

**MadeToPrint XT
Technote TN-002**

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**MadeToPrint XT:
Correct and precise PDF page sizes
and TrimBox/BleedBox information
in PDF files generated
from QuarkXPress pages**

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Introduction

Converting QuarkXPress pages into PDF may quickly confront you with a certain problem: **if your pages sizes are in metric format, e.g. "ISO DIN A 4" or "280 mm by 210 mm" your page size may be incorrect once you have it as PDF.**

This problem has to do with the fact that the coordinate system for PostScript and PDF was invented in the United States at a time where nobody expected that accuracy beyond one point would be needed for things like page sizes. This is even more true, as typical page sizes in the US, like Letter or Legal, do not need to be rounded to the next integer point value.

Meanwhile though you definitely can have precise metric page sizes in PostScript and PDF. Nevertheless one application or another may lag behind and still not use that enhancement. One of these applications happens to be QuarkXPress (at least until the currently newest version 4.11). While having a slightly inaccurate page size on film does not really matter (as long as nothing is clipped from the page - which won't happen, if you have a bleed area). It does matter though if you are going digital. For example, if you digitally impose pages that are not measured accurately can be a nightmare.

Also, QuarkXPress does not send any information into the PDF file to indicate where the trim area of a page resides, and where the bleed area resides. PDF 1.3 has a very nice way to encode this information into PDF files, but this is not being exploited by QuarkXPress so far.

To make a long story short: if you have QuarkXPress pages whose size is not an integral point value you will have PostScript and then PDF files where page sizes are rounded to the next integral point value. Furthermore, no information about trim and bleed areas will show up in the PDF file.

What can you do about it?

Free tools – with limitations

As far as we know there is currently one freely available tool, the Prinergy Distiller Plug-In, that cures some of the problem (see www.creoscitex.com for more information and a downloadable version). It is a small piece of software that gets installed on inside your Distiller setup. Among other things the Prinergy Distiller Plug-In tries to find where the cropmarks are on a PostScript page that has been generated by QuarkXPress. It then uses that information to insert proper TrimBox and BleedBox information into the PDF file. There is one problem though which is not this Distiller Plug-In's fault: the position of the cropmarks on the right and at the bottom is rounded to next integer point value as well...



Ways and tools to get it right

Currently the only ways to get correct and precise TrimBox and BleedBox information in PDF files out of QuarkXPress pages are:

- (1) Enter the correct values manually
- (2) Use MadeToPrint XT from callas software.

How do I use MadeToPrint XT to get exact and precise TrimBox and BleedBox information?

It is pretty simple: In the main setup dialog box for a MadeToPrint printjob definition you click onto the "PDF..." button and will see another dialog box with PDF related settings. The topmost checkbox is called "Precise page size for PDF documents (incl. TrimBox/BleedBox)" just does what it says, when you send output from QuarkXPress through Acrobat Distiller.

How does MadeToPrint achieve the precise TrimBox and BleedBox information

MadeToPrint XT as an XTension for QuarkXPress has access to all geometry information that is relevant during printing. MadeToPrint XT calculates the effective trim page size as well as the bleed area at runtime for the document currently being printed (so it automatically honors for example varying page sizes, if you print different documents with the same MadeToPrint printjob definition). As an XTension for QuarkXPress MadeToPrint XT can also send extra PostScript code with the current printjob. MadeToPrint issues a small piece of PostScript code (based on "pdfmark" operators - see the Acrobat documentation for more details) that will tell Distiller how to get the page size, TrimBox and BleedBox right.

How can I see the TrimBox and BleedBox information in my PDF files

Besids the free Prinergy Distiller Plug-In CreoScitex/Heidelberg also offer the "Geometry" plug-in as a free download (see www.creoscitex.com or www.heidelberg.com). This is not only a TrimBox/BleedBox viewer, but you can also set new values for the TrimBox and BleedBox, which can be very important any corrections you need to apply or for PDF files you receive from somebody else that do not contain any TrimBox or BleedBox information.

Caveat: Apogee Normalizer does not evaluate pdfmark operators

Due to a different engineering approach Agfa's Normalizer - the Distiller-like module coming with the Apogee system as well as the Normalizer in Apogee Create - does not honor pdfmark operators. Thus, MadeToPrint XT does not have an option to tell Agfa Normalizer what TrimBox and BleedBox information shall be stored inside the PDF file. We are currently working with Agfa to identify alternate ways of achieving the same effect.

Caveat: Prinergy Normalizer may not evaluate pdfmark operators

We tried to find out whether the same is true for Prinergy Normalizer from CreoScitex/Heidelberg. As Normalizer does not claim to honor pdfmark operators, we assume that it won't honor pdfmark which means MadeToPrint XT won't get you precise TrimBox or BlledTextBox information when you use Prinergy Normalizer to distill your PostScript files. We are currently working with Heidelberg to identify alternate ways of achieving the same effect.