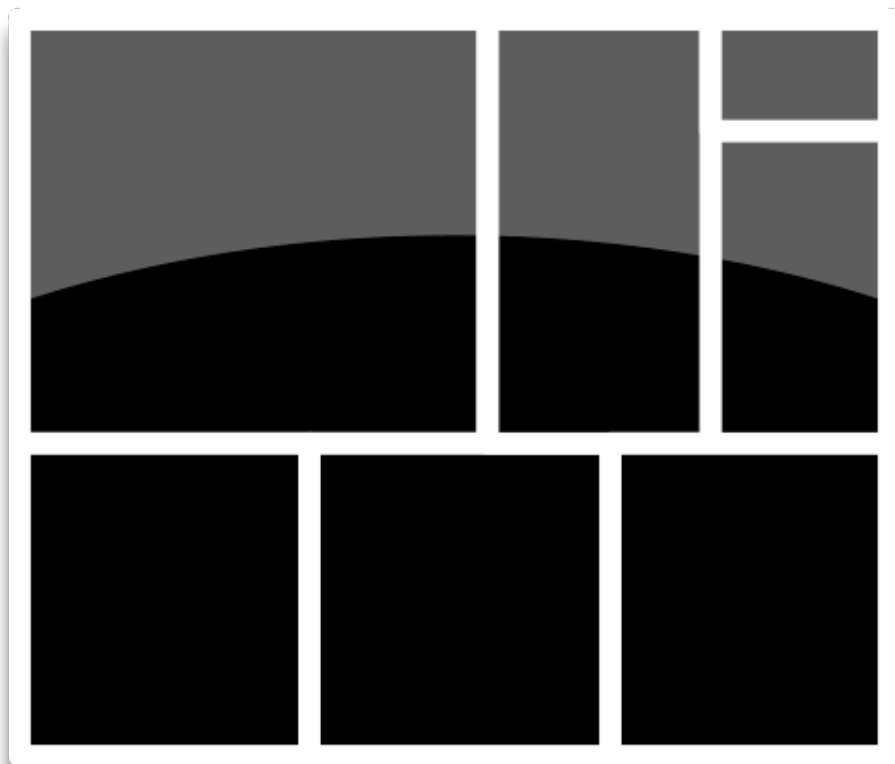




USER MANUAL



cf/x collage v1.4

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WINKELRIEDSTRASSE 1
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SWITZERLAND

Welcome to cf/x collage

We thank you for choosing cf/x collage, and hope that you enjoy working with it. This document will give you an overview of cf/x collage's most important features and how to use them

About cf/x collage

cf/x collage is a highly specialized tool with a specific purpose: it allows you to quickly create, edit, and export high-quality collages. The application provides you with a highly streamlined workflow and gives you intuitive and simple access to powerful layout and image composing features. Many items that take time in traditional layout applications are automated in collage, allowing you to focus on what is important: the images.

Since cf/x collage draws on cf/x alpha's core library, it inherits many of its features: resolution independence, file links and archival copies, comprehensive image import, non-destructive editing, powerful export and printing subsystems. It also allows you to export a layout directly to cf/x alpha (any version) for further editing.

About This Document

This part of the documentation teaches you how to use cf/x collage and best use the tools it provides to quickly create great collages. Although you'll find that you can easily use collage without reading this manual, we strongly recommend you read it if you want to get the most out of your collages.

There is a companion manual, 'cf/x collage quick reference', which allows you to use collage without going through the painful process of actually reading a manual.

Document Conventions

Throughout this document you will find call-outs that define important information. Please look for the following:



An exclamation mark denotes a paragraph that contains important information that you should remember when working with cf/x collage



A paragraph with the ellipsis symbol next to it holds some interesting information that may help you understand how a feature works, or how it interacts with other features.

Installation And Registration

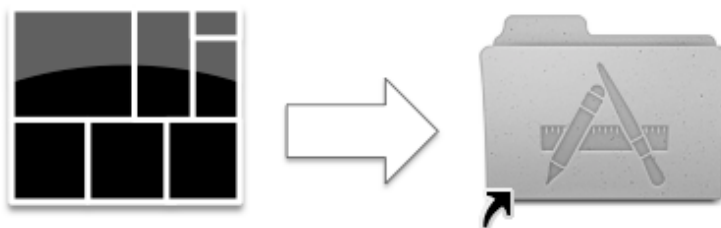
System Requirements

In order to run cf/x collage you need at least the following:

- A Macintosh with 1.25 GHz G4 processor (2.0 GHz G5 recommended) or any Intel-based Macintosh
- 1 GB of memory (4 GB recommended)
- OSX 10.5 or above
- A monitor with at least 1024x768x32 resolution (dual monitor setup recommended)
- Internet connection for automatic update notification and registration

Installing cf/x collage

Simply drag the cf/x collage icon to your 'Applications' folder.



If you purchased Collage from the Apple Store, Collage is already installed, and registered to you. You do not have to go through these steps

Registering cf/x collage



If you purchased Collage from the Apple Store, Collage is already registered to you.

When you install and start up cf/x collage for the first time, it will switch into 'DEMO' mode. In Demo mode the application functions exactly as when licensed - except that any file you export will have a 'DEMO' watermark, and export to cf/x alpha is disabled. Once you purchase a license (i.e. 'registering' it), cf/x collage will switch into production mode, and no longer apply the watermark to subsequent exports. Collage documents (.collage) saved in DEMO mode can be used without any restrictions in production mode.

A license can be purchased on-line within seconds with the 'Purchase License' command from the 'Special' menu. Once you have successfully purchased a license on-line, cf/x collage immediately switches into production mode. Purchasing a license on-line requires that your Mac be connected to the Internet. Licenses can also be purchased off-line from cf/x.

You can also enter a license key manually from the 'Enter License' command. Again, cf/x collage will switch into production mode.

Internet Update Notification

cf/x collage can check to see if a newer version is available for download. This feature can be activated automatically, or manually. In both modes, cf/x collage connects to the Internet, and retrieves current version information from cf/x. No information about you or your Mac is transferred to cf/x during this process.



If you purchased Collage from the Apple Store, the Store will notify of any updates. Due to Apple Store restrictions, Collage's check for update functionality is changed as follows: It will take you to our home page at www.cfxsoftware.com

Introduction

cf/x collage is a tool specifically designed to quickly assemble pictures into great-looking collages. The application provides simple tools that make arranging a collage, composing individual images, and changing whole layouts a snap. When you are done, you can export the result to many different file formats, transfer to cf/x alpha, upload to social web sites, or send them to your printer.

The process of creating a collage is simple, and has been streamlined for fast results. All you do is drop images onto the canvas, and then arrange their layout. Individual images can easily be composed (zoom, pan) directly on the canvas. If you do not like a particular layout, you can either easily re-arrange it yourself or have the application create a new layout for you.

cf/x collage main features

- Extremely easy layout generation
- Auto-layout during image import
- Compose images directly on the canvas (interactive zoom and pan, automatic crop)
- Provides automatic composition guides (Rule of thirds, Fibonacci Spirals)
- Interactive layout control
- Automatic intelligent crop
- Export to many different file formats and upload to social websites
- Save your layouts and turn them into templates in seconds
- Extend any collage by simply adding more images
- Easy to use layout generators with unlimited variety
- Export to cf/x alpha
- Save your collage as self-contained archives

Integration with cf/x alpha

cf/x collage can export your collages directly to our 'cf/x alpha' image composition packages. Collage can export as dynamically linked documents as well as full archive. In order to read a collage exported by cf/x collage you need version 1.02 or higher of cf/x alpha, alpha home, or alpha pro.

Creating A Collage

The Canvas

When you start collage, you will be presented with an empty surface that we call ‘the Canvas’. All images you import will appear here. You can resize the canvas any time you like (e.g. go from a DIN A 5 standard photo paper to a 6x7 inch canvas). When you resize the canvas, any existing layout will automatically be recalculated to fit the new format.

