

Black Ice Newsletter

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 Phone: (603) 673-1019
 Fax: (603) 672-4112
 E-mail: sales@blackice.com
www.blackice.com
[ftp.blackice.com](ftp://blackice.com)

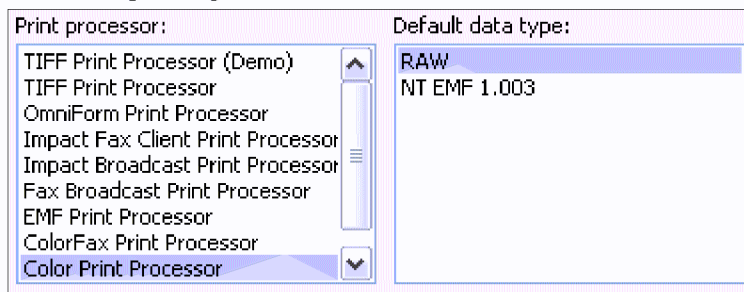
The best printer driver just got better!

The RAW data type.

Black Ice Software printer drivers were enhanced by adding the RAW data type. This will solve the problem with printing from applications like Quicken and QuickBooks that cannot print using the EMF data type, or applications that force the printer to print using RAW data type instead of EMF data type. These applications do not comply with the Microsoft specifications.

Also, the Windows spooler does contain bugs that in some cases causes the generated image to be slightly different than the original document. Switching the printer driver to use the RAW data type when printing from these

applications (Quicken, QuickBooks) will solve the issues. The RAW data type also makes possible printer sharing over a network. See the next article for more details about the printer sharing.



Printer sharing for the Black Ice printers

Printer sharing is working!

The Black Ice printer drivers can now be shared on a

network. The network sharing was not possible using the EMF data type. When the printer is shared over a network

the actual image generation will happen on the computer where the printer is shared. Using the EMF

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Printer driver installation tips & tricks

Printer driver installation Tips & Tricks

The Black Ice printer drivers are software tools to programmatically convert any printable document

such as MS Word, Excel, PDF, etc. into image files like TIFF, JPEG, BMP, PDF and many more. The printer drivers are licensed to developers to develop applications that

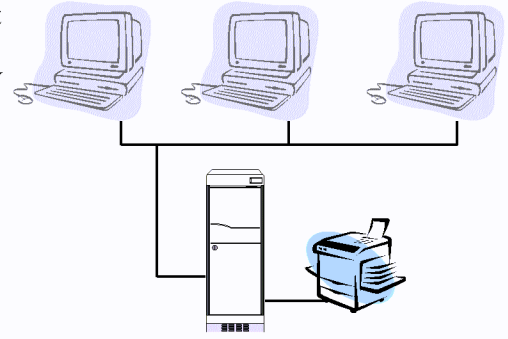
need "on the fly" document conversion of any printable document for faxing, archiving, emailing, etc. The developer distributes the printer driver as part of

(Continued on page 2)

(Printer sharing for Black Ice printers, continued from page 1)

data type the sharing was not possible because the client computer (the one which prints) may have different fonts installed than the server computer. The EMF data contains only the font information, not the font itself. The printer driver located on the server machine cannot generate the

correct image based on the document without the corresponding fonts. This issue was solved by using RAW data type. Using the RAW data type, the printer driver will send the already generated image over the network so the problem with missing fonts is eliminated.



(Printer driver installation tips & tricks, continued from page 1)

their main application.

Installing an application is not usually a very complicated task. It includes copying files and creating registry entries.

However, the installation of a printer driver involves a few more tasks. The printer driver installation includes 3 steps:

1. Copy all necessary driver files to their location
2. Call the necessary Windows API functions to add the printer driver components to the system
3. Configure the settings of the newly installed printer

The developer can use any development tool to write the installation for the printer driver, such as Install Shield, Wise, MSI or even C++ or

VB.

