

## 10 things you do with PDF, but (perhaps) know you shouldn't

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Executive Director & co-chair Specifications Subcommittee, Marketing Officer & co-chair Packaging Subcommittee



#### David

- Started working at Enfocus in 1996 (Tailor, PitStop...)
- Helped to start the Ghent Workgroup in June 2002
- Co-founded Gradual Software in 2004 (Switch)
- CTO at Four Pees from 2008
   (working with callas software, axaio software, Elpical, InSoft...)



#### Christian

- 30 years of experience in several companies and roles:
  - Gap Systems (Implementation Consultant & COO)
  - Enfocus (International Sales Account Manager)
  - Nestlé (eBusiness Project Manager & Graphic Chain Expert)
  - Société Alsacienne d'Aluminium, now AMCOR (Prepress Manager)
- Founder & Owner of bleuprocess (2007), founder & CEO of agileStreams (2018), offering consultancy in process automation & in packaging

## - 1 -Editing PDF with Illustrator





#### Illustrator is **NOT** a PDF editor

- Many PDF constructs are not supported
  - Will be replaced by something similar or simply deleted
- Documents with mixed color spaces are not supported
  - You have to chose for either RGB or CMYK
- Beware of "PDF Compatibility mode"
  - Allows discarding edits done outside of Illustrator!

## - 2 -Importing Illustrator into InDesign





## Importing Illustrator in InDesign How does that exactly work?

 It has been advertised by Adobe (already a long time ago), that it is not necessary to export Illustrator to EPS to import them into InDesign

 It is indeed very handy to directly import the AI file, and not having to generate another file

But, do you exactly know how it works?

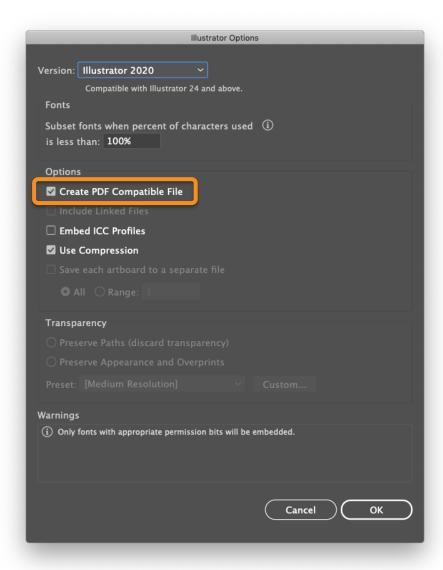


## About hybrid AI files

- You probably have noticed that when saving a file in Illustrator, the application proposes (by default) to make a PDF compatible file
- This is what is called an hybrid AI file. This file contains « 2 sides », where one is the AI (proprietary) format and a second one is a PDF rendition of the file



## About hybrid AI files





# How InDesign manages Illustrator import

- If you import an Illustrator file into InDesign, this is indeed the « PDF side » of the file that you're importing!
- We're not trying to tell you to stop doing like this... we're just warning you about this in case you have strange behaviours happening later in the process
  - In that case, have a look at the import... does it look exactly the same than the original Illustrator file?



## Try this!

 Uncheck the « Create PDF Compatible file » setting while saving the Illustrator file... this is what you will see when importing the file in InDesign 69

This is an Adobe® Illustrator® File that was saved without PDF Content.

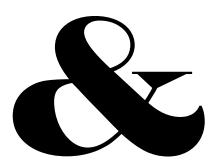
To Place or open this file in other applications, it should be re-saved from Adobe Illustrator with the "Create PDF Compatible File" option turned on. This option is in the Illustrator Native Format Options dialog box, which appears when saving an Adobe Illustrator file using the Save As command.

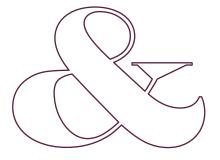
## - 3 -Converting Text to Outline





### What is it?







## Why not? Hinting

Kittens on my kitchen table fu moving silently over above be white walls closing clothing st

Kittens on my kitchen table foot moving silently over ab author). All white walls clos



