# **Jade 1.2**

Jade is a JPEG viewer based on the Independent JPEG Group's library of JPEG compression and decompression routines. It's main purpose is to fill the gap in Macintosh JPEG viewers which can view full sized JPEG images while maintaining reasonable memory and speed requirements. It was also made to be useful as a helper application in Netscape or any other web browser application that supports helpers.

# **Advantages Over Other JPEG viewers**

Jade's main advantage lies in it's virtual memory scheme which allows memory requirements to be very low. One tradeoff is that it requires much more free disk space. Since RAM is fairly expensive relative to hard disk space this is a pretty good tradeoff. Using disk space, Jade allows you to have a large number (limited by it's parition size) of images open simulataneously with few speed penalties. Other JPEG viewers are usually RAM based, and when RAM runs out, need to re-decompress images which can take a relatively long time; especially when there are 30+ images.

In addition to having more images open at once, Jade can also view JPEG images at their full size; all you really need is the disk space.

Jade is also fast at JPEG decompression. Jade offers various display modes which alow you to tradeoff image quality for speed. The only exception I've found is when color quantization is used (when the monitor can only display 256 colors or less). But when it's not used it really flies; especially on a Powermac.

Jade is also multithreaded. This means that you can decompress more than one image at a time. For example, if you use Jade as a helper for Netscape, when you download image A, you can go back into Netscape and download image B, while image A is being decompressed. If image B is finished being downloaded while image A is still being decompressed, decompression will immediately begin on image B. Being multithreaded means that even when Jade is busy decompressing images, all of its functions are still available to you.

One minor disadvantage of the virtual memory scheme is that if Jade happens to crash or terminate abnormally (e.g., by force quitting it), it will leave its temporary files on the disk. To remove these temporary files, you should restart your computer. Upon restarting, all these temporary files will appear in your trash. All you need to do is empty it.

## Requirements

A 68020 (or higher) or PowerPC Macintosh running system 7.5 or later. Or, a macintosh running system 7.0 (or later) with the Thread Manager extention.

## Legal

Use Jade at your own risk. I the author will not be responsible for any damage implicitly or explicitly caused by Jade. Jade may be freely non-commercially distributed (e.g., non-profit). Commercial distribution requires author's consent.

Jade is FREE. I only ask that you send me bug reports and/or constructive criticism/ideas/features on how to improve Jade.

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#### Reference

### File Menu

Open opens a file of the type 'JPEG', 'GIFf', or 'PICT'. An alternative usage is to drag and drop a file/folder onto the Jade icon from the Finder. Jade will accept any file type through drag and drop and will automatically sift through the entire chain of files/folders for JPEG/GIF files to decompress. It will also automatically set the type of any improperly typed JPEG files to 'JPEG'. Thus, for example, you can drag a folder of your newly downloaded files to Jade and it will scan the folder and decompress only the JPEG and GIF files it finds. Note that whenever you drag and drop more than one file on Jade at a time, Jade groups these files together and decompresses them one at a time. If one of these images in a group happens to get aborted, decompression will be aborted for the whole group. See the Windows menu section for more info on Skip and Abort.

If Jade beeps and refuses to open a document, it means you're running low on memory and it can't open any more documents. With the memory partition set at 500K (the default minimum), you should be able to open around 20 documents. The higher the partition, the more documents you will be able to open. In addition, you can open Jade slideshows through this command.

Close closes the foremost window. If the foremost window is still in the process of

decompressing, the processes is aborted (this sometimes takes a little time) and then the window is closed.

Close All Closes all of Jade's image windows and frees all temporary files and memory that may have been left dangling.

Save a Copy As.../Save Slideshow... This menu item will change depending on what type of window you have in front.

If you have an image window in front, it saves a copy of the file in the specified location. This is probably only useful when Jade is used with Web browsers like Netscape which delete viewed JPEG files once they quit. Note that Jade does not do any recompression.

If you have a slideshow window in front, it saves the current slide show. If you use the Previous Set as a source (for the slideshow), the references to each image file will be saved.

**Save As PICT...** saves a copy of the current image as a PICT file. Be aware that Jade saves the current image as is. Thus if the image you are viewing is reduced to half the size, the image you save will also be reduced to half the size.

**Get Info** Provides technical information on images.

**Delete** Deletes the frontmost image. Use with caution!!!

Page Setup... Standard Macintosh Page Setup Dialog.

**Print...** Standard Mac pring Dialog.

**Preferences** Here you can choose a default viewing mode or allow Jade to pick one based on the image's size (area in pixels). See the view menu area below for more info on the different viewing modes. In addition, you can specify which volume you want Jade to use as your scratch disk. This disk should have at least several megabytes free (e.g., don't use a 3.5" floppy as your scratch disk) and should be as fast as possible for best performance.

