



TAKE CONTROL OF

PREVIEW

IMAGES

IMPORT

VIEW

EDIT

CONVERT...

PDFS

READ

ANNOTATE

MANIPULATE

ENCRYPT...

by JOSH CENTERS & ADAM ENGST

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Read Me First

Welcome to *Take Control of Preview*, version 1.3, published in May 2023 by alt concepts. This book was written by Josh Centers and Adam Engst. Versions 1.0 through 1.2 were edited by Scholle McFarland with help from Tonya Engst; version 1.3 was edited by Joe Kissell.

This book explains how to use Apple’s Preview app to view and edit images and PDFs. The book goes beyond the basics to explore numerous features hidden deep within Preview.

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Updates and More

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Settings vs. Preferences

In macOS Ventura, Apple replaced System Preferences with System Settings, and in most apps, the Preferences menu item and window became a Settings menu item and window. In this book, we sometimes use a shorthand like “go to Preview > Settings/Preferences” to reflect both possibilities; when the details are significantly different, we spell them out separately as “Ventura or later” and “Monterey or earlier.”

What’s New in Version 1.3

We’ve replaced nearly every screenshot in the book to bring it up to date with macOS 13.4 Ventura. Additionally, there are a few changes and new features:

- Visual Lookup can identify plants, animals, landmarks, works of art, and other things. See [Identify Photos with Visual Lookup](#).
- macOS Ventura dropped support for opening and editing PostScript and Encapsulated PostScript (EPS) files. However, we never discussed these capabilities in the book. You can still export files in PostScript format; see [Exporting to Other File Formats](#).
- There is now a Form Filling toolbar specifically for filling out PDF forms. It’s merely a smaller subset of the tools available on the Markup toolbar. See [Tour and Customize the Main Toolbar](#).
- macOS Monterey added the Live Text feature, which lets you select text and copy text in images. See [Selecting Text in Pictures](#) for a brief explanation of how it works and instructions for how to turn it off.
- New [PDF](#) export options were added.
- Apple has added a Redact tool to permanently delete text from PDFs. See [Redacting Text](#).
- Preview now has many more options for restricting permissions for a PDF in addition to encryption. See [Restricting PDFs](#).

What Was New in Version 1.2

This update featured fixes and updates for small changes. The one notable new feature in Preview was being able to create a signature with an iPhone or iPad, which we cover in [Signing PDFs](#).

Introduction

So much criticism has been heaped on the likes of News and Photos that it can be easy to forget the software that Apple gets right—apps that are both simple and powerful. There may be no better example of this than Preview, which has been built into macOS from the beginning.

To call attention to all the things Preview can do, we published the “Power of Preview” series of articles in TidBITS in early 2016. The articles proved wildly popular, and we received numerous requests for a book about Preview. “That’ll be easy,” we thought. Little did we know.

On the surface, Preview is a simple image and PDF viewer that launches automatically when you open a photo or a PDF document. Open, read, close—that’s the Preview experience most people have most of the time. But Preview offers so much more. Use Preview to do all this—no additional apps required:

- Take screenshots and import photos directly from a camera
- Quickly cull unwanted images from a large collection
- Play slideshows of party photos
- Crop, resize, and edit images for use on your website
- Convert images to many different formats
- Scan paper documents with a scanner
- Annotate PDFs with highlights, notes, and shapes
- Fill out and sign PDF-based forms digitally, rather than going to the trouble of printing and signing manually
- Rearrange and delete PDF pages, and merge PDFs

We were under the impression that we had covered all of Preview’s features in our articles, and that we would merely have to polish the prose

a bit and tweak some screenshots to turn the articles into a book. For each chapter, though, as we started testing and retesting what we'd written, we discovered that Preview was even deeper and more capable than we'd previously realized. Couple that with a lot more screenshots, step-by-step instructions, and real-world usage suggestions, and our few articles turned into a full-fledged book.

Our goal here is to show you everything that Preview can do and give you ideas for using it to work with images and PDFs. Follow along, and we'll help you become far more capable with Preview and with your Mac in general.

The first version of this book focused on Preview in macOS 10.11 El Capitan, and we've now examined everything up to macOS 13 Ventura. If you have an older version of macOS, much of this book will work just fine for you, though the older your operating system, the more differences you may see.

Preview Quick Start

When it comes to working with images and PDFs, Preview has many more features than most people realize. It can't do everything—it's not a magical mash-up of Adobe Photoshop and Acrobat Pro—but for the majority of graphical and PDF needs, Preview may be all you need. Use this Quick Start to jump to the appropriate part of the book; there's no need to read the book in order.

Pull files into Preview:

- You can open files in all the normal ways, but you can also bring images into Preview by [Importing from the Clipboard](#), [Importing from a Screenshot](#), [Importing from an iPhone or iPad](#), [Importing from a Camera](#), and [Importing from a Scanner](#).
- The main way to make new PDFs in Preview is by [Printing to PDF](#), although there are [Other Ways to Make PDFs](#).

View images and PDFs:

- As befits its primary function as an image and PDF viewer, Preview offers numerous controls for how you can [View and Manage Images](#) as well as [Read PDFs](#).

