not being implemented for Annapurna.

Provide ability to reset Neutral Density values to defaults without resetting all defaults.