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Asian Font Support in the PDF Printer Driver

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When printing a PDF document, you can choose whether fonts will be embedded or not. The embedded fonts increase the size of the document, but guarantee that the appearance of the text will be the same as in the source document in all consumer applications on all computers.

If the size of the font file is small, embedding the font is not a problem. However the size of Asian (Japanese, Chinese (traditional and simplified), Korean) font files are very large, embedding them might not be always practical.

There is a solution to this problem, which does not utilize font embedding, but

the output would still be approaching the required quality. In this case the printer driver saves the character set information into the PDF document and the consumer application tries to display the texts with similar fonts.

For example the Adobe Reader opening the PDF

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New Redirect Printing Feature in The Printer Drivers

The new redirect printing feature is available in the Black Ice printer drivers from version 10.20. The new feature enables redirecting print jobs to multiple printers. So you can print your documents to more printers with one print. The settings for redirect printing can also be changed more easily. You don't have to use other applications (i.e. Setup Redirect Printing sample in the printer driver resource toolkit) to set the redirect printers. A new tab is added to the printing

preferences to help you set redirect printing options.

Enable/Disable Redirect Printing tab

If you don't want to allow users to change redirect printing settings through the printing preferences dialog, you are able to remove the Redirect Printing tab. If you add the following to the printer driver's INI file, the redirect printing tab won't be

displayed, so your users will not be able to modify settings.

```
[UI Tabs Settings]
Display Redirect
Printing Tab=0
```

By default the Redirect Printing tab is enabled.

Set Redirect Printing Settings Using the Printer Driver's INI File

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(Asian Fonts from page 1)

document would try to use the Kozuka Gothic Pro font displaying texts using the Japanese character set. If the Kozuka font is not installed on the computer, Adobe Reader will give the option to install it.

The following replacements are used by the Adobe Reader:

Japanese character set:

KozGoProVI-Medium

Chinese (traditional):

AdobeMingStd-Light

Chinese (simplified):

AdobeSongStd-Light

Korean:

AdobeMyungjoStd-Medium

The Black Ice PDF Printer Driver tries to use this solution whenever the user chooses not to embed fonts. In case the printer driver cannot detect the character set information of the original document, it won't be able to save that into the PDF file. In this case the consumer application will try to use the original font. If the original font is not

installed on the computer, the file won't be displayed properly.

In most cases this new feature will reduce the size of the document radically when the document uses Asian character sets. This new feature is accessible from the 10.21 version of the PDF Printer Driver.

(Redirect Printing from page 1)

If you want to set the default configuration for redirect printing you can change the printer driver's INI file for this purpose. If you change the printer driver's INI file, your settings will be used as the default settings when the printer driver is installed. If you click the Restore defaults button in the Printing Preferences your custom settings will be applied from the INI file also.

Use the **Redirect Printing** section to set the redirect printers. If you don't set any printers the redirect printing feature will be disabled. The **Number of printers** value shows you the number of printers set as redirect printers. The name of the printers should be listed in the INI file also. For example if you want to set 2 printers (*HP Laserjet 1010 and Microsoft Office Document Image Writer*) as redirect printer you should add the following to the printer driver's INI file:

[Redirect Printing]

```
Number of printers=2
Printer1=HP Laserjet 1010
Printer2=Microsoft Office
Document Image Writer
```

If the specified printer isn't installed on your system, the printer won't be set as redirect printer.

Set Redirect Printing Settings Using BlackIceDEVMODE

New methods are available in the BlackIceDEVMODE.dll and BlackIceDEVMODE.ocx to configure the settings for redirect printers. Here is a list with the name of the new methods:

```
GetRedirectedPrintersCount
SetRedirectedPrintersCount
GetRedirectedPrinter
SetRedirectedPrinter
```

```
IsRedirectPrintingEnabled
EnableRedirectPrinting
DisableRedirectPrinting
```

Detailed information about methods is available in the documentation of the printer driver's resource toolkit.

The old SetRedirectPrinting-PrinterName and GetRedirectPrintingPrinterName methods are obsolete. These methods are still available in the BlackIceDEVMODE but you can set only one redirect printer with them.

How to Improve Quality of Faxed or Scanned Images

Black Ice Software provides several tools to improve the quality of faxed or scanned images. Some of these tools will be described in this article. They are the following:

- Punch Hole Removal
- Deskew Image
- Line Removal
- Black Frame Removal
- Cut Image
- Clean Image

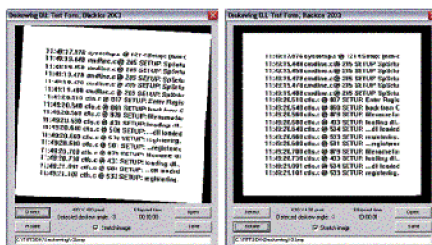
Punch Hole Removal

Punch holes have long presented a problem in scanned documents. Removing punch hole marks from documents has always been a tedious, manual process. To compensate for this, Black Ice provides an automated punch hole removal algorithm. It is a common problem that scanned images show the locations of the holes created by the hole puncher on the documents. The `RemovePunchHoles()` function will detect the location of the punch holes on the image, and will automatically remove them.