Crop, resize, and rotate images:

- For many people, editing images comes down to [Cropping Images](#) and [Resizing Images](#).
- When cropping, you'll want to use the tools explained in [Selecting Content in Images](#).
- If your image is in the wrong orientation, learn how to flip it in [Rotating Images](#).

Annotate documents and images:

- With PDFs, Preview provides tools for [Highlighting Text](#) and [Adding Notes to a PDF](#). You can also learn about [Adding Shapes and Text to a PDF](#).

- If you need to fill out a PDF-based form, read [Working with Forms](#) and [Signing PDFs](#).
- For image annotations, read [Inserting and Manipulating Basic Shapes](#) and [Adding Text to Images](#).

Use advanced editing techniques:

- With images, you can make a lot of edits by [Copying, Pasting, and Deleting Image Content](#).
- Need to border an image or erase something? You'll be surprised at what you can achieve by [Inserting and Manipulating Basic Shapes](#).
- Don't forget that you can radically change the look of images by [Adjusting Colors](#).
- With PDFs, there's a lot you can do by [Rearranging, Deleting, and Adding Pages](#), not to mention [Rotating Pages](#), [Cropping Pages](#), and [Changing PDF Color](#).

Convert and export images and PDFs:

- If you have a JPEG and need a PNG, [Exporting to Other File Formats](#) explains how to accomplish that task.
- For an overview of which image file format makes the most sense for any given situation, read [Choosing a File Format](#).
- Shrink the size of an overly large PDF with the Reduce File Size Quartz filter; see the [PDF](#) section of [Choosing a File Format](#).
- If security is important, read [Restricting PDFs](#) to learn how to protect your content from spying eyes.

Stop looking for features that aren't there:

Preview offers lots of PDF-related features, but there are others you might expect to see, but which are not present. Find a list of these features in [What Preview Can't Do with PDFs](#).

(Re)Acquaint Yourself with Preview

You’ve probably used Preview many thousands of times over the years, but we want to kick off the book with a few setup and configuration reminders so everyone is on the same virtual page.

Preview is designed to work with both graphical images (in common formats like JPEG, PNG, GIF, and TIFF) and PDF documents, the Adobe-created Portable Document Format that’s ubiquitous on the internet for electronic versions of paper documents.

On the face of things, images and PDFs are fairly similar, and you can do many of the same things with them in Preview. However, there are situations where the same tools in Preview work somewhat differently depending on whether you’re manipulating an image or a PDF. The result is that Preview is something of a chimera in the Mac world—most apps with similar features focus either on images or PDFs, not both. For the most part, we’ll discuss the graphic- and PDF-related features separately.

This chapter starts with a look at a few configuration details, and continues with a look at the interface in [Tour and Customize the Main Toolbar](#) and [Tour the Markup Toolbar](#). We also touch on [Sharing from Within Preview](#), a set of more modern features that you may not yet be using. We close with [What Preview Can’t Do with PDFs](#), so you don’t waste time hunting for features that don’t exist.

Make Sure Preview Opens Everything

Although Preview is the default app for most image types and for PDFs, it’s possible that another app has taken over for Preview. For instance, you might have configured GraphicConverter or Pixelmator to open JPEGs. The most common remapping is with PDFs, since

Adobe Reader can be somewhat pushy about making itself the default PDF viewer.

If double-clicking a PDF or a particular image file format in the Finder opens an app other than Preview, here's how to put Preview back in control:

1. Select a file of the desired type in the Finder.
2. Choose File > Get Info (or press ⌘-I) to open the Info window.
3. Under “Open with,” choose Preview from the pop-up menu (highlighted in red in **Figure 1**). If necessary, click the disclosure triangle to the left of “Open with” to expand that section.

