

Overview

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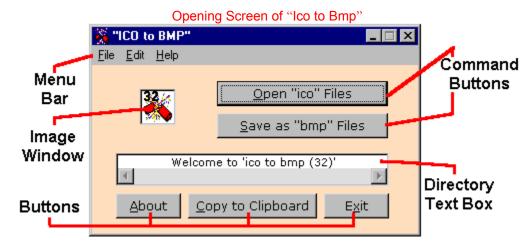
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ICO to BMP is a simple program which written by the author to solve a very simple problem:

"I needed a simple way to copy and view some program Icon's from Windows for use with documentation for teaching and to edit for use in Web Site design."

Using Visual Basic 3.0 in a very short time I was able to write the original program. The program is slowly advancing as time goes by. The program has still stayed small and does its job in a very direct manner. It does one job, creating bitmap files which maybe edited.



The user can open the following File Types:

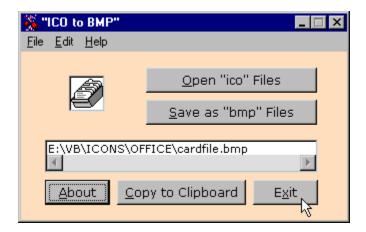
- 1. *.ico files which are program icon images.
- 2. *.cur files which are program cursor images.
- 3. *.bmp files which are bitmap images.

Once the file is open it can then be saved as a BMP file which maybe edited with most graphics editing programs, and converted to other usable graphics formats for any variety of projects. See Program Uses for ideas.

This version of the program allows the user to <u>copy</u> the bmp image to the Windows Clipboard for pasting into another program. The program does not extract icons from DLL files at this point in time and it was not written with the intent of converting bmp files to icons. There are many other programs which do both of these things, but few opened ico files directly. See <u>Other Programs</u> for some of these programs.

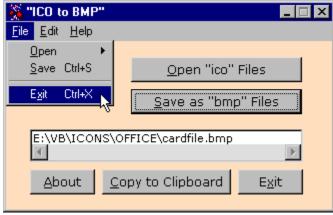
The program runs using few resources so it is possible to keep it open while working in other programs. There are two options for closing "Ico to Bmp" when you have completed your work. First is using the "**Exit**" button on the main screen:

Exiting "Ico to Bmp"



Second is like any standard program, from the menu bar. The menu bar and all buttons are accessible from the keyboard by using the underscored letters. See <u>Keyboard Shortcuts</u>

Exiting "Ico to Bmp"





There are many uses which "ICO to BMP" can be used, the limits are up to the user. I can offer you three specific examples.

Action Buttons

Documentation

Web Pages

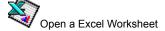
"ICO to BMP" is very useful for software developers as well. A quick tip: it is a good idea to keep graphic file type consistent within a project. Try not to have more than two files types. The advantage of the "BMP" format is that even the most basic system is able to view them. (See <u>File Types</u> for more information.)

It is important to note that the examples provided were actually converted with "ICO to BMP".



There are many times when creating a document it would be nice to add small images which function as buttons, such as a in word processing document, spreadsheet, or database. This allows the author of the document to create a macro which opens a note, or a help item, or a sound, or any attachable item and allows the user to run the preprogrammed macro, or link to another program. The reader of the document can then click the image and access the macro created by the author. Below are examples of icons which might be used as buttons.





View a Multi-media file



Another example is writing documentation for other people on how to use a program, or computer. With being able to convert an icon to a bitmap the author of the documentation can include the actual image they are discussing in their documentation. This will allow the reader to see exactly what the author is talking about. Below are some examples of what a user might see in documentation:

"Click this button to save the file you are working to your disk."

"When you see this symbol in a message box please read the note carefully."

"Click this button will launch the graph wizard."

"This symbol will appear when you drop the selected files to you address book."



