Application Note

English

PDF/X-1a:2001 File Compatibility on Brisque PDF2Go

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PDF/X-1a:2001 File Compatibility on Brisque PDF2Go

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Introduction

PDF/X is a focused subset of PDF, designed specifically for reliable prepress data interchange.

This document describes the PDF/X-1a:2001 version of PDF/X, which is now supported in PDF2Go on Brisque™ version 4.1 and later.

Also covered, is an overview of PDF/X, and the differences between the currently supported PDF/X-1 1999 version, and the new option, PDF/X-1a:2001.



Note: PDF2Go is a password protected option and requires a licence that is obtainable from Creo.

Note: Support of PDF/X-1a:2001is available on Brisque version 4.1 and later.

PDF/X Overview

PDF/X, which is a derivative of the full-fledged PDF format, was created to facilitate "blind exchange" by making PDF file creation reliable and dependable in the prepress world. PDF/X is ISO-certified (ISO 15930-1:2001) and was released in the summer of 2001.

There are simply too many ways in which a PDF file can be created for exchange in a prepress workflow: Should fonts be embedded? Should they be subsetted? Should trapping data be included in the PDF? What about color management? Do I include bleed in the PDF?

The PDF/X standard was developed by the American National Standards Institute's (ANSI) Committee for Graphic Arts Technologies Standards (CGATS) at the request of newspaper publishers and advertisers. These graphic arts industries wanted a standard for exchanging vector advertising data like that of the raster TIFF/IT format.

What CGATS (pronounced "see-gats") came up with was PDF/X-1, which is basically a PDF file with certain characteristics disallowed: RGB images, annotations, form fields, and comments or other objects that might get in the way of making separations or might compromise final output quality.

By restricting what is allowed in a PDF file, the PDF/X-1 standard lets you streamline your production and feel more confident about the quality of the file being printed. This is what's meant by "blind exchange." If you create PDF output files with Brisque PDF2Go using the PDF/X-1 standard,

you can quickly and fluidly send out a single file to multiple publication printers, knowing that they will receive a CMYK file that will print as expected.

Following are the main characteristics shared by the PDF/X-1 versions that PDF2Go supports:

- All component files and resources must be embedded in the PDF/X-1 file. This includes high-resolution data.
- PDF/X-1 ignores music, movies, and non-printable annotations.
- All fonts must be embedded in the file.
- All color data must be CMYK (intent as an ICC profile) or named spot colors.
- PDF/X-1 files contain extra operators that define the bleed and trim area.
- A separate flag (a switch that is either ON or OFF), specifies whether the PDF/X-1 file is trapped or not.
- Only a limited number of compression algorithms are supported.

PDF/X Version Differences

The following section describes the differences between the PDF/X-1 1999 file standard, which is currently supported in Brisque 4.0, with the newer PDF/X-1a:2001 file standard which you can install.

PDF/X-1 1999 File Standard



Note: This is the standard that is currently supported in version 4.0.

This first version of PDF/X-1 was finalized in 1999, and approved as an American national standard aimed primarily at advertisement delivery for publications and newsprint in an environment where CMYK data is preferred.

PDF/X-1 1999 is based on PDF 1.2 specifications (Adobe® Acrobat® version 3.0). This standard requires the inclusion of a specific ICC Profile. However, the inclusion of such an ICC profile had sometimes caused color shifts in a job. To correct this problem and obtain the desired output, users stripped out the problematic ICC profile manually.

PDF/X-1a:2001 File Standard



Note: Support of this standard is new to PDF2Go and is available on version 4.1.

PDF/X-1a:2001 prohibits use of OPI (Open Prepress Interface): the PDF file cannot contain embedded TIFF, TIFF/IT, EPS or DCS files. Instead, all graphical elements must be encoded in PDF native format.

File encryption is also prohibited. The new PDF/X-1a:2001 specification handles ICC profiling in a different way: an ICC profile is still included as part of the PDF file, but while being embedded in the PDF/X-1a:2001 file (in OutputIntents), it is not automatically used by Adobe Acrobat Distiller, nor by the PostScript RIP, nor by any of the PDF workflow system. Since it includes only device colors (CMYK and spot colors), you can send the file through any workflow, system, or device, and get the results you expect.

PDF/X-1a:2001 is based on the PDF 1.3 specification (Adobe® Acrobat® version 4.0), and supports both the DeviceN color space (meaning that spot colors are better supported, even in duotones) and smooth shading (improved quality of blends). PDF/X-1a:2001 is ISO-certified (ISO 15930-1), and was released in the summer of 2001.

The Brisque PDF2Go module now enables you to convert RIPed CT/LW pages into a PDF/X-1a:2001 PDF file.

