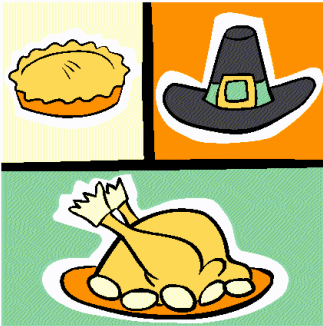


Developer Newsletter

November 2005

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Don't be a Turkey!
License Fax C++/ActiveX before
November 30th and save up to \$1,000

A pink turkey on the left and a brown chicken on the right, both looking towards the center text.

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Capturing Black Ice Printer Driver messages from a service

The Black Ice printer drivers include a messaging interface which will send messages at every Start Doc, Start Page, End Doc, and End Page event, to notify applications about the phases of printing. The message capturing application can use these messages to retrieve the files created by the driver, update status bars, etc.

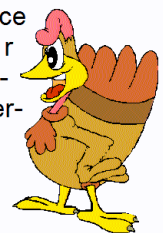
Black Ice printer driver messages can also be captured from a service based application. This approach involves using the pipe messaging interface. Using the pipe interface the BliceCtr.dll will convert the data sent through the pipe into window messages.

The window messages are then captured by the service. The trick is that in order to be able to capture messages from a service, the service must run on the system account with the "Interact with desktop" option checked.

Capturing printer driver messages from a service allows developers to expand the scope of their application and its capabilities. Services can be automatically started when a PC is booted so that your users print jobs do not have to wait for your custom message capture application to initialize itself before each print job.

The latest version of the Black Ice Printer Driver RTK includes a new C++ sample to show developers how to capture the printer messages from a service. This sample can be used as a starting point for developing a custom message capturing service for use with the Black Ice printer drivers.

Maintenance subscribers can contact the Black Ice sales department to request their free upgrade to the latest Black Ice printer driver release, version 9.71



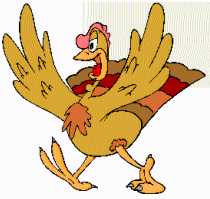
Need to add fax capabilities to your applications? Consider Fax C++/ActiveX

The Fax C++/ActiveX development toolkit allows developers to add fax capabilities to any application or service. It is fully object oriented, and takes into account the new emerging tech-

nology in faxing communications. Developers can build black and white or color faxing applications within a few days using the Fax C++/ActiveX toolkit

Fax C++/ActiveX is designed to be fax hardware independent and can support a variety of fax hardware platforms with a single application. Fax C++/ActiveX is com-

(Continued on page 2)



Using the Black Ice Imaging DLLs in .NET applications

Black Ice Software's development tools include both standard DLLs and ActiveX controls, allowing developers to utilize the toolkit functionality from a variety of programming languages, such as C/C++, Visual Basic C# and VB .NET. All of the Black Ice development tools include sample applications written in a variety of programming languages, including C#, J# and VB .NET. Currently, the .NET samples utilize the Black Ice ActiveX controls, however, in some cases .NET developers prefer to use DLLs instead of ActiveX controls. To assist these developers, Black Ice has recently added a new C# sample which uses the Black Ice imaging toolkit DLLs directly.

In addition to using the Black Ice Imaging DLLs from C#, the same DLLs can be used from VB .NET and J# in the following manner:

[VB .NET]

You can call methods from a DLL, if you declare the specified DLL. You have to specify the name of the method, name of the DLL and the list of the parameters. After that you can use the method as a typical Visual Basic method.

Example:

```
Declare Function GetNumberOfImagesInTiffFile Lib "BiTiff.dll" ( _  
    ByVal FileName As String) As Integer
```

For more information visit:

<http://msdn.microsoft.com/library/default.asp?url=/library/en-us/cpguide/html/cpconInteropMarshaling.asp>

[J#]

It is possible to use DLL functions in J#. If you want to use a method from a Black Ice DLL, you have to use the DllImport attribute in the following way:

```
/** @attribute DllImport  
("BiTiff.dll") */  
  
public static native short GetNumberOfImagesInTiffFile(String  
FileName);
```

For more information visit:

http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dv_vjsharp/html/vjgrfcallingnativemethodsfromjavasource.asp



(Fax C++/ActiveX, continued from page 1)

patible with products from industry leading fax vendors such as Brooktrout, Dialogic, NMS, Mainpine, Eicon, Multi-Tech and more. Fax C++/ActiveX supports standard fax modems and multi port fax modems as well as high density, intelligent fax boards.