Authors of web pages on the Internet or an intranet can grab a copy of commonly used icons as images or graphics links on their pages. Through <u>another program</u> it is possible to convert it to a "GIF" or "JPEG" file for use in web pages. The small file and color nature of icons make them wonderful web page buttons, because they load quickly and are already apart of the users world. Below are some icons which were developed from Icons for use on web pages:



Mail-to



view photo



download a file



previous page



There are many graphics file types. While this is not an extensive list, it does discuss the graphic file types used by "ICO to BMP", and some other graphic file types which might be useful. Graphics files are really formats of images which the computer may access and display. Each image type stores it's information differently, so therefore to view them or edit them require programs which are written access the information.

Vector based and non-vector based graphic files are the most common types of graphic types. Vector type images are based on working with screen coordinates, and do provide the most complex types of images, for example CADD programs use vector based images. Vector based images tend to be very processor (CPU) intensive. "ICO to BMP" is meant to work with non-vector based graphics, and specifically bitmap images. Bitmaps are simpler way of addressing an image. Bitmap images correspond to screen pixels. A simple way to think of them is simply telling the computer to display a blue dot on the computer screen at a specific point. It is not processor (CPU) intensive. It the best way to store images for quick display. When working with bitmaps the creator of the image basically paints the image to the computer screen dot by dot. There are three basic types of bitmap images which this program concentrates on.

1. Icons (ico) are the small images which can be used as buttons in a GUI interface. In Windows there are several basic rules which are followed in creating icons, and is why they are not directly editable by most programs. First with Windows most icons come in two sizes, as small icon is usually 16 pixels by 16 pixels. A large icon is 32 pixels by 32 pixels. Originally icons were limited to 16 colors in Windows, but now can have as many as 256 colors, however you will find that most still stay in the 16 color palette because they tend to be faster and all systems can access them with ease. The larger the size the easier it is to edit, and the more detail can be provided. Icons also have a property which is encoded into the actual image which is called transparency. This allows the icon to appear at any point with any background and only the foreground is left visible. It is to the way web images work in "gif" format. Also like animated "gifs" icons can be animated, but it is not a common practice. Icons are often found as apart of other program elements on your computer, rather than as individual files. Often icons are stored as apart of an "exe" or "dll" files and need to extracted to access them. (See Other Programs for extraction programs.) Here are some examples of common system icons:



2. Cursor (cur) images are very much like an icon images. In fact there is very little difference except the file extension "cur". The difference comes when programming a cursor. The program must be told which pixels are the "hot spot" so when the cursor touches an image it will react. Cursors are those images which a mouse displays on the screen as it's pointer. The arrow is a cursor. Here are some examples of common cursors:



T text pointer

3. Bitmaps (bmp) are the most common type of windows image. They do not require the detailed information about transparency and "hot spots" that icons and cursors require. The great advantage is that they maybe copied into almost any type of windows application. The file extension "bmp" is the clue. They are easily edited and are a common denominator for graphics in windows. Bitmaps can be as small as one pixel (although I don't know why you would want one that small) to a full screen or more. Almost any image can be converted to a bitmap, including photos. As you increase their size by "zooming in" the individual pixels become quite visible. Below is an example of a bitmap in 1:1 scale, and then the same image zoomed in to 8:1 scale:





Other file types which may be of interest and use are "GIF", and "JPEG". For people who work often with the Internet and World Wide Web (WWW) you see these image types almost every time a graphic is viewed on a web site. "ICO to BMP" can open these files too and they can be saved as "bmp" images. "GIF" and "JPEG" images are encoded in such a way to keep file size small, and details high. Using different compression schemes these two files can be compressed to reduce file size, of course this can impact on final quality. Both "GIF" and "JPEG" images are a form of bitmaps, and are based on how the pixels are painted to the computer screen. If you zoom in on them the begin to get the squared dots and edges.

8:1

"GIF" files tend to be based on 256 color pallet and like icons have encoded information in the file format. Information about transparency, multiple images for animation, even the authors name and date it was created.

"JPEG" files can be 256 colors, but are often what is called true color, or 16 million possible colors in the pallet which is overkill for an icon, but it is possible to have an icon which is 256 colors and even a photograph.

