

# February Developer Newsletter

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## New PDF File Format is Available in the Black Ice Printer Drivers

A new PDF format is available in the ColorPlus and PDF printer drivers. The PDF format which was used in the previous printer driver versions is now called "Image PDF" format. The name of the new PDF file format is "PDF (Portable Document Format)". You can select the new PDF format as usual. Open the Printing Preferences of the printer driver and select the PDF file format at the *File Formats* tab.

The Image PDF format contains a printed document as an image on a PDF page, but the new PDF file format supports PDF version 1.4. So the new printer driver can generate ordinary PDF documents. These documents store the printed image as objects on the page. For example text, images, shapes, etc. You can handle these documents as usual for example searching a string in

the document using Adobe Acrobat Reader.

There are several PDF settings you can specify in the printer driver. You can set the description of the PDF document, protect your PDF documents with passwords and set the compression of the PDF objects. There are three ways to set these PDF settings:

### 1. Using Printing Preferences

You can set PDF settings in the printing preferences of the printer driver. Open printing preferences and go to the *File Formats* tab. If "PDF (Portable Document Format)" is selected in the File Format combo box, you can open the PDF settings dialog by clicking on the *PDF setting...* button.

The PDF Settings are:

**Title:** Title of the PDF document.

**Author:** You can specify the author of the document.

**Subject:** Short description of the PDF document.

**Keywords:** You can specify keywords for your document. Search engines will look for these keywords.

**User Password (to open the document):** Opening the document with the correct user password allows limited access to the document.

**Owner password (to edit the document):** Opening the document with the correct owner password allows

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## Printing Color PowerPoint Documents with the AutoPrint Sample

It could happen if you print *ppt* or *pps* documents with the AutoPrint sample that the printed image is in grayscale even though you are using a color file format, for example JPEG. This is because PowerPoint has an option to set the color mode of the printed image.

If this option is set to gray-

scale the output will be a grayscale image, the color mode of the printed image doesn't depend on the file format and color depth you set in the printing preferences. But there is a solution for this problem. You can set the color mode option of Power Point programmatically using COM objects. You only need to add the following code snippets to

the *PrintPowerPointDocument* function of the *BiAutoPrint.dll*.

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unlimited access to the document, and additional operations can be performed.

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

**Color Image Compression:** Compression types 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.

### 2. Using BlackIceDEVMODE.dll or BlackIceDEVMODE.ocx

The new version (v 2.20) of the BlackIceDEVMODE dll and ocx contains methods for getting/setting PDF settings programmatically. Here is the list of the methods. For more information please see the printer driver resource toolkit manual.

- GetPdfTitle
- SetPdfTitle
- GetPdfAuthor
- SetPdfAuthor
- GetPdfSubject
- SetPdfSubject
- GetPdfKeywords
- SetPdfKeywords
- GetPdfUserPassword
- SetPdfUserPassword
- GetPdfOwnerPassword
- SetPdfOwnerPassword
- GetPdfUserPasswordEnabled
- SetPdfUserPasswordEnabled
- GetPdfOwnerPasswordEnabled
- SetPdfOwnerPasswordEnabled
- GetPdfStreamCompression
- SetPdfStreamCompression
- GetPdfColorImgCompression
- SetPdfColorImgCompression
- GetPdfMonoImgCompression
- SetPdfMonoImgCompression
- GetPdfJPEGQuality
- SetPdfJPEGQuality

### 3. Using 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 specify the PDF settings in the INI file, and the printer driver will use it after install, or when you click on the *Restore default* button in the Printing Preferences.

```
[PDF Settings]
Document Title=Title of the PDF document
Document Subject=Description of the document
Document Author=Author of the document
Document Keywords=printer,black ice,image,software
Document User Password=
Document Owner Password=
JPEG Quality=85
Color Image Compression=16
Mono Image Compression=27
Stream Compression=4
```

- The max length of the Document Title is 255.
- The max length of the Document Subject is 255.
- The max length of the Document Author is 255.
- The max length of the Document Keywords is 515.
- The max length of the Document User Password is 63.
- The max length of the Document Owner Password is 63.
- The value of JPEG Quality is an integer value 1 to 100.

