

Black Ice Newsletter

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Black Ice Software, Inc.

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Smaller footprint for the PDF files

A new compression method is now supported by the Black Ice PDF printer driver to create smaller PDF files. The Flate encoding compression method is available in the latest version of the PDF printer driver. The compression method is independent from the color depth used to generate the PDF files. The Flate encoding can be used to generate PDF files using 24 bit, 8 bit or 1 bit.

The Black Ice PDF Plug-in for TIFF SDK is a conven-

ient tool to convert image files such as TIFF, JPEG and BMP images into PDF files. The PDF files generated by Black Ice using the recently added Flate encoding compression method, are fully compatible with the Adobe PDF format and they can be opened with any product which can read PDF files such as the free Acrobat Reader.

When creating PDF files, the Flate encoding compression method can be used for the PDF generation, along with the already

existing (CCITT, Run Length and JPEG) compression methods. The new Flate encoding produces smaller files than the existing CCITT and Run Length compression methods, creating an even better solution for document archiving than the previous versions.

The fully functional demo version of the Black Ice PDF printer driver and the PDF Plug-in for the TIFF SDK can be downloaded from the Black Ice website.

Client side HTML based document imaging with Black Ice products

The latest version of the TIFF SDK ActiveX control and the Annotation SDK ActiveX control are fully web enabled, allowing web developers to build sophisticated web sites which provide visitors with a wide range of document imaging features.

With the latest additions, the TIFF SDK ActiveX control and the Annotation

SDK ActiveX control can be used on both server side ASP and on client side HTML pages. For some applications, like document conversion or when the web site presents its visitors the results of a predefined set of document imaging processing tasks, a server side ASP page provides an easy to implement solution. However in situa-

tions where the user must be involved in the document imaging process, the best way to accomplish this is to use a client side HTML page.

Every time an ActiveX control is placed into an HTML page there are several issues that must be addressed.

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1. **Redistribution** – In order to use an ActiveX control on a client side HTML page the ActiveX control and all the dependent files must be downloaded to the client machine and must be registered. The standard way to redistribute ActiveX controls through the Internet is to package the ActiveX control into a CAB file and publish the CAB file to a web site. When the ActiveX control is added to a client side HTML page then the URL of the CAB file can also be specified and the web browser used to view the HTML page will automatically download and unpack the CAB file and will register the ActiveX control. The TIFF SDK and Annotation SDK contain pre-built, ready to use CAB files that contain all of the necessary files needed by the ActiveX controls.
2. **Security issues** – Because ActiveX controls are running on the client's machine, they have access to a vast majority of system resources. Running ActiveX controls from an unknown origin can cause security problems and malicious ActiveX control can do a huge amount of damage. In order to address this problem, Microsoft introduced a mechanism that allows software vendors to "sign" their ActiveX controls. By signing their ActiveX controls, software vendors certify that the control will not do anything else besides what it was designed for. But Microsoft even goes further and prohibits access to unsigned ActiveX controls with the default security settings set in Internet Settings. TIFF SDK ActiveX control and the Annotation SDK ActiveX control are digitally signed by

Black Ice Software through a certificate issued by Verisign Inc. Both controls can be used on client side HTML pages even when the default security settings have not been changed.

3. **Licensing issues** – Black Ice ActiveX controls include design time license files. These license files are needed only to develop new applications with the ActiveX controls and they are not needed to run existing applications. In order to use a licensed ActiveX control on HTML pages, Microsoft requires that a different license file (named LPK file) to be published on the same web site where the HTML page is published. If the LPK file cannot be located the client will not be able to use the ActiveX control. The latest version of the TIFF SDK and Annotation SDK include LPK files that are needed to use the controls on HTML pages.
4. **Server side document access** – In order to do client side document imaging, the ActiveX control on the client side HTML page has to have access to documents published on web sites and must be able to download the documents locally to make image processing possible. The TIFF SDK ActiveX control has a new property that can be set to an URL that points to a TIFF or JPEG file published on any web site. When the property is set to a valid URL, the TIFF SDK ActiveX control will download the specified image file and will process it locally on the client's machine. As soon as the image file has been downloaded image processing can start and the user

will have access to every functionality of the ActiveX control on the HTML page.

The fact that the TIFF SDK ActiveX control is now fully web enabled opening a window of opportunity to create HTML pages that offer features that have never been seen before.