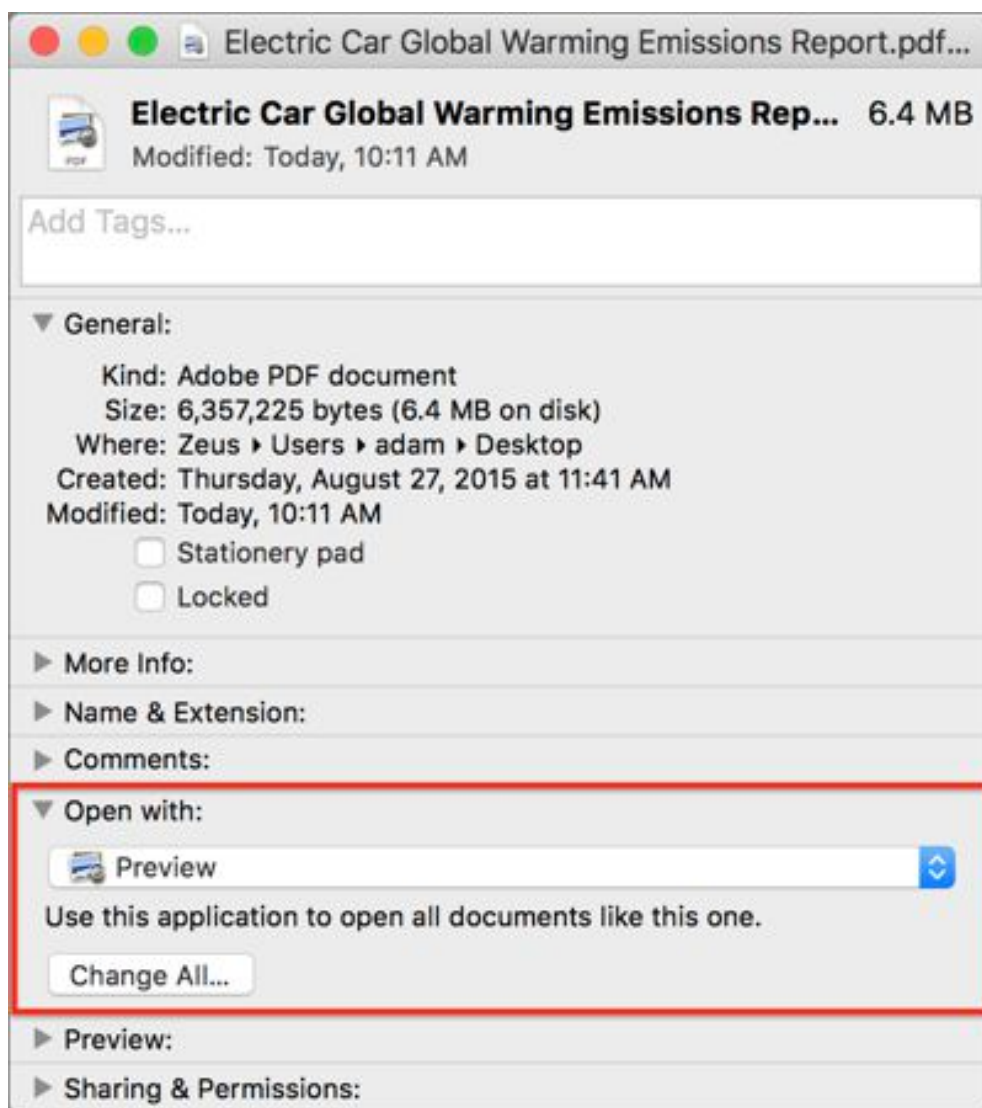


Figure 1: Make Preview the default viewer for a particular file type in the Finder's Info window.

Open and Import

It's important to be aware of all the ways you can move data into Preview, because even though some are painfully obvious, others are more hidden. And, the less obvious methods can be huge time savers.

In this chapter, we start with a look at the many ways you can open files and documents, like PDFs and PNGs, that you already have stored in your Finder. We then look at:

- **Importing from the clipboard:** Anything you can copy, you can turn into a new document in Preview. The results are sometimes just what you'd expect, but other times rather intriguing. See [Importing from the Clipboard](#).
- **Importing from a screenshot:** macOS's screenshot tool lets you send a newly taken screenshot right to Preview, where you can edit and save. See [Importing from a Screenshot](#).
- **Importing from an iPhone or iPad:** The Continuity Camera feature in macOS lets you bring a photo or scan into Preview directly from an iOS device. See [Importing from an iPhone or iPad](#).
- **Importing from a camera:** Connect any digital camera to your Mac, and you can preview your snaps in Preview, plus save them to the Finder. See [Importing from a Camera](#).
- **Importing from a scanner:** Continuing on the theme of importing from a hardware device, note that Preview can scan graphics and turn papers into PDFs. See [Importing from a Scanner](#).
- **Taking screenshots:** Preview offers a nice workflow for capturing portions of your screen in various ways and then modifying the image in Preview before saving it. There's even an option that provides a 10-second delay. See [Taking Screenshots](#).

Opening Images and Documents

Let's begin by looking at how you open images and documents in Preview, starting with the obvious ways and moving on to things you may not know.

If Preview is your default app for images and PDFs, those files will open in Preview when you double-click them in the Finder or when you select files in the Finder and choose File > Open. Similarly, you can go into Preview and choose File > Open; if no documents are open, clicking Preview in the Dock also shows the Open dialog. Or, drag a file to the Preview icon, either in the Finder or in the Dock. You can even Control-click or right-click a file in the Finder and choose Open from the contextual menu.

Tip: You can re-open recently opened files in Preview by choosing File > Open Recent or by Control-clicking Preview's Dock icon.

You probably know all of those methods, but slightly more subtle is the trick of opening files through Quick Look: If you think you've found the right file but aren't sure, you can select the image or PDF file in the Finder and then press the Space bar, or ⌘-Y, to peek at it in Quick Look. If it's the right one, press ⌘-O or click the Open with Preview button in the upper-right corner.

Moving beyond macOS's built-in ways of opening files, there are two Preview-specific techniques that can be useful at times when you're working with images. (When used with PDFs, this trick merges the dropped PDF into the open PDF.)

In Preview, with at least one image open, make sure the sidebar is showing and is set to display thumbnails—for help with that, see [Navigating Images via the Sidebar](#). Then, from the Finder, drag an image into the sidebar (**Figure 10**).

View and Manage Images

For many people, Preview’s primary function is as a viewer for both images and PDFs. Although much of what we cover in this chapter also applies to PDFs, our focus here is on the many ways you can view images in Preview.

We begin by making sure you can use the sidebar and its various views to full advantage, especially the Contact Sheet view, which is helpful for working with a large collection of images. We also cover [Zooming Images](#) and [Viewing in Full-Screen Mode](#), plus [Playing an Image Slideshow](#).