The following images taken from PDF2Go, highlight the new PDF/X-1a:2001 file compatibility setting, and the updated ICC selection field.

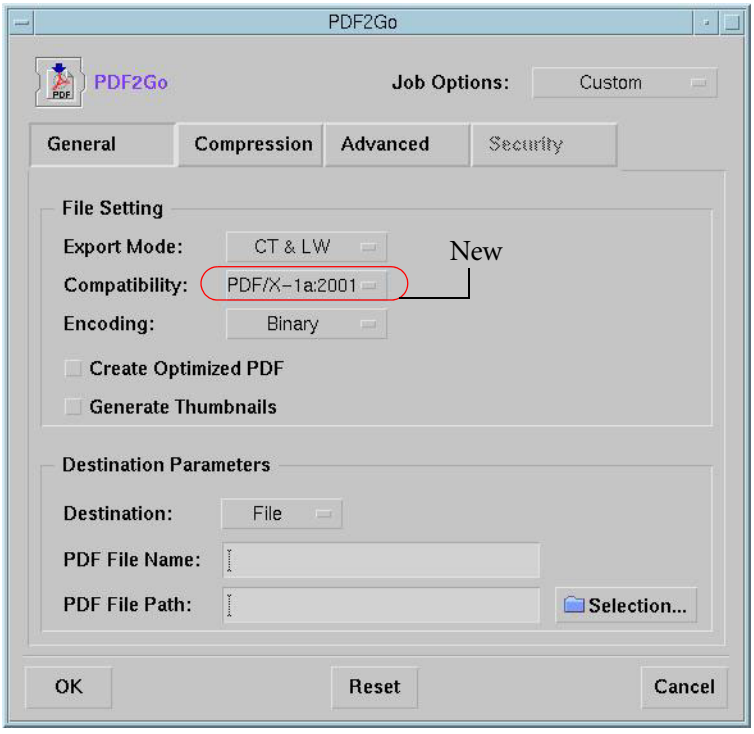


Figure 1: PDF/X-1a:2001 File Compatibility Setting

As you can see in Figure 1, using Brisque version 4.1 and later you can select and work with the PDF/X-1a:2001 file format.

In addition to selecting the PDF/X-1a:2001 file format, now you can also select ICC profiles that are customized for such files.

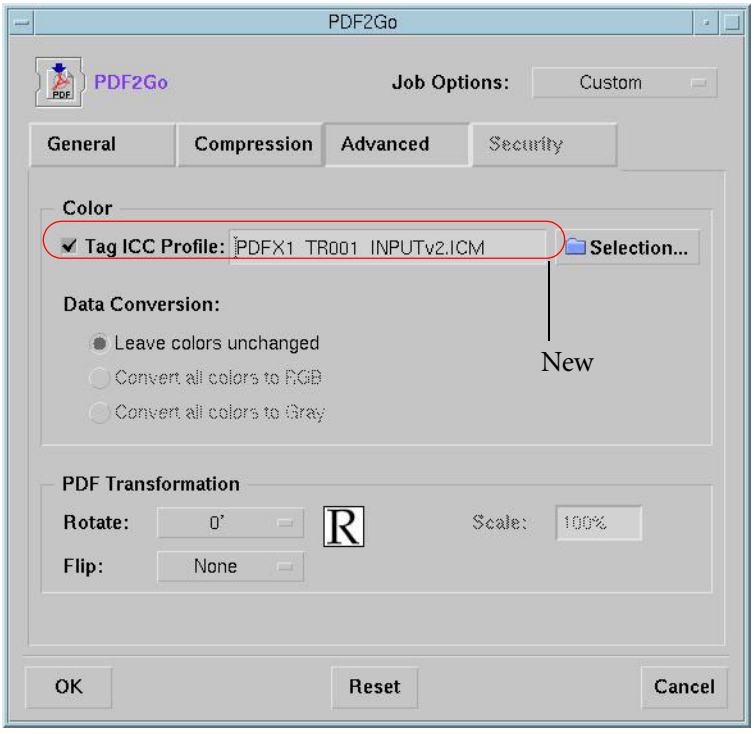


Figure 2: Updated ICC Selection Field

Further Reading

For additional information regarding the technical characteristics of PDF/X-1a:2001, use the following links:

- www.npes.org/standards/cgats.html - a link to CGATS (Committee for Graphic Arts Technologies Standards), the group writing the specification
- www.direct2.time.com - Time Inc. recommendations on file submission
- www.ddap.com - Digital Distribution of Advertising for Publications (DDAP)
- www.pdf-x.com - DDAP's PDF/X Web site
- www.planetpdf.com/mainpage.asp?webpageid=1220 - Planet PDF