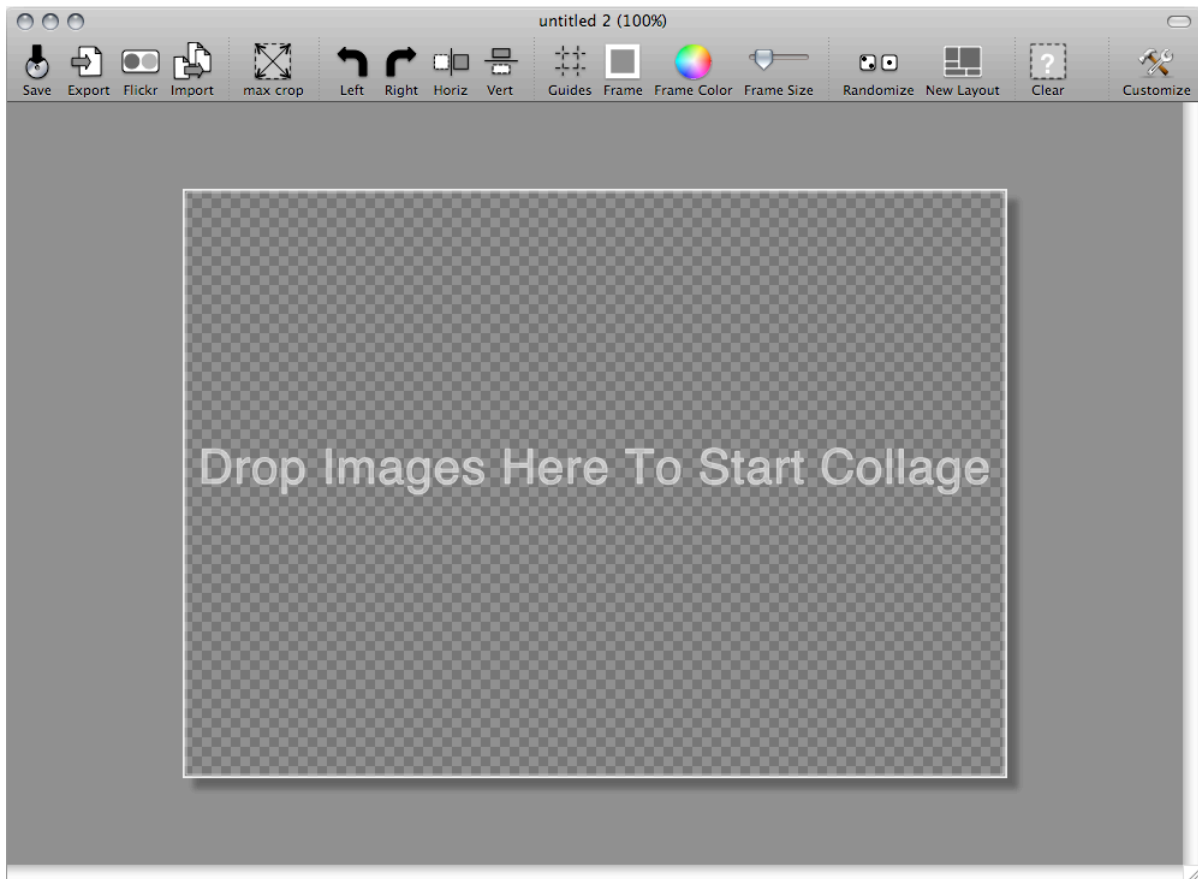


Figure 1 : Empty Canvas

Importing Images

Although cf/x canvas has it's own 'Import' dialog, the easiest way to import images is to simply drag them from another application (iPhoto, Aperture, Lightroom, Finder) onto the canvas. If you drop a folder onto the canvas, all images in that folder will be imported. During import, cf/x collage automatically generates a layout that will accommodate all images in the frame that you dropped them into. You can change the way collage generates the layout in the Preferences (see Preferences).



Figure 2 : Canvas after 5 images where dropped

There is no absolute limit to the number of images you can import (except as dictated by your Mac's memory limits). Practical considerations usually limit you collage to less than 100 pictures, as collages with lots of images tend to look too busy to be interesting.

If you look at the collage depicted above you'll notice a number of things:

- the layout was generated automatically
- the layout covers the whole canvas
- each image is surrounded by a white frame
- there are no overlaps
- all images are auto-cropped to avoid distortion

!

cf/x collage does not support overlapping images, and the sum of all frames will always cover the whole canvas (collage does support empty frames, so you can have 'holes' in your collage). If you want images in your collage to overlap, export your layout to cf/x alpha and fine-tune it there.

Using the Media Browser (importing 'Events', 'Faces' etc.)

Although collage was designed with ease of use in mind, and therefore sports an enhanced drag & drop support, you can also import images the 'old-school' way using OSX's built-in media browser. Using the media browser also gives you access to special

media groups such as 'Events', 'Albums', 'Faces' etc. that you may have defined in iPhoto or Aperture.

To use the Media Browser, simply choose 'Import Images' from the 'Image' menu. Collage will open a dialog. To access all your media, locate the left sidebar (the one that lists all your devices), and scroll down until you reach the 'MEDIA' group (near the bottom). Next to the 'MEDIA' label you'll find a triangle. If the triangle is pointing to the right, click on it to disclose the contents of the media group.

From the media group you have instant access to all your events, photos, faces, albums etc that you have defined in iPhoto.

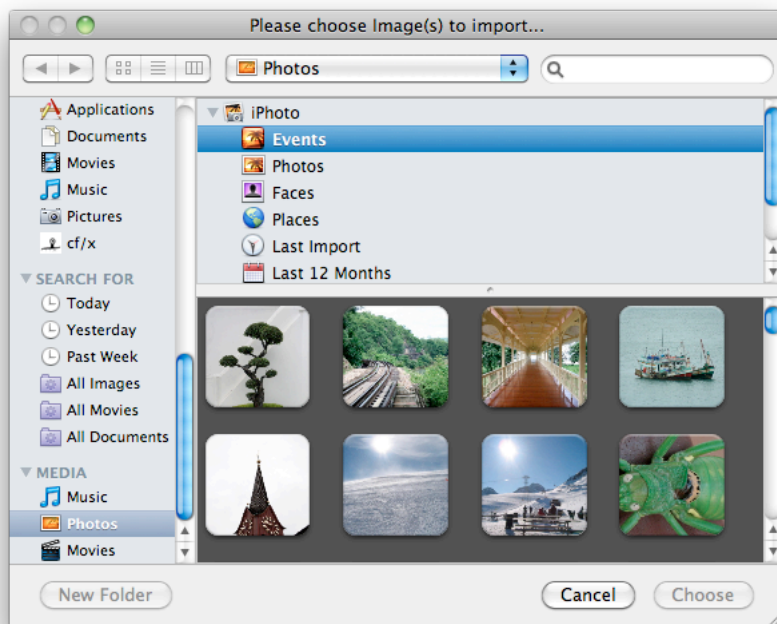
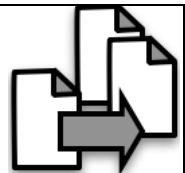


Figure 3 : Using the OSX Media Browser to access iPhoto's Events

Note that collage supports drag and drop from the media browser, so you can either double-click on the items you want to import, hit the 'choose' button, or drag any item you want directly onto the canvas.

... If you find yourself regularly using the import dialog (or media browser), you can customize your toolbar to display a permanent shortcut. Just click on 'Customize', and drag the 'Import' tool (shown right) onto your tool bar



Adding Images to a Collage

Each frame in cf/x collage can receive more images – even if there already is an image in it. All you need to do is drop more images onto a frame. If there is an image already inside the frame, that image will be moved aside, and all dropped images will be arranged inside the newly created free space:

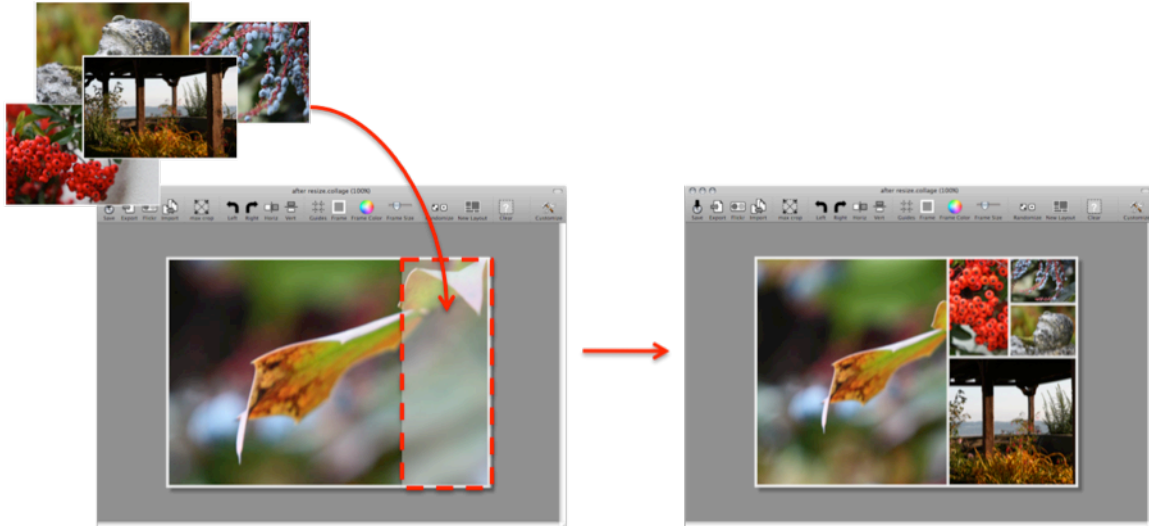


Figure 4 : Dropping images onto an existing image

This mechanism extends to all frames, and allows you to quickly create complex, yet beautiful collages.

The place where you drop the new images determines how the existing image is moved:



Figure 5 : Drop Zones and their behavior

While you hover the drop over a frame, the image inside will visually move aside to give you a preview of how the frame will be split.

As you can see from the drop zone chart above, dropping a bunch of images on the right hand side of an image will cause

- the existing image be pushed into the left half
- all dropped images assembled into the right half
- to delete the current image and replace it with a collage of all dropped images, drop it into the center of the frame

Note that by default, cf/x collage will not split a frame 50/50, but a more visually pleasing ratio (closer to a 1:1.6 golden ratio). This behavior can be changed in the Preferences.