If you find yourself wanting to learn more about an image—what its pixel dimensions are, when it was created, and more—we discuss how to do that in [Examining Image Metadata](#).

But that’s not all that Preview can do—you can also work with the files underlying the images you’re viewing. For instance, if you need to cull near-duplicates from a folder containing a large number of graphics, you don’t even need to leave Preview; see [Managing Images](#).

Navigating Images via the Sidebar

When it comes to navigating among multiple images, Preview’s sidebar is your friend. Preview tries to be smart about displaying this tool, so if you open multiple images, the sidebar automatically appears, as you can see in **Figure 19**.

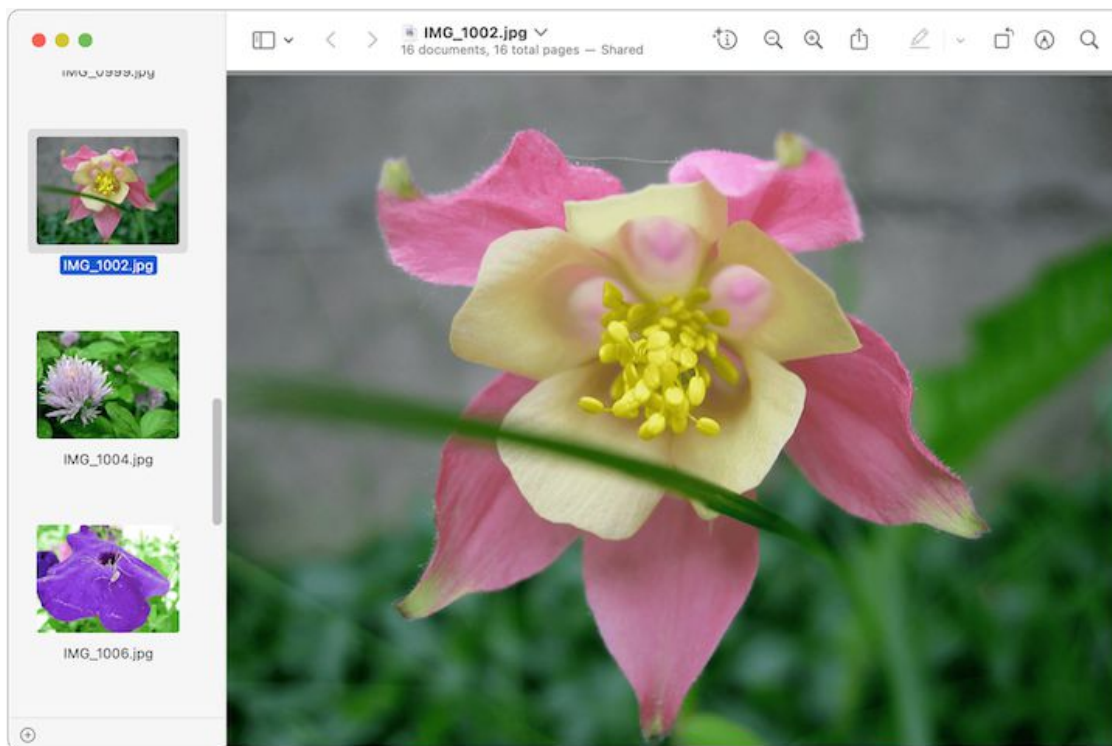


Figure 19: Preview’s sidebar automatically displays on the left side of the window when you open multiple images in the same window.

You can hide the sidebar by choosing View > Hide Sidebar (⌘-Option-1). Note that this command is a one-way toggle; if Preview’s sidebar is showing, choosing Hide Sidebar makes it disappear and puts a checkmark next to the menu command. Choosing it again does nothing. To bring the sidebar back, you must instead choose another of the sidebar-related commands like View > Thumbnails.

Note: All the sidebar views are accessible both from the main View menu and from the pop-up that appears when you click the View  button on Preview’s toolbar.

For viewing collections of images in the sidebar, you have two main options:

- **Thumbnails:** This view, shown in the figure above, shows graphical previews of your images.
- **Table of Contents:** Choose this view to display a text list of image filenames (**Figure 20**).

Edit Images

So far, we've walked you through the basics of opening and viewing images in Preview. Now we dig into Preview's little-known and surprisingly powerful editing features. As people who write about technology, we have some skin in the game. We work with screenshots every day and Preview is our go-to app for cleaning up and tweaking the images that appear in TidBITS articles and this book. Sure, we could use something like GraphicConverter, Pixelmator, or even Adobe Photoshop, but those tools are often overkill for the graphics tasks that many of us need to perform.

In this chapter, we start by looking at how to select content in an image. After that, we cover:

- [Copying, Pasting, and Deleting Image Content](#)
- [Cropping Images, Resizing Images, and Rotating Images](#)
- [Inserting and Manipulating Basic Shapes](#) and [Using the Mask and Loupe Shapes](#)
- [Adding Text to Images](#)
- [Adjusting Colors](#)
- We end with a look at the Undo command and how you can even use it to open an older version of a file; see [Remember Undo!](#)

Selecting Content in Images

Once you understand how to use Preview's tools, you'll discover that you can edit images in ways that are far more subtle than you might think. But first, you must understand how to select image content.