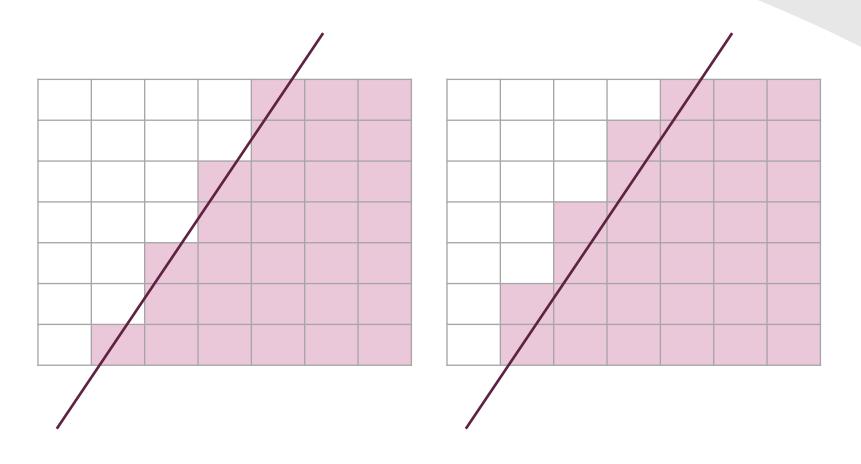
## Why not? Hinting

PACK MY BOX W
THE LAZY DOG V
WYVERN FOXY S
pack my box with
dog effect coffin a
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Of the greatest ar
look with too mux
the human mind a

PACK MY BOX W
THE LAZY DOG V
WYVERN FOXY S
pack my box wit
dog effect coffin
wyvern foxy syry
Of the greatest a
look with too mu
the human mind



## Why not? Thin fill vs. fat fill





## Example

There are old cars. And then there are cla

▶ Strictly speaking, we work can see at with metal, glass and rubber too. But then we mould these mere materials can see into something more like passion. You page: www.

on see along are old cars. And then there are classics.

can see an example of our work on this page. It's the 230 SL of 1963. And you can see many more example on this page: www.mercedes-benz.com/classic. Mercedo The Future of t

telly specifica, we wait the cool action has but the coop mense mension con cesson arministratives and programme of the control of the con



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#### - 4 -

## Converting Text to outline using transparency flattening



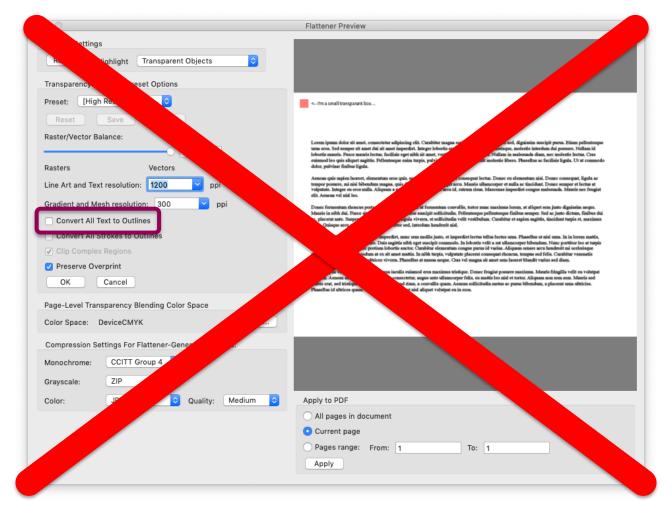


# Transparency flattener is **NOT** a tool for outlining text!

- First of all, you shouldn't outline text 69
- Transparency flattener is a tool to... well, flatten transparency!
  - As everyone (should) know, transparency flattening is not an easy task, and a lot of things are happening during the flattening to preserve the visual aspect of the file
  - Creating outlines while flattening transparency is an option of the flattener to achieve the expected result
  - That means that if you think you're clever ♥ to hijack a feature, actually, you're not ♥



# Transparency flattener is **NOT** a tool for outlining text!





#### **REALLY** need to outline text?

- If you REALLY need to outline text in a PDF file, you
   MUST use tools that are designed for outlining fonts
  - Acrobat Preflight / callas pdfToolbox
  - Enfocus PitStop
  - Etc.

 If you have the original file, you also can use the outline text feature of the authoring tool (if exists)