Available values of Stream Compression:

No compression	0
Flate	4

Available values of Color Image Compression:

No compression	10
Flate	14
RunLength	15
JPEG	16

Available values of Mono Image Compression:

No compression	21
Flate	25
RunLength	26
CCITT Fax	27

(Color PowerPoint Printing Continued from page 1)

```
// Set printer color mode
// Get print options
DISPID dispid_PrintOptions;
DISPID dispid_SetColorType;

// Get ID of print options
szMember = OLESTR("PrintOptions");
hr = pDispPresentation->GetIDsOfNames(
    IID_NULL,
    &szMember,
    1,
    LOCALE_USER_DEFAULT,
    &dispid_PrintOptions);

if (FAILED(hr))
{
    pDispPresentation->Release();
    pDispPresentations->Release();
    ClosePowerPoint();
    m_iLastError =
BIAP_POWERPOINT_AUTOMATION_ERROR;
    _itoa(hr, m_szErrorInfo, 10);
    return FALSE;
}

// Get print options
hr = pDispPresentation->Invoke(
    dispid_PrintOptions,
    IID_NULL,
    LOCALE_SYSTEM_DEFAULT,
    DISPATCH_PROPERTYGET,
    &dispparamsNoArgs,
    &vRet,
    NULL,
    NULL);

// Get pointer to PrintOptions
IDispatch* pPrintOptions = vRet.pdispVal;

// Get ID of SetPrintColorType
szMember = OLESTR("PrintColorType");
hr = pPrintOptions->GetIDsOfNames(
    IID_NULL,
    &szMember,
    1,
    LOCALE_USER_DEFAULT,
    &dispid_SetColorType);
```

```
if (FAILED(hr))
{
    pPrintOptions->Release();
    pDispPresentation->Release();
    pDispPresentations->Release();
    ClosePowerPoint();
    m_iLastError =
BIAP_POWERPOINT_AUTOMATION_ERROR;
    _itoa(hr, m_szErrorInfo, 10);
    return FALSE;
}

VARIANT vArgsColorType[1];
DISPPARAMS dpColorType;
DISPID dispid_PropPut = DISPID_PROPERTYPUT;
dpColorType.cArgs = 1;
dpColorType.cNamedArgs = 1;
dpColorType.rgdispidNamedArgs = &dispid_PropPut;
dpColorType.rgvarg = vArgsColorType;

vArgsColorType[0].vt = VT_I4;
vArgsColorType[0].lVal = 1;           //ColorType

// Call PrintSetColorType
hr = pPrintOptions->Invoke(
    dispid_SetColorType,
    IID_NULL,
    LOCALE_SYSTEM_DEFAULT,
    DISPATCH_PROPERTYPUT,
    &dpColorType,
    NULL,
    NULL,
    NULL);

if (FAILED(hr))
{
    pPrintOptions->Release();
    pDispPresentation->Release();
    pDispPresentations->Release();
    ClosePowerPoint();
    m_iLastError =
BIAP_POWERPOINT_AUTOMATION_ERROR;
    _itoa(hr, m_szErrorInfo, 10);
    return FALSE;
}

// Release print options
pPrintOptions->Release();
```

This code sets the color mode to color in the printing options. You should add this code before printing.



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## Time to upgrade?



## Latest Version Numbers

### Printer Drivers

### Impact Products

Vista / XP Color, ColorPlus, EMF, Mono, PDF	10.08	01/28/08
2003 Terminal Servers / Citrix Color, ColorPlus, EMF, Mono, PDF	10.08	01/28/08

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

### 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	8.01	8/24/07
Tiff Viewer Plug-in - Free Version	8.07	1/11/08
ModemWeasel	2.00	8/01/02