Important note: about opening these files, this applies to "bmp" files as well, the image window in "ICO to BMP" is scaled for working with 32 x 32 pixel size images, while it will try to expand to open a large image it is best to be sure you are opening a small file, something less the 75 x 75 pixels. If the image is larger it will start to cover up the program controls.

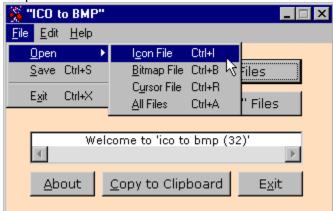


"ICO to BMP" offers the user two ways to open an icon file, either directly from the program interface or form the menu bar. Keyboard Shortcuts are provided for all commands, as with any Windows application hold the "Alt" key down and pressed the underscored key.

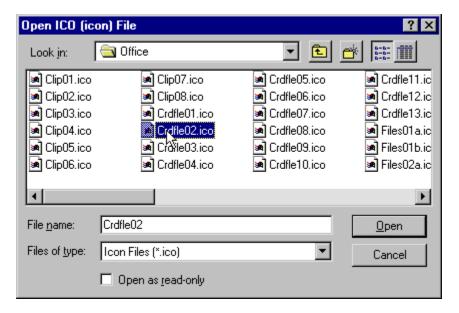
The easiest way to open an "ico" file is use the button "Open Ico File", as shown below. Just give it a single click with the mouse.



The other option is to use the menu to open an "ico" file, as shown below. The menu bar provides specific open dialogs for different file types. The file types include icon, cursor, bitmap, and all files. If you select "All Files" this will allow you to open other graphic formats, such as "GIF" files. (See File Types for more information.) Click "File", then "Open", and then click on the file type desired to open.



Once the option of choice has been selected the dialog shown below will appear. This dialog works as any Windows dialog. Click on the file to be selected and it will appear in the "File Name" box, then click "Open" button and it will return to the main screen of "ICO to BMP". Or double click on the file to open and it will open in the main screen of "ICO to BMP" at once.



Once the program is open the image of the file selected will be visible in the image window located in the upper left corner, and the file name and directory information in the text box located in the middle of main "ICO to BMP" screen.

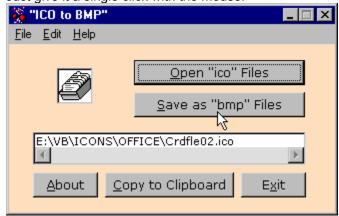
Important note about opening "bmp" files, the image window in "ICO to BMP" is scaled for working with 32 x 32 pixel size images, while it will try to expand to open a large image it is best to be sure you are opening a small file, something less the 75 x 75 pixels. If the image is larger it will start to cover up the program controls.



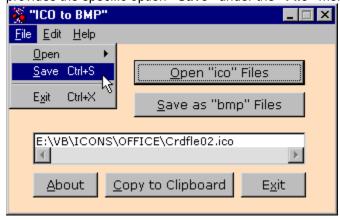
Now that the icon is opened and visible the next task is to save it as a bitmap (bmp) file so it may edited or pasted into another application. Please note that the text box in the middle of the main "ICO to BMP" screen displays the directory and file name. Once the file is saved as a bitmap it will be updated with the current information about where it was saved and what it was named it and will include the "bmp" file extension.

"ICO to BMP" offers the user two ways to save a bitmap file, either directly from the program interface or form the menu bar. Keyboard Shortcuts are provided for all commands, as with any Windows application hold the "Alt" key down and pressed the underscored key.

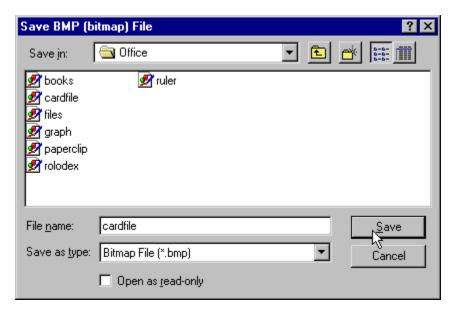
The easiest way to save a "bmp" file is use the button "Save as Bmp File", as shown below. Just give it a single click with the mouse.