Preview offers five different selection tools, each of which may be more or less appropriate depending on what you want to accomplish. You'll use the Rectangular Selection tool the most, but the [Elliptical Selection](#)

Tool, Lasso Selection Tool, and Smart Lasso Tool also can be helpful on occasion. Finally, the [Instant Alpha Tool](#) is extremely useful for making image backgrounds transparent.

You find these tools on the Markup toolbar (see [Tour the Markup Toolbar](#)). To access the first four selection tools, click the Selection Tools  icon and choose from the drop-down menu. (You can access this menu only when you're working on an image. When a PDF is open, only the Rectangular Selection  tool is available.) For Instant Alpha, use the Instant Alpha  icon (**Figure 32**).

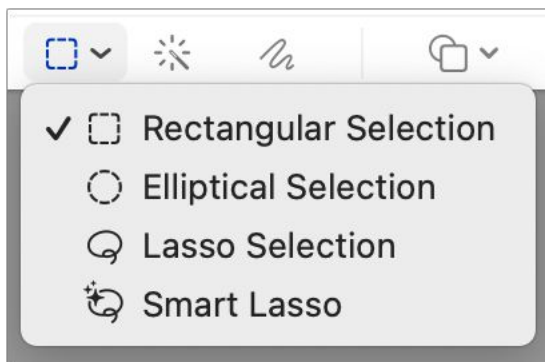


Figure 32: Access four of Preview's selection tools by clicking the Selection Tools icon on the Markup toolbar.

Invert Your Selection

Sometimes you want to select everything in an image *except* a particular object. To do that, select the object using whatever tool makes sense, and then choose Edit > Invert Selection.

If you look closely, you'll see that Preview draws a selection rectangle around the entire image and the adjustment handles disappear from the original selection. Any actions you take on the image (see [Copying, Pasting, and Deleting Image Content](#)) now apply to everything except what you initially selected.

Rectangular Selection Tool

The Rectangular Selection tool should be selected by default when you're viewing images. If not, choose Tools > Rectangular Selection or click the Selection Tools  icon on the Markup toolbar and then choose Rectangular Selection.

Convert and Export

Preview can not only display a variety of image formats, but also convert from one to another. As we explain in [Choosing a File Format](#), each format has its own advantages and disadvantages—for instance, JPEG is the right choice for photos because it produces nice photos at reasonable file sizes, while PNG is superior for simpler, on-screen graphics because it handles solid colors well.

When Should You Convert an Image's File Format?

Some image formats incorporate lossy compression, so converting from one to another can reduce image quality. Why would you convert formats? Here are a few good reasons:

- ✦ You need to open an image in a particular app, but that app doesn't support the image's current format.
- ✦ You need part of the image to be transparent and the current format doesn't support it.
- ✦ The original image is in a format unfriendly to web browsers, like TIFF, and you need to use it on the web.
- ✦ The image isn't in the ideal format, like a largely photographic image in PNG that's much larger than it would be in JPEG.

Exporting to Other File Formats

A few commands in Preview's File menu help you export your files to different file formats:

- **Export:** With this command, you can save a copy of your file with a different name, in a different location, and in a different format, including HEIC, JPEG, JPEG-2000, OpenEXR, PDF, PNG, and TIFF. What you see in the bottom portion of the Export dialog depends on what you've chosen in the Format pop-up menu—press Option while you open the Format pop-up menu to see an extended

set of choices. We'll cover all the export options in [Choosing a File Format](#), [Changing PDF Color](#), and [Restricting PDFs](#).

- **Export Selected Images:** If you select multiple files in the sidebar before looking in the File menu, you'll see that Export changes to Export Selected Images.

Tip: When exporting selected images, if you click the Options button in the Save dialog, you can change the export format. In essence, then, Export Selected Images is useful for batch conversion of images from one format to another.

- **Export as PDF:** As you'd expect, this command is a quick way to export a file as a PDF, but the Export as PDF dialog lacks the Quartz filter options that the regular Export command has (see [Changing PDF Color](#)), as well as all other options available with the File > Print command.
- **Print:** When you choose File > Print, you can “print” to PDF using the PDF pop-up menu at the bottom-left corner of the dialog. We talk about this in detail in [Printing to PDF](#). For now, just know that using the Print dialog to export a PDF offers some advantages, such as additional encryption options and better embedding of annotations.

Choosing a File Format

Earlier in this chapter, we talked about how you can choose File > Export in order to save a copy of your file in a different format. There's a seemingly endless number of image formats, and Preview's Export feature supports a bunch of them. Most people need to be familiar with only a handful of these formats. Here are descriptions of the most common formats that Preview supports and the options that Preview offers for exporting to them.

Read PDFs

In this chapter, we're going to focus on Preview's prime directive: viewing PDF documents. We start by making sure you're using the best view for your needs, and then look at the features for [Navigating Your PDFs](#) that make it easier to move around.

Sometimes a PDF is better than a physical document because you can find specific text within it, and we cover that in [Searching Within a PDF](#). For those who want to look more closely, we discuss [Examining PDF Metadata](#), and we close with a discussion of [Copying Text and Images](#).

Note: While Books for iOS can read PDFs, and Books for both iOS and Mac can store and sync your PDFs, Books for the Mac doesn't actually let you read PDFs—instead, it hands them off to Preview! When you open a PDF stored in Books, Preview launches and opens the file like any other PDF for reading and annotation.

