

March Developer Newsletter



Black Ice Software

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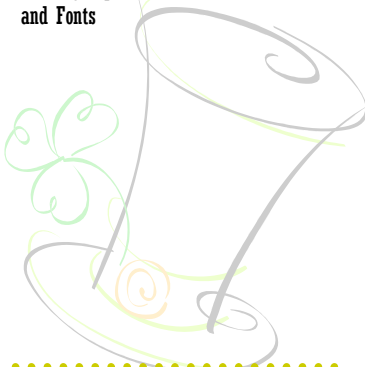
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New PDF Settings in Printer Driver Version 10.10

The latest ColorPlus and PDF printer drivers have the ability to set a wider range of PDF settings, including security and font settings. This article demonstrates the new PDF settings dialog and the new values for the printer driver's INI file.

1. Printing Preferences

You can open the PDF settings dialog in the printing preferences by clicking the "PDF settings" button on the *File Format* tab. (Note: The *PDF settings* button is only enabled if the PDF file format is selected in the *File Format* drop down box.)

The available settings for PDF are organized into four groups: Description, Security, Compression and Fonts. These groups are on separate tabs on the PDF settings dialog.

Description

The Description tab allows you to specify the meta data of the PDF document such as title, author, subject and keywords.

Title: Title of the PDF document.

Author: You can specify the author of the document.

Subject: Short description of the PDF document.

Keywords: Here you can

add keywords for your document. Search engines will look for these keywords.

Security

Under the Security tab you will find the security settings which specify the permissions of your document. You can allow/permit the editing and printing of your document, and you have the option to protect your PDF with a password.

Encryption length: This value defines the length of the encryption key. Available values: No Encryption, 40 bit Encryption.

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What is the PDF Interface?

Black Ice Software's new PDF SDK will be released soon containing PDF writing functionality. It will contain an exciting new tool as well: the PDF Interface. Black Ice gives this tool free of charge with the PDF Reader SDK and the PDF Reader/Writer SDK. This tool will allow you the quick and simple creation of PDF Viewing and Editing applications in C++.

The PDF Interface can load the contents of a PDF

document and its pages into a fully object oriented data structure and it can modify and save/unload that data structure easily. When the data structure is loaded, programmers can call a range of functions on it that help when developing a PDF viewer or editor program. One such feature is the object rendering system. It can be put to action only by calling the Draw function of a page object after having loaded a page. While this feature is so

easy to use it also supports a multitude of settings allowing users to set anti-aliasing, set raster image interpolation, ability to cancel rendering at any time (for multi threading). The Interface also contains an object targeting system allowing the programmer to pass only the coordinate of a mouse click to get the clicked object(s).

The PDF Interface – as the name suggests – is an in-

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(New PDF Settings Continued from page 1)

User Password (to open the document): Opening the document with the correct user password allows only limited access to the document. You can specify a user password only if the encryption has been set (See Encryption length). If the user password is empty, the PDF document will still be encrypted but can be opened without a password.

Owner password (to edit the document): Opening the document with the correct owner password allows unlimited access to the document. You can specify an owner password only if the encryption has been set (See Encryption length). If the owner password is empty the PDF document will still be encrypted and the user will have all access to the document.

Security Settings: These settings are enabled if the owner password is not empty.

Allow users to print the PDF document: If this option checked, the PDF document can be printed..

Allow users to copy out text and graphics: If this option checked, users can copy/paste text and graphics from the PDF.

Allow users to fill in form fields and modify comments: The form fields and the comments can be changed by the users in the PDF document.

Allow users to change the PDF document: Allows the users to edit the contents of the pages, meta data and other settings of the PDF document.

Compression

You can select the compression algorithm of the PDF document's content.

Stream Compression Filter: Compression type of the non-image streams.

Color Image Compression: Compression type of color image streams.

Quality: Quality of the JPEG compressed images (available values from 1 to 100, where 100 is the best quality)

Monochrome Image Compression: Compression types of black&white image streams.

Fonts

The PDF standard supports 14 default fonts: Times (4 types), Helvetica (4 types), Courier (4 types), Symbol and ZapfDingbats. If you only use these default fonts when creating the PDF document, then most consumer PDF viewers will be able to display the document correctly. However if you create a PDF file on a computer which has certain non-default fonts installed, and they are used in the PDF document, the file might not display correctly on another computer if that computer does not have those specific fonts installed.

The solution for this problem is to use embedded fonts. When a consumer application opens a PDF document containing embedded fonts, it can extract the fonts from the PDF file and use the extracted fonts to display the document correctly on any computer. The Black Ice's PDF printer driver supports the following font formats for embedding: TrueType (.ttf), OpenType TrueType (.otf) and Type1 (.pfb, .pfm).

In the PDF Settings window the embedded fonts can be specified under the Fonts tab.

Embed all fonts: If this option is checked the printer driver tries to embed all fonts in the PDF document except the 14 fonts in the PDF standard.

Force to embed: These fonts will be embedded in the PDF document.

Forbidden to embed: These fonts won't be embedded in the PDF document.