Open Drag and Drop in Slide Show will cause drag-and-dropped images to be opened in the slide show. Jade will use your default slide show settings and apply those towards the new slide show. If you want to change these settings, create a new slide show (see the section on the slide show menu), change the desired settings, and then click on the Save Defaults button.

**Use 16 bit Pixmaps** only affects users with the capability of displaying greater than 256 colors. The default for these systems is 32 bit pixmaps. 16 bit pixmaps take up much less space, have a better image refresh time, and are slightly faster to decompress. They also produce lower quality images, causing some color banding to be visible in images with smooth color transitions.

**Open Images in Full Screen** displays all images in a full screen window. See full screen in the Images section for more info.

**Keep Images in Memory.** In order to save RAM, Jade automatically dumps images from RAM to disk when it is done decompressing an image. This option prevents Jade from doing this and thus increases display speed dramatically. Use only if you have lots of real RAM to spare.

**Shrink Images to Screen.** When Jade is finished opening/decompressing an image, this option causes Jade to shrink the image to the size of the screen. If the image is already smaller than the screen size, this option does nothing.

**Faster Previews.** JPEGs are the only types of images that actually open faster in preview mode. Other types of images are normally scaled down to the preview size which adds a small speed penalty. Turning this option on tells Jade not to scale images (other than JPEGs) down. Leave this option off if you like to tile your previews.

**Quit** This closes all the windows and quits. Make sure to always properly quit Jade because it uses temporary files which will otherwise remain on your disk until you reboot, during which time these files will be moved to the trash. Edit Menu

**Copy an Image to the Clipboard.** This usually requires a lot of RAM to be allocated to Jade.

### View Menu

**Preview mode** tries to squish the picture size into a thumbnail view. The image is grayscale on systems with less than 16-bit color (thus quantization will never be performed) and uses the faster decompession schemes (which sacrifice quality).

**Standard mode** tries to squish the picture size into the monitor's dimentions. The image is color (unless the JPEG image is only grayscale), but the faster decompression schemes are still used. Sometimes the image will appear much smaller than the full screen size, even the the actual JPEG size is very large. This is because Jade can currently only decompress images at certain ratios (1/1, 1/2, 1/4, and 1/8). Images that barely can't fit within the screen will thus be reduced one step more, making the image much smaller than the screen.

**Full Mode** is similar to Standard mode, except that it attempts to shrink an image without going so far as to make the image smaller than the current screen. You can use this viewing mode in conjunction with the "Shrink Image to screen" option in the preferences to achieve optimal viewing area and speed.

**Expanded Mode** displays the picture at it's full size. The image is color and the slower but better decompression schemes are used.

**Change All to Preview** All three of these options will convert all open images to their corresponding mode.

Change all to Standard Change all to Full Change all to Expanded

**Tile Previews** Takes all preview images and tiles them across the screen. This is mainly useful when you set the "Open All JPEGs in preview mode" option in the preferences. Tiling only works with preview images: all the other images are usually too big to effectively tile.

**Stagger Images** Takes each image window and offsets it slightly from the other windows so that windows are not hidden behind each other. Stagger will try to always keep image windows entirely on the screen. Thus, if you have a small screen and view large images, this option probably won't do much for you.

**Index** Generates an index of all the currently open images. The bit depth used depends on the use 16bit pixmaps option in the preferences. Currently the only file format supported for saving is PICT.

Filing Menu Filing Window Shows the filing window.

**Label** Sets the Finder label of the file corresponding to the frontmost image. The rest of the items in this menu correspond to filing destinations. These filing destinations can be created/edited from the filing window.

Destinations can consist of either folders or applications.

To file the frontmost image, you can:

- Choose a destination from the filing menu
- Click on the file button in the Filing window. (or double-click on the desti-nation in the window)
- Press the key combination associated with the destination

The frontmost image is automatically closed upon filing. To keep them open, you can hold the option key in the first two situations (using the menu or using the window).

A small warning about filing: If you move a file to a different volume, any aliases pointing to it will become unattached. This is a property of the Macintosh file system.

### Filing Window Menu

This is the menu attached to the Filing Window.

#### New

A dialog box will appear allowing you to choose either a folder or application to file an image to. Upong choosing an image or an application, allowing you to edit additional attributes of the filing item.

#### Edit

Creates a dialog containing the attributes of the selected filing item. From here you can change the target application/folder, edit the filing items keystroke, or edit the filing items name.

To edit a keystroke, click on the Key button. The cursor will change into two arrows pointing downwards. At this point you can either press the desired key combination on the keyboard, or click the mouse if you don't want to assign a keystroke.