If you drop images on a collage that has empty frames ('Template Frames' – the ones that say 'Drop Images Here To Start Collage'), collage will ask you if you want to fill the empty frames first. If you do, and drop more images than you have empty frames, collage fills the empty frames, and then uses the remainder to subdivide the target frame.

Images can be dropped directly via drag & drop from a great variety of applications, for example iPhoto, Aperture, Finder, etc. You can also use copy/paste (note that Aperture currently does not support copy of images)

Automatic Layout and Crop

Because of the way cf/x collage is streamlining collage assembly, many of the traditional tasks are automated. Since we have automated layout generation for you (even though you still have full control over it), we were able to automate another important aspect: distortion-free cropping.

cf/x collage automatically crops all your images for you. The effect is that you never have to worry about images becoming distorted when you change a frame's size. Advanced crop algorithms will always strive to preserve your current crop as much as possible, and revert to slightly zooming an image if the new frame can't be used without re-cropping the image. The result is that you can radically change the canvas format (e.g. from a 5x7 inch portrait to legal landscape) without having to re-crop a single frame.

Should you feel that cf/x collage has cropped too much of an image, you can tell it to re-crop the image while trying to reveal as much of the image as possible. Use the 'Maximize Crop' (for individual images) or 'Maximize Crop for All' commands to quickly re-set any excessive cropping.

Even though cf/x collage does all cropping for you, you retain full control of both image zoom and pan. Zoom and Pan controls are always interactively available for any image in your collage.

Working with a Collage

Once you have some images you can easily re-arrange them in the following ways:

Add more images

As you have seen above, you can add images at any time. Images are always added to a frame, and that frame will be subdivided, while all other frames remain untouched. You control how the frame is divided by choosing the 'drop zone' inside the frame

Change a frame's border

To change a frame's size, click and drag it's border. Collage will immediately resize all affected frames to ensure that no holes appear on the canvas. Furthermore, an advanced crop algorithm will make sure that all images that have been resized get re-cropped to as best represent the previous crop as possible without distorting the image.

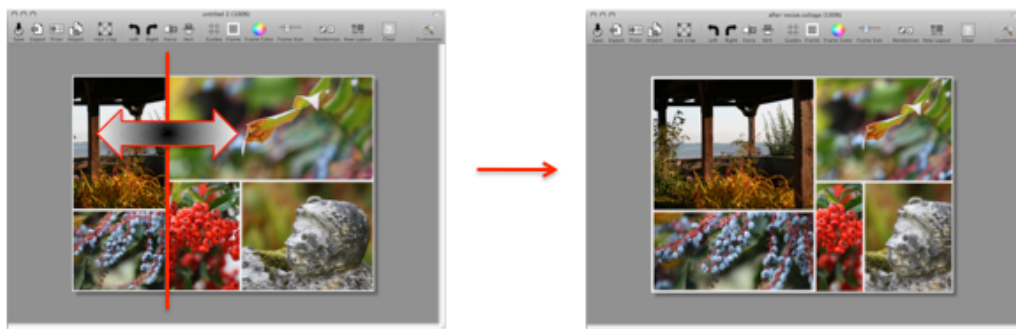


Figure 6 : Dragging a frame's border to change layout

Exchange images

To exchange images already in your collage, simply drag one image over the other one.

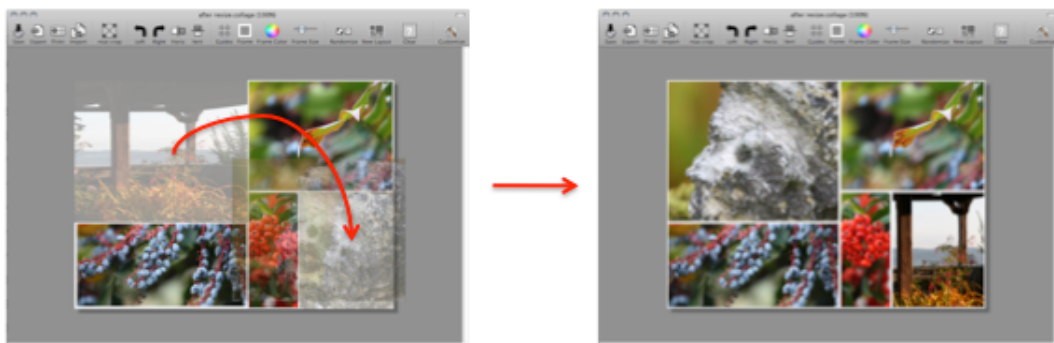


Figure 7 : Dragging an image to exchange it with another one

Remove an Image (with Frame)

There are two distinct ways to remove an image from a collage: deleting it along with its frame, and clearing an image, but retaining its (empty) frame.

To delete an image, click it once. It becomes active (sporting a green frame, and a red 'x' in the upper right corner). Now either click into the 'X', or press 'delete' on your keyboard.

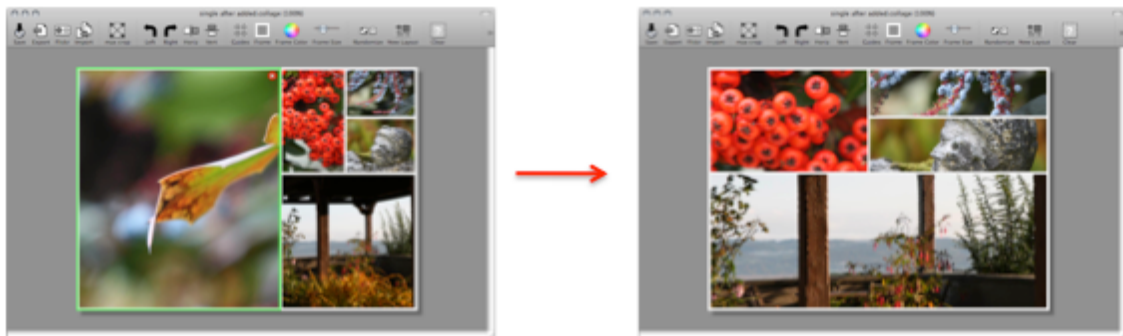


Figure 8 : Deleting an image and frame. Note images have automatically been re-cropped

As soon as you remove the image, its frame will collapse and make room for the remaining images that expand to fill the free space. The images expand proportionally to their previous layout, and are re-cropped accordingly.

Clear Frame (remove image, keep layout) – Create a 'Hole'

The other way to remove an image is to remove it from its frame, but retain the frame. This will leave the current layout as it is, and replace the image with the 'Drop images here...' placeholder (this is what we call a 'Template Frame').

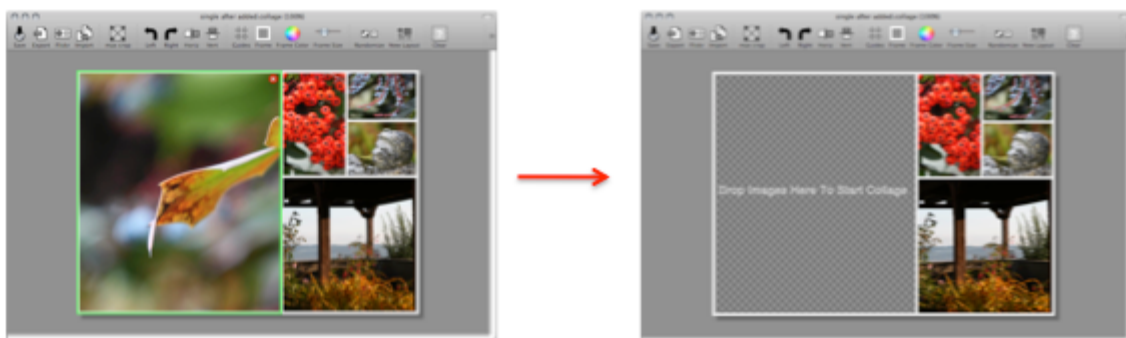


Figure 9 : Deleting (clearing) an image without frame

To clear a frame, simply choose 'Clear Frame' from the Image menu, or click on the 'Clear' Tool. Please see also the 'Creating Your Own Templates' section for more

information on placeholders. A clear frame will display the canvas background color in an export (i.e. look like a 'hole' in the collage). These frames are also useful because if you drop images onto a canvas, cf/x alpha will try to fill empty frames first (only if you allow it, of course).

Zoom and Pan images

cf/x collage gives you full control over how to compose the individual images in your collage. While the crop is defined by the image's frame, you can change zoom factor and pan your image at any time. If an image is moved or resized, collage attempts to preserve or match the current zoom and pan settings as closely as possible.



Figure 10 : Image (left) first zoomed (center), and then panned horizontally (right)

In order to zoom an image, press and hold the 'cmd' key (⌘) and then click into the frame you want to zoom. While holding down the mouse button, move to the right to zoom in, and move left to zoom out. To indicate that you are zooming, the mouse cursor changes into a looking glass symbol (🔍).

