

February Developer Newsletter

Inside this issue:

New 32 bit User-Level Printer	1
Printer Driver Tips - How to Set Start Application Settings During Installation	1
New PDF SDK with Searchable Text	2
Printer Driver Tips - How to Programmatically Reset the Settings of the Printer Driver	3


New 32 bit User-Level Printer Drivers

New user-level printer drivers will be available as of February 1st from Black Ice Software. The user-mode printer drivers have the following advantages over kernel-mode execution:

- Less potential for causing system crashes
- Windows Vista supports only user-mode printer drivers
- Simple Migration to Vista
- Unlimited stack space
- Due to security reasons, Microsoft doesn't recommend kernel-mode printer drivers

The Monochrome, Color, ColorPlus, EMF and PDF user-mode printer drivers will be available on Windows 2000, Windows XP and Windows 2003 Terminal Server operating systems. The Black Ice printer drivers for 64-bit operating systems including Windows Vista 64-bit are under construction and the projected release date is mid February. ◀





FEBRUARY SALE

10% off upgrade price for the new 32 bit User-Level Printer Drivers
 3 months free when purchasing Printer Driver maintenance
 10% off all Barcode SDKs

SALE VALID 2-1-07 TO 2-28-07

Printer Driver Tips - How to Set Start Application Settings During Installation

The BLACK ICE NEWSLETTER is published by Black Ice Software, LLC. The contents of this newsletter in its entirety are Copyright © 2007 by Black Ice Software, LLC. 292 Route 101, Salzburg Square, Amherst, NH 03031, USA. Black Ice Software, LLC. does hereby give permission to reproduce material contained in this newsletter, provided credit is given to the source, and a copy of the publication that the material appears in is sent to Black Ice Software at the above address.

Phone: (603) 673-1019
 Fax: (603) 672-4112
sales@blackice.com
www.blackice.com

If you use the start application feature of the printer driver, you can start any application before or after every print job. You can pass several parameters to the application, so you can configure your start application easily.

If you need to specify the settings of the start application during installation of the printer driver, you have two possibilities:

1. Use the INI file of the printer driver
2. Use the API functions of the BlackIceDEVMODE

Printer driver INI file

You can configure all of the start application settings through the printer driver INI file. The INI file contains the default settings of the printer driver, so if you

click on the "Restore defaults" button in the Printer Preferences, the driver refreshes the settings from the printer driver INI file. In this case you can set your custom settings as the default setting of the printer driver.

You should use the "Default Settings" section for modifying the start application.

(Continued on page 2)

Use the "ApplicationPath" key name for setting the path and name of the start application.

The "LaunchFlags" key stores other settings of the start application, for example the window mode (normal, minimized, hidden), whether the application gets parameters from the printer driver or not. Available parameters: Document name, Group filename, Printer name, Number of pages, Multi-page, Orientation and Custom parameter. The custom parameter is a string of up to 260 characters in length. You can use the "CustomStartApplicationParameter" key for setting your custom parameter.

The "StartApplicationParameterOrder" key name specifies the parameter order by specifying which parameter you would like to have in which position. For example the default parameter list is 123456 (the first parameter is the document name, etc). To specify the parameter list in reverse order enter StartApplicationParameterOrder=654321 to the INI file.

To pass the printer name and the group file name only, enter StartApplicationParameterOrder=320000 into the INI file specifying 0 for the unused parameters. In order to pass only the

group file name as parameter enter the following line in the INI file: StartApplicationParameterOrder=200000

Values of each parameter:

PARAMETER_NONE	= 0
PARAMETER_DOCUMENT_NAME	= 1
PARAMETER_GROUP_FILE_NAME	= 2
PARAMETER_PRINTER_NAME	= 3
PARAMETER_NUMBER_OF_PAGES	= 4
PARAMETER_MULTIPAGE	= 5
PARAMETER_ORIENTATION	= 6
PARAMETER_CUSTOM	= 7

For example: You want to start your application after printing, in normal window and pass the name of the group file as parameter, you should modify the INI file like this:

[Default Settings]

```
LaunchFlags=13
ApplicationPath=C:\MyDir\MyApp.exe
StartApplicationParameterOrder=200000
```

The LaunchFlags 13 means: BLF_LAUNCHAPP (0x00000001) + BLF_PASSPARAMETERS (0x00000004) + BLF_STARTNORMAL (0x00000008).

