

GIFwatcher 2.1

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GIFwatcher is shareware. If you try it and decide to keep it, please send \$15 to:

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Please let me know what version of GIFwatcher you have, and where and how you got it. GIFwatcher 2.1.1 is a free upgrade to paid users of previous versions.

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I don't think White Knight is a trademark of the Freesoft Company, but I'm trying to cover my bases. (Like someone is really going to sue me if I don't say all of this, anyway!)

Packing List

GIFwatcher DA (Suitcase containing GIFwatcher.)
GIFwatcher 2.1.0 update info (What's new, what's fixed.)
This documentation.

Introduction

GIFwatcher is a Macintosh desk accessory for viewing GIF files. It is especially designed for viewing GIF files during download. Using GIFwatcher, you can see what you're getting before your download has been completed. You not only get something more entertaining than a progress thermometer or a pie chart to watch during downloading, but you get the opportunity to cancel a download if you don't like what you see, saving time, download credit, and connect charges.

New features in GIFwatcher 2.1 include full GIF87a compliance and GIF89a compatibility. This means that GIF87a features such as multiple images and local color tables are now supported. The GIF89a support covers static images (pixel maps and plain text) but ignores interactive features (delays, pauses for user response).

The GIFwatcher decompression routine has been rewritten so that "**Fast Open GIF...**" is much faster when reading typical images. GIFwatcher still sacrifices some speed for safety, so that no matter how mangled a GIF file might be, reading it won't crash your system.

Getting Started

You can install GIFwatcher with the Font/DA Mover, access it with a program like Suitcase, or simply drag it out of its suitcase and open it under System 7. For GIFwatcher to work, your communication software must allow time for background tasks while it receives files. I have tested GIFwatcher with White Knight 11.12, with which it works quite well.

Since GIFwatcher is meant to operate as a background task in its normal mode of operation, it periodically grabs just a little of the file it's reading for display. Even so, it's fast enough to keep up with a 2400 bps file transfer without slowing things down. At 9600-14,400 bps some slowdown may occur, especially when running System 7. (I have, however, done transfers at an effective rate of about 1600 characters per second with GIFwatcher running on a Mac II with System 6 or a Quadra 700 with System 7.) GIFwatcher can be used to display completed GIF files as well. If you don't have color, GIFwatcher can display GIF images in monochrome by dithering. Dithered black and white images are, of course, a far cry from full-color pictures, but if it's all you can get, it's better than nothing!

To use GIFwatcher to automatically monitor GIF downloads, start up GIFwatcher just like any other DA. Choose **Open GIF...** from the GIFwatcher menu. Open the folder or volume where your communication software will be storing downloaded files and then click the **Auto-Open From Here** button. GIFwatcher will check the folder about once every five seconds to see if any files appear with a creation date later than both the time that you clicked **Auto-Open From Here** and the creation date of the most recently auto-opened file. If you select the **All Files** button in the **Open GIF...** Dialog (this should be done by Microphone users or any user having difficulty with auto-open) all types of files will be inspected, otherwise only files with names ending in .GIF or of type 'TEXT', 'GIF ', and 'GIFf' will be examined. After activating auto-open, just follow the ordinary procedure for downloading files with your communication software, making sure that it puts the files where

GIFwatcher is looking.

As a GIF file arrives, its image should start to appear in the GIFwatcher window. The top of the window will show you whether the file is a valid GIF file (GIF87a or GIF89a), and if it is, file information such as the dimensions of the image and number of colors will be displayed. Note that some communications software may buffer several thousand bytes before writing to the output file (White Knight, for example, buffers 4-5K). At slow data rates this could mean a significant delay before the incoming image appears.

If you don't use auto-open, start your file transfer first. Pay attention to what file the incoming data is being stored in. If your software is writing to a file named Untitled for instance, this is the file you will want to open. If you are using White Knight as I am, X-modem transfers that aren't in MacBinary format do go to Untitled, to be renamed after the transfer is complete. A Z-modem transfer, however, starts as Untitled but is soon renamed. You should wait the few seconds that it takes for the renaming before using GIFwatcher to open the file.

Once the file transfer is going and you know where on your disk the file is being placed bring up GIFwatcher and choose **Open GIF...** from the GIFwatcher menu. From the file dialog select the file to which your communication software is writing and open it.

Note: GIFs sent in MacBinary format can be read, but at least in the case of White Knight, changes that are made to the download file just as the file transfer is completed prevent GIFwatcher from loading the entire image. No harm is done, however, and the entire image can be loaded afterward.

Program features

Under the **Edit** menu, **Clear** will close any file currently being read, and erase the GIFwatcher window. **Copy** (or **Cut**) will copy the current image to the clipboard, beeping if there is insufficient memory (not uncommon with big GIFs). Holding the shift key will turn the cursor into a crosshair that you can use to drag-select a portion of the image. (When a selection rectangle is active, only the selection is copied the clipboard. Click once while holding the shift key to deactivate the selection.) **Undo** and **Paste** won't do anything. All other features of GIFwatcher are implemented in the **GIFwatcher** menu.

Open GIF... normally displays all 'TEXT', 'GIF ', and 'GIFf' type files, as well as files with names ending in .GIF. If you choose the **All Files** button, all files of any type will be presented. The **Close GIF** menu item will terminate further display of any image that is being read.

Faster GIF Open... will read only completed GIF files, not files that are in the process of being downloaded, but it will read and decompress them much faster than the **Open GIF...** option.

Save PICT As... saves the displayed image as a PICT file, or if you check **Save as PICT ID=0 resource** the image will be saved in the standard start-up screen format. Just like copying to the clipboard, a sub-section of the image can be selected by shift-clicking and dragging.