The other option is to use the menu to save a "bmp" file, as shown below. The menu bar provides the specific option "Save" under the "File" menu. Click "File", then "Save".



After selecting the save option the dialog shown below will appear. This dialog is used as any Windows dialog. Click on the file to be selected and it will appear in the "File Name" box, then click the "Save" button and it will return to the main screen of "ICO to BMP". Or double click on the file to be saved and it will open in the main screen of "ICO to BMP" at once.



Now that the icon or cursor file is saved as a bitmap file there are several thing which may now be done:

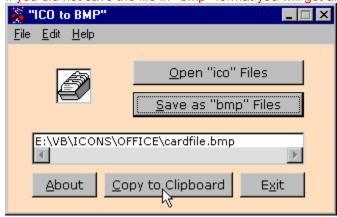
- 1. "Exit" the "ICO to BMP" Program.
- 2. Continue to "Open" and "Save" files.
- **3. "Copy"** the file to the clipboard to paste into other applications.



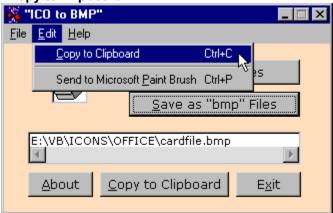
Once the Icon has been saved as a bitmap file it is possible to copy the most recently saved "bmp" image to the Windows clipboard. Once the image is on the clipboard it can be pasted into any other open application. The advantages are that "ICO to BMP" has a very small resource overhead, so even on systems with limited memory the program can run concurrently with most other programs.

"ICO to BMP" offers the user two ways to copy a bitmap file to the clipboard, either directly from the program interface or form the menu bar. <u>Keyboard Shortcuts</u> are provided for all commands, as with any Windows application hold the "Alt" key down and pressed the underscored key.

The easiest way to copy a "bmp" file to the clipboard is use the button "**Copy to Clipboard**", as shown below. Just give it a single click with the mouse and 2 simple messages will keep informed of progress. If you did not save the file in "bmp" format you will get an error message and a chance to fix the problem.



The other option is to use the menu to copy a "bmp" file to the clipboard, as shown below. The menu bar provides the specific option "Copy to Clipboard" under the "Edit" menu. Click "Edit", then "Copy to Clipboard".

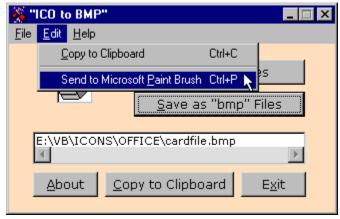


Now that the "bmp" (bitmap) file is copied to the clipboard it is accessible to any program with supports the "bmp" file extention and cut and paste features. It is recommended that the "ICO to BMP" and the Application being pasted to be open at the same time.



There are an infinite number programs on the market, in all categories; freeware, shareware, and commercial, which can edit Windows "bmp" files. For more information on some suggested programs see: Other Programs. However Windows in all it's flavors comes with a plain but useful "paint" program of it's own, which allows editing and saving of bitmap files. Once an icon is grabbed and converted to a "bmp" it can be opened and edited. Written into "ICO to BMP" is a routine to save the "bmp" image to the clipboard and start the Windows paint program (in Windows 95 called Paint Brush). Below are the visual directions.

First save the icon or cursor image to a "bmp" file as shown in <u>Saving a Bitmap</u>. The next step is to select "**Edit**" from the menu bar and then select "**Send to Microsoft Paint Brush**".



The following dialog will display once "Send to Microsoft Paint Brush" is clicked. Click the "OK" button to continue.