## - 5 -Converting CMYK to CMYK using ICC Profiles





#### Color conversions – how?

**CMYK** 

ISOCoated v2

7

**CMYK** 

PSO Coated v3



## Color conversions – ICC profiles

**CMYK** 

ISOCoated v2

ISOCoated v2 ↓

Lab

PSO Coated v3

Lab

**CMYK** 

PSO Coated v3



## Color conversions – ICC profile domino



ISOCoated v2





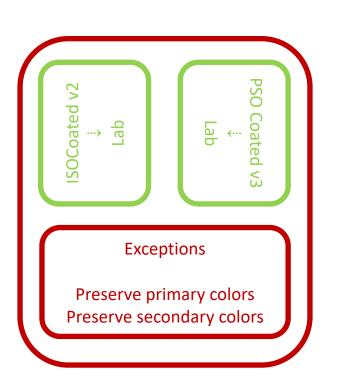
**CMYK** 

PSO Coated v3



### Color conversions – device link





CMYK PSO Coated v3 - 6 -Merge PDF files and multiple font instances



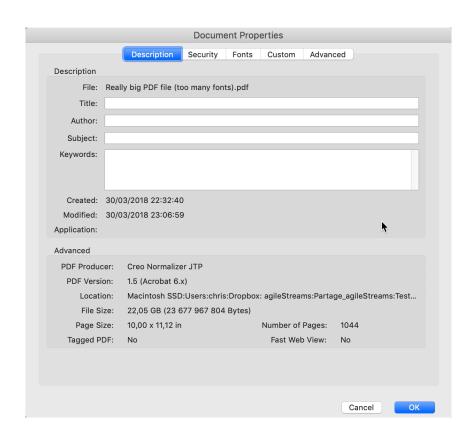


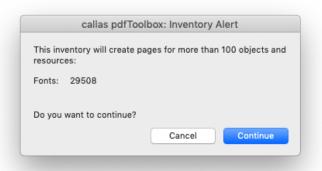
## Font embedding

- Creating a good PDF means embedding fonts!
- It is advised to subset the embedding to:
  - Only keep the necessary glyphs for the document
  - To make sure that the embedded font is the one used later in the process (e.g. RIP/DFE)
- There is only one case where it is advised to fully embed the font during PDF generation:
  - Several pages needed to be merged later in the process



# Example of merged PDF List fonts & Inventory





This file weight 22Gb... with 20Gb of fonts!



## **Inventory Report**

Inventory report for Document: "Merged Files.PDF" Font 1 (out of 27)

Glyphs used in PDF: 0000 0000 0007

Font properties: Type 1 font: 'MinionPro

PostScript name: Mi Encoding: WinAnsiE Font is a subset Embedded: True Font descriptors Maximum heigh y-coordinate of t Maximum depth Italic angle in de Width of the dor Average width o Desired spacing Maximum width Width to use for Vertical width of

y-coordinate of PostScript name

Fixed-width 1 Serif font: Tru Symbolic fon Script font: F Uses the Ado Italic: False All-caps font: Small-caps fo

Inventory report for Document:"Merged Files.PDF"

Font 2 (out of 27)



Font properties: Type 1 font: 'MinionPro PostScript name: Mir

Unicode CMap is pre Encoding: WinAnsiE Font is a subset Embedded: True Font descriptors Maximum heigh y-coordinate of t Maximum depth Italic angle in de Width of the don Average width o Desired spacing Maximum width Width to use for Vertical width of

y-coordinate of t PostScript name:

Fixed-width f Serif font: Tru Symbolic fon Script font: Fa Uses the Ado Italic False All-caps font: Small-caps fo

Inventory report for Document:"Merged Files.PDF"

Font 26 (out of 27)



Font properties: Type 1 font: 'MinionPro PostScript name: Mi

Unicode CMap is pre Encoding: WinAnsiE Font is a subset Embedded: True Font descriptors y-coordinate of t Maximum depth Italic angle in de Width of the dor Average width o Desired spacing

> Vertical width of y-coordinate of t PostScript name

Maximum width

Fixed-width 1 Serif font: Tru Symbolic fon Script font: F Uses the Ado Italic False All-caps font: Small-caps fo Inventory report for Document:"Merged Files.PDF"



Font 27 (out of 27)

0	1	2	3	4	5	6	7
040000 0048	CO III	0- 00 D	CHEED COCKET Street	00-001 00-11 fee	0=000 CE 11 See	CON CON	00-10 00-10
8	9						
U+0008 CE 54	U-CER CERT						

Type 1 font: 'MinionPro-Regular' PostScript name: MinionPro-Regular Unicode CMap is present Encoding: WinAnsiEncoding Font is a subset Embedded: True Font descriptors Maximum height above the baseline: 989

y-coordinate of the top of flat capital letters: 651 Maximum depth below the baseline: -360 Italic angle in degrees counterclockwise: 0 Width of the dominant vertical stems of glyphs: 80 Average width of characters: 0 Desired spacing between lines: 0 Maximum width of characters: 0 Width to use for un-encoded characters.: 0