#### **Delete**

Deletes the currently selected filing item. Caution: there is no warning prompt!

## Open Folder/App

If the currently selected item is a folder, it will be opened in the Finder. If the item is an application, it will be launched.

### **Load Folder**

Loads the folder of the currently selected filing item into Jade. This is similar to dragging-and-dropping the folder onto Jade.

# **Sort By Name**

### **Sort By Key**

Sorts the filing list according to the desired method. The sorting method also affects the Filing Menu.

## **Images**

Next If you have an image window as the frontmost window, this command will go to the next image window. If, instead, you have a slideshow window as the frontmost window, it will go to the next slideshow window.

### **Prev Opposite of Next.**

**Full Screen** View the frontmost image in a full screen. You can also use the space bar to toggle back and forth between full screen mode. This attribute is not global.

Thus you can have some images viewed in full screen and others viewed in a normal window. In full screen mode, the entire image is scaled down to fit within the screen.

**Hide** Hides the frontmost image window. As a default, all images opened from a slideshow are hidden. Hidden images are still visible in the Images menu as outlined items. You can also shift-click the images close box to achieve the save effect.

**Abort** If the window contains an image that is being decompressed, decompression is aborted and the window is closed. Note that if a group a files was being decompressed, (i.e., you drag-and-drop multiple files on Jade), decompression will completely halt for that group of files.

**Skip** If the window contains an image that is being decompressed, decompession is aborted and the window remains open. If the image is part of a group of images, decompression will continue with the next image. Abort All Aborts all currently running threads. e.g., JPEG decompression and/or slide shows.

**Open Windows In Front.** When files are opened via drag and drop, Jade will normally decompress these images behind all other open windows. Thus, when Jade is done decompressing all the images, the first image to be opened will be in the frontmost window and the last image opened will be in the window behind all other windows.

If the **Open Windows In Front** option is toggled on, the opposite order will occur: the first image to be opened will be furthest back, and the last image opened will be in the front. This is useful when you want to watch each image as it is decompressed (sort of a slide show).

When an image is opened from the File menu, the image is always appears in the frontmost window.

The remaining items in the menu are the names of all the images currently open in Jade. In addition, the size ratio is show to the right of the name. The underlined window is the one currently at the front. Items with an Asterisk (\*) next to them are windows which are in the process of decompressing an image.

### Slide Show Menu

**New Slide Show** Create a new slide show. You'll be presented with a new window where you can choose appropriate slide show settings and then begin the slide show.

**The Source** option allows you to you to choose which images you want displayed in your slide show. You can choose to use the currently loaded images, the images from the previous slide show, or the images from a folder. Jade will recurse through this folder to find all images in its subdirectories.

The Mode option allows you to specify who controls the image flow. Jade can automatically proceed to the next slide after its done decompressing an image, or you can manually control the slide show via the arrow keys. The Order allows you to choose the key by which the images will be sorted. The sort always occurs in ascending order.

**Loop Indefinitely** causes the slide show to infinitely loop until it is stopped with command-. or paused with the Tab key.

**Open Images** One at a Time causes images to be closed before the next image is displayed. This option is useful for system with low memory or disk space.

**Expand All** causes unloaded images to be opened in the fully expanded viewing mode. Images which are too big to fit on the screen will be automatically scaled down. Images which are already open (e.g. if you choose the Open Images source) are not affected. Display File Name displays the file name at the bottom left of the slide show.

**Display Comments** displays JPEG comments at the top of the slide show.

**Fade** Performs fades in between slides.

Save Defaults saves the slide show settings for use in future slide shows.

Begin Starts the slide show

Begin Default Begins a slide show using the defaut slide show settings.

**Open Document** Opens the current slide's image window. If it's not loaded, it will open it.

The rest of the items in the menu correspond to open slide show. An underlined item means that it is the frontmost window. An Asterisk next to an item means the slide show is currently running.

# Slide Show Keys

These keys can be used in a slide show:

left arrow: Previous Slide

right arrow: Next Slide top arrow: First Slide bottom arrow: Last Slide

space: Full Screen toggle

command .: Abort

command /: Skip decompression of current image

o: open original image window.

r: reload slide image. If the image is already loaded, it opens the

image window. Tab or p: Toggle Pause

command-option-delete: Delete the image file. Be very careful. This flat out deletes

the file, no prompt, no warning, no nothing. It's just gone. Very useful for browsing many pictures and deleting unwanted ones.

? or h: The help screen

j: Causes the slide show compression thread to jump to the

currently viewed slide. Useful for when you want to skip the decompression of a some images. If the slide show is paused, it

will automatically unpause the slide show.

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