Tweaking the PDF View

The View menu offers three options for how you view PDFs:

- **Continuous Scroll:** This view lets you move smoothly from the bottom of one page to the top of the next one as you scroll in the document.
- **Single Page:** In this view, you see a document page-by-page as you scroll.

Tip: Notice the keyboard shortcuts displayed on the View menu; Continuous Scroll is ⌘-1, Single Page is ⌘-2, and Two Pages is ⌘-3.

- **Two Pages:** Work in this view when you want to scroll by two-page spread (**Figure 68**).

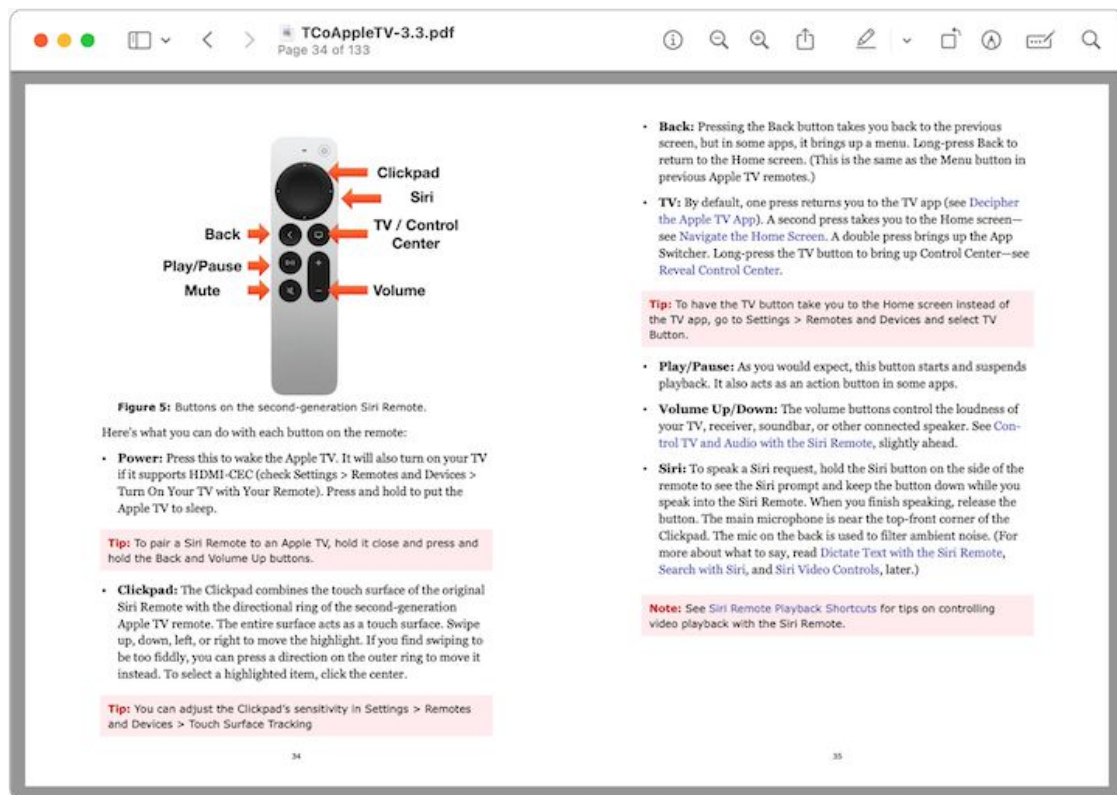


Figure 68: Two-page view works well on large, widescreen displays.

Which view is best for you depends on your personal preferences, the document in question, and your screen size. For instance, if you're working on a small MacBook screen, you'll likely want to stick with Continuous Scroll view, which makes it easy to zoom the page to a comfortable reading size and then scroll through smoothly with the trackpad. For those with larger screens, Single Page may work better because it enables page-based scrolling with a tap of a key (see [Navigating Your PDFs](#)). It's particularly good if each page of the PDF you're reading stands alone. If your screen is large enough, Two Pages lets you see a two-page spread at once; that's ideal if you're viewing a magazine that was designed around two-page spreads.

Happily, you can set your favorite view as the default in the PDF pane of Preview's settings—choose a view from the “Opening for first time: Show as” pop-up menu (for more details, see [PDF Settings](#)).

You can also view pages as thumbnails in a grid by choosing View > Contact Sheet (**Figure 69**). You might find this useful for getting an overview of a highly graphical PDF document or when building a PDF

Annotate PDFs

Preview isn't just a mere PDF reader—it also offers an array of PDF annotation capabilities that can take your reading and collaboration to the next level.

[Highlighting Text](#) lets you mark interesting passages in a PDF. [Adding Notes to a PDF](#) helps you add context to your highlights and include independent notes throughout the document. If those annotation methods are too complex for your needs, [Bookmarking a PDF](#) is a simple way to keep your place. For more graphical annotations, try [Adding Shapes and Text to a PDF](#).

Finally, we cover [Working with Forms](#), such as those issued by the government, and [Signing PDFs](#), which makes it easier to slap your John Hancock on a digital document.