Combined with additional Black Ice products, such as the Black Ice Printer Drivers, Voice C++/ActiveX, and Imaging libraries, Fax C++/ActiveX allows developers to rapidly build fax servers, fax back applications, or to "fax enable" existing applications. Fax C++/ActiveX also quickly and

painlessly integrates with Visual Basic 6, Visual Studio .NET, and Borland's Delphi.

A few of the key features of the Fax C++/ActiveX toolkit include:

- V.34 (33.6K) Faxing
- Color and Monochrome fax support
- Fax queue management
- Real time access to faxes received with the Fax C++ ActiveX
- Error Correction support

- DTMF and DID detection
- Multiple Fax Hardware Vendors supported

Recent results from a series of reliability tests run with the Fax C++/ActiveX showed that Fax C++/ActiveX was able to flawlessly send and receive in excess of 200,000 faxes in a continuous session!

Developers can download a fully functional evaluation version of the Fax C++/ActiveX toolkit from the Black Ice Website at <http://www.blackice.com/Fax%20C++%20ActiveX.htm>

Printer Driver Tips & Tricks - Changing Printer Settings Manually and Programmatically

The Black Ice printers, like any traditional printers, have several settings including settings which are common to most printers such as DPI (graphical resolution), paper size and orientation. In addition to these common settings the Black Ice printers have several unique settings such as the output directory for the files, file name generation methods, watermark and annotation settings, etc. Most computer users know that printer settings can be changed from the printer driver user interface through the File -> Print menu, but there are additional ways to change printer settings which most users are unaware of.

Changing the *default* printer settings

On Windows 2000/XP and Terminal Server Systems, each user can have their own set of printer settings. The default printer settings are used exclusively by the OS to be assigned to users who do not have their own settings yet. These users can be new users, just added to the system, or existing users, who never used the printer. When one of the above users use the printer for the first time, the system will assign the *default printer settings* to that user. If the administrator wishes to change the *default* printer settings, they can do so from Control Panel -> Printers. Right click on the selected printer, and choose Properties. On the Properties dialog select the Advanced tab, and use the Printing Defaults button.

Note: Even if the default settings are changed that will not affect any users who already have their own settings since each user must be able to change his/her

own printer settings.

Changing the *default* printer settings programmatically (Black Ice Printer Drivers only)

First released in October 2005, version 9.70 of the Black Ice printer drivers includes new functionality which allows developers to programmatically change and/or restore default printer settings for the Black Ice printer drivers. Using the newly available **ReplaceUserSettings** function/method of the BlackIceDevmode controls, developers can replace the existing printer settings with new printer setting for either the current user or system wide.

Changing the *current* printer settings

The *current* printer settings represent the settings assigned to a user. Since each user can have different settings, one user can print to TIFF while another user on the same system can print to JPEG, using the same Black Ice Color Printer Driver. To change the current printer settings, go to Control Panel -> Printers, right click on the selected printer and choose "Printing Preferences". Once the settings are changed these settings will effect any new print job. Close all running application to make sure that the applications are aware of the new settings. When printer settings are changed, the operating system will alert all open application about the printer settings change, however not all applications take this alert into consideration.

Restoring the Default Printer Settings

Default printer settings can be restored by pressing the "Restore

Defaults" button from the Black Ice Printer Driver Properties. Default settings can be restored programmatically in version 9.70 and higher by using the ReplaceUserSettings function of the BlackIceDevmode controls.

Per application temporary printer settings

Sometimes it is necessary to change the printer settings temporarily just for the lifetime of one document. One of these cases would be when writing a notepad document and you wish to print just that one file in landscape mode, even if the current printer settings are Portrait.

To change the printer settings temporarily access the printer settings through the printing application's File -> Print menu. Changing the printer settings from within the application will affect only the current application without affecting any other running applications, these changes will not effect the current or default printer settings. Once the printing application is closed the temporarily changed printer settings are discarded.

Changing the printer settings programmatically

All of the Black Ice printer settings can be changed programmatically, without any user interaction using either the BlackIceDEVMODE.DLL or BlackIceDEVMODE.OCX ActiveX controls from your favorite programming language such as C++, VB, Delphi, C#, VB.NET, etc.

The controls contain more than 300 functions to read and change any of the Black Ice printer settings on the fly.