Step 1. Copy all necessary driver files to their location

All driver files should be copied to the correct locations *before* the API function calls. The actual location of the files depends on the operating

All driver files should be copied to the correct locations *before* the API function calls

system. The correct folder for the driver files can be obtained by calling the `GetPrinterDriverDirectory()` Windows API function. For Windows NT / Windows 2000 / XP, the default location for the driver files is the “\WINNT\system32\spool\drivers\w32x86” and the “\WINNT

\system32\spool\drivers\w32x86\2” directory (the files should be copied in both these directories).

The correct location of the print processor can be obtained by calling the `GetPrintProcessorDirectory()`. For NT / Windows 2000/XP, the default location for the print processor files is the “\WINNT\system32\spool\prtprocs\w32x86” directory.

The print monitor must be copied into the system folder.

The Resource Toolkit Help contains detailed descriptions of the file names and the target folders.

Step 2. Call the Windows API functions to add the printer driver components to the system

After all files are copied, the installation will add the printer driver components to the system.

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Install utility for the Brooktrout TR114/TR1000 boards

The most difficult and time consuming part of setting up a fax/voice system is to install the fax hardware and to configure the hardware to work with the phone line.

This is especially true for the Brooktrout boards, because the Brooktrout boards have several configuration files and the information contained in all the configuration files is essential in order to make the installation and configuration process easier.

Black Ice Software has released a Brooktrout installation utility. The utility is a wizard style installation and configuration tool that will do most of the Brooktrout board setup. The user has to provide some very basic information like PCI or ISA bus type, board model number and the utility will detect the board, will install the drivers and will create all the necessary configuration files. If there is a hardware conflict the utility

will report that and will give suggestions for the user on how to fix the conflict. It will even advise the user on where the hardware specific jumpers and switches are located on the board and what jumper or switch setting they have to change.



Dipswitch for Brooktrout ISA boards

(Printer driver installation tips & tricks, continued from page 2)

1. Add the print processor

The print processor must be added to the system by calling the AddPrintProcessor() function of the Windows API().

2. Add the port monitor

The Port Monitor can be added to the system by calling the AddPortMonitor() function of the Windows API().

3. Add the printer port

Add a port to the port monitor using the AddPort() Windows API() function call.

4. Add the printer driver

To add the printer driver the install must call the AddPrinterDriver() Windows API() function.

5. Add the printer

The last step is to add the printer. Call the AddPrinter() function to add the printer to the system.

If every driver file is in the correct location, and if the function parame-

ters are specified correctly at this point the printer is installed on the system. The printer is installed using the default settings hard-coded in the printer driver, or the settings specified in the INI file if there are any.

“The developer can call the Install DLL’s functions to setup the printer settings at install time”

The structure of the INI file is described in the Resource Toolkit (RTK) manual.

3. *The last step is to modify the printer settings, if needed.* This can be done by calling the DocumentProperties() Windows API function to retrieve the current devmode of the printer. Change the printer settings to the desired values by modifying the members of the DEVMODE structure. The members of the DEVMODE structure are fully described in the RTK manual. When

the changes are made call the DocumentProperties() to update the printer with the new settings.

Black Ice supplies a DLL in the Resource Toolkit that has all of the system calls implemented. The developer can call the Install DLL’s functions to add or remove the printer driver components and setup the printer settings at install time.

Also, Black Ice provides a sample written using Install Shield 6.31 which installs the printer driver and sets the printer driver parameters. This sample can be a good starting point for developers to write their own installation.

Of course, to write the installation, any other programming language can be used. The only restriction is that the developer must call the Windows API() function directly or must be able to load the Install DLL supplied by Black Ice and use the installation functions from the install DLL.