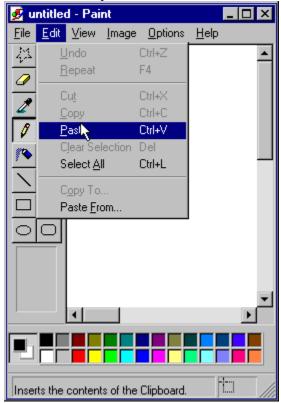


The next dialog will display with a reminder of what next actions are required by the user. (If the image has not been saved as a "bmp" file an error dialog will appear and send the user back to the main screen of "ICO to BMP".) Click the "OK" button to continue.

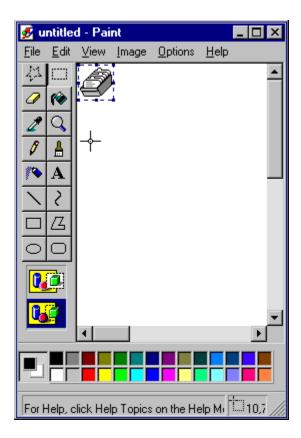


Once the "**OK**" button is activated on the previous dialog Microsoft Paint Brush will load as shown below. (It is assumed Paint Brush is installed on your system and is located in the directory C:\

Windows. If you receive an error this is the first thing to check.) Now that Microsoft Paint Brush is opened select "**Edit**" from it's menu bar. The word "**Paste**" should be dark, which means the image is loaded and ready. Select "**Paste**" and the image will appear and be ready to edit, as shown below.



Now that the image is opened it a good idea to select the magnifying glass to the left and zoom the image. The larger the image the easier it is to edit. From this point on the bitmap image maybe altered in any way the user desires. When finished save the image again, either with a new name, or copy over the original "bmp" you saved with "ICO to BMP".



The process is the same for most any graphics application by using the plain Copy Image function of "ICO to BMP". It is usually best to have both the graphics application open and "ICO to BMP" open at the same time.

Key Board Shortcuts

Below are list the keyboard shortcuts associated with "ICO to BMP". Once you get use to them it helps make using the program much faster.

FUNCTION Open an Icon File Open a Cursor File Open Bitmap File Open All Files		Ctrl Ctrl - I Ctrl - R Ctrl - B Ctrl - A
Save File	Alt - S	Ctrl - S
Copy File	Alt - C	Ctrl - C
Send to Paint Brush	Alt - P	Ctrl - P
What's This (Help) F1		Ctrl - W
Register About	Alt - R Alt - A	
Exit Cancel Esc	Alt - X	Ctrl - X



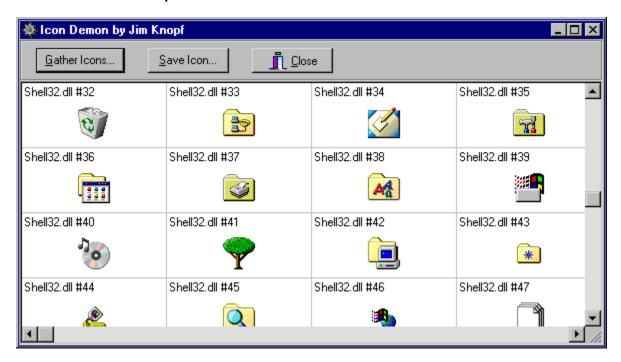
There are several programs which are freeware and shareware which are small and compact which work very well in conjunction with "ICO to BMP". Most of these program are easily accessible from the Internet. "ICO to BMP" also works very well even with commercial programs of all types. Here are three specific freeware/shareware programs which I recommend and have used along side "ICO to BMP" without an ounce of problem. I gain nothing by recommending these three programs other than the fact that I believe they will give you a graphics suite which can't be beat for working with small images.

Tip for using Web Addresses: Use your mouse to highlight and select the URL you desire, right click and select "copy". Open your browser and paste it into the URL Address box, and then you by go directly to the web site without having to type it in by hand.

The first two are very simple and straight forward freeware programs for extracting icons from "exe" and "dll" files. After extracting the icons you are able to save them as "ico" files, and then use "ICO to BMP" to convert them to "bmp" files so the image maybe worked with. Both programs are very compact and work very well. I recommend either one.