To pan an image, hold down the space key, and click and drag in the frame. The image will pan inside the frame to follow your mouse. To indicate that you are panning, the mouse cursor changes into a pan symbol (🖱️).

Interactive Composition Guides

When you zoom or pan an image, cf/x collage will superimpose composition guides onto the frame you are working with. The purpose of these guides is to aid you in better composing images. Remember that these are 'Guides', not absolute rules. Not all images will always look better when composed according to golden ratio¹.

¹ Most do, though.

A peculiarity of human vision is that some arrangements look better than others. Artists have long ago found out that images that observe the 'golden ratio' in their compositions look aesthetically more pleasing than those that do not. The golden ratio (mathematically $(a+b)/a = a/b$ – but we do not need mathematics here) roughly equates to dividing your image at either the 1/3 or 2/3 mark. When you enable the composition guides, cf/x collage draws red lines to help you align your composition.

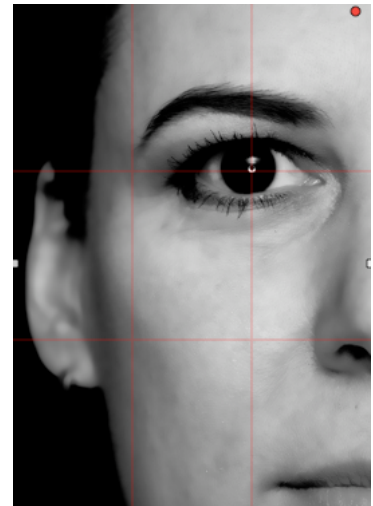
Currently, you can choose between the following composition guides:

- *Rule of Thirds:*

When enabled, this guide puts horizontal and vertical lines at the 1/3 and 2/3 marks. The result is a grid and is very similar to what is displayed in many modern cameras. Rule of Thirds is a good approximation of the Golden Ratio and is very easy to use: simply make sure that your most prominent lines in an image (e.g. a nose ridge in a face, a tree in the foreground, the horizon) lines up with one of the lines.

Dramatic images usually have a prominent horizontal and vertical line that converge at one point. Ideally, the focus of your image coincides with a point where a horizontal and vertical guide line meet. Consequently, the four intersection points of the guides are points that you can to your advantage.

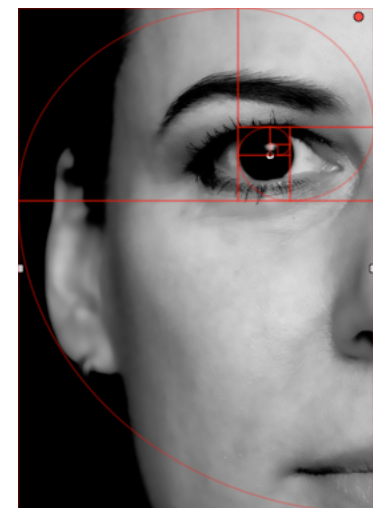
This works even if there are no prominent horizontal/vertical lines in the image, as our example with the close-up shows).



- *Fibonacci-Approximated Golden Ratio Spiral*

Although 'Rule of Thirds' is a good approximation of the golden ratio and delivers good results, professionals prefer a more accurate guide: The Fibonacci-approximated Golden Ratio Spiral (try to say that three times really fast). The advantage of the Spiral is that it is far more accurate, and is calculated for each image individually. The disadvantage is that it is not intuitive to use, and for any given image four such Spirals exist (similar to the four intersections in the Rule of Thirds). It's up to the artist to choose one they need, and then compose the image accordingly.

Our implementation of the Spiral not only correctly calculates the Focal Spot, but also displays the 'Fibonacci'-Lines (1:1.6 Divisions) that subdivide the image while the Spiral closes in on the focal spot. Images that manage to place lines on the Spiral (see the iris



of the model) or prominent lines on the Fibonacci-Lines look far more pleasing than those that do not.

cf/x collage gives you quick access to the Rule-Of-Thirds (press ⌘-3), and all four Fibonacci Spirals (press ⌘-2 to cycle through the guides). You can also disable all guides using the Guides tool in the Toolbar.

Change Frame Properties

A frame surrounds each image in the collage. You can change the frame in number of ways using the toolbar.

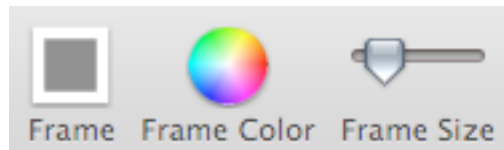


Figure 11 : Frame controls in the toolbar

The 'Frame' button toggles drawing of the frame for the whole collage. Currently, collage does not support individual frames – they are all or nothing.

The Frame Color Tool allows you to choose a color for the frame color (it defaults to white and can be pre-set in the Preferences).

Finally, the Frame Size slider controls the 'thickness' of the frames. Note that the size (thickness) is determined as a percentile of the canvas so it scales correctly when collage renders for different dpi.

Change Canvas Size

At any time you can tell collage that you want to change size of the canvas that lies beneath your collage (collage has many convenient defaults, such as EU and US standards, and many devices).

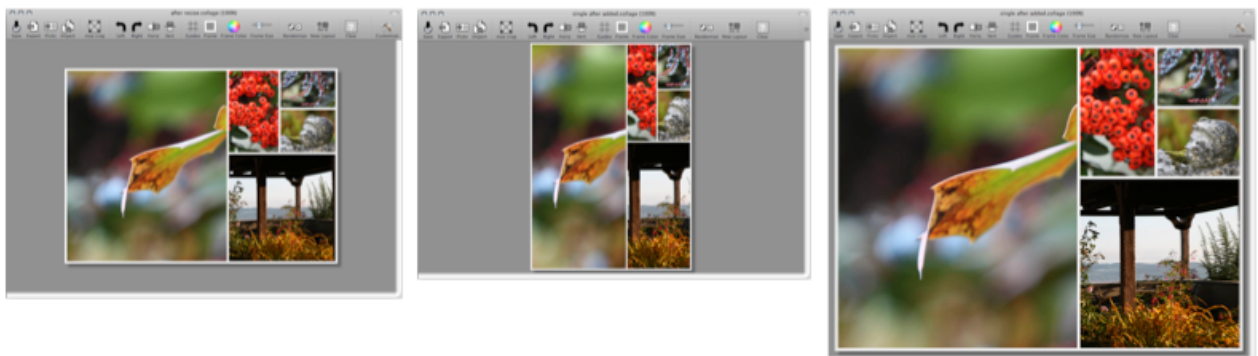


Figure 12 : Original collage 7x5 inches (left), resized to DIN A6 (center), resized for iPad landscape (right). Note the slightly different crops.

As soon as you change the canvas size, collage will recalculate all frames and retain the general layout as much as possible. Also, all images are automatically re-cropped, again with the goal to retain as much as possible of the original zoom/pan while not distorting the image.

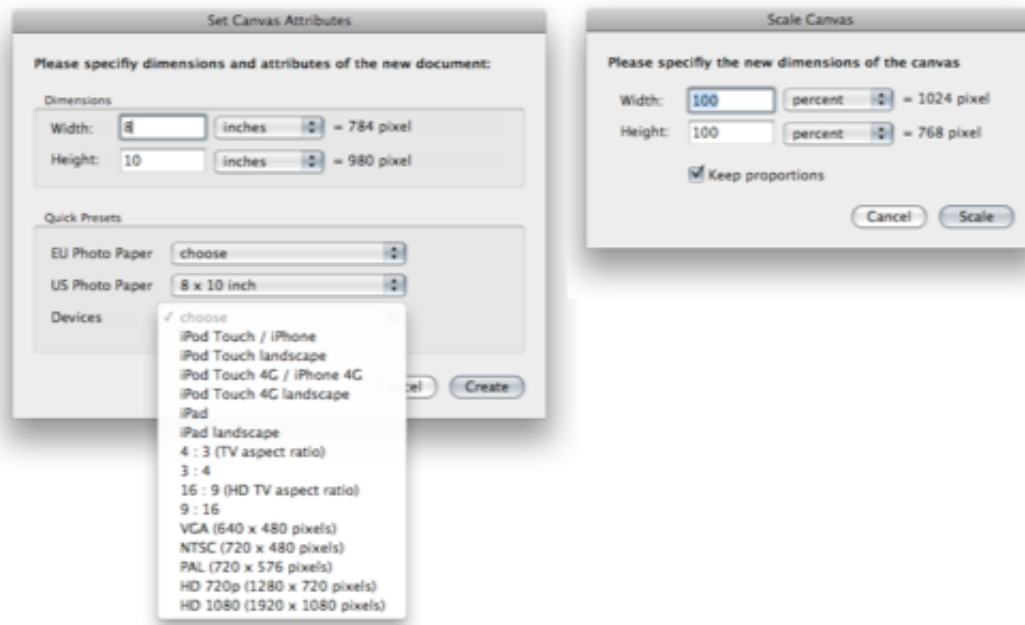


Figure 13 : Set Canvas (left) and Scale Canvas (right).

The two commands to change the canvas size are 'Scale Canvas' and 'Set Canvas Size', both available from the 'Arrange' menu. Use Scale canvas if you want to change the canvas size by a relative amount, and Set Canvas if you need to set it to some specific dimensions (e.g. for an iPad, portrait orientation).

