GIFwatcher 2.0
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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 it.
GIFwatcher 2.0 is a free upgrade to paid users of version 1.0.

Packing List

GIFwatcher	Usable on all Macs.
GIFwatcher 68020	Faster, but usable only on '020-based or more advanced Macs.
GIFwatcher 2.0.1 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 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 2.0 include the ability for fast decompression and viewing of complete GIF files, the ability to save images as PICT files, magnified monochrome dithering, color dithering, and full display viewing. For images that may have originally been scanned sideways, an image rotation feature is provided.

You can install GIFwatcher with the Font/DA Mover, access it with a program like Suitcase, or simply open it under System 7.0. 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 grabs just a little of the file it's reading periodically 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 slow down may occur. (I have, however, done transfers at an effective rate of about 1600 characters per second with GIFwatcher running.) GIFwatcher can be used to display completed GIF files as well, and with this new 2.0 release of GIFwatcher, there is a new feature for faster viewing of complete GIF files. 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 hold down the option key while choosing **Open GIF...** all types of files will be inspected, otherwise only files of type 'TEXT', 'GIF ', and 'GIFf' will be examined. After this, 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 or not the file is a valid GIF file (GIF87a only), and if it is, file information such as the dimensions of the image and number of colors will be displayed. (Often the number of colors for "image #1" is incorrect, with only the global color count showing the correct amount.)

If you don't use auto-open, start your file transfer first. Pay attention to what file the incoming data in being stored in. If your software is writing into a file named "Untitled" for instance, this is the file you will want to open. If you are using White Knight like 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 going — 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 option key will cause the viewable image to be copied (as per **Save As PICT...**). **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. If you hold down the option key while selecting **Open GIF...**, all files of any type will be presented. The **Close GIF** 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. Choosing the **Viewable** option on the file dialog can have two effects: If **Scale To Window** is in effect (described later) the image saved will be scaled as seen in the GIFwatcher window. Otherwise the image will be cropped to what is in the window. Choosing **Entire unscaled image** means that you get the entire image saved at its original scale.

Best Color causes your display's palette to be altered to match the GIF file's 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, like 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. The colors used for this method are not part of the standard system colors for a 16-color palette, so use the **4-bit Dither Colors** option for best results.

Dithered B&W serves two 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.

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 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 menu bar and window frame. Pressing the space bar in full display mode hides the cursor for a completely unobstructed image view. Clicking the mouse 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 three sub-menu options that scale the image to the current window size, rotate the image to the left, or rotate it to the right.

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.

Miscellaneous

• Command-period cancels **Open GIF...** or **Faster GIF Open...**. (You may have to hold the keys down for a few seconds.)
• 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

I have yet to see a single GIF file that didn't have a global color map, that did use a local color map, or had more that one image — even though all of these things are technically possible under GIF specifications. Consequently, GIFwatcher expects a global color map, doesn't like local color maps, and will only pay attention to the first image in a file. Unless I here many pleas to handle any or all of these features I probably won't do anything about it. (In fact, I still might not do anything about it!)

Please let me hear your comments and suggestions. This is the second release of GIFwatcher, but I have added a lot of new features, so I imagine that there might even be a bug or two to be reported. I can be reached on GEnie at K.SHETLINE or on Internet at shetline@bbn.com.

Mother of all Disclaimers

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