ICON DEMON by Jim Knopf

Web Sites: http://www.ghostlight.com/software/ http://www.pcwin.com/ http://www.windows95.com/



ICON EXTRACTOR by Gregory Braun Software by Design Web Site: http://www.ghostlight.com/software/ http://www.execpc.com/~sbd

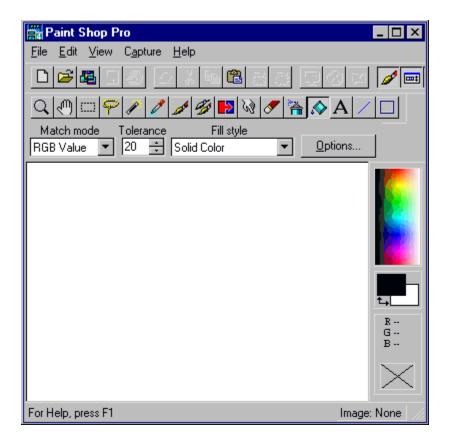


This program is a very solid shareware program, which has become a standard for many people. It allows the user edit many types of graphics files, including "bmp", "gif", "jpeg", "tiff", and on and on, but is does not open "ico" or "cur" files. The wonderful thing is you may open a file in one format, edit it and then save it as another format. I have used it often to convert a "bmp" to "gif" for web pages. Another nice feature is called "Screen Capture", all the screen shots of the programs you see in this help file were created using this feature. There are also several effects filters which may be used. The price is practical, and there are several books written about the program and how to make the best use of it. It is an excellent choice if you do not have a commercial graphics program, even if you do it is well worth having.

PAINT SHOP PRO by JASC Software

Web Sites: http://www.ghostlight.com/software/

http://www.jasc.com/ http://www.pcwin.com/ http://www.windows95.com/

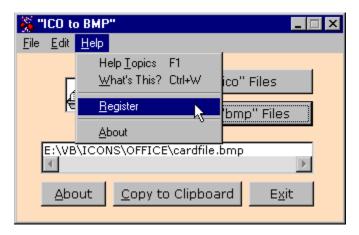


If you combine "ICO to BMP" with either of the extraction programs, and with Paint Shop Pro you have a graphics suite for working with icons and small images which can't be beat. It is possible to have all three programs open at the same time along with any major program you are working with, for example a web page or word processing document. This is true even for very limited systems working with at little as 8 megs of ram.



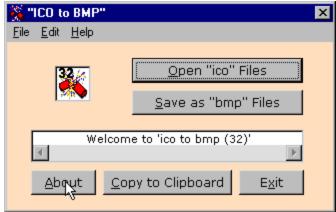
Perhaps you may be asking: "Why do I want to register this program?" Registration of "ICO to BMP" will provide you with a diskette copy of the program, with extras included, additional icons, and notification of free updates for a year. Most importantly you will be supporting the future development of "ICO to BMP". With your copy of the program you will get complete details about how take advantage of your registration. Your support is appreciated.

The easiest way to register your copy of "ICO to BMP" is directly from the program menu bar. Click on the "**Help**" option then select "**Register**". The program will launch the registration form which will help you get the most important information.



Once you have finished the registration form print it out by clicking the "**Print Registration**" button in the lower right corner. Attach your check or money order made out to **Rufus Productions** and the correct amount. If you are having problems you can use this version of the **Registration Form**.

If you want a quick information about the program, and where to get the on-line version just click the "About" button.



You can also click the "Register" button on the About Screen to access the program registration.



Click "OK" button to close the About Screen.

If you want more information about "ICO to BMP" you may e-mail us at:

rufusproductions@ghostlight.com

Our web site is located at the following URL:

http://www.ghostlight.com/software/



Version 1.0 of "Ico to Bmp" was originally created with Microsoft Visual Basic 3.0 Standard version September 9th 1996. It was a very simple interface which allowed only the opening of "ico" files and then allowed simply saving them as "bmp" files. The program was allowed only short file names and was in 16 bit form.