Highlighting Text

If you're one of those people who highlight important passages in textbooks, you're going to love Preview's highlighting feature. It works much like using a marker to highlight passages in a book, except that you can add a note to go with each highlighted passage, rather than having to write in the margin with another pen. This is tremendously handy when you're reviewing a PDF document for someone else, or even to leave yourself notes.

To highlight a passage, click the Highlight  button on the toolbar. When selected, the yellow highlighter is enabled by default. Click the arrow next to the button to choose among different highlight colors, or to use red underline or strikethrough marking (**Figure 77**).

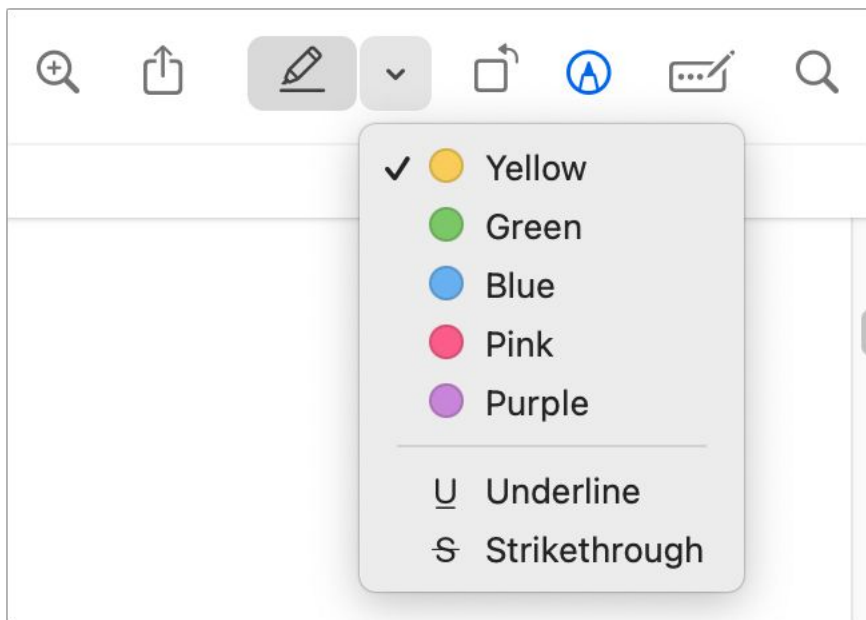


Figure 77: Choose a highlight color. Or pick Underline or Strikethrough as your “highlight.”

Now, drag over your passage to highlight it. The highlight color or style remains selected, so you can keep highlighting passages without any additional action.

Once you’ve highlighted a passage, you can modify the highlight in a few ways:

- **Change the highlight:** Control-click the highlight and click a different color, or click the underline  or strikethrough  icon.
- **Delete the highlight:** Control-click the highlight and choose Remove Highlight.
- **Remove part of a highlight:** Choose the same highlight color or style as is used in the highlighted text you want to modify, and select some of the highlighted text. (In other words, each highlighter works to erase its own highlights as well.)
- **Add a note:** We explain how to add a note in the next topic.

You can efficiently view all your highlights in the sidebar or the Annotations inspector. See [Quickly Viewing Highlights and Notes](#), ahead.

Manipulate PDFs

We've covered how to add text, shapes, signatures, and more to a page in PDF, but what if you want to work at an overview level to re-organize or format the pages in a PDF? Whether it's [Rearranging, Deleting, and Adding Pages](#); [Rotating Pages](#); [Cropping Pages](#); or even [Changing PDF Color](#), Preview makes it possible.

Rearranging, Deleting, and Adding Pages

If you don't like the order of pages in your PDF, you can change it. You can also delete pages, copy them to another PDF, and even add a new blank page or a page from a scanner.

TidBITS editor in chief Tonya Engst does this sort of thing all the time with multi-page scanned documents, such as scans of the paperwork that she receives for each payroll. She feeds the pile of papers into her Fujitsu ScanSnap scanner and ends up with one big PDF. In that PDF, she occasionally finds that a page was scanned out of order, and she usually wants to delete a few pages that represent the blank backs of scanned sheets. Plus, she copies the “payroll stub” page for one employee into a separate document so that she can send it to that person electronically. Your needs are probably different, but if you scan documents regularly, Preview can help you manipulate your PDFs.

To start, choose a view where each page in the document appears as a thumbnail:

- **Thumbnails:** Choose View > Thumbnails (⌘-Option-2) to see the thumbnails in the sidebar. This is a better choice for a short document or a document where the changes that you want to make are all in the same short stretch of pages.

- **Contact Sheet:** Choose View > Contact Sheet (⌘-Option-6). Because you can see many pages more quickly in this grid view, it's a better choice for longer documents or for situations where you need to work with more pages as you fix up your document. If you work in this view, note that you can press ⌘-= or ⌘-- (we think of these commands as ⌘-Plus and ⌘-Minus) to make the thumbnails tiny (thus showing more in the window at once) or to make them nearly large enough to read (which makes differentiating between similar pages easier).

This is nearly identical to how you can rearrange images in a Contact Sheet. See [Viewing a Contact Sheet](#).