Vertical width of the dominant horizontal stems of glyphs: 0 y-coordinate of the top of flat non-ascending lowercase letters:

PostScript name: ZRBSWY+MinionPro-Regular

Serif font: True

Symbolic font: False Uses the Adobe Standard Roman Character Set: True Italic False All-caps font: False Small-caps font: False Force bold at small text sizes: False

Preflight - Inventory Report created by Christian on 23 June 2020 at 14:46 - Page 2

Preflight - Inventory Report created by Christian on 23 June 2020 at 14:46 - Page 3

Preflight - Inventory Report created by Christian on 23 June 2020 at 14:46 - Page 27

Preflight - Inventory Report created by Christian on 23 June 2020 at 14:46 - Page 28

### - 7 -Redistill





## Redistill – refry

• Call it what you want, it's still not a good idea ☺

- What?
  - Convert from PDF to Postscript and back to PDF
- Why?
  - To "fix" documents there is a problem with
  - Forces a "rewrite" of all PDF content

## - 8 -Overprint Preview





## **Overprint Preview**

- As graphic arts users, we MUST see on screen exactly the same result than the final print
- Therefore, overprint MUST be previewed to simulate the final result/final print

 This discards all applications that are not honoring the overprint, such as Apple Preview and all apps based on Quartz/WebKit (Safari, Chrome, etc.)



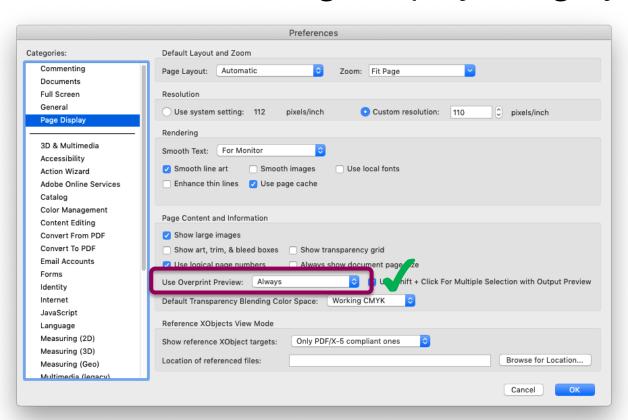
## **Acrobat & Overprint Preview**

- For Acrobat, you can control the behaviour of the overprint preview
  - Don't show if you are in an office environment
  - show if you are in graphic arts
- To ensure that you will NEVER end up with a disappearing text (typical example), you should set up the overprint preview to « Always »



## Where do I set this up?

Acrobat Preferences > Page Display category



## - 9 -Convert To image





## Why? Why not?

- Obvious because the PDF doesn't work.
  - Convert the PDF into a rasterized version = it's simpler and will now work
- Bad idea?
  - Well… maybe ☺
  - Mostly depends on how you do this
    - Use a PDF tool, not Illustrator or Photoshop
    - Make sure there are no problems with overprint
    - Watch out for resolution, especially for files with text

### - 10 -Local Fonts in Acrobat





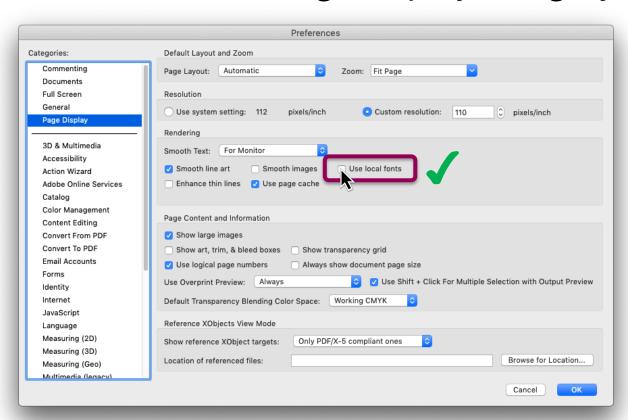
## Use of local fonts What does this mean? Is it bad?

- By default, Acrobat uses your local fonts
- When « Use local fonts » is on, if a font is missing in your file, Acrobat will look on your machine if the font is available and use it
- That means that with this setting, you will never be aware of any font problem on your file!
- The only way to ensure that the recipient of your file will see the same result than you is to uncheck that setting



## Where do I set this up?

Acrobat Preferences > Page Display category





## Local fonts on/off

- Local fonts on
  - looks how I wanted, but WRONG!

I don't feel like me when I'm not embedded

- Local fonts off
  - doesn't look how I wanted, but REAL!

I don't feel like me when I'm not embedded

## Ghent Workgroup