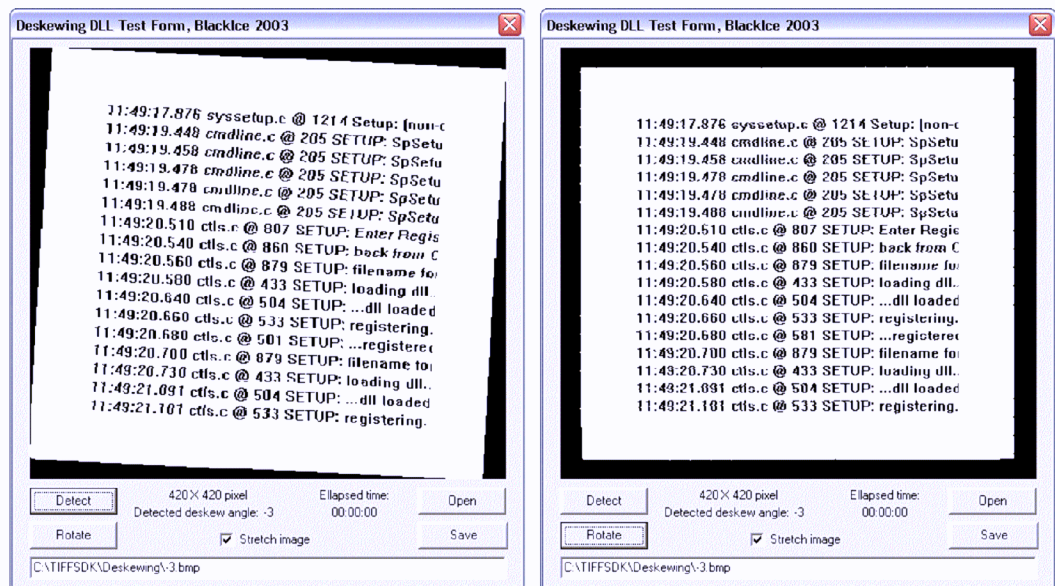
Deskew for the TIFF SDK

The Deskew feature was enhanced in the TIFF SDK. This feature is extremely useful in automated image processing, when the images come from a scanner. The scanned images are often skewed (the paper was moved/rotated) on the scanner. Developers can use the new Deskew() function to automatically repair the image. The function will detect the angle and will rotate the image to the correct position.

The new version of the Deskew() function will work for images with a black frame around the paper and for images without black frame around the scanned paper.

The function also works for received faxes, using the information (text) on the image to calculate the angle of

the rotation, not the margins of the paper.



Inside

Printer sharing and RAW data type

Time to upgrade?



Latest Version Numbers

Programming Tools			Impact Products		
Product	Version	Date	Product	Version	Date
Fax C++/ActiveX/COM	9.10	03/17/03	Impact Fax Server	4.36	12/18/02
Voice C++/ActiveX/COM	9.10	03/17/03	Impact Voice Mail Server (Standard)	3.14	04/11/01
ColorPrinter Driver for Win95/98/ME	5.56	03/17/03	Impact Voice Mail Server (Deluxe)	3.79	04/11/01
Metafile Printer Driver for Win95/98/ME	5.56	03/17/03	Impact Terminal Fax Server	4.34	05/03/02
Mono Printer Driver for Win95/98/ME	5.56	03/17/03	Impact Fax on Demand	4.06	12/01/00
PDF Printer Driver for Win95/98/ME	5.56	03/17/03	Impact Fax Broadcast	3.03	03/17/03
Mono Printer Driver for NT/Win2000/XP	7.57	03/17/03	Impact ColorFax	5.00	02/21/03
Color Printer Driver for NT/Win2000/XP	7.57	03/17/03	Drag and Drop Printing	2.00	12/24/02
Mono Printer Driver for NT/W2K/XP	7.57	03/17/03	Internet Tools		
Metafile Printer Driver for NT/W2K/XP	7.57	03/17/03	Print2Email	3.00	01/20/03
PDF Printer Driver for NT/W2K/XP	7.57	03/17/03	Tiff Viewer Plug-in - Complete	4.00	03/26/02
Terminal Server Printer Driver for NT4.0/Win2000	7.57	03/17/03	Print Monitoring Server	2.00	02/10/03
Tiff SDK/ActiveX/COM	9.04	02/27/03	Free Software		
Annotation SDK/ActiveX/COM	3.04	02/27/03	ColorFax LITE	5.00	02/21/03
TIFF SDK w/ Cover Page Generator			Tiff Viewer Plug-in - Free Version	4.00	09/27/02
PDF Plug-in for TIFF SDK	2.00	12/31/02	ModemWeasel	2.00	08/01/02
Image SDK/OCX	5.57	05/04/01			