# Black Ice Newsletter

Black Ice Software, Inc.

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#### Add user specific annotations to every printed document!

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Add user specific annotations to printed

Creating an "Email to Fax" service.

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Black Ice Printers for Terminal Servers



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Phone: (603) 673-1019 Fax: (603) 672-4112 E-mail: sales@blackice.com www.blackice.com ftp.blackice.com The annotating capabilities of the Black Ice printer drivers have been improved significantly. Earlier versions of the Black Ice printer drivers were capable of printing annotations to every printed page, but the content of the annotation text was limited. Basically the annotation consisted of static text and the current date and time. In the newest version, in addition to the static text, user specific

fields can also be specified in the annotation text. User specific fields can be any combination of the followthe user name, the domain name, the computer name or the IP address of the printing user, the value of any environment variable or some other document specific values like document name, current page number, and printer name. When the annotation text contains one or more user

specific fields, the printer driver will replace the field's name with the current value of the field and this new annotation text will be printed to the page. There are several areas where the new annotation features can provide great help. For example in a shared network environment where several users use one physical printer, the Black Ice printer drivers can be used to forward

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# Creating an "Email to Fax" service using technology from Black Ice Software

Developers can create an automated email to fax solution with only four steps. In this article we will explain how you can convert the documents sent by the user in an email into faxable TIFF files, and how to build a faxing application using the Black Ice Software development tools.

Creating an email to fax service requires the following steps:

- 1. Retrieve the emails and attachments from the email server
- 2. Convert the email and attachments into faxable format
- 3. Send the fax generated from the attachment to the specified fax number, using your fax hardware
- 4. Send a confirmation email to the user reporting the status of the fax.

Black Ice development tools will help you perform all of these tasks to achieve your goal.

#### Retrieving the emails

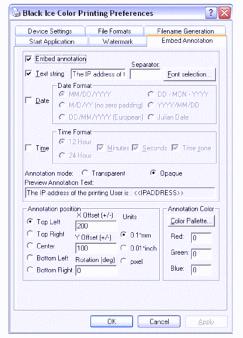
The emails can be retrieved using the Black Ice Email2Fax library. The content of the emails and their attachments can be saved to the disk as files. The attachments, before they can be faxed, must be

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Printer settings

print jobs to the physical printer and add a user specific note, like the name of the printing user, the IP address of the printing machine to



Sample annotation document

every printed page. This way printer usage can be easily monitored and it is very easy to track what each user prints.

Another area where the new annotation fields could be very helpful is in environments where several copies of the Black Ice printer drivers have to be installed to several machines and the environment requires having a user specific annotation string printed to every page. Without fields adding user specific annotations to every printer driver installation means that the system administrator has to install the printer driver individually and set up the annotation

text manually on every machine. With the improved annotation fields the system administrator can create one cloned image of the whole operating system with an instance of the printer driver already installed and with the annotation text set to use a field containing the value of an environment variable or a field containing the name of the printing user. This OS image can be cloned to several machines and the annotation settings of the printer driver will be working correctly because the fields will be replaced automatically with the current user specific values.

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converted into a faxable format.

## Convert the email and attachments to a faxable format

Automated document conversion with the Black Ice Printer Drivers

Since the users will have their document in several formats like Microsoft Word, Excel, Adobe PDF, PowerPoint, HTML WebPages, text files, image files like JPEG, PNG, GIF and several more, the emails and the documents attached to the email must be converted into a faxable format. The fax standard requires the documents to be sent to be TIFF files in faxable format using 1728 pixel width, and 204x98 or 204x196 DPI (resolution).

The document conversion can be accomplished using the Black Ice Monochrome Printer Driver which will generate TIFF files based on the printed documents. Black Ice ships the printer driver with several sample applications with full source code. One of the sample applications, the AutoPrint Sample, implements automated printing of many popular file formats such as: Word, Excel, PDF, PowerPoint, HTML, text, JPEG, BMP and other image formats. The AutoPrint Sample can be used as a starting point for developers to implement automated conversion of the documents sent by the users via email. The developer may add printing of additional file formats in addition to the existing ones.

Also, the printer driver supports seven different file name generation

methods. The developer can select one of the seven available file name generation method to define how the file names for the TIFF images are created.

Integration with the main applica-

The main application, which will send the faxes, must be notified that the documents have been converted into faxable format and the fax can be sent. This can be done by integrating the printer driver with the application through the Messaging Interface. The printer driver will notify the main application via windows messages or events from an OCX control that the document was converted into TIFF images.

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#### Sending a fax

Sending a fax using the Black Ice Fax C++/ActiveX is an easy task. The developer can develop a custom application using any programming language which supports using OCX controls or calling DLL functions. With only five function calls, the developer can prepare and send the fax using any of the supported hardware. The developer doesn't need to know how to program the fax hardware (modems or fax boards) since this is all handled internally by Fax C++/ActiveX.