All size dialogs can work in Pixels, Centimeter (metric), and Inch (a legacy unit still used in some backwater countries²). For the Centimeter and Inch measurements to be reflected correctly on your monitor it is important that your Preferences are set up correctly.

Locking An Image

You can protect an Image in your collage from being overwritten or it's frame to be subdivided. To do so, choose 'Lock' from the contextual menu or choose it's tool bar icon.

Note that a locked Imager/Frame can still be resized or deleted.

² Nobody is going to argue with that, right?

Individual Frame Borders

You can turn a Frame's border individually on and off. To do so, choose 'Frame' from the contextual menu or choose it's tool bar icon. Note that if surrounding frames still draw their borders, it may appear as if the border is still drawn, just at half of it's size

Outer Frame Assist

To make all frame borders appear to have a universal width, Collage draws a double-width border around the canvas (when border frames are enabled). You can turn this feature off (for example if you have disabled individual borders on the outside).

Changing the Color Theme

Collage has the ability to apply a number of color themes to your collage. A color theme is a set of rules that collage applies to all your imported pictures to give them a common look. Below are twelve of the color themes that ship with version 1.3 applied to the same sample collage of four images:

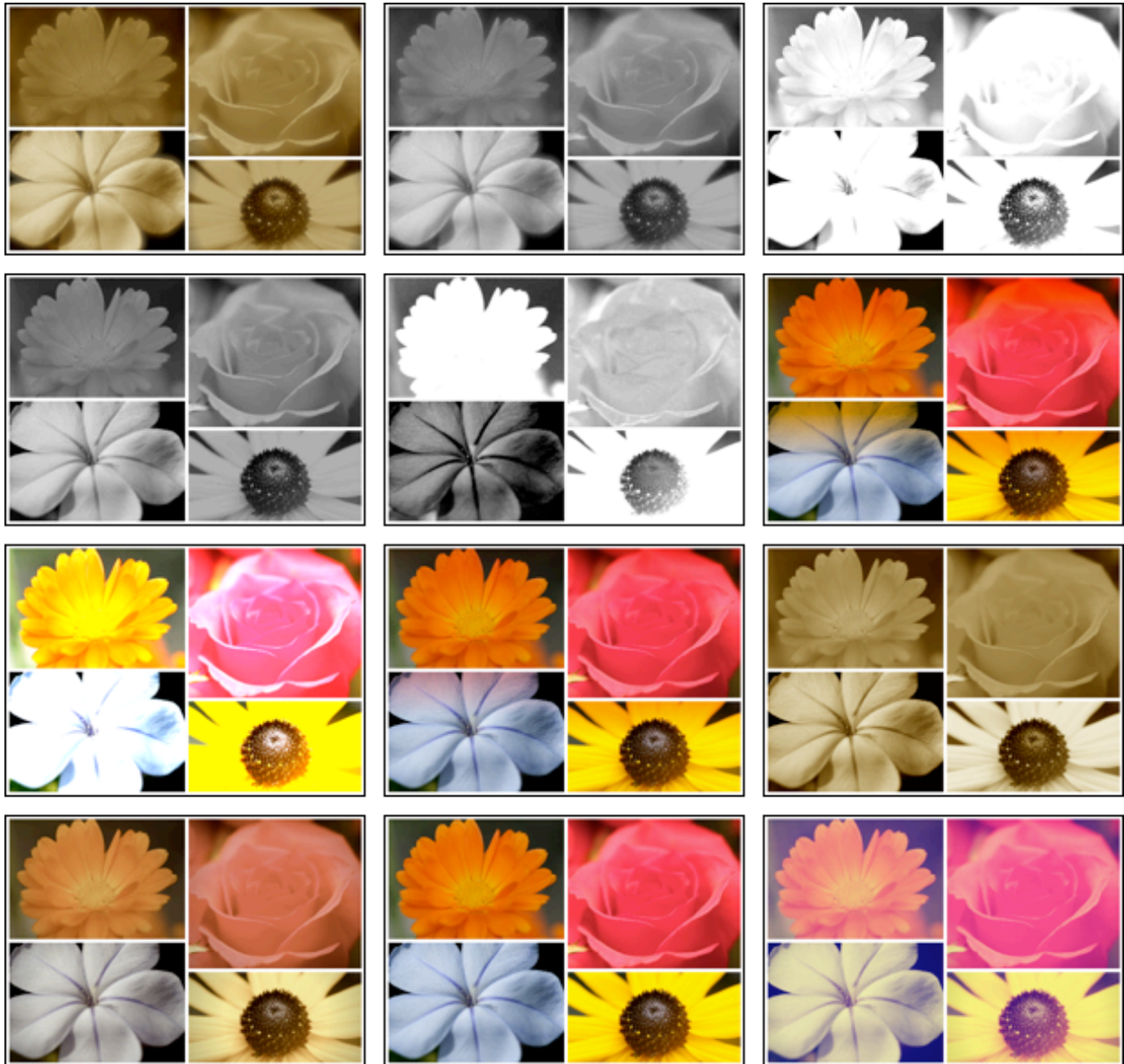


Figure 14 : Twelve different Color Themes applied to the same collage.

To apply any theme, simply click on the 'Themes' button, and choose a theme from the list of themes that collage offers. Only one color theme can be active, but you can change a color theme any time you like.

Randomize Images / Generate a New Layout

There are a number of layout generators built into cf/x collage to speed up the process of creating a collage, or restart the process of creativity.

Randomize Images

This function simply gives you a new perspective on the collage by randomly distributing your images while keeping the current layout. In collages with extreme frames (e.g. a disproportionally high frame on a portrait orientation) this can lead to excessive zooming in some images. In these cases, simply use the 'Max Crop' command.

Generate Layout

Far more complex and fun to explore is cf/x collage's layout generator. It takes a page from cf/x alpha's (standard and Pro versions) collage generators, but adds it's own twists, and more precise controls over frame division and distribution.

To completely change the layout of your current collage, choose the 'Generate New Layout' command from the 'Arrange' menu or use the 'New Layout' tool.

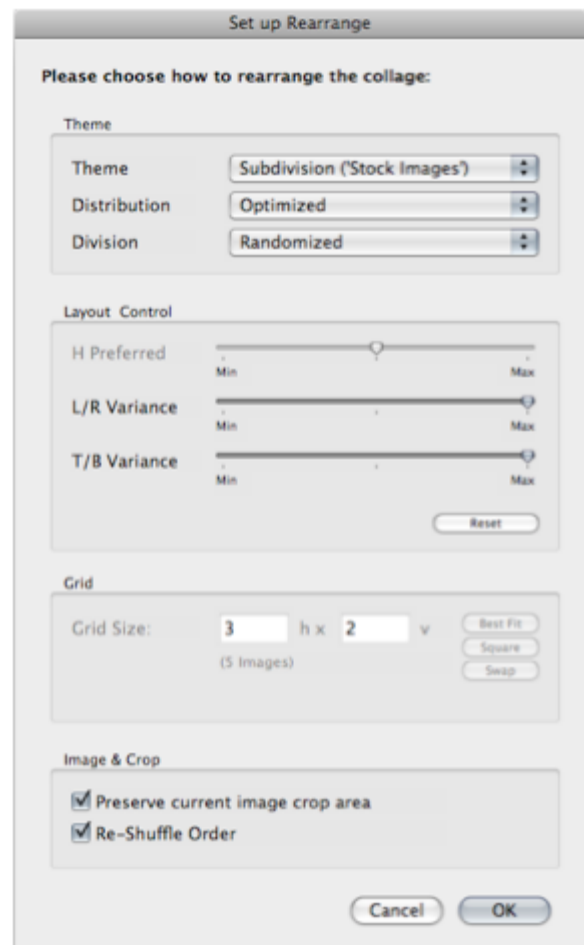
The New Layout function gives you quick access to a number of highly customizable layout generators, called 'Themes'. Currently available are

- Keep Current Layout
- Subdivision
- Contact Sheet / Grid

cf/x collage will shield you from most of the underlying complexity and steer you through the configuration process. Still, some of the more advanced generators may take some experimenting to fully understand.

To generate a new layout, follow these simple steps:

1. Select Theme
2. When available set Distribution and Division parameters



3. Where applicable, fine-tune your theme in the Layout Control. Note that they default to values that give good-looking results.
4. Set Image randomization and auto-crop

Please see the 'Collage Layout Generation' section for more information on how to use the various generators at your disposal.