Deskew Image

Scanned images are often skewed when the paper is slightly moved/rotated on the scanner. Developers can use the `Deskew()` function to automatically repair these images. The `Deskew` feature is extremely useful in automated image processing, when the images come from a scanner. The function will detect the angle and will rotate the image to the correct position. The `Deskew()` function works for images with or without a black frame around the paper. The function also works for received faxes, using the information (text) on the image to calculate the angle of rotation, instead of using the

margins of the paper. The following image shows an example of using this method.



Line Removal

The `Line Removal` is used with faxed or scanned documents. Faxed documents often contain annoying horizontal lines due to communication noise on the telephone line. By utilizing the `Line Removal` functionality of the Document Imaging SDK, these lines can automatically be removed from faxed documents. Scanned documents in some cases, also have horizontal or vertical lines due to the banding or folding of papers.

Black Frame Removal

The most common case of using `Trim Black Image` is with scanned images when a black frame surrounds a white scanned paper, thus the white page is on a black background. There is also a more rare case when a white frame surrounds a black scanned paper, thus the black page is on a white background.

Cut Image

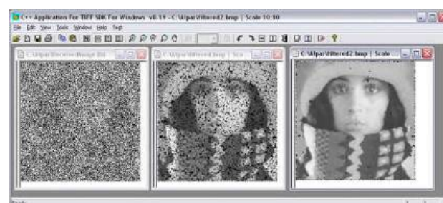
The `Cut Image` is used primarily with a faxing application. In some cases manually fed fax machines can combine several pages into a single long continuous fax page without the sender's knowledge. The `Cut Image` functionality of the Document Imaging SDK/ActiveX allows developers to cut up a long page into smaller individual pages in the

same manner as one would cut a received paper fax.

Clean Image

`Clean Image` function in the Document Imaging SDK can be used to completely clean a fax (image) received with the well-known communication "noise". This "noise" is represented on the received image as black dots and lines. A noisy or low quality phone line usually causes this telecommunication "noise". The "Clean Image" function will completely clean the noise from the received image. The feature will work for both monochrome (1 bit) images and 256 color (8 bit) grayscale images. The following image was received with 80% noise and it is an extreme condition. The received image is practically unusable; but look at the results after using the "Clean Image" feature!

For details you can see the online manual of the Document Imaging in one of



the following web pages:

For DLL users: http://www.blackice.com/Help/Tools/Document%20Imaging%20SDK%20web%20help/WebHelp/Black_Ice_Document_Imaging_SDK_Help.htm

For ActiveX users: http://www.blackice.com/Help/Tools/Document%20Imaging%20OCX%20web%20help/WebHelp/Black_Ice_Document_Imaging_OCX_Help.htm



Time to upgrade?

Latest Version Numbers

Printer Drivers

Impact Products

Vista / XP Color, ColorPlus, EMF, Mono, PDF	10.20	06/02/08
2003 Terminal Servers / Citrix Color, ColorPlus, EMF, Mono, PDF	10.20	06/02/08

Impact Fax Server	8.03	5/21/08
Impact Fax Broadcast	6.40	5/21/08
Impact ColorFax	8.02	02/25/07
Print2Email	7.10	04/25/08
Tiff Viewer Plug-in - Complete	8.12	04/25/08

Fax, Voice, and Image Toolkits

Fax & Voice C++/ActiveX	12.50	6/18/07
Document Imaging SDK/ActiveX	10.95	04/25/08
Image PDF Plug-in	10.95	04/25/08
PDF SDK/ActiveX Professional	2.0	6/11/07
Annotation SDK/ActiveX	10.95	04/25/08
Image SDK/ActiveX	10.95	04/25/08
Tiff SDK/ActiveX	10.95	04/25/08
Cover Page Generator SDK/ActiveX	10.95	04/25/08
Barcode SDK/ActiveX	5.10	5/7/07

Print Monitoring Server	4.10	03/14/08
Print2RDP	4.30	4/11/08
Print2FTP	2.02	8/15/06
FileMorph	2.13	5/20/08
FileMorph DS	2.12	04/25/08

Free Software

Impact ColorFax Lite	8.02	02/25/07
Tiff Viewer Plug-in - Free Version	8.12	04/25/08
ModemWeasel	2.00	8/01/02