Version 1.1 of "Ico to Bmp (16)" was rewritten in March 3rd, 1997 with Microsoft Visual Basic 4.0 Professional version. Fixed a problem with proper file extension when saving files. This was the first publicly released version as freeware. The interface included the "About" button and setup program for Windows 3.1 and Windows 95.

Version 1.2 of "Ico to Bmp (32)" was the second publicly released version of the program on March 17th, 1997 as freeware. While the interface stayed the same it now allowed long file names and improved path display to handle better viewing of long paths, it was written in 32 bit form. The interface included the "About" button, and setup program for Windows95 and Windows NT. Web site help was provided to give program help and download options.

Version 1.3 of "Ico to Bmp (32)" was never released publicly. The program was updated on November 30th, 1997. The interface was the same but included a menu bar. It was only produced in the 32 bit form so worked only with Windows95 and Windows NT.

Version 2.0 of "ICO to BMP" was publicly released January 2nd, 1998 as shareware, because of the positive public response to versions 1.1 and 1.2 and the need of support for continued develop the program further. The program is in 32 bit form for Windows95 and Windows NT. Program is still written with Microsoft Visual Basic 4.0 Professional. Changes include new setup/uninstall program, new menu bar, registration form, copy functions, and help file. New web site for downloads and help.

Future Versions and updates are still under consideration. This program was originally written purely for the use of the author and for the same reason it was written it seems to meet the need of many other people too. New functions which are under development are "DLL" file extraction and conversion of "bmp" files to "ico" and "cur" files. While this is possible with MS VB 4.0 Prof. the acquisition of MS VB 5.0 Prof. will increase speed and ease of programming. If you register version 2.0 you will be kept aware of updates and new versions of "ICO to BMP" and supporting it's future development.

Thank-you for your past support. **INTRODUCTION**



"ICO to BMP" Registration

It is recommended that you use the registration form which is part "ICO to BMP", it prints out a very readable form and also does any math for you. However if you are having any problems you can print this form and hand print the information.

Enter the information on the lines below, be complete as possible. Items in **BOLD** are required for proper registration. Suggested Registration fee for this version is \$12.00 U.S. per copy. The fee provides you with a disk copy of this program, additional icons, and free updates for the next calendar year.

FIRST NAME:		MI:
LAST NAME:		
Company Name:		
ADDRESS:		
CITY:	STATE:_	
	POSTAL CODE	:
Country:		
	address enter NONE.	
	Fax Number:	
Comments:		
Number of Copies Check or Money O	Requested: x \$12.00 = rder accepted. Make payable to:	Total \$00 Dollars U.S. RUFUS PRODUCTIONS
Send Registration		
	James A. Packard Rufus Productions	rufusproductions@ghostlight.com
	26 East Shore Road Huntington, NY 11743 USA	http://www.ghostlight.com/software/

Registration Information INTRODUCTION

Open File - Click this button to open the file selection dialog. To open different file type select "File Type" at bottom of dialog box. Shortcuts: "**Alt-O**", "**Ctrl-I**" (Icon), "**Ctrl-B**" (Bitmap), "**Ctrl-R**" (Cursor), "**Ctrl-A**" (All files).

Save File - Click this button to save a file in "bitmap" format. Dialog will open which allows naming of file and directory location for storage. Shortcuts: "**Alt-S**", "**Ctrl-S**".

Copy File - Click this button to copy file to system clipboard for pasting into other applications. Image must be saved as a "bmp" extension file first. Shortcuts: "**Alt-C**", "**Ctrl-C**"

 $\textbf{About Button} \text{ - Click this button for information about the program version and author.} \quad \textbf{Shortcut: :"Alt-A"}$

Exit Button - Click this button to end program. Shortcuts "Alt-X", "Crtl-X"

Image Window - View of current image being, opened, saved, or copied.

Directory Text Box - Displays directory path, file name and file extension of current image in window.