Best Color causes your displays palette to be altered to match the GIF files color map as closely as possible. **Available Color** uses whatever colors happen to be around. If you have 32-bit color, the choice of color modes shouldn't make a difference. In 4-bit color mode, **Available Color** may actually look best, because GIF color tables aren't usually prioritized for a 16-color palette, so Best really isn't. For standard 8-bit color, however, **Best Color** generally will, as it says, look best. The reason for using **Available Color** instead is that this mode is less disruptive of your color environment. If you select **Best Color** after an image as been read, or while it is being read using the **Available Color** mode, the colors will change. Going back to **Available Color** from **Best Color** won't have an immediate effect. The colors that are then available are the best colors for the current image, and until something else changes the palette, switching to **Available Color** won't effect the current image.

Dithered 8-bit Color creates images that use only the standard system colors for a 256-color palette, but mixes those colors in a way that closely matches the intended image colors, albeit with a bit of graininess. This setting makes for slower image decompression (possibly slowing down 9600-14,400 bps file transfers), but it avoids palette contention while looking nearly as good as the **Best Color** mode. PICT files made from dithered color images are a good source for desktop background pictures. If the palette has already been altered, use **Reset Standard Colors** for best results. (Color dithering is done using either a pattern dither or the Floyd-Steinberg technique.)

Dithered 4-bit Color will render an image for viewing in a 16-color environment (like a Mac LC with a 13 screen). The colors used for this method are not all in the standard 16-color palette, so use the **4-bit Dither Colors** option for best results.

Dithered B&W serves three purposes. One is for showing images on monochrome systems that can't show them any other way. The second is for saving memory. Desk accessories can't always count on lots of memory being available, so if you get a "Not enough memory" message while trying to display an image in color, try **Dithered B&W** at normal or x2 magnification instead. The third reason: some people just like the effect.

Note: If an image has already be displayed, selecting any of the dither modes will only effect the way the next image read. Similarly, selecting any of the other display modes will not convert a dithered image, but only

change the way the next image is displayed.

Reset Standard Colors sets screen colors back to the standard system palette. If the current color mode is **Best Color**, it will be set to **Available Color**.

4-bit Dither Colors provides the colors needed to best view 4-bit dithered images.

Use Full Display enables full display mode. Full display mode allows an image to use the entire display, hiding the window frame and optionally the menu bar as well. Pressing the space bar in full display mode hides the cursor for a completely unobstructed image view. Clicking the mouse on the image will shrink the window back to its former size and restore the menu bar.

Show Text toggles the file/image information text display on and off.

Alter Image leads to four sub-menu options that scale the image to a specified size, scale the image to the current window size, rotate the image to the left, rotate it to the right, or invert the colors (like a photographic negative). Using **Scale To Window** disables the ability to make a selection rectangle on the image.

Preferences... leads to a dialog with the following choices:

Always pattern dither and **Use Floyd-Steinberg when possible** give you a choice of how dithered images are rendered. Floyd-Steinberg will not be possible with interlaced images, magnified B&W, or when the extra memory required for this technique is unavailable.

Add random noise to dither helps to reduce some of the graphic artifacts produced by dithering. It has no effect of B&W pattern or 4-bit color pattern dithers.

Save window position will cause the GIFwatcher window to open where you last left it, rather than assuming its default position.

Save color and dither settings will cause the GIFwatcher window to open with the same setting as were last used, rather than assuming its default settings.

Auto-show text when opening GIF automatically shows the text display of file information when a GIF is opened.

Check events while processing makes GIFwatcher more polite to other processes running on your Mac instead of having GIFwatcher hog processor time. The event checking can slow down GIFwatcher, however, and the wisdom of having desk accessories check events is questionable from a technical standpoint. I have had no trouble at all with this, but if anything weird happens, you may want to turn event checking off.

Hide menu bar in full-display mode determines whether the menu bar can be seen when the **Use Full Display** feature is used. Unchecking this item may help improve compatibility with some software. (Some users have reported difficulty using **Use Full Display** with America On-Line.)

GIF89a: Retain disposable graphics allows those interactive portions of a GIF89a image that would normally be erased after they are displayed to remain in the static image that is produced.

Expand early interlaced lines: When viewing an incoming interlaced image, this feature will fill in the blank spaces between the scan lines by expanding them to fill the empty space. This way you quickly have a complete, though coarse, image that, rather than having gaps, simply improves in resolution as more data arrives. You may actually have difficulty seeing much of anything happening after the first half of the picture data has arrived because the first part, consisting of every other scan line, when expanded to fill the gaps makes for a good visual approximation of the entire image. Note: this feature may interfere with the use of transparency, a rarely used GIF feature that allows parts of a graphic to be transparent holes to any previous graphic within an image.

Miscellaneous

- Command-period cancels **Open GIF...** or **Faster GIF Open...**
- Holding the option key while clicking on an image allows you to scroll the image. Using the command key the same way yields faster scrolling.
- Holding the option key while clicking on the zoom box does the same thing as selecting **Use Full Display**.

Some parting comments

GIFwatcher now produces fully-compliant GIF87a color images (to the best of my knowledge with the samples I had available). Dithered images are just as compliant with the exception that background color specification is ignored and always treated as black. GIF89a plain text will be rendered properly in non-dithered color images

with the exception that text will not be made invisible (although text background will be when appropriate). In dithered color mode text will be displayed in the closest solid color, and in dithered monochrome mode text and text background will be either solid black or solid white. GIF89a interactive features are not supported, but are gracefully ignored.

Please let me hear your comments and suggestions. I can be reached on the Internet at shetline@bbn.com or on GENie at K.SHETLINE. (Internet is you best bet. I don't check in on GENie on a very regular basis.)

Mother of all Disclaimers

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