BlackIceDEVMODE API functions

You can call functions of the BlackIceDEVMODE.dll during installation time for specifying the start application settings. After you changed

the settings of the devmode, you can save the devmode, so after install the printer settings will contain setting one desired. You have to change the settings when the printer is already installed.

The following functions can be used for changing the start application settings:

EnableStartApplication: Enables the start application feature

SetApplicationPath: Sets the path and name of the start application

SetCustomStartApplicationParameter: Sets the value of the custom start parameter.

EnablePassParameters: Enables pass parameters feature.

EnableStartNormal: Starts the application in normal window.

SetStartApplicationParamCode : Sets the value of the parameter at the specified position.

There are additional functions in the BlackIceDEVMODE.dll and ActiveX for configuring the start application settings. Please check the Resource Tool Kit (RTK) manual for more information. ◀

New PDF SDK with Searchable Text

Black Ice Software announces the PDF SDK Professional. The new PDF SDK Pro will have significant affect on all of the Black Ice products. The PDF SDK Pro will be incorporated in most of the Black Ice Software document management products and also into the Impact Product line. In addition, the PDF SDK Pro will be licensed as a software development tool kit for third party developers "per user" based. The current PDF SDK for Images will continue to be sold royalty free.

The current version of Black Ice Software PDF SDK supports Image imbedded in PDF (PDF version 1.4). It means that the programmer can save images as a PDF document and the programmer can add new images one page at a time to the document. The disadvantage of the image based PDF is that the document can not be edited and it cannot be searched.

Black Ice Software will release the PDF SDK Professional in several phases. The

first release of the SDK will support a subset of PDF, PDF/A.

Some of the new features for the first release are:

- Supports PDF version 1.4 or earlier versions, not just Image PDF
- Read or Load PDF document
- Search text in the PDF document.
- Rasterize PDF document page by page (draw it to a DC or to a bit-

(Continued on page 3)

- map), that the programmer can save to any image format.
- 14 standard fonts and some of the embedded font types are supported such as (TrueType, Type1 and Type1C (Compact Font Format))
- Get an image from PDF pages.
- The following compressions are supported for streams: FlateDecode, LZWDecode, ASCII85Decode
- The following compressions are supported for images: DCTDecode, CCITTFaxDecode, RunLengthDecode, FlateDecode, ASCII85Decode
- Paths (draw shapes, diagrams, vector images)
- Operator categories: Graphics state, Path, Text, Font, Color

- Objects: Path object*, Text object, XObject objects (Image object, Form object)

The PDF SDK Pro will have some constraints in the first release:

Audio and video content are forbidden.

Javascript and executable file launches are prohibited.

All fonts must be embedded and also must be legally embeddable for unlimited, universal rendering.

Colorspaces specified in a device-independent manner.

Encryption is disallowed.

Use of standards-based metadata is mandated.

See the March news letter for more details on the Impact PDF SDK Professional. ◀



* Path meaning in the PDF terminology is:

"Paths define shapes, trajectories, and regions of all sorts. They are used to draw lines, define the shapes of filled areas, and specify boundaries for clipping other graphics."

(PDF Reference fifth edition)

Printer Driver Tips - How to Programmatically Reset the Settings of the Printer Driver

The Resource Tool Kit (RTK) contains the BlackIceDEVMODE dll and ActiveX control, which allow you to reset the values of the printer driver DEVMODE programmatically. You can reset the settings for the current user or for all users. Since a user has no permissions to change the settings of the installed printer driver, one can configure the printer settings for all users with a single function call using the RTK API.

You can use the ReplaceUserSettings function to reset the printer settings. This function uses the INI file of the printer driver by creating a DEVMODE structure according to the INI file of the printer driver and setting this DEVMODE to the printer.