Once you're looking at Thumbnails view or Contact Sheet view, it's time to make some changes:

- **Rearrange pages:** Drag a page thumbnail to a different place in the sidebar (or the contact sheet) to reorder the pages as you like. As you drag, thumbnails of other pages shift out of the way to help you drop the page in the desired spot.
- **Delete pages:** Select one or more thumbnails (by Shift-clicking for a contiguous selection or ⌘-clicking for a discontinuous selection) and press Delete.
- **Copy a page to another PDF:** With two or more Preview document windows visible, drag one or more thumbnails from one PDF document to another to add copies of their pages to the destination document. The dragged pages are added in the location where you drop them. This is particularly handy for combining scanned single-page PDFs into a single file.
- **Merge PDFs:** Drop a PDF from the Finder into the Thumbnails view or Contact Sheet view of an open PDF to merge the two.

Tip: We find it easiest to manipulate our PDFs when we can see all the pages at once. For that reason, we usually use Contact Sheet view for this task unless we're just swapping the position of two pages, which can be done easily in Thumbnails view in the sidebar.

Create PDFs

While Preview can't create a PDF entirely from scratch, like apps such as Adobe InDesign and Apple's Pages, it does offer some capabilities for generating new PDFs from existing content. Preview, like most Mac apps, can “print” to a PDF file. Additionally, you can create a PDF by converting one or more images to a PDF (see [Convert and Export](#)), [Importing from the Clipboard](#), or [Importing from a Scanner](#).

Printing to PDF

You can “print” any document from nearly any app to a PDF. This system-wide feature on the Mac is just like printing, except that instead of a printing marks on paper, the Mac creates a graphical image in PDF format of what that paper would look like. Because it's a graphic, any text is “understood” in the file only as an image—the words aren't stored as individual characters that can be edited and searched. In this way, what you see on the screen becomes an exact visual representation of what the printed document would look like.

The Mac's print-to-PDF feature has a few special options: you can add metadata, such as keywords, to the PDF, and you can specify a password for opening the file, as well as a permissions password to restrict whether the PDF can be copied from or printed (or both). (Flip back to [Restricting PDFs](#) for more about what activities the passwords restrict.)

One use of print-to-PDF that our editor has used frequently is assembling meeting minutes for the PTA of her son's school. As secretary, she would type up the minutes in Apple's Pages and ask speakers to give her computer files or paper documents of any supplemental materials, like presenter slides or handouts from the school nurse. She'd then print the Pages document to PDF, scan any paper documents to PDF, and combine everything into one final PDF document that she could email to parents, plus post on the PTA website. Pretty

much any computer can easily download and display a PDF, so this system worked well for publishing the meeting minutes.

Also, if you are making a brochure or poster, printing to PDF is a great way to make a version of the file that can be shared online.

When Printing to PDF Is Better than Exporting to PDF

Why print to a PDF in Preview, when the program has built-in PDF export capabilities (described in [Convert and Export](#))? Notably, the print-to-PDF method offers more metadata and security options than Preview's export feature. More on those shortly.

Printing to PDF from within Preview can also solve a Preview problem we've seen on occasion: you mark up a document in Preview, save it, send it to a collaborator, and they don't see your highlights. We don't know why this might happen—PDF is a standard file format, but that doesn't mean every app implements it correctly—but printing to PDF appears to cause the highlights to show up properly.

Here's how to print to PDF:

1. Open any document in Preview (or whatever app you normally open it in; printing to PDF is a system-wide feature).
2. Choose File > Print.
3. In the Print dialog, click the PDF pop-up menu in the lower-left corner (**Figure 95**) and choose Save as PDF.

About This Book

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About Josh Centers



Josh Centers is the Business Journalist at TextExpander, editor-in-chief of [Unprepared](#), and founder of [Apple Buying Advice](#). He is also the author of [Take Control of iOS 16 and iPadOS 16](#), [Take Control of Apple TV](#), and [Take Control of Apple Home Automation](#), and [Take Control of Notes](#). He has been featured in USA Today, Macworld, Scientific American, the Washington Post, Boing Boing, Wirecutter, and other publications, as well as on Comedy Central, HuffPost Live, and Voice of America.

Josh lives in Tennessee with his wife and sons.

About Adam Engst

Adam Engst is the publisher of TidBITS and co-founded Take Control Books in 2003. He has written numerous technical books, including the best-selling *Internet Starter Kit* series, and many magazine articles—thanks to contributing editor positions at MacUser, MacWEEK, and Macworld. His innovations include the creation of the first advertising program to support an internet publication in 1992, the first flat-rate accounts for graphical internet access in 1993 (with Northwest Nexus for *Internet Starter Kit for Macintosh*), and the successful Take Control ebook series. His indefatigable support of the Macintosh community has resulted in him being included among the most influential people in the Macintosh industry throughout the 2000s. And how many industry figures have been turned into an action figure?

He and his wife Tonya Engst run TidBITS Publishing, Inc. from their home in Ithaca, New York, which they share with their cat Polly.

About the Publisher

alt concepts, publisher of Take Control Books, is operated by Joe Kissell and Morgen Jahnke, who acquired the ebook series from TidBITS Publishing Inc.'s owners, Adam and Tonya Engst, in 2017. Joe brings his decades of experience as author of more than 60 books on tech topics (including many popular Take Control titles) to his role as Publisher. Morgen's professional background is in development work for nonprofit organizations, and she employs those skills as Director of Marketing and Publicity. Joe and Morgen live in Saskatoon, Saskatchewan, Canada, with their two children and their cat.

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