Export Collage Artwork

Once finished with the layout of a collage it is time to export or print your artwork. To do the former, choose 'Export' from the 'File' menu. A dialog will open, allowing you to specify your export options:

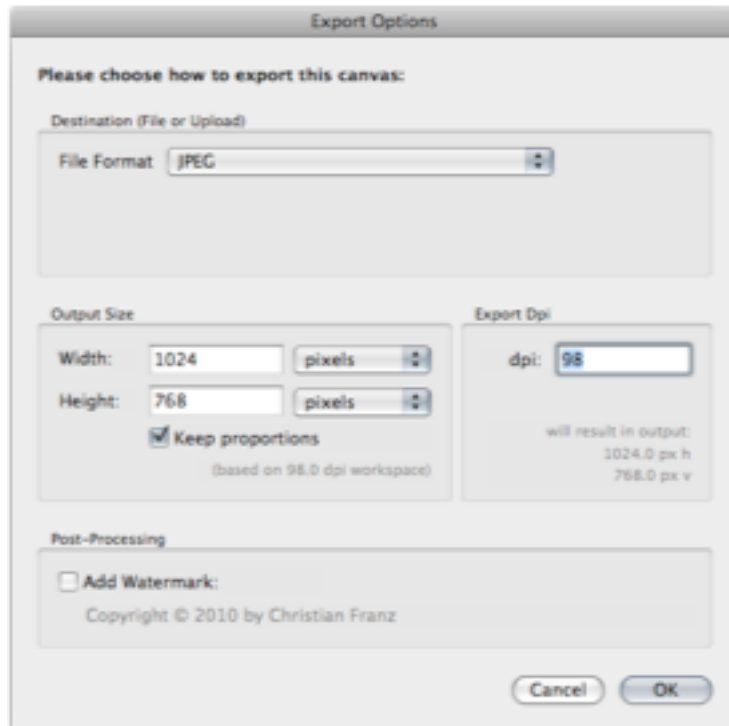


Figure 15: Export Settings dialog

Exporting your collage is a good way to make it available to other people. For this, cf/x collage allows you to render the collage to a file in many standard file formats that can be read by almost any other application. The export function has great flexibility built-in: you can render for different size, at different image resolutions (dpi), and file formats (lossy, and lossless compressions).

EXIF support

Whenever you export a canvas, collage will automatically tag the image with relevant information (e.g. dpi) so other applications that utilize this information can immediately use it.

Canvas Size

Initially, these fields show the current screen size, calculated at the screen's dpi (which you can set in the Preferences). The dimensions shown here are used to create the final

output size based on the Export dpi. You can change the canvas size to quickly generate differently scaled images during export without needing to scale the canvas.

!

In the export dialog the canvas size is always specified in the **Monitor's dpi**. It is then scaled to the desired "Export dpi".

Export pixel count is calculated with the following formula:

$$(\text{Canvas size} * \text{Monitor dpi}) * (\text{Export dpi} / \text{Monitor dpi})^3$$

You cannot change the Monitor's dpi in the export dialog. Use the preferences to do that.

Export dpi

While you work, cf/x collage renders the composition at your monitor's resolution (or rather: whatever you entered in the preference). Normally most imported images have a much higher resolution than your screen. When you create output for a different device, cf/x collage can take this into account and render at full quality for the desired resolution. To do this, simply enter the resolution in the dpi fields (e.g. '300' for a laser or inkjet printer). The entire output will be rendered to this resolution. If any of the images in your collage has a lower resolution, that image will be interpolated.

Export File Format and Quality

Choose a file format for the export. The file format determines if the image will be compressed using a lossy or lossless codec. In the case of lossy compression, collage always chooses the highest quality (least loss).

File format	Compression
JPEG	Lossy
TIFF	Lossless
PNG	Lossless
PDF	Yes
Macintosh PICT	Lossless
Windows BMP	Lossless
PSD	Lossless, single layer only
GIF	Lossless
JPEG 2000	Lossy
Flickr Upload ⁴	Lossy
eMail	Lossless (PNG)

³ Mathematically savvy people will quickly point out that this can be simplified to 'Canvas size * Export dpi', which is true. We only want to emphasize the fact that canvas size is inextricably linked to the monitor's dpi setting.

⁴ Not a real file format (alpha exports to Flickr as file in JPEG format). See 'Uploading to Flickr'

File format	Compression
iPhoto	Lossless (PNG)
Aperture	Lossless (PNG)
Desktop (Wallpaper)	Lossless (PNG)
HTML	Lossless (PNG)

As of version 1.04, GIF format is supported for export. GIF files are limited to 256 colors. Collage will allocate an optimized color palette and approximate colors through a technology called 'dithering' (we are not making this up. It's really called that).

...

Export to desktop will install the collage as the current wallpaper to all currently connected screens. For optimal quality, please ensure that you have chosen a size (in pixels) that is at least as large (or larger) than your largest screen

!

Because of Mac App Store regulations, collage will store all desktop images it creates in (home)/Library/Application Support/cfx collage/Desktop Images/. If you want to share the Wallpaper with all users on your Mac, you will have to move it manually.

Automatic Watermark

You can automatically add a watermark to any export. The watermark is a freely definable line of text that it is placed in the lower right corner. Checking the 'Add Watermark' checkbox will automatically add it to the image. The Watermark scales to the image size.

!

The Watermark text can be edited in the Preferences. This function was originally limited to the non-MAS version, but as of version 1.3 is accessible to all users

Uploading (exporting) to Flickr

Collage can directly export your work to the 'Flickr' social website. In order to do so, you must have a valid Flickr account, be connected to the Internet, and you must grant collage the rights to upload images.

To export to Flickr, simply choose 'Upload to Flickr...' from the Export's File Format pop-up dialog.

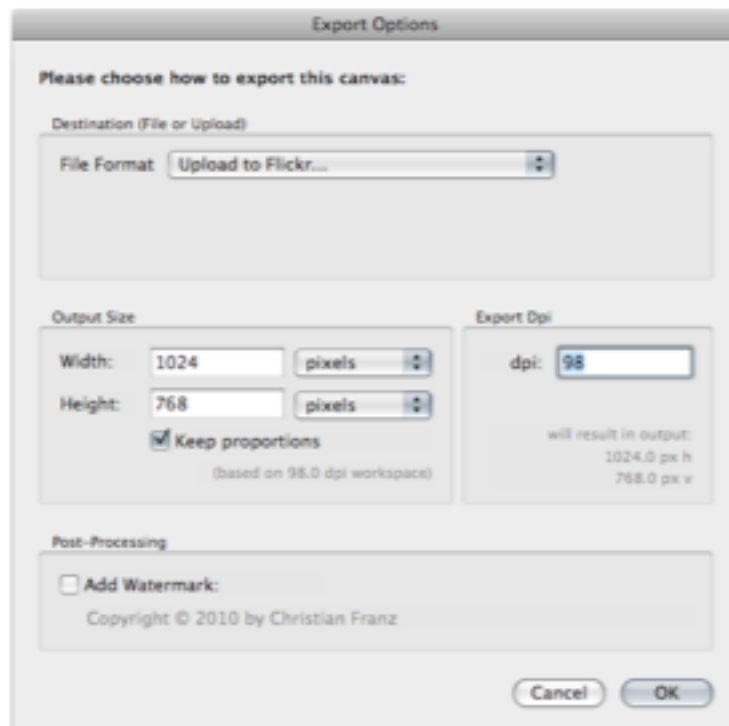


Figure 16: Export Settings for Flickr upload

Allowing collage to upload to Flickr

If you have not yet set up your Flickr account to work with collage, or if you have de-authorized Flickr to accept content from collage, you will be asked to authorize Flickr to grant collage read and write (but not delete) privileges.

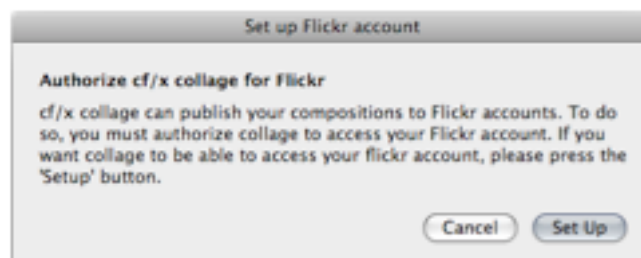


Figure 17: Flickr account setup

Once the authorization request has been sent to Flickr, collage will display a dialog to this effect, and will wait for you to grant access in your Browser.

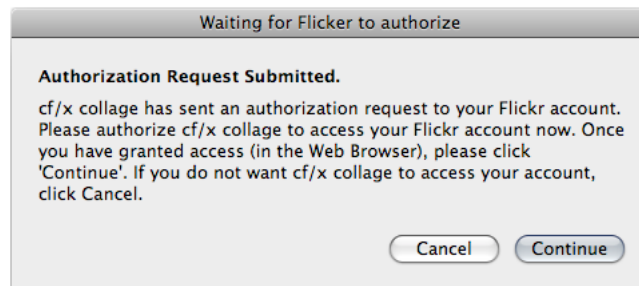


Figure 18: Waiting for Flickr to authorize

Once this process is finished, you can upload to Flickr.