The Fax C++/ActiveX product supports a wide range of hardware starting with the low cost fax modems

(CLASS1, CLASS2, CLASS2.0 compatible) up to the intelligent fax boards like Brooktrout, Dialogic, NMS, Gammalink. Applications written with Fax C++/ActiveX will work with any of the above hardware. Fax C++/ActiveX is internally multithreaded, the developer doesn't have to implement sophisticated multithreaded environment to handle sending multiple faxes in the same time. Simply pass the fax file and Fax C++ will send it using the first available channel.

#### Sending a confirmation email

After the fax was successfully sent or if sending the fax has failed, the fax service should send a confirmation to the user via email.

Using the Email2Fax component of

the Fax C++/ActiveX product the developer can send confirmation emails to the users by using SMTP protocol.

#### **Flexibility**

The technologies developed by Black Ice Software are extremely versatile to meet a variety of needs. Sophisticated applications can be developed using only Black Ice technology, but if needed, other controls/tools can easily be incorporated into the end application to add additional features to the Black Ice tools.

Also, applications developed for one kind of hardware can be easily changed to use more channels or even a different hardware (modem or fax board).

#### Black Ice Printer Drivers for Terminal Server Environment

The Black Ice printer drivers for Windows XP, Windows 2000 and Windows NT can be installed and used on machines running Terminal Services. The printer driver will work as a regular non-terminal server printer driver; remote terminal server clients will not have separate

settings and output folders. Black Ice recommends using this driver for systems where terminal services are running, however the printer driver is not used by remote users.

For terminal server environments, Black Ice recommends the Black Ice Printer Drivers for Terminal Servers, which can be used by remote terminal server users. Using the terminal server version of the Black Ice printer drivers, each remote user can have different settings and different output folders for the image files generated by the printer driver.

#### New image processing product line from Black Ice Software

Black Ice Software has reorganized its image processing product line and added significant enhancements and many new features and capabilities to its imaging products.

Currently, all Black Ice image processing products are centered around the "TIFF SDK/ActiveX control". To truly reflect the original intent to create a TIFF processing SDK, some of the TIFF SDK features have been removed and two new products have been created. These new products are "Document Imaging SDK/

ActiveX control" and "Image SDK/ActiveX control". The old "Image SDK PLUS" product will be discontinued and all its functionality will be ported into the two new "Document Imaging SDK/ActiveX control" and "Image SDK/ActiveX control" products.

More advanced document image processing functions like punch hole removal, de-skew, and clean image that are currently part of the "TIFF SDK/ActiveX control" have been moved to the new "Document Imag-

ing SDK/ActiveX control" product. The reorganization of the Black Ice imaging tools will simplify the process of selecting the correct toolkit for a given project.

Customers who own a copy of the "TIFF SDK/ActiveX control", "Annotation SDK/ActiveX control" or "Image SDK PLUS" products will be able to upgrade to the corresponding product from the new product line. Upgrade details and pricing will be available at a later time.



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## Inside Add user specific annotations to every printed document!

### Time to upgrade?



## 📂 🗢 Latest Version Numbers

Programming Tools			Impact Products		
Product	Version	Date	Product	Version	Date
Fax C++/ActiveX/COM	9.16	05/08/03	Impact Fax Server	4.36	12/18/02
Voice C++/ActiveX/COM	9.16	05/08/03	Impact Voice Mail Server (Standard)	3.14	04/11/01
ColorPrinter Driver for Win95/98/ME	5.54	05/02/03	Impact Voice Mail Server (Deluxe)	3.79	04/11/01
Metafile Printer Driver for Win95/98/ME	5.54	05/02/03	Impact Terminal Fax Server	4.34	05/03/02
Mono Printer Driver for Win95/98/ME	5.54	05/02/03	Impact Fax on Demand	4.06	12/01/00
PDF Printer Driver for Win95/98/ME	5.54	05/02/03	Impact Fax Broadcast	3.03	03/17/03
Mono Printer Driver for NT/Win2000/XP	8.09	07/07/03	Impact ColorFax	5.01	02/21/03
Color Printer Driver for NT/Win2000/XP	8.09	07/07/03	Drag and Drop Printing	2.00	12/24/02
Mono Printer Driver for NT/W2K/XP	8.09	07/07/03	Internet Tools		
Metafile Printer Driver for NT/W2K/XP	8.09	07/07/03	Print2Email	3.01	01/20/03
PDF Printer Driver for NT/W2K/XP	8.09	07/07/03	Tiff Viewer Plug-in - Complete	5.01	06/26/03
Terminal Server Printer Driver for NT4.0/Win2000	8.09	07/07/03	Print Monitoring Server	2.00	02/10/03
Tiff SDK/ActiveX/COM	9.11	07/08/03	Free Software		
Annotation SDK/ActiveX/COM	3.11	07/08/03	ColorFax LITE	5.01	02/21/03
TIFF SDK w/ Cover Page Generator	9.11	07/08/03	Tiff Viewer Plug-in - Free Version	5.00	03/26/03
PDF Plug-in for TIFF SDK	2.11	05/02/03	ModemWeasel	2.00	08/01/02
Image SDK/OCX	5.58	05/04/01			00/01/02