By using the TIFF SDK ActiveX control's sophisticated image display routine, TIFF and JPEG images can now be displayed in a web browser with different scaling modes like Fit to width, Fit to window, Scale to DPI, etc. The user is not limited anymore to a static view of the image: scroll bars can be displayed and the image can be scrolled so only the required portion of the image is displayed. Zooming is also possible. The user can zoom in or zoom out with a single click and can also select an area of the image that will be displayed. To change the area that is currently displayed, one can pan the image by dragging the image with the mouse. If an area of the image should be zoomed in even more, then the magnifying glass can be used.

In addition to displaying images in a web browser, Black Ice ActiveX controls offer other document imaging features also. From simple image rotation, flipping, and inverting to more sophisticated features like scaling, dithering, anti-aliasing, skew angle detection, clean image or punch hole removal, all of the features of the ActiveX control are available and can be used on client side HTML pages.

Because image files published on web sites can be accessed remotely, web based fax clients and other web based document retrieval and document distribution applications can be

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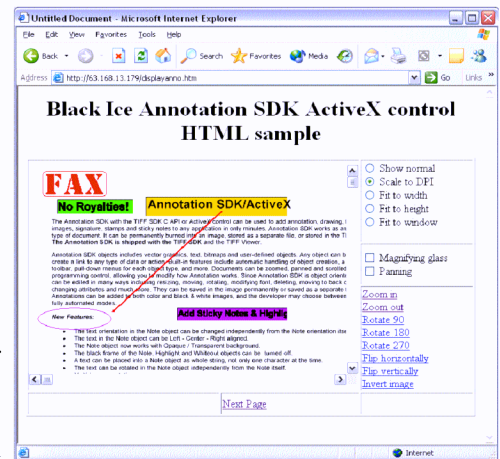
created. A user can log on to a web site and can check for new faxes or other messages. If there are new messages available, the user can check them and can save them locally. With the usage of the Annotation SDK ActiveX control the user can add annotations, highlights, notes to an existing document and can save the modified document locally.

To send a new fax the user can create the fax locally and can upload it to a web site where the fax transmission will be made.

The possibilities using web based document imaging are endless and Black Ice Software's TIFF SDK and Annotation SDK ActiveX controls provide a powerful tool for web developers. The applications created with these ActiveX controls can provide real answers for several of today's document retrieval/distribution related problems. To view a live demonstration of the capabilities of the TIFF SDK ActiveX control please visit the following web pages:

<http://www.blackice.com/tiffocx/DisplayTIFF.htm>

<http://www.blackice.com/tiffocx/DisplayJPEG.htm>



<http://www.blackice.com/annoocx/DisplayAnno.htm>

Printer drivers with PNG and Hardware Specific TIFF Format

The Black Ice printer drivers are the best tools on the market to convert your every day documents into images. Using the Color printer driver you can convert any printable document into color, grayscale or black and white images. Simply print your documents such as Word, Excel, PDF, Notepad text etc. to the Black Ice printer driver. The Black Ice printer driver will generate image files based on the target documents.

The images can be saved in several formats. The PNG, Dialogic TIFF, Gammlink TIFF and NMS TIFF file formats have been added to the list of the currently supported file formats (JPEG, BMP, TIFF Group 3 1D, TIFF Group 3 2D, TIFF Group 4, PCX, DCX and more).

Each fax hardware specific TIFF file format is a TIFF file produced to comply with the requirements of the

given fax board. For example the Dialogic fax boards require the page numbering TAG to be set in the TIFF file in order to fax the multi-page TIFF file. By selecting the Dialogic TIFF file format, the printer driver will automatically add all of the necessary TAGs to the output image, so the output TIFF file can be faxed without any further modifications.

New printer driver features!

Add, remove and edit paper size

The Black Ice printer driver currently supports up to 45 standard and 36 advanced paper sizes. For special cases, if the user needs a special paper size which is not present among the paper sizes defined in the printer driver, users can use the Custom Paper size option. Using the Custom Paper size option they can specify the paper size (width and height) that they need.

The new Add paper size feature makes handling several custom paper sizes easier by allowing the addi-

tion of the specified custom paper size to the list of the existing paper sizes listed by the printer driver. Once a new custom paper size is added to the list of available papers, it will appear in the list of supported paper sizes and the user doesn't have to enter the width and length of the paper again after they have used another paper size. They can simply select the custom paper from the list of the available paper sizes and they are ready to print.

Users can also remove unneeded paper sizes as well as rename or redefine the size of existing paper sizes.

Increased resolution – 3000 DPI!

The latest version of the Black Ice printer driver is capable of creating images using up to 3000 DPI. The already existing standard resolutions in the printer driver are still available, but the Custom DPI now can be set up to 3000 DPI. Images created using this high resolution can be extremely large so make sure that you have sufficient system resources available in the system to handle the generation of these images.