Uploading Images to Flickr

Before you can upload to Flickr, you can specify a few options as follows:

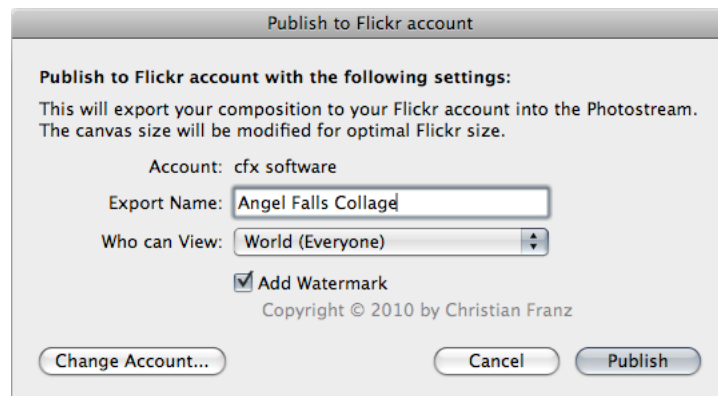


Figure 19: Flickr upload options

The options available are the standard set you have during Flickr account administration. For privacy reasons, the View option will default to 'You'. Additionally, you have the option to add a watermark.

In order to re-authorize or to switch to a different user, click on the 'Change Account' button.

Images that are larger than 1024 pixels in any dimension will automatically be scaled and re-rendered so that the largest dimension is exactly 1024 pixels. This is to comply with Flickr's image restrictions.

Once the image is uploaded to Flickr, collage will launch your default browser and open the newly uploaded image in Flickr. Note that any image you upload will add a tag 'cf/x' and a description of 'Created with cf/x collage. You can change that.

Sending As email (must use Apple Mail)

At any point in time you can send the current canvas as an attachment to email. If you use the Toolbar shortcut, the canvas gets rendered immediately. If you go through the export dialog and choose 'Send via Mail...' as file format you can also set destination size.

Collage renders your artwork, and then hands it off to Apple Mail (the artwork as an attachment) and then switches Apple Mail to front.



cf/x collage will send the attachment to Apple Mail, no other email application. If you are not using Apple Mail, you cannot use this function.

Quick Preview



Quick Preview is only accessible via the Tool Bar. Choose 'Configure' from the tool bar, and drag the 'Preview' icon from the available tools onto the tool bar. Now the Preview tool is always available.

The Preview tool looks like this:



You can quickly call up the current collage in an outside viewer (Apple's Preview). Simply click on the preview tool, and collage will render the current collage at screen resolution, and export it to Preview.

Saving a Collage

As soon as you have imported a few mages, it is a good idea to save your work. The 'Save...' command is the one that does this for you. It will save the current state of your collage to disk. At any time you can choose to write all changes to a different document by using the 'Save As..' command from the 'File' menu. All subsequent changes will be saved to that file.

cf/x collage will save most imported images as 'file links', or references to the source files. This has a number of important implications:

- Small document size. A typical '.collage' document is only a few kilobytes in size.
- Lightning-fast save time
- If you change a source image after you have imported it into collage, this change will flow into the collage the next time the document reloaded.
- If the source file disappears, collage can no longer load it and will replace the image with a 'link lost' image. As soon as the source file reappears, the correct image is restored.
- cf/x collage documents are not portable (i.e. can't be easily transferred to another computer) unless they are saved as a special 'Archive' version (see below).

Images that where imported into cf/x collage as non file-based image drops (for example images dragged from an Internet browser) are copied without a link. These images do not update when the original changes, and cannot be lost when the source feed goes down.

Archiving a Collage

If you need to transfer your work, or want to save the current version of the collage (i.e. save a 'snapshot' that prevents future changes to source images to affect the saved version), cf/x collage provides a special 'Make Archive' command.

An archive will sever all existing file links, and save all images into the same document. Saved file size increases dramatically (images are saved at native resolution and compressed lossless), and it takes significantly (sometimes seconds) longer to save the document.

An archive can, however, be easily transferred to other computers that have no connection to the same image server. Archives will be indifferent to any changes that have been made to source images.

Once saved as an archive, existing images can't be linked back to their originals.



Creating an archive creates a different document than a normal save does. Therefore, collage will create an archive, and after that it will resume saving to your normal document, with all links intact .

New Document

The new document dialog gives you access to a number of options:

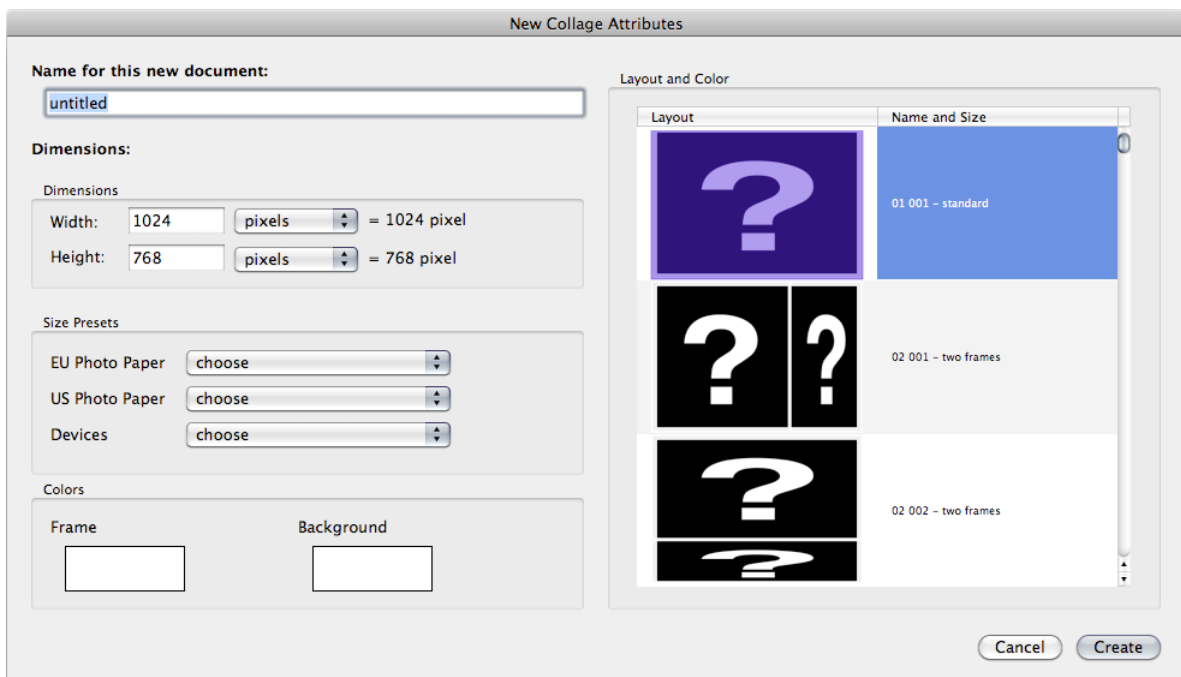


Figure 20: New document dialog

Presets

While you can enter specific measurements in the 'Dimensions' box, it is usually far more convenient to use one of the many Presets that collage supports:

European Formats	Unit Size	Remark
9 x 13 (portrait and landscape)	cm	Photo format
10 x 15 (portrait and landscape)	cm	
11 x 17 (portrait and landscape)	cm	
13 x 18 (portrait and landscape)	cm	
20 x 30 (portrait and landscape)	cm	
A6 (portrait and landscape)	10.5 x 14.8 cm	DIN A6
A5 (portrait and landscape)	14.8 x 21.0 cm	DIN A5
A4 (portrait and landscape)	21.0 x 29.7 cm	DIN A4

US Formats	Unit Size	Remark
2.5 x 3.5 (portrait and landscape)	inch	Photo format
4 x 6 (portrait and landscape)	inch	
5 x 7 (portrait and landscape)	inch	
8 x 10 (portrait and landscape)	inch	
Junior Legal (portrait and landscape)	5.0 x 8.0 inch	US Standard
Letter (portrait and landscape)	8.5 x 11.0 inch	US Standard
Legal (portrait and landscape)	8.5 x 14.0 inch	US Standard
Ledger / Tabloid	17.0 x 11.0 inch	US Standard

Device Formats	Unit Size	Remark
iPod Touch / iPhone	320 x 480 pixel	Device
iPod Touch 4G / iPhone 4	640 x 960 pixel	Device
iPad	1024 x 768 pixel	Device
4 : 3		Aspect only
3 : 4		Aspect only
16 : 9		Aspect only
9 : 16		Aspect only
VGA	640 x 480 pixel	Device
NTSC	720 x 480 pixel	US Video device
PAL	720 x 576 pixel	EU Video device
HD 720p	1280 x 720 pixel	Device
HD 1080	1920 x 1080 pixel	

The new document dialog supports measurements specified in Centimeter, Inch and Pixels.

Layout Templates

Collage comes with a number of prefabricated layouts (templates) for even faster collage creation. You can easily create such templates yourself – see ‘Creating Your Own Templates’.

Collage defaults to the single frame collage, but you can choose any of the provided layouts. Each question mark (‘?’) in the Layout corresponds to an empty frame (‘Template Frame’). The layout, once selected, will be recalculated for the dimensions you have chosen once you generate the new document.

Creating Your Own Templates

Collage's powerful auto-layout functions make templates nearly redundant. However, every now and then you have crafted a layout that you find particularly beautiful and would like to re-use.

Collage allows you to create a template from a collage very easily:

Simply drop your saved collage into the

(home)/Library/Application Support/cfx collage/Templates

directory. You can create subfolders (e.g. to group them) and collage will still find them.