For example in Visual Studio 6.0:

```

if (ReplaceUserSettings
(m_szPrinter.GetBuffer(32), bAllUser))
    MessageBox(TEXT("User settings successfully replaced.));
else
    MessageBox(TEXT("Error replacing user settings.));

```

There are sample applications in the RTKs that demonstrate the usage of the ReplaceUserSettings function.

If you want to reset the printer settings with a specified DEVMODE, you should use the ClearUserSettings and CreateDefaultSettings functions.

The CreateDefaultSettings function returns a new DEVMODE structure from the specified printer driver by reading the values from the printer's

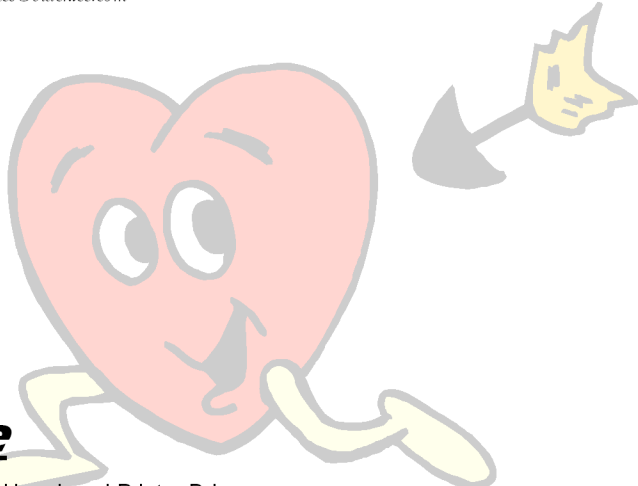
INI file as current default settings. This function must be used in conjunction with the ClearUserSettings function. The returned DEVMODE can be assigned to the printer as the new default settings by using SaveBlackIceDevmode. PLEASE NOTE: Memory used by the returned DEVMODE must be freed by the developer using the Global-Free API function. The ClearUserSettings function clears the existing printer settings for either the current user or all users on the system. This function will only clear the existing printer settings for the specified printer, it will not assign new default settings. ◀



292 Route 101
Amherst, NH, 03031

Phone: 603 673 1019
Fax: 603 672 4112
Email: sales@blackice.com

Presorted Standard
US Postage
PAID
Permit No. 425
Manchester, NH



Inside

- New 32 bit User-Level Printer Drivers
- Printer Driver Tips - How to Set Start Application Settings During Installation
- New PDF SDK with Searchable Text
- Printer Driver Tips - How to Programmatically Reset the Settings of the Printer Driver

Time to upgrade?



Latest Version Numbers

Printer Drivers			Impact Products		
Printer Drivers for ME/98/95	5.81	4/13/06	Impact Fax Server	7.05	10/30/06
Printer Drivers for XP/2000/NT Color, ColorPlus, EMF, Mono, PDF	9.92	11/29/06	Impact Fax Broadcast	5.11	11/29/06
Printer Drivers for 2003, Citrix and Terminal Servers Color, ColorPlus, EMF, Mono, PDF	9.92	11/29/06	Impact Fax on Demand	4.08	7/2/02
			Impact ColorFax	7.02	8/15/06
			Drag and Drop Printing	2.00	12/24/02
Fax, Voice, and Image Toolkits			Internet Tools		
Fax C++/ActiveX	12.31	12/18/06	Print2Email	5.13	10/19/06
Voice C++/ActiveX	12.31	12/18/06	Tiff Viewer Plug-in - Complete	7.01	1/10/07
Document Imaging SDK/ActiveX	10.72	1/10/07	Print Monitoring Server	3.00	9/16/04
PDF Plug-in	10.72	1/10/07	Print2RDP	3.0	9/6/06
Annotation SDK/ActiveX	10.72	1/10/07	Voice2Email	2.01	4/20//05
Image SDK/ActiveX	10.72	1/10/07	Print2FTP	2.02	8/15/06
Tiff SDK/ActiveX	10.72	1/10/07	Free Software		
Cover Page Generator SDK/ActiveX	10.72	1/10/07	Impact ColorFax Lite	7.02	8/15/06
Barcode SDK/ActiveX	4.52	1/2/07	Tiff Viewer Plug-in - Free Version	7.01	1/10/07
			ModemWeasel	2.00	8/01/02