If the PDF document contains non-default fonts that aren't in the force or

forbidden list, they will be embed in the document only if the "Embed all fonts" option is checked.

Default fonts will be embedded only if they are in the force to embed list.

Printer driver's INI file

If you want to specify the PDF settings automatically during install or you want to specify the default PDF settings easily you can do it using the INI file of the printer driver. You can set the new PDF settings through the INI file as below:

```
[PDF Settings]
Document Encryption=
Document Security Flag=
Embed all fonts=
```

```
[PDF Force Font Settings]
Count=
Font 1=
```

```
[PDF Forbidden Font Settings]
Count=
Font 1=
```

You can set the security encryption length used with Document Encryption. Available values of Document Encryption:

- 0: No encryption
- 1: 40 bit encryption

The Document Security Flag sets the security settings with one flag. Available values:

- 0: There are no security settings to be set
- 1: Allow users to print the PDF document
- 2: Allow users to copy out text and graphics
- 4: Allow users to fill in form fields and modify comments
- 8: Allow users to edit the PDF document

You can combine these values. For



example if you want to enable the printing and modifying comments of the PDF document, the Document Security Flag should be set to 9 (8 + 1).

If Embed all fonts is 1 (default value), all fonts will be embedded in the PDF document except the 14 fonts in the PDF standard.

You can enumerate the fonts to force to be embedded in the PDF Force

Font Settings section. The Count value contains the number of fonts to force to be embedded. For example if you want to force to be embedded the *Modern* and *Symbol* fonts:

```
[PDF Force Font Settings]
Count=2
Font 1=Modern
Font 2=Symbol
```

You can enumerate the fonts to forbid to be embedded in the PDF Forbid-

den Font Settings section. The Count value contains the number of fonts to forbid to be embedded. For example if you want to forbid to be embedded the *Modern* and *Symbol* fonts:

```
[PDF Forbidden Font Settings]
Count=2
Font 1=Modern
Font 2=Symbol
```

(PDF Interface Continued from page 1)

terface for the PDF SDK through which a programmer can interact with the PDF SDK itself. The base class of the PDF Interface is the CPDFInt. Instantiating an object of this class will also associate it with a new or an existing PDF document and manage the embedded PDF SDK object. One can then create the main object oriented data structure by calling one function of CPDFInt, and it will create a PDF document object containing the document's properties and pages within itself. The programmer is then free to load any page's contents and display or edit them.

The SDK will contain a PDF Editor sample, which will use the PDF Inter-

face and will show the usage of the PDF Interface in the well-known MFC Document/View architecture. The sample will include the following features:

- Creating a new PDF document or loading an existing one
- Display the PDF document page by page with the PDF Interface's advanced drawing engine
- Viewing and editing the PDF document information, password/ encryption and compression settings
- Adding new objects onto a PDF page. Supported object types will be:
 - Text

- Bitmap
 - Rectangle
- (The PDF Interface itself supports many more objects!)

- Modifying existing objects on a page. (Fully supporting the previously mentioned types and supporting many more partially.)

Printing Tips: EMF File Format and Fonts

It could happen the printed EMF page doesn't come out as you expected. In most cases this could be a font problem. The EMF file format doesn't store the font itself, so the font must be permanently installed on your system, if you want to display the EMF correctly. But there are cases when the font is installed only during printing and then it will be deleted. For example the embedded fonts in the

PDF documents are installed temporarily. If you open the PDF document with Adobe Acrobat Reader the embedded fonts are installed to the system until you close the reader.





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Time to upgrade?



Latest Version Numbers

Printer Drivers

Impact Products

Vista / XP Color, ColorPlus, EMF, Mono, PDF	10.10	02/15/08
2003 Terminal Servers / Citrix Color, ColorPlus, EMF, Mono, PDF	10.10	02/15/08

Impact Fax Server	8.01	8/24/07
Impact Fax Broadcast	6.10	6/1/07
Impact ColorFax	8.02	02/25/07

Fax, Voice, and Image Toolkits

Internet Tools

Fax & Voice C++/ActiveX	12.50	6/18/07
Document Imaging SDK/ActiveX	10.92	01/24/08
Image PDF Plug-in	10.92	01/24/08
PDF SDK/ActiveX Professional	2.0	6/11/07
Annotation SDK/ActiveX	10.92	01/24/08
Image SDK/ActiveX	10.92	01/24/08
Tiff SDK/ActiveX	10.92	01/24/08
Cover Page Generator SDK/ActiveX	10.92	01/24/08
Barcode SDK/ActiveX	5.10	5/7/07

Print2Email	7.00	7/9/07
Tiff Viewer Plug-in - Complete	8.07	1/11/08
Print Monitoring Server	4.00	8/30/07
Print2RDP	4.10	6/20/07
Print2FTP	2.02	8/15/06

Free Software

Impact ColorFax Lite	8.02	02/25/07
Tiff Viewer Plug-in - Free Version	8.07	1/11/08
ModemWeasel	2.00	8/01/02