When you create a template, use the 'Clear Frame' function on all frames that you want to turn into 'Template Frames', and then use 'Save As...' to save the new template. Then move it into the Templates folder (see above).



If you want to share your Templates with friends, remember to save as Archive to include all images as source, not links. If you don't save as an Archive, your friends still can open the collage, but no images will be transferred.

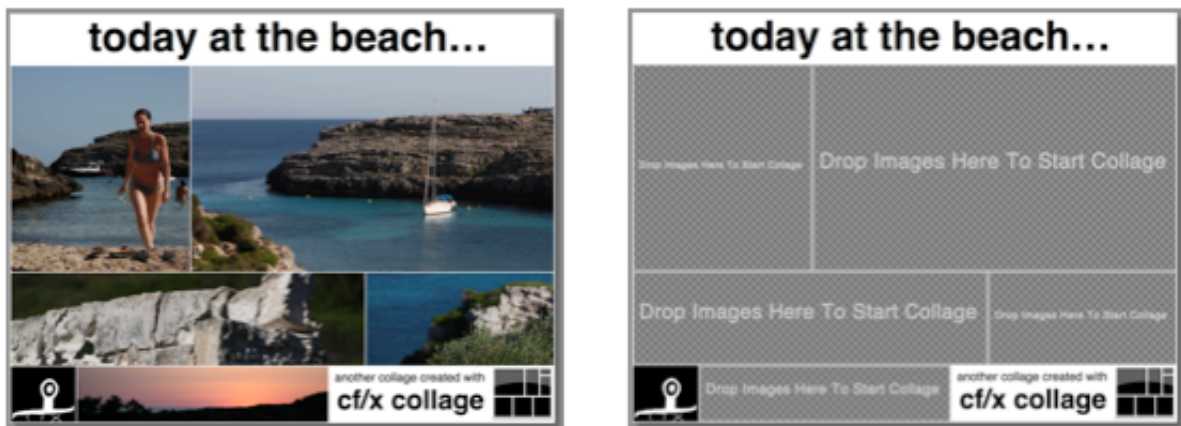


Figure 21: Collage (left), converted to template (right)

Note that a template does not necessarily have to be composed out of only empty frames. In the example we show above, we have left the title, our logo, and the 'created with' frames filled.

Remember that each template remains a collage. This means that you still can add as many pictures as you like (even if there are only five empty frames as shown here), rearrange the layout etc. The template just gives you a quick starting point for new collages.

Preferences

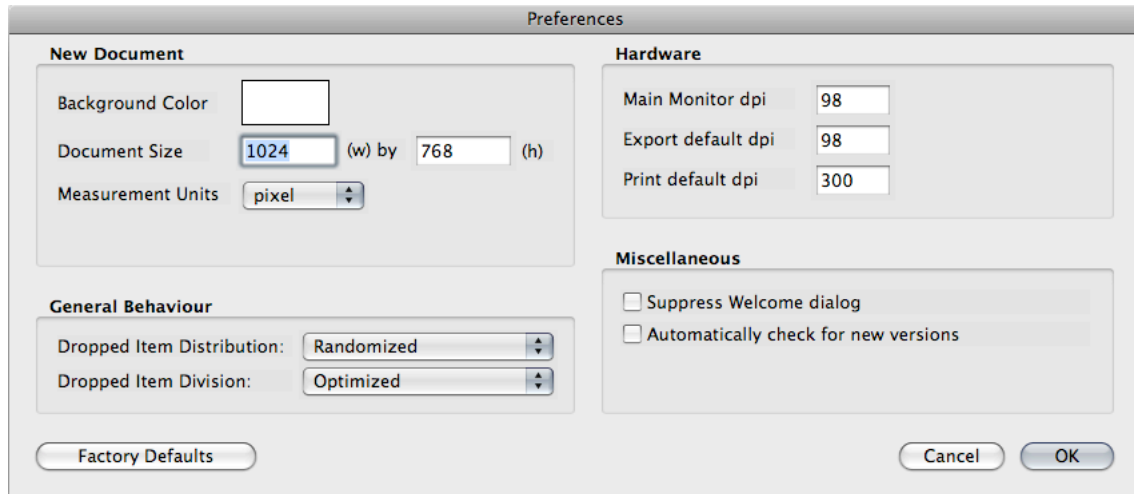


Figure 22: Preferences dialog

New Document

Here you can specify the default dimensions for a new document, and the background color for the collage. Note that the background color will only be visible if there are empty frames (those that display 'Drop Images Here...') in your collage and you export or print such a collage.

Hardware

These settings affect the default measurements conversion for your Monitor, Export and Print. Both Export and Print dpi settings can be overridden in their respective dialogs. If the Monitor dpi is set up correctly, measurements in cm and Inch will be exactly reflected on your screen.

General Behavior

These settings define the strategies that cf/x collage follows when you drop images into a frame. See 'Collage Layout Generation'.

Miscellaneous

These settings control if you want collage to automatically check for new versions, and if you want collage to suppress the welcome dialog when starting up.



If you purchased Collage from the Apple Store, The automatic version Check is always turned off, and disabled.

Collage Layout Generation

cf/x collage makes some important assumptions about a layout that enable it to work so efficiently. The two most important assumptions are

- the collage always covers the whole canvas (although 'empty images' are allowed)
- no two images overlap

With these two conditions in place, cf/x collage can quickly generate a tremendous amount of collage, and can generate layouts for any number of images.

The main collage generators built into cf/x collage (and, to a lesser extent, cf/x alpha), can use two independent strategies to parcel a canvas into individual frames:

- **Distribution**
This determines how collage distributes frames over the canvas by splitting a frame horizontally or vertically
- **Division**
This determines the two individual parts of a frame are divided (after it is decided which direction to split a frame)

Each strategy can have different settings, and not all generators can use all strategies. cf/x collage will enable only those controls that a strategy uses.

Distribution Strategies

The Distribution Strategy describes how collage determines which direction a frame is to be split: horizontally or vertically.

Currently, collage supports the following Distribution Strategies:

- ***Optimized (default):***
If a frame is wider than it is high, the frame is divided somewhere along the horizontal axis, else along the vertical
- **Alternating:**
This strategy alternates divisions between horizontal and vertical. The very first Frame uses the Optimized strategy, all others alternate from there.
- **Randomized:**
The direction is determined by random. This Strategy uses the 'H Preferred' slider in the Layout Control. Use the H Preferred slider to alter the bias from complete random (center) to either horizontal or vertical preferred (left/right)

Distribution Strategies

The Distribution Strategies determine how the space of a frame that is to be split is distributed to its two subframes.

Collage supports the following Distribution Strategies:

- Fixed:
All frames are split by a fixed amount. The L/R Variance and T/B Variance sliders are used to set the fixed distribution amount (L/R for horizontal split, T/B for a vertical split)
- Fibonacci:
The frames are split in a 1:1.6 ratio (golden ratio). The left/upper part is always the larger one.
The 'Fibonacci' name is in honor of Leonardo Fibonacci (1180-1241) who among many other great things also discovered the 'Fibonacci' sequence. A solution of the closed form of the sequence is phi, the golden ratio.
- Fibonacci enhanced:
The frames are split in a 1:1.6 ratio (golden ratio). Which part is the larger is determined by a pseudo random number.
- Randomized (default):
The frames are split in a random proportion. The variance of distribution is controlled by the L/R Variance (for horizontal) and T/B Variance (for vertical) sliders.

Grid Controls

These controls are specific to the 'Contact Sheet' Theme, and control grid layout and size. If active, the Grid controls allow you to

- Specify grid dimensions (rows and columns)
- Solve for best fit (based on the current number of images)
- Solve for closes to a square (based on the current number of images)

Image & Crop Controls

These controls are always available. They control:

- If a crop area is to be calculated to be as closely to the current crop as possible (checked), or from scratch (unchecked).
- If the images should be kept in the current sequence (unchecked) or if they should be randomized (checked). Note that some distribution strategies (see above) make predicting the image sequence non-trivial.

Collage Themes

Theme: 'Keep Current Layout'

This layout generator does not change the frame layout, but can randomize the image distribution and re-set all cropping. This generator is a more formalized version of the 'Randomize Images' function, and uses the same random generator.

The only controls available are Image & Crop

Theme: 'Subdivision / Stock Images'

This is the default layout generator that creates cf/x collage's signature layout. It works by sequentially subdividing a frame until all images have been placed. You have control over the following:

- Distribution: All Strategies
- Division: All Strategies
- Grid: none
- Image & Crop: All

Theme: Contact Sheet

This layout generator arranges all images into a grid of same-sized rectangles, very much like a classic contact sheet. If the number of columns times rows is greater than the number of images in the collage, empty placeholders are added at the end.

You have control over the following:

- Distribution: none (fixed, determined by grid size)
- Division: none (fixed, determined by grid size)
- Grid: Full control. Grid size that has less cells than images in the collage are not permitted.
- Image & Crop: All

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Included Software Frameworks

cf/x collage uses the following software packages

- **Sparkle**, Copyright © 2006 by Andy Matuschak

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